



Service bureau or in-house microfilming

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

Introduction

Once government officials have decided to microfilm records, they must choose whether to film those records in-house or to use a government or commercial vendor. A variety of micrographics options are open to officials, but they should make their choice only after careful analysis. They can handle the entire micrographics process internally; they can give it all to a vendor; or they can use a combination of in-house and vendor processing.

The Micrographics Services Branch of the S.C. Department of Archives and History provides a variety of microfilm services for government offices—it films records, and it processes, duplicates, and quality tests microfilm. Before it films records, however, the branch must have a retention schedule that shows the S.C. Department of Archives and History has authorized the microfilming.

This leaflet explains the factors that officials must weigh in choosing the best option for microfilming records of a government office.

In-house Advantages

1) **Security:** the records remain in your office and are handled only by your employees. Some service bureaus may ask you to send your records to them, and when you do, you risk the





loss of those records. Some of your records—health records or criminal records for example—may be too sensitive to be handled by non-employees.

2) Better access to records: if you need records that have been set aside for filming, you will have access to them if you film in-house and will lose access if you send them to a vendor.

3) Control: you control the quality of the work, the procedures, the personnel, the turnaround time, and the quality of the final product.

4) Cost savings: you can usually conduct large-scale, continuous filming more inexpensively in-house.

Disadvantages

1) Equipment expense and maintenance: you must pay the expense of leasing or buying the equipment. Once you own the equipment, you must repair it, maintain it, and replace it when it wears out or becomes obsolete. You may want to purchase a maintenance agreement for the equipment.

2) Expense for supplies: you will have to find a reliable supplier and pay for the cost of supplies.

3) Technical expertise: you must hire new employees or train existing staff to operate the equipment.

4) Lack of backup: the loss of a microfilm operator or the breakdown of equipment, particularly in small operations, can bring your microfilming to a halt. You must have several employees who know how to operate the equipment and can take over in an emergency.

5) Technical requirements: producing quality microfilm requires attention to technical details and strict quality control. Your budget should include costs for refilming, a consideration that is particularly important when inexperienced employees are operating the equipment. You will have to ensure that your security microfilm is quality tested and meets the “Quality Standards and Practices for the Microfilming of Public Records” set out in State Regulation 12-200 through 12-203. For more information on quality testing, refer to our Public records information leaflet no. 6.

6) Space: you must have adequate floor space and electrical outlets.





Service bureau

Advantages

1) **Flexibility:** many service bureaus have a wide variety of equipment and can handle different camera and film requirements. For example, while wrinkled, fragile, or bound records must be filmed on a planetary camera, many other records can be filmed on a rotary camera. A service bureau could meet both needs.

2) **Expertise:** service bureaus have trained personnel who can produce quality microfilm. Special training and equipment is essential for work like the laboratory testing of film. A good service bureau can produce microfilm that meets required standards.

3) **Equipment:** service bureaus with high-volume operations can afford both back-up and technologically up-to-date equipment.

4) **Cost savings:** if you have small quantities of records to be filmed or require only one-time filming, your costs will be less if you choose a service bureau instead of buying a camera you will use infrequently.

Disadvantages

1) **Control:** you surrender management control of the work when you turn it over to a service bureau.

2) **Higher unit cost:** service bureaus build in a profit margin; public offices do not.

3) **Security:** you risk loss of your records if you send them off-site.

4) **Potential for miscommunications:** if you fail to specify clearly the guidelines and standards you want for your film, the usability of the final product could be affected.

Making the decision

Once you have determined the relative advantages and disadvantages of service bureaus and internal operations, you should analyze your situation and choose your best options. Begin by asking questions about your microform and microfilm requirements. Do you need roll film, microfiche, aperture cards, jacketed microfilm, or another type of microform? Do you need 16mm, 35mm, or 105mm silver gelatin, diazo, or vesicular film? The answers to these questions will affect your decision because a single camera cannot produce every type of microform. They will also determine





what processors, duplicators, and inspection equipment you will need.

Camera What sort of camera will you will need? The microform you require will influence your answer, but you must also consider the records themselves. Can they be filmed on any camera or on only a certain type? Are some cameras better suited for your records than others?

Calculations for filming What quantity of records you will be filming continuously? To obtain an accurate count, do not include records you may have accumulated in your office over the years. If you include your entire records inventory, you might buy a camera, operate it full-time for a few weeks, then find that it has no further use. Count only your day-to-day workload and ask yourself if it is great enough to keep a microfilm camera and operator busy.

To determine how frequently you will use a camera, you must (a) calculate the number of documents you will be wanting to film—either daily, weekly, monthly or annually—and remember to double the figure for two sided pages, (b) divide the result by 1,000 for a rotary camera or 500 for a planetary or step-and-repeat camera, and (c) add 10 to 15 percent to allow for retakes and other problems that might slow production. These calculations will give you the approximate number of hours that the camera will be in operation.

For example, if you plan to film 5,000 two-sided documents daily, estimate ten hours for filming on a planetary camera and add one hour for errors; estimate five hours for filming on a rotary camera and add fifty minutes for errors. If the records are wrinkled, fragile, or bound into books, however, you will have to film them under glass on a planetary camera and the process will be slowed; you will film only about two thousand records in ten hours.

Once you determine your normal workload, you can decide what to do with your backlog. Use the same formula to calculate filming time, then explore filming options. You may find that the volume of your daily workload is large enough to warrant in-house filming but too large to allow time for the backlog. You may, therefore, decide to use a service bureau to film your one-time backlog.





In-house facility If you want to set up an in-house operation, do you need to modify your office? Do you have the space to set up a camera? Do you have a stable source of electric power for a camera and duplicating equipment? Can you provide one electric line for your camera alone? Do you have plumbing facilities for a processor?

Service bureau facility If you choose to send some records to a service bureau, what is the bureau's reputation and accountability. Shop around, ask each bureau for a list of its customers, then ask those customers to verify the bureau's reputation.

When you contract with a service bureau, you must specify the type of microfilm the bureau will provide, the cost of the service, the time it will take to complete the work, and the standards you require—the microfilm must meet the standards set out in the *Code of Laws of South Carolina, 1976*, Regulation 12-200 through 12-203. The contract is important because you, as the records custodian, have final responsibility for the quality of the film.

Comparative costs First, estimate the cost over a three to five year period for filming in-house, then contact several service bureaus for price estimates. When you compare the costs, consider your camera needs and your workload as well. If you do this, you will have good basis for making your decision.

The worksheet The worksheet on the next page will help you estimate the cost of an in-house operation. Consider the following costs in your calculations:

- 1) **Labor:** These include the important and often overlooked costs for document preparation, for filming, for processing and duplication, and for inspection.
- 2) **Space:** include the cost of floor space, for any modifications for electricity, water supplies, or ammonia venting (for diazo duplicators), for environmental controls (air conditioning or a dehumidifier), and for work space.
- 3) **Equipment:** depreciated over the period of analysis.
- 4) **Supplies:** allow for future inflation.





Cost estimate worksheet

Item	yr.1	yr.2	yr.3	yr.4	yr.5
Equipment					
Camera	_____	_____	_____	_____	_____
Processor	_____	_____	_____	_____	_____
Duplicator	_____	_____	_____	_____	_____
Densitometer	_____	_____	_____	_____	_____
Microscope	_____	_____	_____	_____	_____
Other inspection equipment	_____	_____	_____	_____	_____
Furniture	_____	_____	_____	_____	_____
Supplies					
Film	_____	_____	_____	_____	_____
Processing chemicals	_____	_____	_____	_____	_____
Labor					
Micrographics supervision	_____	_____	_____	_____	_____
Document preparation (1000 documents @ hour)	_____	_____	_____	_____	_____
Camera operation					
Rotary camera (1000 documents @ hour)	_____	_____	_____	_____	_____
Planetary camera (500 documents @ hour)	_____	_____	_____	_____	_____
Lab technician (1000 documents @ hour)	_____	_____	_____	_____	_____
Quality inspection (1 roll @ hour)	_____	_____	_____	_____	_____





Cost estimate worksheet, cont'd.

Item	yr.1	yr.2	yr.3	yr.4	yr.5
Subtotal	_____	_____	_____	_____	_____
Labor					
Fringe benefits	_____	_____	_____	_____	_____
Office facilities					
Floor space	_____	_____	_____	_____	_____
Site preparation	_____	_____	_____	_____	_____
Utilities	_____	_____	_____	_____	_____
Total cost	_____	_____	_____	_____	_____

For more information

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 advising government offices on micrographics. The Archives and Records Management Division also issues publications and gives advice and help on all aspects of records management and archival administration.

For more information, please contact: South Carolina Department of Archives and History Archives and Records Management Division State Record Center 1919 Blanding Street Columbia, SC 29201 (803)734-7914.





Public information leaflets from the Archives

- no. 1 *Legal requirements for microfilming public records (1992)*
- no. 2 *On choosing records for microfilming (1992)*
- no. 3 *Service bureau or in-house microfilming (1992)*
- no. 4 *Targeting and certification of microfilm (1996 revised)*
- no. 5 *Choosing a microfilm camera (1992)*
- no. 6 *Quality testing of microfilm (1992)*
- no. 7 *Microfilm and microforms (1992)*
- no. 8 *Choosing a micrographics service bureau (1992)*
- no. 9 *Choosing microfilm readers and reader/printers (1992)*
- no. 10 *Computer assisted retrieval systems (1992)*
- no. 11 *Microfilm storage (1992)*
- no. 12 *Preservation microfilming (1992)*
- no. 13 *Optical Disk: policy statement and recommended practices (1996 revised)*
- no. 14 *Storing records in the State Records Center (1993)*
- no. 15 *The deposit of security microfilm (1993)*
- no. 16 *Disaster preparedness and recovery in state and local government records offices (1993)*
- no. 17 *How to conduct a records inventory (1993)*
- no. 18 *How to establish records retention schedules (1993)*
- no. 19 *Photographic media (to be announced)*
- no. 20 *Editing and splicing roll microfilm of long-term or archival value (1994)*
- no. 21 *Managing E-Mail (to be announced)*
- no. 22 *Standards for microfilm service bureau certification (1996)*

