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# Microfilm

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Dear Reader:

The following document was created from the CTAS website ([ctas.tennessee.edu](http://ctas.tennessee.edu)). This website is maintained by CTAS staff and seeks to represent the most current information regarding issues relative to Tennessee county government.

We hope this information will be useful to you; reference to it will assist you with many of the questions that will arise in your tenure with county government. However, the *Tennessee Code Annotated* and other relevant laws or regulations should always be consulted before any action is taken based upon the contents of this document.

Please feel free to contact us if you have questions or comments regarding this information or any other CTAS website material.

Sincerely,

The University of Tennessee  
County Technical Assistance Service  
226 Anne Dallas Dudley Boulevard, Suite 400  
Nashville, Tennessee 37219  
615.532.3555 phone  
615.532.3699 fax  
[www.ctas.tennessee.edu](http://www.ctas.tennessee.edu)

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# Microfilm

Reference Number: CTAS-1199

The process of microfilming<sup>[1]</sup> is more than 150 years old. "In 1839 the French began to use micro-photography, primarily for placing small portraits into lockets. During the Franco-Prussian War of 1870-1871, the French filmed documents and used carrier pigeons to transport the filmed information to unoccupied portions of France."<sup>[2]</sup> Comparatively, this makes the process of microfilming seem ancient compared to newer electronic formats for record keeping. There are several well-documented advantages of microfilm; control, convenience, space savings, protection, and the quick entry of full text.<sup>[3]</sup> Microfilming can offer as much as a 98 percent reduction in storage space over storing records in their original paper format.<sup>[4]</sup> By having a back-up copy of microfilm stored off-site, governments can almost immediately recover from any disaster or occurrence that damages its vital paper records. Produced correctly, microfilm is considered to be archival quality meaning it is a suitable format for storing permanent retention documents.

But microfilm also has its disadvantages. No alternative format is going to be a perfect solution for all your records management problems. Microfilming is not cheap. It is a labor intensive process that requires a level of expertise from the person doing the work. Additionally, if microfilm is not properly produced, developed and stored, it will not stand the test of time. It may be difficult to recognize deterioration of microfilm records or mistakes in the filming process until it is too late to correct the problem. There is anecdotal evidence of some cases where a person filming records made the error of skipping over many pages of text which were subsequently lost forever when the paper originals were destroyed upon the completion of filming. For these reasons, it is vitally important that any county office relying on microfilm have a strict quality control procedure in place to make sure the film adequately captures the content of the paper records prior to their destruction.

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[1] The term microfilm or microfilming will be used generally to discuss the various micro-photographic processes available.

[2] *Using Microfilm*, Julian L. Mims, CRM, issued by the National Association of Government Archives and Records Administrators (February, 1992), p. 1.

[3] *Using Microfilm*, p.1.

[4] *Using Microfilm*, p.1.

# State Laws Regarding the Photographic Preservation of Records

Reference Number: CTAS-1200

County public records commissions may authorize the destruction of original records that have been reproduced through photocopying, photostating, filming, microfilming, or other micro-photographic process.<sup>[1]</sup> When doing so, the records must be reproduced in duplicate. The reproduction must result in permanent records of a quality at least as good as is prescribed by the minimum standards for permanent photographic records as established by the Bureau of Standards of the United States government (now the National Institute for Standards Testing). One copy of the reproduction shall be stored for safekeeping in a place selected by the county public records commission and concurred in by the county legislative body. If proper facilities are available, the location should be within Tennessee. The storage location should be selected based on the goal of preserving the records from fire and all other hazards. The other copy of the records must be kept in an office in the county accessible to the public and to county officers, together with the necessary equipment for examining the records whenever required and requested by the public during reasonable office hours. Microfilmed records may be kept in the office that generated the records, or, if the records commission determines, all such records of the county may be kept in one central microfilm repository for all microfilm records of the county.<sup>[2]</sup> The law specifically states that it is the intent of the General Assembly to provide for the original recording of any and all instruments by photograph, photostat, film, microfilm or other microphotographic process.<sup>[3]</sup> Other statutes also provide that county election commissions, with the approval of their county legislative bodies, may use a supplemental system for maintaining voter registration using microfilm.<sup>[4]</sup>

## State Microfilming Program

Before embarking on their own microfilming program, county offices should consult with the Tennessee State Library and Archives to find out more about the services available from that agency and for its recommendations on working with private vendors. The office of Preservation Services, Tennessee State Library and Archives may be reached by phone at (615) 741-2764. The law provides that the Tennessee State Library and Archives is charged with providing trained staff and appropriate equipment necessary to produce and store microfilm reproductions of official, permanent value bound volume records created by county and municipal governments. To implement this security microfilming program, the Tennessee state librarian and archivist is authorized to develop a priority listing of essential records based on retention schedules developed by the County Technical Assistance Service and the Municipal Technical Advisory Service. This priority listing of essential records may be revised from time to time to accommodate critical needs in individual counties or municipalities or to reflect changes in retention schedules. The camera negative of the microfilmed records shall be stored in the security vault at the Tennessee State Library and Archives and duplicate rolls of these microfilmed records shall be made available to county and municipal governments on a cost basis.<sup>[5]</sup>

Budgetary constraints over recent years have forced the Tennessee State Library and Archives to scale back some of the microfilming services it offers. However, the agency still performs limited microfilming services free for local governments and remains the best objective source of information and advice about microfilming for Tennessee counties.

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[1] T.C.A. § 10-7-404(a).

[2] T.C.A. § 10-7-406.

[3] T.C.A. § 10-7-406.

[4] T.C.A. § 2-2-137.

[5] Title 10, Chapter 7, Part 5.

## Technical Guidelines

Reference Number: CTAS-1201

The following guidelines for producing and storing microfilm are considered crucial by the Tennessee State Library and Archives.<sup>[1]</sup> For more information on microfilming, contact the Tennessee State Library and Archives.

- Microfilm must conform to national archival processing and storage standards if it is to survive.

Tennessee law requires that "photographic film shall comply with the minimum standards of quality approved for permanent photographic records by the national bureau of standards [now the NIST] and the device used to reproduce such records on film shall be one which accurately reproduces the original thereof in all details."<sup>[2]</sup>

- Good preparation of records to be filmed is crucial to success.
  - If they need it, you should clean and flatten the records before filming. You must film the records in their correct order and arrangement. At the beginning of each group, series, and sub-series, identify the records by filming descriptive "targets" that also include notes on physical condition and arrangement of the records.
- All records in a group or series, regardless of condition, must be filmed in proper orientation, order and focus.
  - If a page is omitted or improperly filmed and the original destroyed after filming, there is no way to recover the permanent record that should have been preserved.
- Archival quality silver-gelatin film must be used for the camera-image negative film, and it must be processed according to archival standards.
  - Diazo film and other inexpensive process films will not endure. Residual chemicals on film from poor processing will destroy film.
  - However, reference copies may be on any sort of commercial film that is convenient and affordable. It will have to be replaced from time to time, since heavy use in readers will wear out the film.

- The original negative (camera-image) film must be reserved in archival storage conditions and should be kept in a site removed from the main archives.

Only positive copies of the original negative should be used for reference, otherwise the original may be destroyed. High humidity and changes in temperature that are wide or frequent tend to hasten the destruction of film.

The original negative (camera image) film must be used only to produce reference copies as needed. Indeed, it is still better to have a second negative copy, from which to produce reference-use positives, so that the camera-image negative original is itself preserved.

Off-site storage, under archival conditions offers the best chance for survival of the original negative film. The Tennessee State Library and Archives is a good storage option for counties and municipalities that wish to preserve their original camera-image, negative film.

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[1] Tennessee Archives Management Advisory 99-005, Microfilming Permanent Records, January 11, 1999.

[2] T.C.A. § 10-7-501.

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