

Tennessee Archives Management Advisory

1999

ELECTRONIC RECORDS ARE NOT PERMANENT ARCHIVAL RECORDS

This advisory pertains only to records that have been appraised to have permanent value and are to be saved indefinitely in archives. It is to warn local officials of the perils of relying on electronic systems for the preservation of permanently-valuable records.

Q: Why aren't electronic records archival?

A: Computers help us do more work faster than at any time in history; but, they cannot ensure records will survive more than 25 years. Why?

- <u>Deterioration</u>. Information in 3.5-inch discs, tapes, and CD-ROMs may deteriorate and disappear within five years from date of recording.²
- <u>Tampering.</u> It is relatively easy for a determined "hacker" to access a system and cause irreparable mischief.
- Obsolescence. Systems are out-dated as fast as they come on the market; hardware, software, and operating expertise quickly vanish from use.

Q: How can you be sure *permanent* records are kept for future reference?

A: There are three different options for preserving electronic records:

- 1. You can spend money and other resources to maintain hardware, software, and operating knowledge of all systems into which records have been put in the past.
- You can devise and monitor contracts with vendors to require and assure performance of replacement systems that completely and reliably convert all old files into readable files in the new system.
- 3. You can convert all electronic records that must be kept permanently into a permanent, readable medium such as high-grade carbon ink on acid-free paper or archival quality microfilm.

The third choice is generally the <u>surest</u> and <u>cheapest</u>. However, there is not presently a clear and simple method for preserving electronic records permanently. You will have to use all three methods at least to some extent.

Current Tennessee law regarding electronic record keeping, interpreted by TSLA References are to Tennessee Code Annotated (TCA).

Tennessee law clearly permits—but *only conditionally and under certain circumstances*—the destruction of original permanent records that have been copied onto microform or into computer storage.³

1. You must make a record <u>easily available</u> for public inspection.

<u>Interpretation</u>: The record must be presented promptly in response to any public request; and it must be in a form the requester can **read** and **understand**. Although in cases of voluminous data, the requestor may prefer the record in electronic format (such as CD ROM), this often means that you must have **at least the ability** to present the record on paper, if the public inspection requires it. An electronic system that does not offer confidence that this can be done—and done indefinitely into the future—is inadequate for permanent records. TCA § 10-7-121(a)(2).

2. You must retain a record for <u>all</u> its retention term.

<u>Interpretation</u>: Records designated as permanent by law or by records disposition authorization must be available forever. Authority to keep a record means duty to maintain it. A record must be kept under conditions that ensure its survival to be used in the future as reliable and authentic evidence. A record may not be kept under conditions that damage it or speed up its natural deterioration. Officials who let a record be inaccessible or become decayed through careless storage or risk its loss through electronic system deterioration or obsolescence violate law and public trust.

- 3. You must protect electronic records against erasure or power failure.

 Interpretation: Any computer record must be copied daily onto a removable storage medium, which must be stored in a place other than where the original record is kept in computer. But, this is only like having a spare tire in case you have a blow-out; it does not ensure permanent survival.
 - 4. You may not destroy a record without the approval of a public records commission. Moreover, a public records commission may NOT destroy any record needed for audit, and may NOT destroy any record "otherwise required by law to be retained."

<u>Interpretation</u>: You may not destroy and may not neglect to maintain original records, *unless* specifically permitted and authorized to do so by vote of the public records commission. A public records commission may require you to continue to keep and maintain the original paper copy of a permanent record forever, and in a form and manner that it can be produced promptly for inspection by a citizen. [See condition #1, above.] [TCA § 10-7-404(a)]

5. A county officer or judge of court may prevent destruction of the records of his/her court or office.

<u>Interpretation</u>: Even if the public records commission decided to destroy a permanent record because it has been properly copied onto microform or into computer storage, a county judge or county official may require that the original record be kept anyway. [TCA § 10-7-404(a)] However, any decision to retain carries with it an equal obligation to maintain the record and make it available as noted in condition #1, above.

6. If any record is properly authorized to be destroyed, the state librarian and archivist must be given ninety (90) days' notice and the opportunity to declare it is historically valuable and to take itinto the state archives.

<u>Interpretation</u>: This offers the state librarian and archivist a chance to use the resources of the state library and archives to keep and maintain historically valuable records that cannot be kept at public expense elsewhere. However, in such cases it is better if the local archives can keep the records that the State Librarian and Archivist believes have high historical value. [TCA § 10-7-413]

¹ "... it must be concluded that magnetic recording media and other machine-readable recording media (e.g. magneto-optic and optical disks) cannot be recommended for long-term (say, over 25 years) archival applications." *Preservation of Historical Records*, National Academy Press, Washington, DC, 1986, p. 62. This is a National Research Council publication of a joint study performed by the Committee on Preservation of Historical Records of the National Materials Advisory Board and the Committee on Engineering and Technical Systems of the National Research Council. It is a readable, authoritative, basic reference for those engaged in the preservation of historical records

² An article in *U.S. News and World Report* (February 16, 1998, pages 67-68) reports a number of serious cases where electronic systems have failed to preserve information because of deterioration.

³ §§10-7-121(a), 10-7-404(a), and 10-7-404(d) provide *authorization*. "Microform" here is used to stand for any form of micro-photographic reproduction such as microfilm or microfiche. "Computer storage" is any electronic "machine-readable" record storage media such as punched cards, disks, hard drives, etc. Neither microfilm nor computer storage can be read with the unaided human eye as writing on paper can be read.