



Office of the Secretary of State
Washington State Archives

Records Management Advice

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Electronic Records Management: Analog Audio/Visual Recordings – Recommendations & Best Practices

Purpose: Provide guidance to state and local government agencies on the best practices for preserving analog audio recordings.

The requirement to preserve records and information comes with the burden of providing access by keeping up with the rapid changes in technology.

Analog recordings (audio cassettes, reel-to-reel, videotapes) represent one of many media made obsolete by advances in technology. Some issues with the continued use of analog recordings are:

- Damage occurring to media as a result of exposure to light, dust, magnetic fields, and/or variations in temperature and humidity.
- Injury to media during playback or during long-term storage, when layers of the tape can stick together, print-through magnetically, or break due to brittle conditions.
- Difficulty in maintaining the equipment necessary to play the analog recordings.
- Duplication of analog recordings results in loss of quality with each generation.

The following are strategies for the long-term preservation of analog recordings:

1. Transfer the original or best available copy of the analog recording to an uncompressed or lossless digital format such as WAV (audio) or WMV (video). Conversion to a digital audio format will improve access and ensure protection and preservation of the information. It will also allow for lossless migration of the audio data to other digital formats as technologies change.
2. If conversion is not an option, tapes have a better chance of protection if stored under the following conditions. Many analog recordings kept in these conditions *may* last up to 30 years, although they degrade quickly after 20 years.
 - a. The temperature where analog recordings are stored should not vary more than 5 degrees from 65 degrees Fahrenheit.
 - b. The relative humidity (RH) in the storage area should not vary more than 5% from 50% RH.
 - c. Analog recordings should be rewound and played regularly to ensure flexibility and general clarity of recording.

Agencies need to periodically assess their storage media and strategize migration and systems support in order to meet the requirements of managing public records in this challenging era of ever-changing technology.

**Additional advice regarding the management of public records is available from
Washington State Archives:**

**www.sos.wa.gov/archives
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