

SECRETARY OF STATE'S OFFICE

Three Things You Should Know About Electronic Records

1. A record is a record, regardless of media or format.

Missouri's State and Local Records Law (RSMo 109.200 – 510) defines a record as any “. . . document, book, paper, photograph, map, sound recording or other material regardless of *physical form or characteristics* made or received pursuant law or in connection with the transaction of official business.”

Many of the technologies used to create electronic records readily come to mind – electronic imaging, e-commerce, and financial systems. However, others, such as e-mail, databases, spreadsheets, presentations, and web pages, are not nearly as apparent. Therein lies the challenge.

2. Electronic records will last forever – or five years whichever comes first.

There are two major problems with electronic records.

One, they are ubiquitous. Network back-ups and e-mail are two of the biggest culprits. However, there is a third, possibly more dangerous perpetrator – *delete* doesn't mean destroyed. Delete just means you can't get to the information easily. The way information is written to a computer's hard drive makes it possible to recover information that has been deleted. Pieces of information are broken apart and stored in various locations on your hard drive. When you hit delete, you've just told the software that you don't need to get to that information. The information is still there; it's just that your software doesn't know where to look for it anymore. New information has to be written on top of the exact same location as the old information – not once, but seven times – before it is completely gone.

Two, technology is a moving target. Things change and media doesn't last forever. Let's take a quick look at each of these threats.

- **Media decay** – magnetic media, like back-up tapes and hard drives, aren't static. Electrons wander over the media. Eventually, this causes damage to the recorded data. Optical media, like CD's, are alleged to have life spans of 100+ years. However, studies have shown that under normal conditions, 25 years is closer to reality.
- **Hardware obsolescence** – the ever increasing pace of technology change exacerbates the fact. Today's CDs and DVDs are tomorrow's 8-track tapes and Beta-video cassettes. Who still has the hardware to use them?
- **Software obsolescence** – in reality, this is the biggest threat. Think about the changes we've experienced in the last ten years. Windows 3.1, 95, 98, ME, NE. Now

think about the changes in software applications. Remember when WordPerfect and Lotus were kings?

3. You have to budget for change.

There are no easy answers to the questions about how to manage electronic records. Nonetheless, there are good rules of thumb (but they'll cost you).

- **Records with a retention period of five years or less** – these are probably safe to keep in electronic format. However, if your organization undergoes a major change in software, hardware, or media, you should check the records to ensure you can still access them.
- **Records with a retention period greater than five years and less than ten years** – you should have a written plan in place to audit these records periodically after the five year mark. Any changes in software, hardware, or media should be signal to audit the records.
- **Records with a retention period of ten or more years** – unless the records remain highly active, it will be more cost-effective to store the paper (if there is paper) in an offsite facility than it will be to migrate the data over the many changes in technology. Another alternative is microfilm. The benchmark for State agencies is 35 years. In other words, if records have a retention period of 35 years or more, it is more cost-effective to maintain them on microfilm than to store them on paper. There's more to microfilm than just paper conversion. Digital information can be stored on microfilm and digital information can be created from microfilm.

The Records Management and Archives Service Division can help you determine the best solution. Call us at (573) 751-3319. Also, visit our website <http://www.sos.mo.gov/records/recmgmt>. There you'll find guidelines on managing e-mail records and on digital imaging systems.