

A Framework for Governing Electronic Records

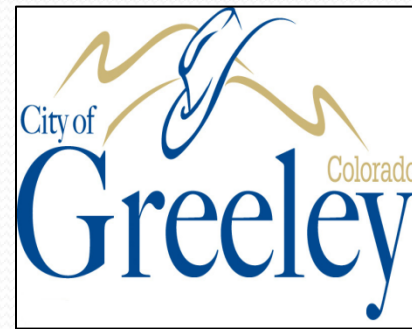
**Colorado Historical Records Advisory Board, Denver,
Colorado**

September 5, 2014

Presenters

Molly J. Davis, CRM
Records Management
Consultant
970-482-1303
MDavis2765@aol.com

Betsy Holder, CRM, MMC
Greeley City Clerk
970-350-9742
Betsy.Holder@greeleygov.com



Session Summary

An information governance perspective

- **Overview**
- **Strategies for Governing E-Records**
 - Accountability
 - Transparency
 - Protection
 - Compliance
 - Integrity
 - Availability
 - Retention
 - Disposition
- **Handling Common E-Records Issues**
- **Wrap-Up**
- **Q&A**



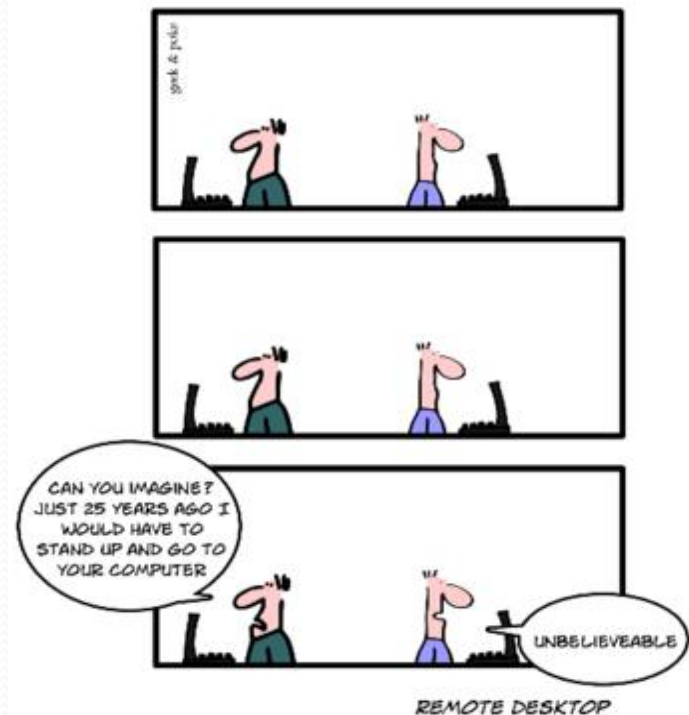
Overview

The Big Picture

Evolution of Technology

- 1900 years ago: paper invented in China
- 1795: pencil patented in France
- Early 1800's: file shelves in safes
- Mid-1800's: file cabinets
- 1870: typewriters sold commercially
- 1945: commercial ballpoint pens \$12.95/ea
- 1951: UNIVAC computer for federal census
- 1969: data transferred between two computers via 15-foot cable
- 1970's: email became possible
- 1980's: dot.com addressing system
- 1981-1982: IBM PC & IBM clones
- 1990: WWW invented
- Today: billions of users, web pages, devices
- Tomorrow

SIMPLY EXPLAINED



<http://geekandpoke.typepad.com/geekandpoke/>

Trends

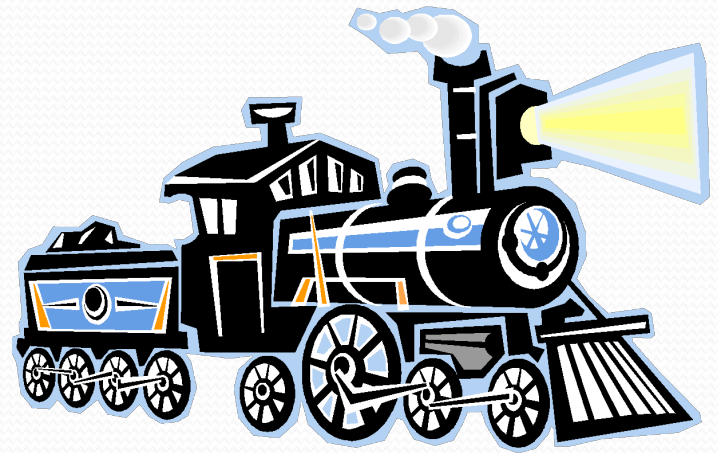
- RIM ⇨ information governance
- Growing costs: litigation, government mandates
- Rising expectations: unlimited data available indefinitely
- Rapid increase in volume of data
- Widely distributed mobile & cloud-based information (community, private, public & hybrid clouds)
- New uses for e-records, i.e., data analytics (mining)
- Internet of everything
- Technology way ahead of policy



E-Records in a Nutshell

- Lots of questions, some partial answers & solutions
- No “one-size-fits-all” fixes
- Unending learning curve
- Evolving terminology
- Constant change
- What has been lost or will be lost soon?

“Digital content and analytics exist currently in isolated tools that don’t talk to each other and don’t easily allow the transfer of that content. Think about it like the old railway system where each company laid down a different set of rails with a different gauge, and trains from the other companies couldn’t transfer between the tracks.” <http://www.govtech.com/education/4-Research-Universities-Fight-for-Open-Digital-Standards.html>



What Is a Record?

- **Something you'll need that is:**

- Declared as a “record” (generated or received, filed, organized, kept for a work purpose)
- Documentation/evidence of business actions: who, what, where, when, how & why

- **May include:**

- Original or exact “working” copies
- Copies that are not exact (wherever kept)
- Public (open) or non-public
- Paper-based, electronically stored, film-based & associated



Where Do E-Records Exist?

- **E-files & associated metadata** – scanned images, word processing files, databases, spreadsheets, electronic calendars, GIS datasets, digital photos
- **Computer systems & mobile devices** – shared drives, PC hard drives, laptops, PDAs, SmartPhones, backup tapes, older records (legacy data), personal devices used for business
- **Portable storage media** – CD, DVD, flash or thumb drive, magnetic tape, VHS tape
- **Communications systems** – e-mail messages & attachments, spam, text messages, recorded voicemails, videoconferences, social media posts
- **Third party hosted records** – contractor computer systems, “clouds” (**community** for more than one organization, **private** for one organization (most common for state & local governments), **public** for anyone to use, operated



Value of Records

- Institutional memory, history
- Accountability & continuity
- Research, plan, analyze, & track
- Document rights, responsibilities



49% of an organization's total value comes from the information it owns *Information Management, Mar/Apr 2013*

E-Records in the News

- IRS unauthorized disposal of e-mail
- Data breaches: Russian hackers, Target and others, WikiLeaks
- School district open records request (e-mail)
- Lost water rights
- Denial of service attack on Larimer County offices



Common Misconceptions

- E-records last forever
- “Just get rid of the paper”
- “My” records on “my device”
- “E-storage is cheap”
- OK to keep “just in case”
- OK to keep e-records longer
- Perfection is possible
- Why worry?



Types of E-Records Issues

- Applying information governance principles
- Establishing accountability
- Mitigating obsolescence
- Preservation/retrieval of legacy data



Costs of Mismatched E-Records

- Information missing in action
- Storage & management
- Backup times
- Bugged down access
- Time consuming searches
- Penalties & legal sanctions
- Damage to image, credibility



Building an E-Records Foundation

- **Generally Accepted Recordkeeping Principles® (now “The Principles”)**
 - Accountability
 - Transparency
 - Protection
 - Compliance
 - Integrity
 - Availability
 - Retention
 - Disposition
- **A way to measure RIM performance**
- **Capture key e-records standards in an understandable way**

About ARMA International and the Generally Accepted Recordkeeping Principles®

ARMA International (www.arma.org) is a not-for-profit professional association and the authority on information governance. Formed in 1955, ARMA International is the oldest and largest association for the information management profession with a current international membership of more than 10,000. It provides education, publications, and information on the efficient maintenance, retrieval, and preservation of vital information created in public and private organizations in all sectors of the economy. It also publishes Information Management magazine, and the Generally Accepted Recordkeeping Principles®. More information about the Principles can be found at www.arma.org/principles.

Examples: Existing Standards

- **ISO 15489**
 - Technical guidelines for electronic recordkeeping – authenticity, documentation, etc.
 - **Key:** systems capable of facilitating & implementing decisions on retention & disposition of e-records
- **DoD 5015.02**
 - Design criteria for e-records management
 - Functionality requirements for RIM software applications



Creating an E-Records Plan

- **First:** sturdy e-records foundation
- **Decide why you want a plan:** management support, funding, data longevity (not paperless perfection)
- **Setting priorities**
 - How will plan get done? When?
 - Reasonable incremental (phased) steps
 - Begin to address preservation upfront at time of e-records creation
- **Possible contents**
 - Assess current program & strategies
 - Roadmap for 3-5 years: update annually
 - E-records inventory
 - Identification of ongoing resources
 - Technology recommendations
 - Written policies: benefits & downsides



E-Records Accountability

A senior executive (or person of comparable authority) oversees the recordkeeping program and delegates program responsibility to appropriate individuals. The organization adopts policies and procedures to guide personnel, and ensure the program can be audited.

**ARMA International,
Generally Accepted
Recordkeeping Principles,
2010**



E-Records Styles

- **Loose cannon**
 - Erratic, no organization
 - Purges e-records “whenever”
 - Mingles personal/business e-records at work/home
 - Assumes e-mail is “personal” & private
- **Hoarder**
 - Squirrels everything away indefinitely “just in case”
 - E-storage = overflowing “mine field”
 - Relies on keyword searches
 - Subscribes to misconception that e-records last forever
- **Tosser**
 - Thinks e-records aren’t “records”
 - Assumes someone else keeps important stuff, discards too soon
- **Filer**
 - Secures & protects e-records for entire retention period
 - Empties e-mail inboxes daily
 - Organizes e-records (folders, naming rules,

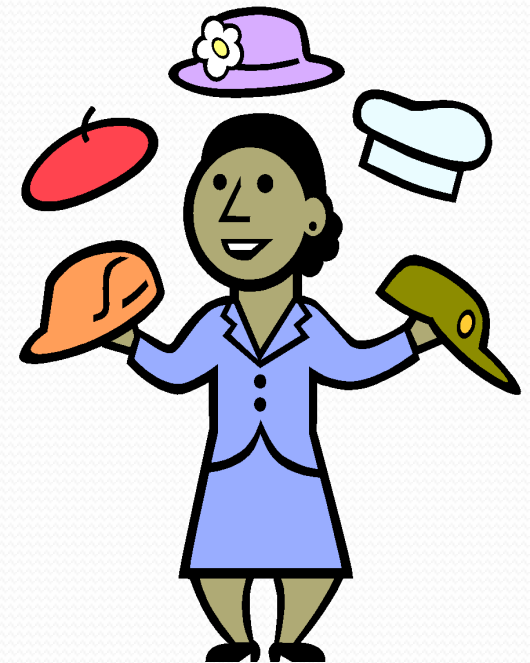


Roles & Responsibilities

- **Assigned centralized or decentralized responsibility for:**

- Overall coordination, planning for the future, \$\$\$
- Content management/custody for e-records
- Policy & procedure development & roll-out
- Records retention & disposition
- Compliance audits
- Assessing e-records project readiness
- Backups, data preservation, disaster planning & recovery
- Legal advice, open records, e-discovery, legal holds
- RIM education
- Technical support

- **Every employee:** Compliance with policies whether or not specified in job description



Examples of E-Records Teams

- RIM-IT-Legal
- Stakeholders
(directors, managers,
etc.)
- Policy or planning
team
- Technical teams
- User groups
- Project assessment
teams or steering
committees
- Project deployment
teams



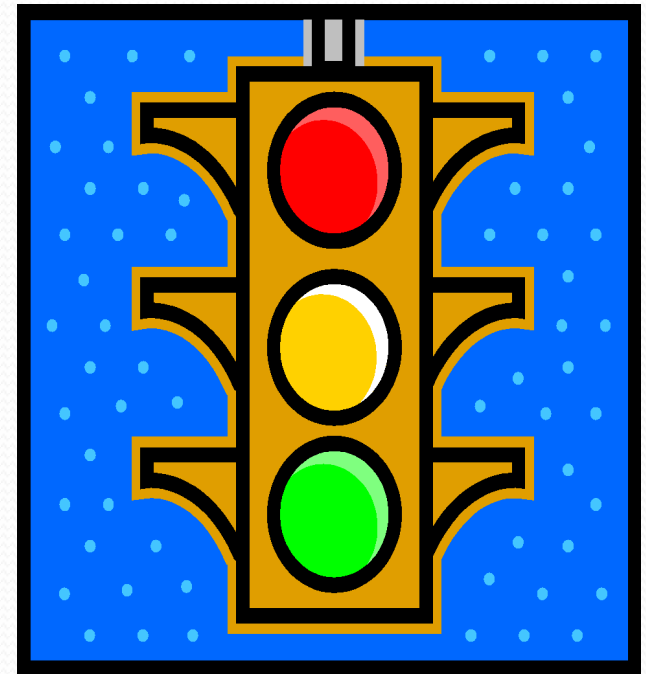
Why E-Projects Fail

- **Underestimating:**
 - Scope & size, chances of initial failure
 - Costs – licensing, maintenance, administration, future migrations, potential data loss during conversions, customization
 - Impact on users
 - Management buy-in
 - Upfront work needed – standards, project assessment, naming conventions, storage & retrieval needs
- **Trying to go it alone**
- **Flawed or unrealistic approach:** pilot, backlog, day forward, as-needed



Assessing E-Project Readiness

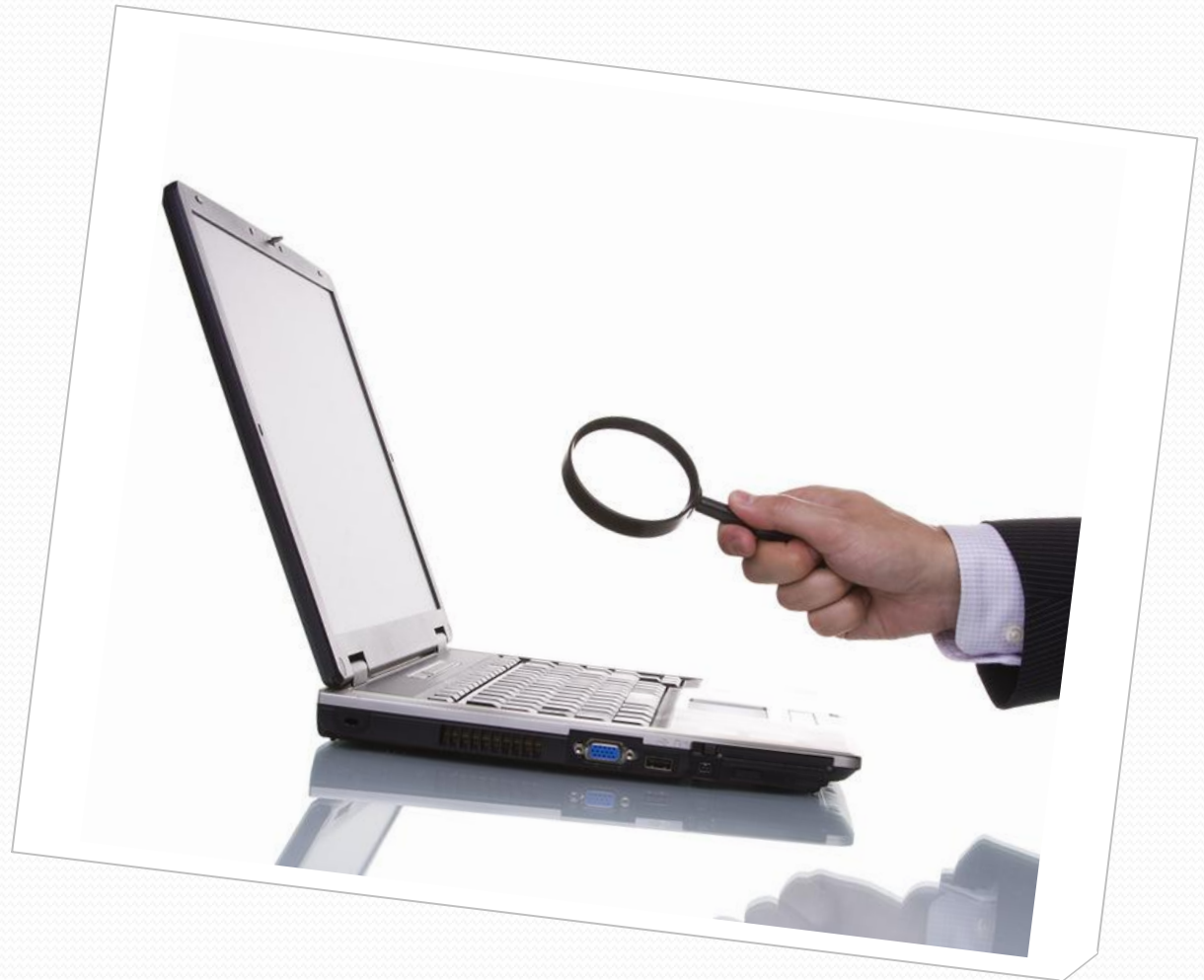
- **Project support**
 - Management priority
 - Resources available & committed
 - Clear understanding of roles & responsibilities
- **Content assessment**
 - Valid reason for change based on established criteria
 - Other possibilities considered
 - Content has current/future value
 - Understanding of who will use content
- **Preservation readiness**
 - Ready – born digital, current formats meet e-repository standards
 - Near ready – tools exist to export from native to new formats
 - Unready – stored to proprietary legacy systems, no tools to export to required formats, nobody has functional knowledge of legacy system



E-Records Transparency

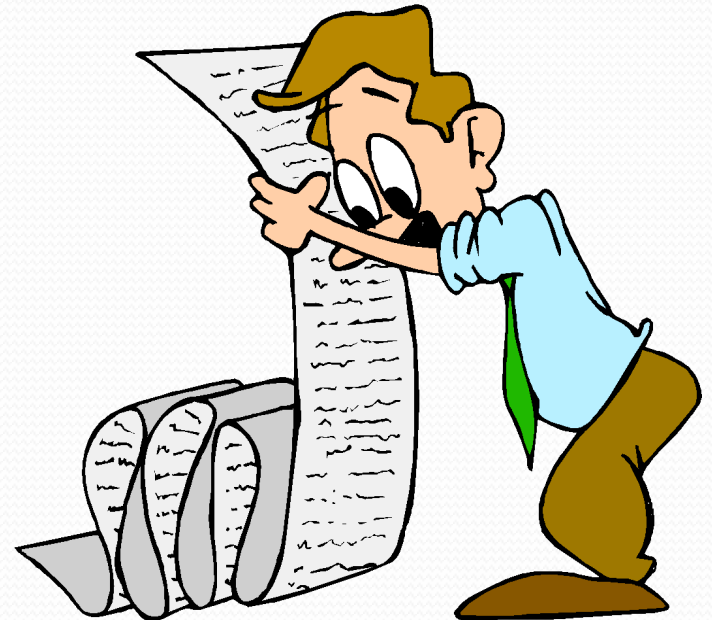
The processes and activities of an organization's recordkeeping program are documented in a manner that is open and verifiable and is available to all personnel and appropriate interested parties.

**ARMA International,
Generally Accepted
Recordkeeping
Principles, 2010**



Inventorying E-Records

- **Purpose:** makes e-records visible & understandable
- **Decision:** in-house/contract out
- **Interview rather than physical inventory**
- **Information to collect**
 - System name & description
 - Purpose/function of the system
 - Data sources
 - Information content & value
 - System outputs
 - Location
 - Contact info



Documentation

- **Purposes:**
 - Enables measurable, sustainable & reasonable goals
 - Enhances visibility, knowledge of program
 - Enables program audit
 - Demonstrates “normal course of business”
- **Sample documentation**
 - Operating plans: records disaster recovery plan, naming conventions, written file plans, continuity plans, taxonomies, system ops
 - Written policies: adopted standards, identity theft, disposal of personal identifying info, e-mail, retention schedule, purge process, information security, legal hold process, copying fee schedule, access to open records, social media use, information security



E-Records Integrity

A recordkeeping program shall be constructed so the records and information generated or managed by or for the organization have a reasonable and suitable guarantee of authenticity and reliability.

**ARMA International,
Generally Accepted
Recordkeeping
Principles, 2010**



Reliable E-Records

- **Colorado Uniform Electronic Transactions Act (UETA) CRS**

24-71.3-101, *et seq.*

- Facilitates, but does not require, electronic transactions
- E-records & e-signatures good in court if “authentic”

- **Uniform Electronic Legal Material Act (UELMA) CRS 24-71.5-101, *et seq.***

- Publisher of legal material in e-format: authenticate, preserve & secure, ensure availability for use
- Applies to: Colorado Constitution, Session Laws, CRS, State agency rules, potentially other types of “legal” material such as legislative audio recordings

- **Trustworthy/documentated:** system operation, policies & procedures, authorizations, chain of custody, controlled



Trustworthy Backups

- Frequency?
- Tested?
- How well will it restore records?
- Can individual items be retrieved?
- Off-site?



Risky Business

- **Appearance of impropriety**
 - Failure to apply legal holds or answer open records requests on timely basis
 - Inability to produce public records on a timely basis
 - Records destroyed too soon, kept too long, not secured
 - Not accessible for whole retention period
 - Unreadable obsolete storage media
 - Unexplained gaps
 - Inadvertent disclosure or abuse of access to personal identifying info
- **Conflicting records**
 - Unauthorized duplicate records
 - “Official” record not identified
 - “Smoking guns”



E-Records Protection

A recordkeeping program shall be constructed to ensure a reasonable level of protection to records and information that are private, confidential, privileged, secret, or essential to business continuity.

**ARMA International,
Generally Accepted
Recordkeeping
Principles, 2010**



Fast Records Disasters Happen



E-Records Disasters

- Hardware failure
- Fire or water damage
- Unauthorized access, theft, data breach
- Malicious damage
- Computer virus
- Power fluctuation/outage
- Corrupted data
- Untested backup
- Inaccessible older data



Slow Records Disasters Happen

■ Paper

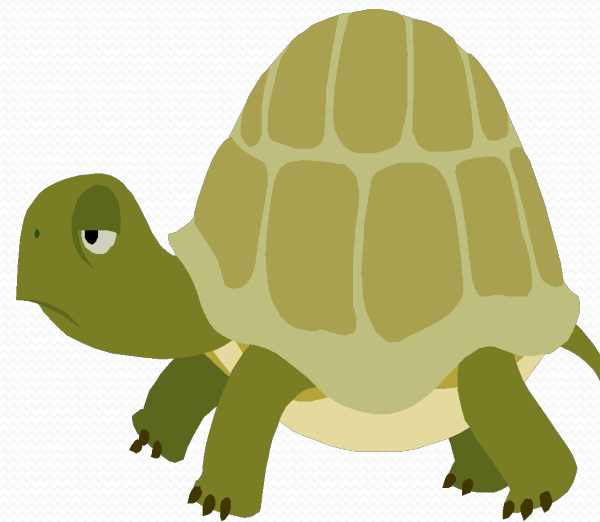
- Good quality paper, reasonable care: 100+ years
- Slow deterioration, time to take action

■ Microfilm

- Meet industry standards: 100+ years
- Warning signs of deterioration, time to take action

■ Computer-based records

- As little as 5 years* and no more than 10–20 years
- No warning signs of impending failure



Decision-Making on Protection

- **Level of protection**
 - Know what's in your custody and where!
 - Declared “record” or working version?
 - How valuable is it? Mission-critical?
 - For how long?
 - Identical protected copy elsewhere?
 - Will it be there when needed with current level of protection?
 - Cost of loss vs. cost of protection
- **How to protect**
 - Know & research options
 - Storage formats & locations matter!



E-Records Preservation Options

- **Periodic testing:** annual sample check
- **Environmental controls:** minimize temperature & humidity fluctuations, secure from unauthorized access
- **Backup for e-records not backed up centrally**
 - Scheduled intervals to transfer tested copies **off-site**
 - External label for contents, software, format, etc.
- **Consider for preservation copy (not backup):**
 - Non-electronic format (paper, microfilm)
 - Different storage formats at different stages in life of record (active, inactive, archival)!
- **Media renewal:** copy from one type of storage medium to the same type without any changes to the records
- **Media copying/reformatting**
 - One storage medium to another (i.e., digital to microfilm)
 - Results in minor changes to the records
 - Compare sampling of the old and newly copied records
- **Media transfer/migration***



* NARA and others migrate or transfer electronic data to an updated version every **two years** and check the software program in which the data is written and the media format on which it is written to ensure that both are still viable and active.

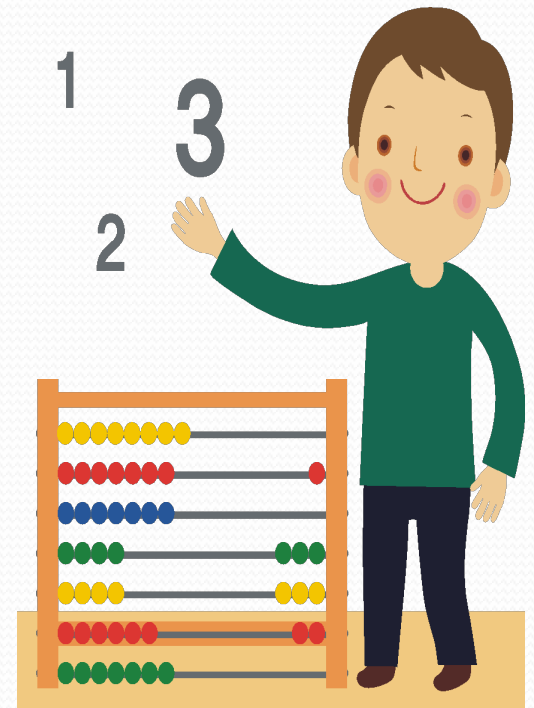
Plan Ahead to Preserve Data

- **Up-front:** consider how preservation will occur at time created, not at end of system life
- **Migration is inevitable when:**
 - Scheduled destruction date is **five+ years** from initial installation date or last major upgrade of HW/SW needed to read, process or store record
 - Retention period is **10+ years** from date records were created
 - **Usability** will be affected by replacement, upgrades or other changes to HW/SW before end of retention period



One Approach: 1-2-3

- **1 original**
- **2 independent locations:**
 - Secure digital repository for public access
 - Separate system for reliable, perpetual archival storage (off-site servers, cloud)
- **3 different platforms or formats**



Resource: State Legislative Digital Policy Advisory Committee (LDPAC), *Final Report*, 2013

Storage Formats Matter

Best E-Formats for Permanent and Nonpermanent Images

Source Material	Preferred Formats
Short-term records (10 years or less)	PDF, PDF/A, JPEG or TIFF
Long-term records (longer than 10 years)	Lossless formats such as TIFF to facilitate preservation
Archival images	TIFF

E-Mail, Social Media, etc.

- **Information governance issues:**
 - Archive or not? All or part?
 - Custodian of “record” copy?
 - How? Automatic or manual archiving?
 - How to get rid of “junk” before archiving?
- **Systems:**
 - E-mail, social media, text messaging & similar systems: communications rather than recordkeeping tools
 - Archive to preserve in recordkeeping system that supports retention & disposition
- **Archiving software:**
 - Rolled out as court cases unfold
 - Vendors may say you need to archive it all forever (you don’t)
 - Base retention on content rather than format



Managing Shared Drives

- **May become data landfill:** abandoned (ownerless) data, inaccessible legacy data, data that should have been destroyed long ago, personal stuff, junk
- **Responsibility/process for e-records of former employees**
 - E-mail archives
 - Other paper or e-records
- **Check for IT reports:**
 - Files by organizational unit
 - Dates of last reference
 - Duplicate data



BYOD & Mobile Data

- **Information governance issues:**
 - Security, compliance, cost effectiveness, unsupported (rogue) devices & apps
- **Dropboxes:**
 - Growing popularity & use
 - Easy to use, cloud-based, freely available solutions outside organization's control
 - Examples: Microsoft Skydrive, Apple iCloud, dozens more
 - Solution: provide secure file sharing app for use



The Cloud

- **Definition:** accessing shared data & computing services over a network
- **Benefits:** cost savings, greater storage capacity, expands capabilities
- **Information governance cautions for cloud contract:**
 - Continued availability of information
 - Access for e-discovery
 - Enforcement of retention periods
 - Preservation of metadata
 - Compliance with privacy laws
 - Handling of info in provider acquisitions or divestitures
 - Exportability & portability of information
 - Adherence to standards
 - Audit accessibility
 - Review of provider policies & documentation



E-Records Compliance

The recordkeeping program shall be constructed to comply with applicable laws and other binding authorities, as well as the organization's policies.

ARMA International, Generally Accepted Recordkeeping Principles, 2010



Laws & Regulations

- **Know your legal requirements!**
- **Federal, State & local:** UETA, UELMA, CORA, CFR, USC, Code, Charter, etc.
- **Requirements:**
 - Statutory
 - Regulatory
 - Court-ordered



E-Discovery

- **E-mail & rogue data = jugular veins**
- **Suspension of destruction:** begins when legal proceeding is anticipated
- **Courts considering:** search terms used, sources searched, scope of search
- **Legal Hold Orders**
 - Accountability for issuance
 - Suspends destruction of pertinent records (including electronic) until hold is released by issuer
- **Discovery Process**
 - Stage 1 (ongoing): Manage e-records
 - Stage 2: Identify
 - Stage 3: Preserve & collect
 - Stage 4: Process, review, & analyze
 - Stage 5: Produce
 - Stage 6: Present



Sensitive Information

- **Unauthorized disclosure:** protect confidential information assets from improper disclosure
- **Identity theft:** prevention & mitigation, protection of account information, red flags, etc.
- **Information security:** passwords, virus protection, remote access, application and equipment installation, etc.



E-Records Availability

An organization shall maintain records in a manner that ensures timely, efficient, and accurate retrieval of needed information.

**ARMA International,
Generally Accepted
Recordkeeping
Principles, 2010**



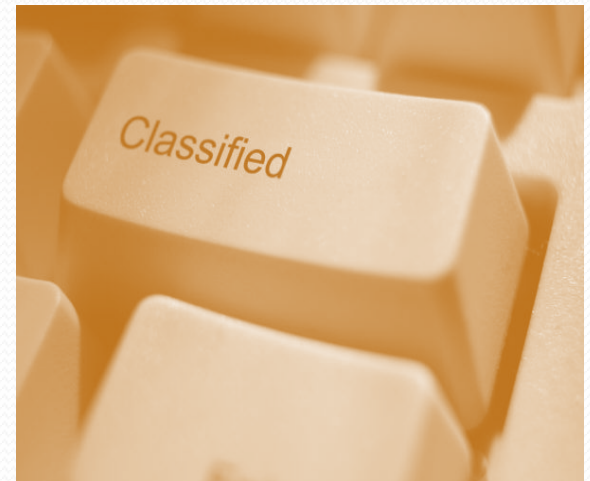
Organizing E-Records

- **Purpose:**
 - Management, including retention/destruction
 - Search enhancement
- **How to organize**
 - File structure may reflect paper records system
 - Metadata – data about data, consistent descriptors that help preserve content, context & structure
 - ❖ System imposed
 - ❖ Human added, i.e., indexing



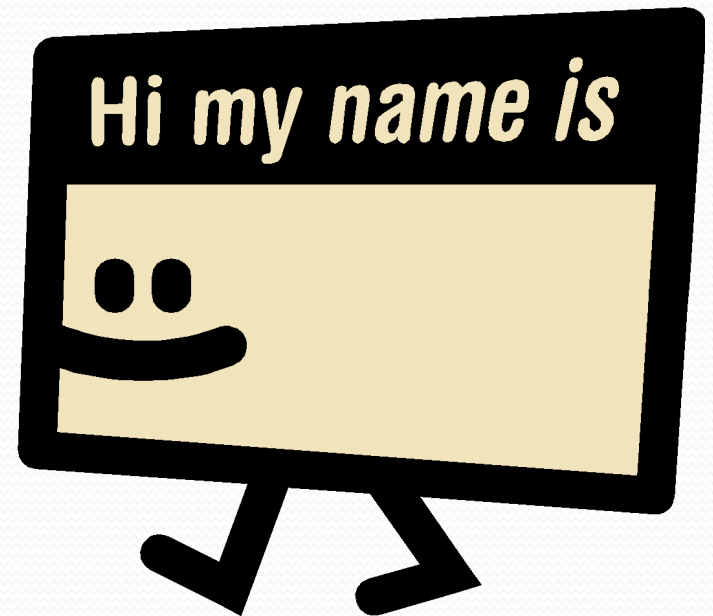
Classification of Records

- **Not new:** zoologists, librarians, archivists & others have classified things for centuries
- **Systematic & proactive:** not just “save as” on the fly
- **Hierarchical:** think organization chart, grocery store, encyclopedia, etc.
- **Types:**
 - Subject
 - Business unit
 - Functional
 - Hybrid – combinations of other schemes



Naming/Labeling Consistency

- **Facilitates management of:**
 - Ownership/accountability
 - Retrieval & discovery
 - Retention & disposition
- **Which is it?**
 - Betsy
 - Holder, Betsy
 - City Clerk



Taxonomies (File Structure)

- **Navigation**
 - Helps us understand info holdings
 - Types: list; tree, hierarchy, polyhierarchy, facets, matrix, system map
- **Information discovery**
 - Improves search predictability by grouping related things
 - Base on natural categorization patterns
- **Findability**
 - Captures key vocabulary that can be understood without ambiguity (naming conventions)
 - Requires accountability for accepting or rejecting terms of inclusion
 - Simple controlled list of accepted terms



Resource: AIIM Briefing, *How to Develop Taxonomies to Support Navigation, Information Discovery, and Findability*

E-Records Retention

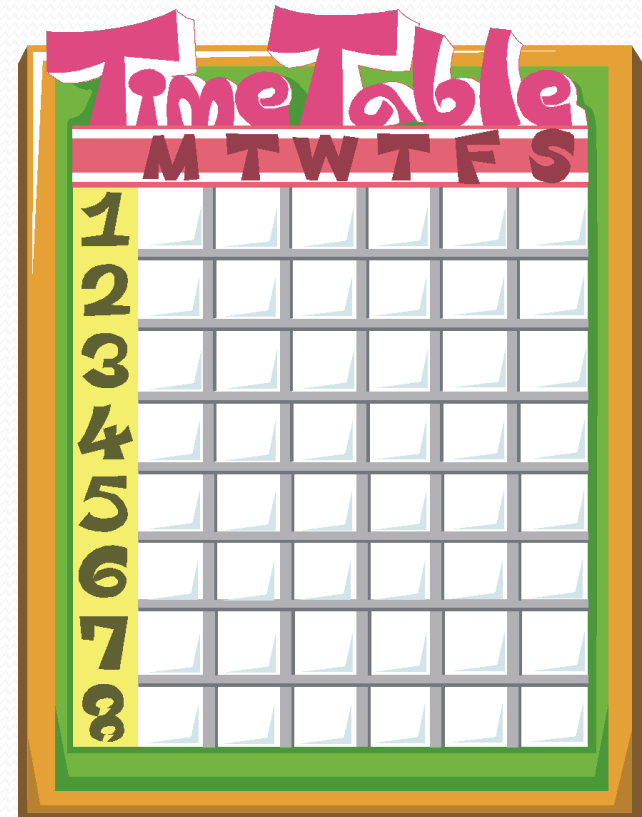
An organization shall maintain its records and information for an appropriate time, taking into account legal, regulatory, fiscal, operational, and historical requirements.

**ARMA International,
Generally Accepted
Recordkeeping
Principles, 2010**



Records Retention Schedules

- **What is a retention schedule?**
 - Lists minimum retention periods for “record copy”
 - Based on legal requirements & operational need
 - Why apply to e-records
- **Why apply to e-records?**
 - Legal authority to dispose of e-records
 - Better decisions on what to keep/how long
 - Space saving, cost reduction, risk management
 - Allocation of resources for protecting essential records
- **Exceptions:**
 - Legal holds
 - Non-records



E-Records Disposition

An organization shall provide secure and appropriate disposition for records that are no longer required to be maintained by applicable laws and the organization's policies.

**ARMA International,
Generally Accepted
Recordkeeping
Principles, 2010**



E-Records Destruction

- **Recommended Policy:** all employees required to retain and dispose of e-records created at desktop level based on content and in accordance with records retention schedule
- **Basic Rules**
 - Personal identifying information or sensitive information: destroy in a manner that prevents unauthorized access or use (obliterate)
 - Controlled addition, deactivation, removal of computer equipment & software applications
 - Delete doesn't do it!
 - Are all versions getting destroyed when the "record" is destroyed?



Tools for E-Records Destruction

- **Records purge days**
- **Authorization for destruction of records forms**
- **Authorization for destruction of scanned paper records**
- **Records retention schedule**
- **General guidelines:**
 - Portable e-media (CD, DVD): shred
 - Hard drives: wipe, consult IT
 - Digital copiers: disable image storage
 - Magnetic tape: shred or erase magnetically, don't just overwrite



Handling Common Issues

Bring it all together

Unsupportable Legacy Systems

Currently, four systems contain scattered data for municipal court cases – one paper-based and three electronic. Technical and cost issues hinder efforts to move information from older unsupportable systems. Because of one past case, the Municipal Judge insists on retaining all case files indefinitely “just in case” to be able to look at the case history for defendants. The City has an approved local exception to the CMRRS specifying retention for 3 years after the case closes.

Possibilities?

- Abide by the retention schedule specified in local exception
- Keep legacy systems spinning
- Secure funding for outside help
- Retain e-records as the “record”
- Retain paper files as the “record”
- Audit outstanding warrants to weed out obsolete older data

Archiving Born-Digital Records

Recently, the Finance Department forwarded an electronic version of a bond proceedings document on CD to Central Records for permanent retention in accordance with the records retention schedule (the CMRRS). In the past, bond proceedings have been in paper form as a bound book. The dilemma is how to retain such permanent documents in electronic form from now on and whether the backlog of bond proceedings should be converted.

Possibilities?

- Print 500+ pages to paper
- Store to EDM system in PDF-A format (day forward, not backlog)
- Request that bond counsel review permanent retention requirement, which could result in local exception request to State Archives or request to CMRRS Review Group to reduce retention
- Other?

Scattered Mixed Format Files

Purchasing requested advice on files that contain mixed formats. Bid files contain paper documents and born-digital information that is stored to CD (with no backup). Part of the record is in the e-mail archive and in the “cloud” with a third party provider that posts bid announcements via the Web. In this and other cases, the full “record” is scattered across many systems and locations. Other departments ask similar questions.

Possibilities?

- Meet with the department to discuss file content, records retention & appropriate storage formats, locations & backups
- Develop a standard protocol for mixed format files
- Consider exporting full “record” to central e-repository
- Other?

Disposal of Scanned Paper Records

IT met with HR to recruit them to use the new EDM workflow software. HR now wants to scan all personnel files and dispose of the paper files immediately. [The retention period is 10 years after an employee separates from service.]

Possibilities?

- Meet with IT and HR to discuss preservation issues
- Place a moratorium on new projects until criteria for project readiness can be established
- In the interim, ask HR to begin mapping their processes and document input/output
- Other?

Disposal of Obsolete E-Records

Code Compliance requested advice on how to describe and group obsolete e-records to apply the records retention schedule, complete an Authorization for Destruction of Records form, and dispose of them as authorized. While this department is working hard to comply with our policies, we're concerned that other departments are not as concerned with applying the records retention and destruction procedures to e-records.

Possibilities?

- Work to establish mandatory training sessions on managing e-records
- Discuss with the department ways to ready obsolete e-records for disposal
- Other?

Acquisition of a New App

The Utilities have \$\$\$ available to acquire proprietary software that they hope will capture information from long-term employees who are expected to retire in the near future. The expectation is that the information will remain available indefinitely. The IT Steering Committee recommended against the the proprietary software, and the City Manager vetoed it. The department has gone ahead with a SharePoint solution and the storage location for these e-records has not been determined.

Possibilities?

- Meet with Utilities & IT to discuss:
 - Quality control issues
 - Where the captured information will reside and how preservation, retention, disposition & e-discovery will be managed
- Other?

A New Stand-Alone Custom App

We met a number of times with the construction management group, which was seeking an automated solution to manage project records and get rid of the paper. Recently, the group met with IT to discuss using the EDM system for the proposed project. The outcome was that IT agreed to customize an in-house stand-alone solution for these records, rather than recommending use of the new EDM workflow upgrade, creating a new island of information outside of the centrally managed e-repository.

Possibilities?

- Seek an opportunity to discuss the ultimate storage format(s) and location(s) for these records
- Meet to get on the same page with IT about how the upgraded central system can be used
- Other?

Archiving Social Media

IT requested input on acquiring social media archiving software. We have a social media policy that does not address the archiving of social media posts that may be “records.” One vendor approached IT about acquiring software. The Records Manager is aware of recent court cases imposing sanctions for failure to archive seemingly ephemeral e-records such as social media posts and text messages. The CMRRS Review Group is tackling the issue of retention of social media posts in 2014-2015 in a review of the Information Technology section of the retention

Possibilities?

- Delay until CMRRS Review Group makes recommendations
- Research how archiving software handles retention & disposition, then request product demos
- Conduct needs assessment
- Update social media policy
- Other?

Wrap-Up

Parting thoughts on e-records

E-Records (Done Right)

- **First: Build a foundation & framework**
- **Right records accessible and available:**
 - At the **right** time
 - For the **right** length of time
 - To the **right** people
 - At the **right** (lowest possible) cost
- **Broad accountability/compliance**
 - All employees
 - Centralized guidance
- **Viable e-records**
 - Credible/authentic/acceptable as evidence
 - Trustworthy & reliable
 - Faster & less costly search & retrieval
 - Long term protection/access



Resources for E-Records

- ARMA www.arma.org
- AIIM <http://www.aiim.org>
- CMCA: RIM-ERM Toolkit <http://www.cmca.gen.co.us/shop-cmca>
- Colorado State Archives <https://www.colorado.gov/archives>
- COSA <http://www.statearchivists.org>
- MER Conference <http://www.merconference.com>
- NAGARA <http://www.nagara.org>
- NARA <http://www.archives.gov>
- NEDCC <http://www.nedcc.org>
- SAA <http://www2.archivists.org>
- SRMA <http://www.srmarchivists.org>
- Vendor demos, websites, presentations, etc. (remember, they're selling something)



Questions & Answers

