

NATIONAL ASSOCIATION OF SECRETARIES OF STATE (NASS): Harnessing the Power of Digital in State Records Management

February 2016



Executive Summary

The National Association of Secretaries of State (NASS) estimates that the nation's Secretary of State offices collectively spend hundreds of thousands of dollars each year to collect, manage, store, and dispose of state records – both paper and digital. The ever-increasing volume of digital information presents a considerable challenge for state agencies looking to streamline costs and management processes. Moreover, the complexity of balancing access and transparency with security and privacy is inherently difficult.

NASS members are looking for practical, cost-effective solutions to these issues by working together to harness the power of digital recordkeeping for the future. By investing in technology and processes to help complete a complex migration from paper to digital, and by staying on top of the major policy challenges that exist, states can reach greater maturity levels of digital integration and deliver stronger incentives for others in government to support these efforts. However, technology alone cannot support the massive investment required to achieve success.

This white paper examines the ways in which state agencies can realize cost savings and efficiencies by implementing best practices and developing a strategic state plan that addresses technology and workflow issues, as well as policymaking and public outreach priorities. Using this approach, state agencies can streamline records management practices, improve infrastructure, better secure data and reduce risk, bridge gaps between agency silos, and better serve the public.



The High Cost of Recordkeeping: Making the Case for Better Records Management

Like all state government agencies, Secretary of State offices are grappling with the explosive growth of digital information. Information that was once entirely paper and phone-based is now being collected, curated, and stored in millions of digital records and emails. A recent review of NASS member office websites turned up nearly 250 database search options associated with a wide range of state government functions, noting that "electronic records management is becoming increasingly more demanding, challenging, and complex."¹

Members of the public often contact their respective Secretary of State's office for records-related transactions, perhaps most notably for the state business formation and filing processes that are available to the nation's nearly 28 million small businesses. With an estimated 543,000 new businesses created in the U.S. each month, the amount spent on state processing, management, and storage of these records alone is significant.

With limited access to state funding for such efforts, Secretaries of State are seeking cost-effective solutions to streamline their recordkeeping operations, reduce risk, and make access to government records easier, transparent, and more affordable.³ Many realize they need a strong strategic plan to support such a transition, including best practices and success stories to help move the needle in the right direction.

The good news is, NASS members are conducting the due diligence that is required on this subject, recruiting the technical, legal, and operational experts needed to make well-informed decisions. Nothing speaks more powerfully to this call for collaboration than the NASS Digital Records Forum held in Seattle, Washington in May 2015. During the event, members laid out clear priorities of mutual state interest.

To better understand the challenges of moving forward with a clear strategy, it is first important to understand where Secretary of State offices have been directing their given resources on digital recordkeeping and information management.

Why are State Records So Costly and Challenging to Manage?

State government agencies are required by law to properly manage public records from creation to storage through destruction, all the while making pertinent information available when needed and protecting it from fraud and abuse at all times. As an added complication, records are being created by many users at all levels of state government, and the risks associated with data privacy and security have significantly increased. Even under perfect circumstances, being able to fulfill all of the competing demands is a major task.

Professionals can explain the difficulties they routinely face working in the Secretary of State's office, with multiple layers of staffing and departments, thousands of consumers to serve, third-party vendors



Case Study: Washington

CHALLENGE

Washington State sought a statewide "game changer" solution to address ineffective records management and public disclosure issues.

SOLUTION

The Office of the Washington
Secretary of State is a lead agency in
a multi-agency effort that generates
solutions with breakthrough
principles and statewide master
contracts for Enterprise Content
Management (ECM) systems. These
systems "un-silo" information,
allowing users secure access anytime,
anywhere, supporting public access,
and providing timely responses to
public records requests, reducing
costs and human resources. MORE

RESULTS

Having statewide master contracts available clears the way for agencies to move forward with records management and process improvement, confident that all requirements are met.

to deal with, and the myriad - and sometimes conflicting – legal requirements they face when it comes to transparency and security.

Retention policies, in particular, can pose challenges. Every state agency has policies governing how long records must be saved and when they can be purged, but legal requirements understandably vary from state to state. Even with a strict retention schedule in place, it may be left up to each state agency or local government to decide how to meet these requirements, and many governments are still trying to follow processes that were developed for handling paper records. According to Pew research, employees often have to decide on their own what they will do with electronic communications, such as emails and texts.

As a result of these factors, the costs of efficient, secure, and professional recordkeeping are high. States must bear the costs of staffing, storage facilities, retention, and destruction. Laws governing public records requests drive a lot of this activity, and if a significant percentage of records requests can't be satisfied in timely fashion because the agency cannot locate or quickly deliver, the costs can quickly escalate. Other add-on costs include cataloging, redaction, and changing technology for storage.

Further complicating the budgetary picture is the fact that many state agency managers say they are operating with a patchwork system of legacy files, systems, processes, and procedures that were developed and changed – and changed again – throughout the course of many years. While many offices have figured out how to update their services to keep up with the times, not all agencies have done the same for their records, or their recordkeeping practices.

One additional area of cost and concern is cybersecurity. State agencies typically spend less than five percent of their IT budget on cybersecurity, compared to the more than ten percent spent by commercial enterprises. Many SOS offices want to conduct risk assessments and enhance staff training, but lament the lack of resources available to devote to these efforts.



More than Technology: Developing a State Plan

While there is no doubt that going digital is the best way to achieve cost-savings and other needed efficiencies, states that have been through the process caution that technology alone is not the answer to better records management.

Digitizing helps to streamline information handling and reduce costs to improve service, but automation won't necessarily improve workflow processes. The importance of establishing a framework for a robust records management plan is vital to long-term success for any state agency looking to manage information in a disciplined, efficient manner, with targeted metrics for measuring progress.

Secretary of State offices that take part in information governance decision-making on behalf of their entire state can be helpful when it comes to comprehensive approaches. Eighteen NASS members are the designated state archivist or records administrator for the state (or both). In many cases, the archives or the public records division provides all state agencies with guidance on "the necessary instruments to develop effective and efficient information controls," creating state records retention policies and schedules, destroying records when requirements have been met, and carrying out compliance audits.

Many of these offices belong to the National Association of Government Archives and Records Administrators (NAGARA), which promotes the ARMA International maturity model for effective information governance.⁸ The diagram below (see Figure 1) shows how information technology (IT) governance in the area of enterprise architecture (strategy, business, information/data, applications, and technology) can work with ARMA's Information Governance Maturity model.

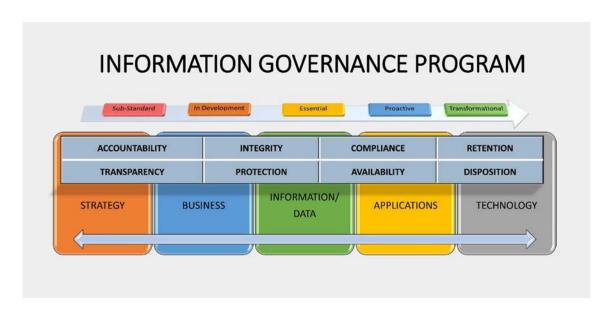
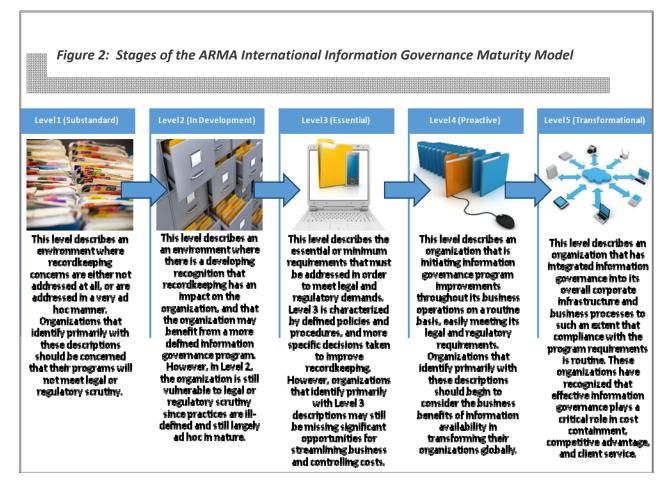


Figure 1: NAGARA Information Governance Model (SOURCE: NAGARA)



Under the ARMA model, there are eight recordkeeping principles that serves as "pillars" of good information governance: (1) accountability; (2) integrity; (3) compliance; (4) retention; (5) transparency; (6) protection; (7) availability; and (8) disposition. Each one can be evaluated using a five-stage or level maturity model (see Figure 2) that ranges from substandard to transformational.

By assessing maturity based on the characteristics for each of the eight pillars used in the model, state agencies can aim to develop a comprehensive approach to their work with an improved foundation for identifying risks, responding to the need for standards, and achieving measurable results.



It's important to note that paper records will remain an important part of state government business. Technology may be changing how state agencies collect and handle paper records, but many agencies will continue to have more of a hybrid environment for the considerable future. In some cases, digitizing records may actually increase costs in the short-term. That's largely because collecting, storing, protecting, and destroying electronic records comes with its own costs.

NASS members add that strategic planning should also involve changing attitudes by pushing for collaboration outside of agency silos. Providing guidance and support for this shift is important.



Seeking Outside Expertise

Considering the many elements involved in creating and managing today's state government records systems, Secretary of State offices may find it beneficial to partner with an outside expert to help plan, implement, and manage a major transition. Some agencies, such as the state archives or public records divisions, may be effectively carrying out their work solely with internal staffing and resources. However, as legal, regulatory, and IT requirements become increasingly complex, it can be beneficial for these divisions to seek good partners or allies for cross-agency projects.

Agency size and staffing roles may also play a role in decision-making. For smaller agencies that rely on "IT generalists," it may be necessary to look to the outside for assistance with complex data management projects.

When seeking private-sector partners, Secretary of State offices with experience in this area say it is critical to select professionals who understand the rigors of state government information management requirements and compliance regulations. An outside vendor may be able to help develop a transition plan more quickly than an agency could do it in-house, and there may be additional savings from working with experienced technical or subject matter experts who can help to avoid costly missteps.

Developing a Records Risk Management Approach

Any undertaking to better manage digital records should include a risk assessment. The goal is to rigorously examine your state agency culture and be aware of your risk and compliance profile.

A basic approach should include the following:

- 1) Performing a risk analysis: Covering an inventory of people, processes, technology and controls that are in use, including physical and cyber security
- **2) Carrying out a records assessment:** Reviewing records policies, retention schedules, and compliance/legal requirements
- **3) Creating an agency-wide plan:** Including retention schedules, technology alignment and cyber security support, and a crisis response plan to respond to emergencies

Case Study: Oregon

CHALLENGE

To provide a cost-effective, statewide, electronic records management solution for use by Oregon government agencies, K-12 and higher education.

SOLUTION

The Oregon Secretary of State's office formed a public-private partnership to implement the Oregon Records Management Solution (ORMS), a cloud-based, DoD certified, SaaS solution. The partner pays all capital costs and provides on-going support. Agencies pay a monthly subscription fee, which decreases as more users subscribe. Customized implementation is provided for each agency. MORE

RESULTS

Currently, 50 agencies have adopted the system to capture, apply security, search, share, collaborate, report on, and dispose of information, including emails. Requests for public records are available via Internet.



Case Study: Vermont

CHALLENGE

The Vermont Secretary of State's office conducted a risk assessment of its information security programs to develop a comprehensive plan for dealing with any vulnerabilities.

SOLUTION

The office partnered with a professional cybersecurity firm to run security penetration exercises and expose any weaknesses that existed. After looking at the network firewall architecture and doing a physical security review, an incident response program was adopted to increase awareness and improve security policies.

RESULTS

The Secretary of State's office has a three-year strategic roadmap which has reduced costs through the use of managed services. **4) Tracking results:** Identifying metrics for sustainable success, including good policies, controls, training and audits

Safeguarding state data is a critical piece of risk management. Hackings, security breaches, and data protection failures are all issues which garner negative news coverage and contribute to a loss of consumer confidence. Protecting records that contain classified, confidential business, or other types of sensitive information with appropriate safeguards should be a priority, particularly as Secretary of State offices continue moving services almost entirely to the Internet.

Having a full inventory of your software and IT applications is also vital. Following a breach, one state office was shocked to learn that the agency was using more than 9000 unique pieces of software!

In addition to identifying weaknesses, a comprehensive risk assessment can help with generating executive or legislative support for funding cybersecurity programs and corrective solutions. Avoiding litigation and legal penalties will also reduce costs in the long-run.

Preparing an incident response plan to help cope with inevitable crisis situations, such as data breaches, hacks, and system failures, will also help agencies convey their accountability to the public when it comes to handling records placed in their care.

Staying on Top of the Policy Challenges of Digital Records Management

Rapid changes in state records management and the regulatory environment surrounding them pose tremendous considerations for policymakers.

One of the chief challenges is public access policies for records and data. Agencies need a clear policy that is available for employees and consumers alike, along with strategies for helping these stakeholders understand their own role in ensuring security and regulatory compliance.



Many offices report they are currently updating their topdown policies and controls to cover the use of emails, texts, and social media content (including those on personal accounts and devices), pointing out that human behavior is often just as important as systems and security.

Additional policymaking considerations that have emerged include:

Bill Tracking. Stay on top of bills or regulatory proposals that would create some type of recordkeeping obligation on the office of the Secretary of State.

Consumer Protections and Education. Be prepared to engage consumers, state legislators, the media – or all of the above – in order to adopt a more proactive strategy towards information governance. Create a website page for the public that outlines your state's public records policies.

Migrating to the Cloud. As state agencies with increasing data needs look to cloud-based storage and records management services for cost-savings and the ability to rapidly add or reduce usage, security and privacy remain top concerns. Talk to your state's Chief Information Officer (CIO) and any in-house IT specialists on staff for guidance.

COMMON ISSUES IN SOS RECORDS MANAGEMENT:

- 1. Information/records must be ready for retrieval in timely, cost-effective fashion for increasing number of compliance or litigation requests.
- **2.** Records created by many users, residing in multiple (often, aged legacy) systems and locations.
- **3.** Need to reduce duplication of services, or duplication of information flow, from state systems to counties or cities.

Professional Training. Offer training resources for local government officials on keeping and managing records, so they are aware of your shared priorities and the breakdown of designated responsibilities. Try to provide tools for efficiently managing requests.

OAT Strategy. Improving public access is a priority, as is preserving valuable state and local history for posterity. Consider the ways in which you can serve as a proponent of open, accessible, and transparent (OAT) recordkeeping.

Green Initiatives. The movement towards "paperless" offices is growing, and you may find yourself moving towards digital records with online access as part of this trend. Be ready to discuss your own philosophy.

Finally, communicating with the public about steps to improve records management policies can create an atmosphere of increased trust in government. Sharing information about your office's programs, steps you are taking to address any problems or concerns, and actions that the public can take to further protect themselves or their records, can go a long way towards maintaining that trust.



Conclusion: Looking Into the Clouds... What's Next?

States are looking towards several digital forces – social, mobile, cloud, and big data – to generate the next wave of online growth and innovation. According to the Center for Digital Government, government is the premiere source for open data. Secretaries of State should consider taking advantage if their state already has an open data platform. Otherwise, all states can focus on improving three areas of data management:

- 1) Making data easier to access
- 2) Putting data together to tell a story
- Combining state data with private-sector data to promote the economic vitality of a locality, state, or region

Not surprisingly, the increasing adoption of new tools and platforms around digital offerings has resulted in new types of public records, such as tweets and audio-video recordings, which must be retrievable, searchable, and indexable. As a result, records management and data science are converging.

While most discussions at the state level are still focused on this transition to digital, and rightly so, the shift will not end considerations about costs and services. Digitally preserving records for long-term access comes with its own unique set of savings and costs. Without a clear and comprehensive strategy, Secretary of State offices may face increased staffing and legal costs, frequent software and hardware upgrades, and increased security risks.

Ultimately, the challenges of moving to digital may be many, but so are the opportunities. By developing a path forward that is cost-conscious and based on tailored approaches to each state agency's unique situation, Secretary of State offices can address the key issues at hand. Through working with other state agencies and partnering with professional experts, state leaders can also control costs and allow staff to focus more of their limited resources on core services and consumer service.

Case Study: West Virginia

CHALLENGE

In response to growing public demand, the West Virginia Secretary of State's office sought to supply data on the number of businesses opened/closed in each county in an accessible, easy-to-use format.

SOLUTION

The Secretary of State's office launched its <u>Business Industry Growth</u> (<u>BIG) Map</u> in February 2014. BIG Map compiles business filing and formation data into a single, simple-to-use source which can be used to research the number of businesses formed in each city, county, or region. Data can also be searched according to industry, such as "coal mining" or "sporting goods" to show growth or decline trends by location.

RESULTS

West Virginia has a cutting-edge business intelligence tool for economists, citizens, business owners, civic leaders, and media – that provides information in real-time!



Endnotes

¹ "NASS Egov Update: Online Services for State Member Websites." NASS. January 2015.

² U.S. Small Business Administration

³ According to one industry estimate, paper records cost between 20 to 100 times more to store and manage than their electronic counterparts. "Saving Paper Records May Be More Expensive Than You Think." *Inside Counsel*. October 17, 2011.

⁴ For more information on state retention schedules and policies, the Council of State Archivists provides a state-by-state listing here: http://www.statearchivists.org/arc/states/res_sch_genlst.htm.

⁵ Bergal, Jenni. "Save or Delete? Official Email Policies Vary by State." The Pew Charitable Trusts. October, 30, 2014. Online: http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2014/10/30/save-or-delete-official-email-policies-vary-by-state.

⁶ Lipman, Paul (CEO, ISHERIFF). "4 Critical Challenges to State and Local Government Cybersecurity Efforts." Government Technology. July 17, 2015. Online: http://www.govtech.com/opinion/4-Critical-Challenges-to-State-and-Local-Government-Cybersecurity-Efforts.html.

⁷ Office of the Missouri Secretary of State. Records Management Web Page. September 2015. http://s1.sos.mo.gov/records/recmgmt/default

⁸ See ARMA International Information Governance Maturity Model: http://www.arma.org/r2/generally-accepted-br-recordkeeping-principles/metrics.

⁹ Well-documented incident response programs may also help with reduced insurance premiums from insurance underwriters.



APPENDIX I: Additional Resources

- ARMA: http://www.arma.org/
- Center for Digital Government: http://www.govtech.com/cdg/
- Council of State Archivists: http://www.statearchivists.org/
- Library of Congress / Digital Preservation: http://www.digitalpreservation.gov
- Multi-State Information Sharing and Analysis Center: <u>State Cyber and Information Security</u> Policies
- The National Archives: http://www.archives.gov/
- National Archives and Records Administration (NARA): <u>Federal Guidelines on Email</u>
 <u>Management</u>
- National Association of Chief State Information Officers (NASCIO): www.nascio.org.
 See Report: www.nascio.org.
 State Government Enterprise
 - See Report: <u>2012 Deloitte-NASCIO Cybersecurity Study</u>. <u>State Governments at Risk: A Call for Collaboration and Compliance</u>.
- National Association of Government Archives and Records Administrators: http://www.nagara.org/
- The Society of American Archivists: http://www.archivists.org/



Acknowledgements

NASS would like to thank and recognize the members and sponsors who led the discussions at the May 2015 Digital Records Forum, forming the basis for this white paper. We would also like to thank the National Association of Government Archives and Records Administrators (NAGARA), and the Center for Digital Government for their participation.

Digital Records Forum Sponsors

PCC Technology Group | Chaves Consulting Inc. | Microsoft | NIC | NuHarbor Security | Socrata













Digital Records Forum Participants

Secretaries of State:

Hon. Jeanne Atkins, Oregon Secretary of State

Hon. Jeffrey Bullock, Delaware Secretary of State

Hon. Barbara Cegavske, Nevada Secretary of State

Hon. Matthew Dunlap, Maine Secretary of State

Hon. Tre Hargett, Tennessee Secretary of State Hon. Elaine Marshall, North Carolina Secretary of State

Hon. Mark Martin, Arkansas Secretary of State

Hon. Linda McCulloch, Montana Secretary of State

Hon. Denise Merrill, Connecticut Secretary of State

Hon. Alex Padilla, California Secretary of State

Hon. Paul Pate, Iowa Secretary of State

Hon. Tom Schedler, Louisiana Secretary of State

Hon. Natalie Tennant, West Virginia Secretary of State

Hon. Kim Wyman, Washington Secretary of State

Sponsors and Senior State Government Staff:

Mr. Brent Beal, Office of the Alabama Secretary of State

Mr. Lee Miller, Office of the Arizona Secretary of State

Mr. Tim Griesmer, Office of the Colorado Secretary of State

Ms. Kathryn Mikeworth, Office of the Colorado Secretary of State

Mr. Rich Schliep, Office of the Colorado Secretary of State

Mr. Kevin Bronson, Office of the Connecticut Secretary of State

Mr. Merritt Beaver Office of the Georgia Secretary of State

Ms. Veronica Martzahl, Massachusetts State Archives

Mr. Jake Spano, Office of the Minnesota Secretary of State

Mr. John Dougan, Missouri State Archives

Ms. Mary Beth Herkert, Oregon State Archives

Mr. Chris Molin, Office of the Oregon Secretary of State

Ms. Haley Haynes, Office of the North Carolina Secretary of State

Mr. Christopher Fowler, Office of the Rhode Island Secretary of State

Mr. Kevin Callaghan, Office of the Tennessee Secretary of State

Mr. Christopher Winters, Office of the Vermont Secretary of State

Ms. Tanya Marshall, Office of the Vermont Secretary of State



Acknowledgements (continued)

Ms. Stephanie Horn, Office of the Washington Secretary of State

Ms. Cheri Kennedy, Office of the Washington Secretary of State

Mr. Greg Lane, Office of the Washington Secretary of State

Mr. Mark Neary, Office of the Washington Secretary of State

Mr. Russell Wood, Office of the Washington Secretary of State

Ms. Sheryl Webb, Office of the West Virginia Secretary of State

Ms. Kathleen Chaves, CEO, Chaves Consulting

Mr. Justin Fimlaid, Managing Director, NuHarbor

Mr. Athlan Lathan, Territory Manager, Socrata

Mr. Saf Rabah, Vice President of Product, Socrata

Mr. Ali Sarafzade, Chief Products Officer, PCC Technology Group

Ms. Jessica Simmons, Account Manager, PCC Technology Group

Mr. Brett Stott, Director of Marketing, NIC