Toward a Common Understanding

INSIGHTS ON INTER-AGENCY STATE ELECTRONIC RECORDS TRANSFER

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PO BOX 1583 • FRANKFORT, KY 40602-1583
502-229-8222 • INFO@STATEARCHIVISTS.ORG
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Government agencies in US states, territories, and the District of Columbia create millions of public records on an annual basis that must be captured and managed in accordance with respective recordkeeping laws, mandates, and good practices. Increasingly, these records are ‘born-digital’ and the proliferation of information technology platforms, applications, and storage options across all levels and branches of government bring significant risks to retaining and preserving permanent government records. These risks also extend to analog records converted to digital formats for preservation and public access.

Risks include the obsolescence of software and hardware, the fragility of digital media, lack of dedicated resources to manage electronic records, and a lack of understanding among state agencies about digital records preservation techniques and standards. Exacerbating these issues is the reality that effective electronic records management remains a low priority and largely underfunded mandate in state government. For the state, territorial, and district archives with a mission to identify, preserve, and provide access to permanent government records with historical value to current and future users, the challenges are manifold.

This report documents the genesis, implementation, and findings of a research project targeted at shedding light on current practices associated with the inter-agency transfer of permanent electronic records undertaken by the Council of State Archivists (CoSA) and sponsored and supported by Preservica. Preservica has been a corporate sponsor of CoSA since 2015, and shares the association’s commitment to preserve and provide access to permanent government records.

Support and feedback from the National Association of State Chief Information Officers (NASCIO) was instrumental to the success of the survey and report. Support for this publication was also provided by the Institute of Museum and Library Services (IMLS) through a National Leadership Grant to the Council of State Archivists (CoSA) for Archives Collaborating and Cooperating with External Strategic Stakeholders (ACCESS), a project of the State Electronic Records Initiative (SERI).
INTER-Agency Records Transfer Survey Findings

Demographics

Representatives from 27 states and territories responded to the survey. Archives staff were the second most frequent responders and IT unit staff the smallest number of respondents.

The majority of respondents were agency staff, with the majority of those being from the State of Maryland. The extraordinary response from Maryland state agencies was due to the communication of a Maryland State Archives staff member who repeatedly reached out to encourage response from the state’s agencies.

Records Eligibility

State records are appraised for permanent historical value and eligible to be transferred to the archives based on the records retention schedules of that state. Questions in the survey addressing records eligibility were designed to assess whether agency, IT and archives staff were aware of pending permanent electronic records transfers. While agencies have long transferred archival records in paper format, management and transfer of electronic records requires additional skills and resources.

The survey focused on permanent records appraised for transfer to the archives. Agencies were asked if they had identified permanent state electronic records to be transferred to the archives. Only 40% of responding agencies had identified permanent state records to be transferred to the archives; 60% either had not identified any permanent records or were unaware if they created permanent state electronic records.

While this response might suggest that a significant portion of electronic records are not properly managed for permanent storage, it is difficult to gauge the depth of the problem because responses from archives are not in synch with the responses from the agencies. Almost 61% of archives reported that they have a current list of permanent state government records that they expect to receive from each of the agencies.

From the pre-survey and survey results it appears that the archives know which permanent state records have come to them in the past and are aware agencies have permanent electronic records that have not yet made it to the archives. The differences between the reporting by archives and agencies for permanent archival records that are eligible for transfer would seem to validate the proposition that a backlog exists and should be addressed.

Transfer Requirements

Less than half (42%) of responding agencies were unaware of permanent records transfer requirements. While some responding archives had current electronic records transfer guidelines, others commented they felt the need to update
their guidelines or did not have formal guidelines in place.

Agencies were asked to report how and when they transferred permanent state records to the archives. Relatively few ad hoc transfers and relatively few planned-and-automated transfers were reported.

Given the exponential growth in electronic records and storage, manual scheduling and transfers are insufficient to match the scale and diversity of government records. The gap in readily available guidance and lack of planning for records transfer is noteworthy. Pre-configuring records systems and automating transfer to ease the burden on agencies and increase the number of records preserved and available for use will require closer collaboration between record producing agencies and archives.

**Figure 3. Transfers to Archives by State Agencies**

- Planned and automated
- Planned and manually transferred by Agency staff
- Planned and manually transferred by IT
- Ad hoc transfer by Agency staff
- Not currently scheduled

While technical infrastructure is undoubtedly the foundation for many inter-agency transfer capabilities in state government, agencies are largely unaware of IT agency support for transferring permanent state electronic records to the archives. Only 5% of agencies reported that transfer to the archives is an IT-supported activity.

Thirty-percent of archives reported having full IT support for state electronic records transfer. The remaining 70% of respondents indicated additional opportunities for IT support around records transfer. This response correlates with responses from IT agencies, 55% of whom reported supporting agencies in the transfer of their permanent state electronic records to the archives.

This fractured understanding among stakeholders is reflected in the reporting of the transfer protocols shown in Figure 4. Although agencies were the largest group of survey responders they identified only one kind of transfer protocol supporting their transfer activities. Archives confirmed the availability of numerous electronic records transfer protocols; the notable exception was that archives did not believe HTTP transfer was supported. IT agencies identified all listed transfer protocols as being supported for transfer of electronic state records.

**Figure 4. Transfer Protocols Supported Reported by Group**

While technical infrastructure is undoubtedly the foundation for many inter-agency transfer capabilities in state government, agencies are largely unaware of IT agency support for transferring permanent state electronic records to the archives. Only 5% of agencies reported that transfer to the archives is an IT-supported activity.

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**Figure 4. Transfer Protocols Supported Reported by Group**

- FTP
- FTPS
- HTTP
- HTTPS
- SFTP

**PRESERVATION PLANNING**

Preservation planning includes a number of tasks from creation to maintenance, transfer, and preservation of electronic records designed to protect the integrity and usability across systems and custodians. The questions posed in the survey were intended to determine at what stages of electronic record creation and use the planning work between agencies and archives takes place. One way to determine if agency and IT staff are planning for preservation is to identify when they communicate with the archives.

The majority of agency respondents reported that they communicate with the archives on an ad hoc basis. Most agencies do not have formal or scheduled communication with state archives. Communication happens, for instance, at conferences, meetings, in hallways, or when organizations require specific information. Given the increase in technology refresh cycles and backlog of electronic records yet to be transferred, this gap in proactive communication is troubling.

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In some states, changes of leadership have spurred increased communication. In others, an annual meeting has been scheduled. Increased and regular communications between record-producing agencies and the archives is one way to potentially address the backlog of permanent electronic state records at agencies.

IT agencies and archives both reported that archives are rarely consulted in many of the stages of technology refresh. Failure to understand the lifecycle requirements of electronic state records while developing/managing the technologies used to create, provide access to, and maintain those records represents a significant risk and lost opportunity. It is not surprising ad hoc manual processes are relied upon by agencies since the systems of record aren’t designed or configured to automate lifecycle actions.

Agency responses indicated permanent state electronic records are managed in a relatively small number of software and data management systems. IT agencies responded they expected to find permanent state electronic records in every software and data management system on the list. Archives indicated permanent state electronic records were likely to be found in many, but not all, systems. These responses further underscore a lack of common understanding about where permanent state electronic records are created or stored.

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**Systems of Record**

State information technology environments are complex and dynamic. Temporary and permanent government records are created and stored in a variety of software and data management systems that are managed by agency staff and central IT support, as well as third parties.

All three responding groups were asked to indicate systems of permanent records from a list of common software application types.
COLLABORATION AND COMMUNICATION OPPORTUNITIES

Even with a relatively small sample size and the narrow snapshot in time represented by the survey findings, significant gaps in understanding and coordination among the responding agencies regarding the requirements, timing and methods for transferring permanent electronic state government records are apparent. This section identifies some potential opportunities for increased collaboration and communication based on the topic areas covered in the survey.

An Inter-Agency Electronic Records Transfer Checklist (Appendix 3) was created by the backlog research project team to help CoSA members develop their own guidelines for transfer within their respective state, territory or district. It may also serve as a useful starting point for discussions with the State CIOs office.

RECORDS ELIGIBILITY

OPPORTUNITY It appears that there are ample opportunities to increase routine communications between archives and agencies about permanent records. Twice yearly exchanges on specific electronic records management topics are one way to significantly increase networking among archives, IT, and record-producing agencies. Not only would regular and scheduled engagements help the archives to anticipate and plan for accessions, they could serve as a reminder for IT support and agencies to schedule resources and validate transfer protocols.

OPPORTUNITY It appears from the survey results that even agencies with established histories of sending paper records to the archives have not sufficiently mastered the routing, identification, and transfer of permanent electronic records. Archives and agencies can dialogue, using inventories of archival holdings and current retention schedules, to identify which records are permanent and where there is a requirement to transfer to the archives. These discussions could also serve to explore expectations about cutoff practices and opportunities to discuss transfer options.

TRANSFER REQUIREMENTS

OPPORTUNITY Only 39% of responding archives have created and circulated guidelines to agencies about how to transfer permanent state electronic records. Some archives that have circulated guidelines recognized that their materials need to be updated. This is clearly a gap that can be addressed by the CoSA community through established education and resource-sharing mechanisms. Once documented, the archives can engage and educate stakeholders on good practice methods and approaches.

Archives can seek ways to collaborate with their state CIOs to garner support for timely and efficient transfers. There is an opportunity to define common practice for bulk records transfer and drive down the amount of human touch (and the cost) each record requires to transfer and then to process.

With relatively few state electronic records transfer guidelines in place, archives have an opportunity to define the common practice for electronic records transfer and develop transfer practices that will support the needs of the agencies in a standardized, routine way that the archive can successfully manage. State archives can update or create their electronic records transfer guidelines and use Appendix 3, the State Interagency Electronic Records Transfer Checklist, to do so. Archives could use the checklist to begin working with state CIOs and state IT to clarify transfer capabilities and preferred protocols for agencies to use.

PRESERVATION PLANNING

OPPORTUNITY The backlog of records appraised for permanent preservation by the archives, but stuck in upstream records systems, was validated by the survey responses.

Since the majority of permanent records transfers are currently ad hoc and manual, the archives have a clear opportunity to support agency staff and engage the IT agency to consider automated transfers. Since technical support is undoubtedly key to improving these capabilities, attention and
support from agencies, archives, and state CIOs will be needed.

**OPPORTUNITY** The amount of human involvement needed to prepare, transfer, manage, and provide access to permanent state electronic records could be reduced by greater involvement of archives staff in technology refresh cycles.

State CIOs should include archives staff in planning activities in order to proactively address life cycle and transfer requirements.

Routine and timely transfers could help reduce records systems storage needs and costs. Separating out the permanent electronic records from the temporary records might also improve timely disposition of the temporary records.

**SYSTEMS OF RECORD**

**OPPORTUNITY** The survey helped to illustrate the confusion among stakeholders regarding where permanent records series are being managed in state government electronic information systems.

Building consensus and a clear line of sight into systems and software used by agencies will require a concerted effort by all three of the surveyed groups. Agencies should map the permanent records series they create to the systems and repositories they use. State CIOs and IT agency staff should analyze the maps from agencies and document which systems of record under their care are impacted and then research options for transfer.

Archives can become more familiar with the systems and software used by agencies, identify records and metadata requirements for transfers, and help IT develop workflows. Familiarity with systems and software used in state agencies can help the archives plan for technical requirements for transfer.

**OPPORTUNITY** Establishing regular, scheduled, and consistent communication among CIOs, state agencies, and state archives about their systems and software will greatly help the archives plan for seamless records transfers that will benefit everyone.

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**ABOUT COSA**
Formed in 2002, the Council of State Archivists (CoSA) is a national nonprofit using collaborative research, education, and advocacy to provide leadership that strengthens and supports state and territorial archives in their work to preserve and provide access to government records. Its members comprise the state archivists in the 50 state, 5 territorial, and District of Columbia archives. These individuals oversee agencies that hold a legal mandate to document government and protect the rights and history of the American people across our country. For more information, visit [www.statearchivists.org](http://www.statearchivists.org).

**ABOUT NASCIO**
Founded in 1969, the National Association of State Chief Information Officers (NASCIO) represents state chief information officers (CIOs) and information technology (IT) executives and managers from the states, territories and District of Columbia. NASCIO’s mission is to foster government excellence through quality business practices, information management and technology policy. NASCIO provides state CIOs and state members with products and services designed to support the challenging role of the state CIO, stimulate the exchange of information and promote the adoption of IT best practices and innovations. From national conferences to peer networking, research and publications, briefings and government affairs, NASCIO is the premier network and resource for state CIOs. For more information, visit [www.NASCIO.org](http://www.NASCIO.org).

**ABOUT PRESERVICA**
Preservica is changing the way organizations around the world protect and future-proof critical long-term digital assets. Available in the cloud (SaaS) or on premise, our award-winning active digital preservation software has been designed from the ground-up to tackle the unique challenges of ensuring digital information remains accessible and trustworthy over decades.

It’s a proven solution that’s trusted by a growing number of governments, archives, libraries, museums and businesses around the world including the City of Boston, University of Notre Dame, Associated Press, MoMA, Transport for London, World Bank, Yale University and 21 US state archives including Texas, California, and Massachusetts. For more information, visit [www.preservica.com](http://www.preservica.com).