Preserving State Government Digital Information:

A Baseline Report

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EXECUTIVE SUMMARY	1
CHAPTER 1. INTRODUCTION	3
HOW TO READ THIS REPORT	5
The State Government Digital Information Preservation Survey	5
Understanding the data	6
CHAPTER 2. CREATING CAPABILITY FOR DIGITAL PRESERVATION PARTNI	ERSHIPS8
Observation 1	8
OBSERVATION 2	
Observation 3	
Observation 4	
OBSERVATION 5	
OBSERVATION 6	
MOVING FORWARD	
CHAPTER 3. BUILDING A BASELINE	
Section 2. Institutional roles and responsibilities	24
SECTION 3. STATE GOVERNMENT DIGITAL INFORMATION PRESERVATION ACTIVITIES	
SECTION 4. TRAINING NEEDS FOR DIGITAL PRESERVATION RELATED ACTIVITIES	
SECTION 5. STATE GOVERNMENT DIGITAL INFORMATION CURRENTLY AT-RISK	
At-risk information	
Information no longer accessible	
SECTION 6. ENTERPRISE ARCHITECTURE	
APPENDIX A. ADVISORY COMMITTEE	
APPENDIX B. SURVEY PROCESS	40
APPENDIX C. SUMMARY OF RESPONDENTS	41
APPENDIX D. SURVEY RESPONDENTS	44
APPENDIX E. SURVEY RESPONSES ORGANIZED BY RESPONDENT AND QUES	TION46
APPENDIX F. STATE GOVERNMENT DIGITAL INFORMATION PRESERVATIO	N SURVEY92

TABLE OF CONTENTS

Executive Summary

State libraries and archives have traditionally managed, preserved, and provided access to significant government information in paper and other traditional formats. More and more, however, this information is created in digital form. Much of it has short-term value, but a considerable fraction must remain available for many years, in some cases, permanently. Unfortunately, states are finding their current preservation capabilities do not extend from paper to digital formats. All signs point to continued growth in the volume and complexity of this information, yet library, archives, and records management professionals are hampered in their efforts to respond to this growth by a host of resource gaps. These gaps include a lack of comprehensive program strategies, personnel and funding, as well as a lack of technology infrastructure and appropriate and sufficient skills.

Partnerships have emerged as the most viable strategy for securing the resources necessary for preserving state government digital information. Whether these partnerships span units within a single agency or multiple state and local governments and in some cases the federal government, their development requires knowledge of capabilities and priorities to be shared among potential partners. This report provides the baseline knowledge necessary to launch these critical partnership development efforts. Baseline data on state government digital information preservation capabilities and activities was collected in five key areas:

- 1. Institutional Roles and Responsibilities
- 2. State Government Digital Information Preservation Activities
- 3. Training Needs for Digital Preservation
- 4. State Government Digital Information Currently At-Risk
- 5. Engagement with Enterprise Architecture

Six observations about the challenges facing state government digital preservation initiatives emerged from the baseline data:

- 1. Capability for preserving state government digital information is low.
- 2. There is no consistent approach to addressing "at-risk" information.
- 3. Authority for setting standards and responsibility for providing digital preservation services is dispersed.
- 4. Executive, legislative, and judicial agencies operate parallel digital preservation efforts.
- 5. Digital preservation and Enterprise Architecture initiatives are not well-connected.
- 6. Efforts to develop strategic digital preservation programs are hampered by problem focused practices and funding and staffing models.

The challenge to library, archives, records management, and information technology professionals, agency executives, elected officials, and many others at all levels of government, is to use this baseline information to build digital preservation partnerships. The following recommendations are offered to assist in that task:

- Identify and build on existing knowledge and expertise.
- Build digital preservation partnerships within and among states.
- Clarify roles and responsibilities between and among state library, archives, records management, IT, and other interested and responsible parties.
- Use state Enterprise Architecture efforts to establish the centrality of digital preservation to enterprisewide information management.
- Continue to invest in knowledge sharing initiatives across the digital preservation community.

Chapter 1. Introduction

State libraries and archives have traditionally managed, preserved, and provided public access to significant government information in paper and other traditional formats. More and more, however, this information is being created in digital form. Much of it has short-term value, but a considerable fraction must remain available for many years, in some cases, permanently. Unfortunately, states are finding their current preservation capabilities do not extend from paper to digital formats. All signs point to continued growth in the volume and complexity of this information and most libraries and archives are hampered in their efforts to respond to this growth by a host of technical and organizational shortcomings. These shortcomings include the lack of technology infrastructure as well as appropriate and sufficient skills. Moreover, underlying these shortcomings is a lack of comprehensive program strategies and personnel and funding resources to improve existing capabilities. Faced with these many challenges, library,

National Digital Information Infrastructure and Preservation Program (NDIIPP)

NDIIPP is developing a national strategy to collect, archive, and preserve the burgeoning amounts of digital content, especially materials that are created only in digital formats, for current and future generations. This effort includes identifying stakeholder communities and the digital material of concern to them. The Library has established an initial network of preservation partners and is exploring how best to work with additional stakeholders to expand the scope and impact of NDIIPP. NDIIPP has involved a number of domains. This particular exploration is focused on state governments and their digital information assets. archives, and records management units across the country and around the world are seeking new strategies and models to support their efforts to ensure long term access to information. Partnerships have emerged as one of the most viable strategies for securing the necessary resources and capabilities. Whether these partnerships span units within a single agency or multiple state and local governments and in some cases the federal government, their development requires knowledge of capabilities and priorities to be shared among potential partners.

One effort in particular is focused on building the foundation of shared knowledge necessary for partnership development. In 2005 through its National

Digital Information Infrastructure and Preservation Program (NDIIPP) the Library of Congress launched an effort to facilitate the development of digital preservation partnerships among states and territories.¹ The Library of Congress is pursuing this agenda with a grant to the Center for Technology in Government.² These efforts have generated four resources focused on building the capability of state and territorial governments to be successful in digital preservation programs and initiatives through the use of partnerships. This report represents the fourth in this series of resources; baseline data about digital preservation programs and capabilities within the states. The specific information of interest was outlined by participants at a series of workshops sponsored by the Library of Congress and then refined by an expert advisory board of state and

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¹ For more information about NDIIPP visit <u>http://www.digitalpreservation.gov/about/index.html</u>.

² National Science Foundation Grant No. ITR-0205152.

The Library of Congress States Workshops

As part of NDIIPP, the Library invited more than 150 representatives from state library, archives, records management, and information technology organizations to one of three workshops in the Washington DC area on April 27, May 11 and May 25, 2005. The purpose of the workshops was to assess interest in and current work in digital preservation, as well as to discuss the types of issues states are facing and how commonalities of interest can be leveraged to advance the NDIIPP collaborative partnership network.

The Library of Congress States Workshops were of great value in helping the Library learn about the complex issues faced by the states. Participants shared a bounty of facts about significant categories of digital information and helped identify some basic priorities. As discussed in the report on the workshops, attendees were enthusiastic, motivated, and keen to share ideas and experiences. According to that report, "the commitment—and even passion—for improving digital preservation among the workshop participants was 'remarkable.'" Despite the barriers, there was no shortage of earnest optimism and suggestions for fostering partnership efforts and collaborative strategies toward preserving state government digital information. Participants identified a number of opportunities for partnerships within and across states, the federal government, and the academic and private sectors. In order to build new or strengthen existing partnerships, the participants identified the need for access to basic information about the existence and nature of ongoing preservation activities in other states. Participants suggested that the Library of Congress or other national organizations take the lead in developing resources to provide states access to this information.

federal library, archives, and records management professionals. Sharing knowledge about the status of digital preservation activities across the 50 states and territories was identified as the most important first step in building partnerships. This report contributes to this effort.

To provide further context for this report, each of the resources developed as part of this overall effort are summarized below. A brief outline for the rest of the report and an overview of the survey and the data follows.

- 1. *Preservation of State Government Digital Information: Issues and Opportunities*. The first report in the series reflects the findings of the Library of Congress States Workshops. These workshops included members of state library, archives, and records management units from all 50 states and several territories in discussions focused on key questions related to digital preservation capabilities. Workshop participants indicated that partnerships are the primary and in some cases, only, workable strategy for digital preservation initiatives. During the Workshop, the Library of Congress asked participants what they could do to assist in this effort. The response from the states was consistent across all three workshops facilitate partnership development by collecting information about the current capabilities, institutions, and activities related to state-level digital preservation and to make that information available to states, territories, and other interest parties via the Web. The report from the workshops can be found at http://www.digitalpreservation.gov/partners/states_wkshps.pdf.
- 2. Building State Government Digital Preservation Partnerships: A Capability Assessment and Planning Toolkit. The second product from this effort is a capability assessment and planning toolkit, developed by the Center for Technology in Government and released for use by the digital preservation community. This toolkit is designed to assist library, archives, records management, and information technology (IT) professionals in assessing where capability for digital preservation exists and where it must be developed in order to achieve

the goal of preserving significant at-risk government information. The toolkit is designed to support agencies in their efforts to collectively determine if they have the capabilities necessary to succeed in digital preservation initiatives and to inform the development of strategies to build necessary, but missing, capabilities. This toolkit can be found at http://www.ctg.albany.edu/publications/guides/digital_preservation_partnerships.

- 3. State Government Digital Preservation Profiles. The third product is the State Government Digital Preservation Profiles. This Web-based resource was produced in response to the interests of participants at the Library of Congress States Workshops. The Center for Technology in Government worked with the advisory committee to identify a set of topics around which to develop a useful baseline of state government digital information preservation efforts within the United States. These state profiles present information collected from those state and territorial library, archives, and records management units that completed the State Government Digital Information Preservation Survey (see Appendix <u>F</u> for a copy of the survey). This information is being made available to support the efforts of states to learn about each other, to identify potential partners, and to initiate partnership development efforts. The state profiles are available at http://www.ctg.albany.edu/publications/reports/digital_preservation_profiles.
- 4. Preserving State Government Information in Digital Form: A Baseline Report. This report provides a baseline for state government digital information preservation capabilities and activities. It includes an analysis of the results across states and territories and presents several observations on the current digital preservation environment. The State Government Digital Preservation Profiles and this Baseline Report are both drawn from data collected through the State Government Digital Information Preservation Survey. The report includes a copy of the survey, a description of the survey process and a breakdown of the survey respondents. This report is available at

http://www.ctg.albany.edu/publications/reports/digital_preservation_baseline.

How to read this report

This report contains three primary chapters. This introductory chapter provides context for the report, as well as some tips for reading the summary of results. Chapter 2 presents a set of observations and discussion drawn from the analysis. Chapter 3 presents the summary results for each question on the survey. These results represent an overall baseline for digital preservation in the states and territories in terms of the issues examined in the survey. The appendices include a copy of the survey, as well as a summary of the process used to administer the survey. A summary of the units represented in the responses is presented as well. Additional appendices include tables referred to throughout the report such as ones showing how specific types of units responded to specific questions. Please note, for the rest of this report LARM will be used to refer to state and territorial library (L), archives (A), and records management (RM) units.

The State Government Digital Information Preservation Survey

The Center for Technology in Government, in partnership with an advisory board of representatives from state and federal LARM units, designed a survey to create a state

government digital information preservation baseline. The scope of the baseline was extensively informed by the results of the Library of Congress States Workshops. The survey addressed questions in the following areas:

- 1. Institutional Roles and Responsibilities
- 2. State Government Digital Information Preservation Activities
- 3. Training Needs for Digital Preservation
- 4. State Government Digital Information Currently At-Risk
- 5. Engagement with Enterprise Architecture

Not included in the scope of this survey are activities related to the transformation of information from an analog or physical format into a digital format (e.g., scanning of paper records and converting text on paper into text in computer files). See Appendix <u>B</u> for details on how the survey was developed and administered.

Digital Preservation

Digital preservation was defined broadly in this survey as the management of government digital information for longterm access and use.

Understanding the data

The following four points should be kept in mind when reading this report:

- 1. <u>Responses represent self-assessments.</u> Responses summarized in this report and detailed in the online *State Government Digital Preservation Profiles* represent "self-assessments" by the responding states.
- 2. <u>A single response may represent a variety of possible units.</u> State librarians, archivists, and records managers were given the option of submitting one or multiple responses for their state or territory, therefore, the responses themselves vary in terms of the number of units represented in a single response. While CTG received a total of 67 responses representing all fifty states and three territories, the actual responses include different representations from state LARM units. For some states, LARM units are represented in a single response. In other cases, the state library and archives for a particular state submitted separate responses. Finally, in several cases, the survey response from a state represented a single unit such as the state library or state archives only. While this response method has contributed to some very comprehensive and informative state profiles, it does make the reporting of results somewhat unique. Readers are encouraged to use this report as a "spring board" into the state profiles to learn about the challenges and successes of specific states. See Appendices <u>C</u> and <u>D</u> for details on which states and LARM units responded and the nature of their response efforts.
- 3. <u>Level of analysis.</u> It is important to note that the majority of the analysis was done at the respondent rather than the state level. As described in Appendix <u>C</u>, different types of responses were received from different states. For example, two states might have their LARM units represented in the results. However, the first state may have submitted one integrated response while the second submitted two separate responses. Therefore, when reading the summary of results, keep in mind that the results do not represent a *unified* state-

level picture and, in some cases, separate responses from the same state may result in an over representation or contradictory information from one state compared to responses from those states that submitted a single response from multiple units.

The one exception to this comes in the analysis of survey Section 2 *Institutional Roles and Responsibilities*. For the analysis of Section 2, responses were combined to represent a "state-level" response. The purpose of this section is identify where authority for setting standards and responsibility for providing services to executive, legislative, and judicial agencies is placed in each state. To create a state-level response, separate state responses, i.e., separate responses from a state archives and a state library, for example, were combined. This combination of responses and the exclusion of responses not representing at least the state library and archives resulted in 38 state-level responses (i.e., 37 states and one territory). See Appendix \underline{D} for the specific state responses included in this summary.

4. <u>Response completeness.</u> When interpreting result summaries, please note that not every respondent answered every question on the survey. Nonetheless, for each question summarized below, readers can assume a minimum of a 64% response rate. Section 2, as explained above, is an exception to this rule. For a breakdown of responses to the questions see Appendix <u>E</u> and the Web-based *State Government Digital Preservation Profiles*.

Chapter 2. Creating capability for digital preservation partnerships

Six observations about state government digital information preservation capabilities drawn from the analysis of the data are presented below (see Table 1). The observations are offered to inform discussions related to the development of state government digital preservation partnerships. Based on these observations, several general suggestions for improving existing digital preservation capabilities in the states are offered and discussed.

Observation	Table 1. Observations about the digital information preservation capabilities of the states			
Observation 1	Capability for preserving state government digital information is low.			
Observation 2	There is no consistent approach to addressing "at-risk" information.			
Observation 3	Authority for setting standards and responsibility for providing digital preservation services is dispersed.			
Observation 4	Executive, legislative, and judicial agencies operate parallel digital preservation efforts.			
Observation 5	Digital preservation and Enterprise Architecture (EA) initiatives are not well-connected.			
Observation 6	Efforts to develop strategic digital preservation programs are hampered by problem focused practices and funding and staffing models.			

Observation 1. Capability for preserving state government digital information is low.

Formal education and professional development within the LARM professions has traditionally focused on paper. As a consequence, many of the skills required for the preservation of state government information in digital form have not been developed, and in some cases even identified. To get at the extent of the skills gap, the advisory committee requested a significant segment of the survey be devoted to this question. To support the collection of this information the advisory committee identified 12 specific categories of digital preservation capability (see Table 2).

The majority of respondents indicated that their LARM units, or some combination of the three, are in need of basic or advanced training in all categories. In 11 of the 12 categories 25% or less of the respondents report that training has already been provided. Respondents reported a high of 34% for training in *Identifying key stakeholders* already provided and a low of 8% for *Manage the long-term storage of digital information in a repository*. The high-level of need for basic and advanced training may signal an overall low to medium level of capability for digital

preservation across the states. Several respondents further stated that training alone is not sufficient to build digital preservation capabilities; funding, digital preservation related tools, and personnel was identified as more critical at this stage than training.

Barriers to building capability within the current professional community include developing appropriate material and identifying organizations to assume responsibility for continuing education programs including identifying qualified trainers. New curricula for undergraduate and graduate programs was also identified as necessary in addressing the capability gap.

Interestingly, while respondents indicate a high level of new training is necessary to build capability within LARM units, these same units are currently responsible for providing consulting and training services to executive agencies and to a lesser extent, judicial and legislative agencies in these same areas (See Tables 9, 10, and 11).

Capability	Basic or advanced training needed	Training already provided
Identify the type and amount of digital information throughout the state	80% (49)	20% (12)
Select and appraise state government information in digital form	76% (47)	24% (15)
Identify key stakeholders related to specific digital information (other local/state agencies, other states, private sector, etc.)	66% (40)	34% (21)
Negotiate and make agreements with key stakeholders to preserve digital information	78% (47)	22% (13)
Acquire state government information in digital form for holdings	78% (47)	22% (13)
Manage state government information in digital form (metadata, reformatting, etc.)	83% (50)	17% (10)
Manage the ingest of digital information into a repository	79% (49)	21% (13)
Manage the long-term storage of digital information in a repository	92% (57)	8% (5)
Develop mechanisms to monitor the long-term usability of state government information in digital form	89% (54)	11% (7)
Make state government information in digital form accessible to users	77% (47)	23% (14)
Produce a disaster and recovery planning for state government information in digital form	82% (51)	18% (11)
Manage copyright, security, and other legal issues of relevance to state government digital information	84% (55)	16% (10)

Table 2.Levels of training needed for digital preservation activities

Observation 2. There is no consistent approach to addressing "atrisk" information.

The majority of states report being involved in at least one activity to preserve state government digital information identified as *at-risk* and *a priority for preservation*. The results indicate that there are still definitional issues to be resolved; for some respondents at-risk means "it's actually being lost," in other cases, it means the information is valuable. Definitional issues aside, the results provide some insight into the where states are, and maybe more importantly, are not, generally investing in strategies to preserve at-risk information. Table 3 combines results from the Library of Congress States Workshops³ and results from this survey. Doing so shows that the top six categories of at-risk information, as identified during the workshops, are receiving inconsistent attention across the states. While a large group of states are involved in activities to preserve at least one of these categories of information, no state is consistently addressing each (or even a number) of the priority categories. Three of the six priority categories, for example, *databases/data sets, email*, and *audio and video*, are being addressed by only four states, six states, and three states respectively.

Table 3. Preserving at-risk state government digital information					
Category of at-risk digital information in order of priority ⁴	Specific type of at-risk digital information	involvement in related			
Records	Vital, land, and other historical records; legislative and court records	CA, GA, MA, MD, MI, MO, MN, MS, MT, NJ, OK, SD, TN, TX, UT, VT, WA, WY	18		
Databases/data sets	Geographic Information System (GIS) data; geospatial data	CA, CT, KY, ME	4		
Digital Publication	Web-based publications; born-digital state publications; state government document; state agency reports	AK, AR, AZ, CA, CO, CT, FL, IA, IL, KS, KY, LA, MN, MO, MT, NC, NE, NJ, NM, NY, OH, OR, SC, TN, TX, UT, VA, WI, WY	29		
Web sites	State government agency Web sites; Governor's Web site; subset of Web site content regarded as having special importance such as press releases	AL, AZ, DE, KY, MI, MS, NC, PA, SC, SD, UT, VA, WI	13		

³ The complete list of the at-risk digital information that the states identified during the workshops is included in the *Report of the Library of Congress Convening Workshops with States*, which is available at http://www.digitalpreservation.gov/partners/states_wkshps.pdf.

⁴As identified by participants at the spring 2005 Library of Congress workshops with the states.

Table 3. Preserving at-risk state government digital information					
Category of at-risk digital information in order of priority ⁴	Specific type of at-risk digital information	States that reported involvement in related preservation activities	Number of states involved		
e-mail	Agency e-mail; official e-mail records including attachments; electronic correspondence of elected officials	ME, NC, NJ, OH, PA, VA	6		
Audio and Video	Digital photographs and digital recordings of government proceedings and public meetings	IL, MI, MS	3		

One unknown at this point is the approach being used by each state to define "at-risk", to determine what information is at-risk, and to prioritize from among those information types. There are many indications that states are establishing priorities based on available resources such as staff skills and grant dollars rather than based on a program strategy that might factor in issues such as the value proposition of specific information types.

Observation 3. Authority for setting standards and responsibility for providing digital preservation services is dispersed.

Understanding institutional roles and responsibilities of state LARM units was identified by the Library of Congress States Workshop participants as necessary to the process of partnership development. The participants noted that this information would also inform the development of digital preservation programs.

As shown in Table 4, a number of other units in all three branches either share authority for setting standards and responsibility for providing services with LARM units or have sole responsibility. The IT unit, in particular, stands out across all three branches of government as holding a significant role in the standards setting process and in providing services related to digital preservation. The units identified as consistently playing a central role include the office of the state CIO or its equivalent and IT units in the legislative and judicial branches. In addition, respondents identified statewide committees and commissions (some of which are IT focused) and specific units within legislative and judicial agencies as also having responsibilities with regard to the preservation of state government digital information.

Units other than L	Table 4. ARM with authority for setting standards for and providing services to executive, legislative, and judicial agencies
Other unit category	Other unit named by respondents
	Office of the State CIO
	Enterprise Technology Services
State IT unit	Department of Administration or Administrative Services (IT Divisions)
State II unit	Bureau of Information and Technology
	Department of Information and Innovation
	Office of Information Technology
	The State Records Board
G	Legislative Information Technology Committee
Committee or commission	Information Technology Advisory Council
	Information Technology Resource Management Council
	Architecture Oversight Committee, chaired by the CIO
	Legislature
	Legislative Auditor
	Legislative Budgetary Council
Legislative	The Law and Research Library
unit	Information Technology Division of the General Assembly
	Offices of the Senate and House
	Legislative Reference Bureau
	Legislative Printing, Information, and Technology Systems
	Judiciary
	Administrative Office of the Courts
Judicial unit	Director of Information Systems for the Judiciary
	Information Technology and Communications Division of the Judiciary
	Superior Courts Clerks Authority
	Judiciary CIO

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Observation 4. Executive, legislative, and judicial agencies operate parallel digital preservation efforts.

State-level LARM units and related units within legislative and judicial agencies are investing in parallel standards setting and service provision efforts in support of digital preservation. Survey findings consistently show that even within the areas generally considered to be within the realm of LARM units – retention and disposal; legislative and judicial agencies are operating to a great degree independent of state LARM units (see Table 5).

Table 5. Setting standards for information retention and disposal (e.g., retention periods and methods of disposal) for various series/types of digital records and publications						
Agency TypeAuthority not assignedL, A, or RM has authorityL, A, or RM share other ha 						
Executive	5%	61%	26%	8%		
Legislative	21%	34%	18%	24%		
Judicial	13%	29%	18%	39%		

The following two sections present a more detailed discussion of these findings both in terms of authority for setting standards and responsibility for providing services.

Authority for setting standards for digital information created or maintained by executive, legislative, and judicial agencies

The findings indicate that authority for setting standards related to the creation and maintenance of digital information resides primarily outside of state LARM units. In executive agencies authority is shared between LARM units and other units; in legislative and judicial agencies it often exists fully outside of state LARM units.

As shown in Tables 6-8, units other than the state LARM units were consistently identified by the states as having the authority to set standards for digital information created and maintained by government agencies. For some states, this authority was shared among the LARM units or some combination of the three and these other units. However, a number of states responded that authority resided only within units other than the state LARM units. As described above, these other governmental units most often included state IT units when dealing with digital information created or maintained by executive agencies and a combination of state IT units and legislative and judicial units when dealing with information created or maintained by legislative and judicial agencies.

Table 6. Authority for setting standards for digital information created or maintained by executive agencies					
Standard	Authority not assigned	L, A, or RM has authority	L, A, or RM share authority with Other	Only Other has authority	
Setting data management standards and or guidelines for information creation (e.g., metadata, file formats)	11% (4)	18% (7)	34% (13)	37% (14)	
Setting information technology standards and or guidelines for information creation (e.g., state approved software applications)	13% (5)	5% (2)	16% (6)	66% (25)	
Setting standards for information retention and disposal (e.g., retention periods and methods of disposal) for various series/types of digital records and publications	5% (2)	61% (23)	26% (10)	8% (3)	

Table 7.
Authority for setting standards for digital information created or maintained by
legislative agencies

Standard	Authority not assigned	L, A, or RM has authority	L, A, or RM share authority with Other	Only Other has authority
Setting data management standards and or guidelines for information creation (e.g., metadata, file formats)	29% (11)	13% (5)	13% (5)	39% (15)
Setting information technology standards and or guidelines for information creation (e.g., state approved software applications)	26% (10)	3% (1)	3% (1)	63% (24)
Setting standards for information retention and disposal (e.g., retention periods and methods of disposal) for various series/types of digital records and publications	21% (8)	34% (13)	18% (7)	24% (9)

Table 8. Authority for setting standards for digital information created or maintained by judicial agencies						
Standard	Authority not assigned	L, A, or RM has authority	L, A, or RM share authority with Other	Only Other has authority		
Setting data management standards and or guidelines for information creation (e.g., metadata, file formats)	16% (6)	11% (4)	11% (4)	61% (23)		
Setting information technology standards and or guidelines for information creation (e.g., state approved software applications)	13% (5)	0% (0)	5% (2)	82% (31)		
Setting standards for information retention and disposal (e.g., retention periods and methods of disposal) for various series/types of digital records and publications	13% (5)	29% (11)	18% (7)	39% (15)		

Digital preservation services provided to executive, legislative, and judicial agencies

As shown in Tables 9-11, LARM units or some combination of the three appear to provide most of the digital preservation services to executive agencies. The numbers of states where the LARM units or some combination of the three provide digital preservation services to executive agencies increases when the services are also provided by other governmental units. The government units other than the LARM units that provide these services are the same state IT units that have authority for setting standards for information created and maintained by executive agencies.

Similar to authority for setting standards for information created and maintained by legislative and judicial agencies, the units that provide digital preservation services to both of these branches of government appear to be combinations of LARM units along with other units within the legislative and judicial branches and to a lesser extent state IT units. In the case of services provided to legislative agencies and even more so for services provided to judicial agencies, a large number of the states indicated that these same legislative, judicial, and to a lesser extent state IT units provided these services rather than the LARM units.

Table 9. Services provided to executive agencies					
Service	Service not provided	L, A, or RM provide service	L, A, or RM provide service with Other	Only Other provides service	
Storage for digital information	11%	26%	34%	29%	
	(4)	(10)	(13)	(11)	
Consultation and training services on digital information creation	21% (8)	(10) 32% (12)	32% (12)	16% (6)	
Consultation and training services on digital information management	13%	50%	32%	5%	
	(5)	(19)	(12)	(2)	
Consultation and training services on digital information preservation	18%	66%	11%	3%	
	(7)	(25)	(4)	(1)	
Consultation and training services on digital information access	26%	42%	18%	16%	
	(10)	(16)	(7)	(6)	
Preservation (e.g., migration, reformatting)	18%	45%	26%	11%	
	(7)	(17)	(10)	(4)	
Access (e.g., search engine)	13%	39%	26%	21%	
	(5)	(15)	(10)	(8)	
Certification (e.g., trustworthiness of system, backups sufficient)	34%	11%	16%	37%	
	(13)	(4)	(6)	(14)	

Table 10. Services provided to legislative agencies							
Service	Service not provided	L, A, or RM provide service	L, A, or RM provide service with Other	Only Other provides service			
Storage for digital information	13%	21%	32%	34%			
	(5)	(8)	(12)	(13)			
Consultation and training services on digital	26%	26%	18%	29%			
information creation	(10)	(10)	(7)	(11)			
Consultation and training services on digital	24%	29%	21%	26%			
information management	(9)	(11)	(8)	(10)			
Consultation and training services on digital	26%	45%	11%	16%			
information preservation	(10)	(17)	(4)	(6)			
Consultation and training services on digital	32%	26%	13%	29%			
information access	(12)	(10)	(5)	(11)			
Preservation (e.g., migration, reformatting)	18%	34%	18%	29%			
	(7)	(13)	(7)	(11)			

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Table 10. Services provided to legislative agencies							
Service	Service not provided	L, A, or RM provide service	L, A, or RM provide service with Other	Only Other provides service			
Access (e.g., search engine)	18%	26%	18%	37%			
	(7)	(10)	(7)	(14)			
Certification (e.g., trustworthiness of system, backups	37%	5%	5%	50%			
sufficient)	(14)	(2)	(2)	(19)			

Table 11. Services provided to judicial agencies							
Service	Service not provided	L, A, or RM provide service	L, A, or RM provide service with Other	Only Other provides service			
Storage for digital information	13%	18%	24%	45%			
	(5)	(7)	(9)	(17)			
Consultation and training services on digital information creation	18%	24%	16%	42%			
	(7)	(9)	(6)	(16)			
Consultation and training services on digital information management	16%	29%	16%	39%			
	(6)	(11)	(6)	(15)			
Consultation and training services on digital information preservation	26%	29%	16%	29%			
	(10)	(11)	(6)	(11)			
Consultation and training services on digital information access	21%	18%	21%	39%			
	(8)	(7)	(8)	(15)			
Preservation (e.g., migration, reformatting)	39%	18%	16%	26%			
	(15)	(7)	(6)	(10)			
Access (e.g., search engine)	29%	18%	18%	34%			
	(11)	(7)	(7)	(13)			
Certification (e.g., trustworthiness of system, backups sufficient)	37%	3%	5%	53%			
	(14)	(1)	(2)	(20)			

Observation 5. Digital preservation and Enterprise Architecture (EA) initiatives are not well-connected.

State governments are creating Enterprise Architectures (EA) to guide enterprisewide information and information technology related decision making and planning. A 2005 NASCIO report indicates that states are embracing EA as a framework for reshaping government processes and organization. Enterprise architecture efforts are generally managed by state CIO and IT units; the same units that hold authority for creating standards and responsibility for providing services related to digital preservation. EA initiatives were identified by Library of Congress States Workshop participants as having the potential to positively influence digital preservation initiatives by integrating the issues of digital preservation into the ongoing creation of enterprise governance bodies, reference models, business processes, and accountability strategies under development and in use in many states.

The National Association of State Chief Information Officers (NASCIO) defines EA as a management engineering discipline that presents a comprehensive view of the enterprise including:

- Strategic planning,
- Organization development,
- Relationship management,
- Business process improvement,
- Information and knowledge management, and
- Operations.

It is an ongoing iterative process of analysis, collaboration, and leadership to make better decisions.

See IT Procurement & Enterprise Architecture: Recognizing the Mutual Benefits NASCIO Research Brief, October 2005 at http://www.nascio.org/nascioCommittees/procurement/EA _IT_Procurement_Brief100305.pdf.

However, few LARM units are actively involved in these efforts. Results show that while the majority of respondents are aware of their state's EA efforts, only half of those who indicated awareness are involved in current efforts.

For those respondents reporting involvement in their state's EA efforts, many characterized their effort as "in the early stages" of working on EA with state IT and other units. As shown in Table 12, these EA efforts are primarily focused on strategic planning and policy related issues and their involvement tends to be issue related rather than ongoing.

⁵ Thirty-seven states and the District of Columbia responded to the NASCIO survey. Download a copy of the NASCIO report *The States and Enterprise Architecture: How far have we come? Findings from the NASCIO 2005 EA Assessment*, NASCIO, October 2005 at <u>http://www.nascio.org/publications/index.cfm</u>.

Table 12. Involvement in State Enterprise Architecture (EA) efforts						
Involvement in State EA efforts	Specific example					
Committees or working groups related to EA efforts	State CIO's Enterprise Architecture and Standards CommitteeElectronic Records Working GroupState CIO's project team and Electronic Records Preservation project teamIT planning BoardEnterprise Architecture CommitteeInformation Technology Strategic Planning groupE-government committeesInformation Domain teamsEnterprise Applications Subcommittee of the state's Architecture OversightCommittee and Assistive Technology Advisory CommitteeFiscal and HR part of the state's EA efforts					
Involvement in EA efforts	 Worked with the state's Division of Information Systems and Communication on storage agreements Submit Return on Investment Technology Plan each biennium Auditing requirements including records management schedules Leading a subcommittee on drafting the Information Management section of the Statewide Technical Architecture Heading a team of representatives from other state agencies in developing a new 'Records Management' series of Information Technology Bulletins providing policies and procedures for managing the state electronic records Jointly developing a comprehensive strategy for the management of all records created by state agencies Working with the Office of Enterprise Technology to maintain the data and records chapter of the architecture Managing the search engine for the state Web site and assisting with training on use of content management system Working with the lead agency for the personnel system to determine how best to preserve important long-term records Partnership with the state judiciary to provide access to all verified land record instruments in the state Helping develop an enterprise Web portal for the state and metadata standards and subject thesauri Joint development of a Web-based depository for all state electronic publications with the Information Technology Enterprise section of the Department of Administrative Services Participation in the data and electronic records domain of the state's Department of Information Resources' enterprise architecture project 					

Observation 6. Efforts to develop strategic digital preservation programs are hampered by problem focused practices and funding and staffing models.

The preservation of state government information is the core responsibility of most LARM units. Overtime, more and more of this information is created and maintained in digital form. In the early days of the digital era, LARM units created ad-hoc response strategies informed by longstanding approaches for preserving paper-based information. As the scales have tipped to the point where information is almost exclusively created and maintained in digital form, these adhoc preservation approaches are no longer sufficient, however, states face many challenges as they work to evolve to more strategic digital preservation programs. In particular, funding and staffing investments appear to be driven by episodic problem solving priorities rather than an overall program development strategy. Survey respondents stated that recent or ongoing digital information preservation activities are supported with limited or project specific state funding or relatively short duration grants where funding ends when the project is complete. Additional evidence of this can be found in the approaches taken to respond to at-risk information. Survey responses illustrate a consistent focus on a small number of specific types of at-risk digital information rather than broader or multiple categories of at-risk digital information. This approach appears to be influencing investments in staff development programs as well. Training is primarily focused on gaining the skills necessary to solve a specific problem rather than to develop overall capability in terms of digital preservation. The low to medium level capabilities reported by the majority of states appears to be both a consequence of and a contributor to ad hoc project (versus program) level initiatives.

Moving forward

The task of using this baseline data to move the efforts to build digital preservation partnerships forward lies in the hands of LARM and IT professionals, agency executives, elected officials, and many others at all levels of government. The following recommendations are offered to assist them in that task.

Identify and build on existing knowledge and expertise

The findings presented in this report highlight the many challenges facing state governments in their digital preservation efforts. However, the activities described in the state-level profiles present many success stories as well. Many states have been successful in at least one if not several areas of digital preservation including building successful funding models, training programs and collaborative partnerships, establishing clearly defined roles and responsibilities for digital preservation, and building effective technical tools and infrastructure. The baseline data presents the challenge; the profile data provides the inspiration that challenges can, in some cases, be overcome. The assignment for public managers with digital preservation responsibility is to seek out colleagues with complementary or leveraging capabilities and to employ partnerships as a strategy for building capability.

Build digital preservation partnerships within and among states

The results show that intra- and interstate partnerships present great opportunities to those involved in and responsible for state government digital information preservation. Building partnerships with those who share authority over the standards setting processes and responsibility for providing digital preservation services appears well-advised. The findings show that authority for and responsibility for digital preservation related standards setting and digital preservation services are divided among a number of agencies/units within each state. In many cases it is clear that LARM units have little authority over the standards setting processes for digital preservation related standards, yet significant responsibility for providing digital preservation services. This division of labor is one of the more challenging conditions in the environment. Its impact may be mitigated by building partnerships among state-level LARM units and those units located within legislative and judicial agencies.

Other new intra-state partners should include the state IT department. Of note, ten states – GA, IA, KS, ME, MI, MN, MT, PA, SD, and UT – indicated that the equivalent of their state IT department or a committee or commission formed by their state IT department is a partner in the digital preservation activity described in their response. These efforts and others can serve as models for other states in building new relationships between and among state LARM units and state and agency level IT units.

Clarify roles and responsibilities between and among LARM, IT, and other interested and responsible parties

Decisions about how information is created, managed, and used are being made across all branches of government as well. This distribution of authority must be well understood in the development of digital preservation programs. Each state has taken a somewhat unique approach to assigning authority for standards that govern creation and management of information. How these differences come about is in some cases due to different institutional structures, unique policies, and idiosyncratic practices. In other cases their source is unclear. In some cases no formal authority for these activities have been assigned. Understanding the nature and source of these differences is an important element in identifying and working with potential partners.

Use State EA efforts to establish the centrality of digital preservation to enterprisewide information management responsibilities

In general, the nature of EA activities provides an ideal opportunity for integrating the full range of management, policy, and technology issues related to the preservation of state government digital information into enterprisewide information and information technology related decision making and planning. EA efforts provide a forum for the discussion of roles and responsibilities, as well as an examination of enterprise business processes and requirements. The centrality of digital preservation as a enterprise business responsibility can be illustrated and ideally, operationalized, through these discussions. EA efforts also provide a forum for discussions about the development of program capabilities rather than one-off problem solving efforts. The EA planning and policy development process may be the most effective venue for discussions about authority over standards setting processes that govern the full life-cycle of digital information. While the level of awareness reported above is encouraging, the level of involvement is less so. Fully, two-thirds of the respondents, generally top management in state LARM units, are not involved in the EA efforts of their state.

Continue to invest in knowledge sharing initiatives across the digital preservation community

Participants in the Library of Congress States Workshops, as well as respondents to the survey, expressed an interest in and a need for additional and ongoing forums focused on the preservation of state government digital information. Workshop participants expressed a need for a continuing forum sharing knowledge and expertise among members of the "digital preservation community."

Many respondents to the survey also shared ideas and preferences on future baseline efforts. Two examples of information of interest are:

- Identify those digital preservation initiatives funded/created by specific legislation identify the state and the legislation so others can track it down as a reference.
- Determine if and how units act on their standards setting authority.

The baseline data and the state profiles provide a wealth of data to support a range of uses by the digital preservation community. The data will have most value to the community, however, if used and improved upon in the development of partnerships, in making a case to agency leaders or elected officials for investments in digital preservation, and for creating new synergies and new knowledge within and across states about digital preservation challenges and opportunities.

Chapter 3. Building a Baseline

The summary results represent the first-ever compilation of data about the status of institutional relationships, activities, concerns, and priorities related to the preservation of government information in digital form at the state and territorial level in the United States. This baseline data may inform the development of performance expectations in states or even possibly the development of performance standards. As this point however, they simply provide information about the current state of affairs – a baseline – against which future state government digital information preservation efforts may be compared. They can be used to inform strategy development, business cases and priority setting for states and other interested organizations alike. The results from the open and closed ended questions asked in the survey are presented in order of their inclusion in the survey (See Table 13).

Table 13. State government digital information survey topics						
	Section	Description	Question format			
Section	Title	Description	Question format			
Section 1.	Responding Unit(s)	State and organization including which units were represented in the survey	Open-ended and multiple choice			
Section 2.	Institutional Roles and Responsibilities	Identification of which units, if any, have authority over digital preservation related standards and provide services to Executive, Legislative, and Judicial Agencies	Closed-ended with some open- ended for explanation			
Section 3.	State Government Digital Information Preservation Activities	Description of recent or ongoing efforts to preserve state government digital information in the respondents' state	Open-ended			
Section 4.	Training Needs for Digital Preservation Related Activities	Identification of existing training available or basic or advanced training needed for specific capabilities	Closed-ended with some open- ended for explanation			
Section 5.	State Government Digital Information Currently At-Risk	Examples of state government information that is at-risk or is no longer accessible in the respondents' state	Open-ended			
Section 6.	Enterprise Architecture	Awareness of and involvement in the respondents' state Enterprise Architecture efforts	Open-ended and multiple choice			
Section 7.	Additional Thoughts or Comments	Opportunity for respondents to comment on the survey itself or provide any additional information related to their digital preservation efforts	Open ended			

The discussion in each section includes tables and graphs that show the number of responses given for the closed-ended questions and related tables that characterize many of the key points or themes from the open-ended questions. For a detailed discussion of the survey process, including the survey itself and respondent demographics, see Appendices B, C, and F.

Section 2. Institutional roles and responsibilities

Section 2 of the survey asked participants to indicate which units (i.e., library, archives, records management, or other), if any, have authority for setting standards for digital information created or maintained by executive, legislative, and judicial agencies. Respondents were also asked to indicate which of these units, if any, provide services related to digital information to these agencies. The findings in this section are based on state-level responses. Thirty-seven states and one territory are included in the analysis for a total of 38 responses. Each includes representation from both the library and archives units; in many but not all these responses, records management units and several other units were represented as well. Table 14 lists the specific authorities and services included in the survey.

Table 14. Authority for setting standards and services provided for digital information for executive, legislative, and judicial agencies
Authority for setting standards
Setting data management standards and or guidelines for information creation (e.g., metadata, file formats)
Setting information technology standards and or guidelines for information creation (e.g., state approved software applications)
Setting standards for information retention and disposal (e.g., retention periods and methods of disposal)
for various series/types of digital records and publications
Services provided
Storage for digital information
Consultation and training services on digital information creation
Consultation and training services on digital information management
Consultation and training services on digital information preservation
Consultation and training services on digital information access
Preservation (e.g., migration, reformatting)
Access (e.g., search engine)
Certification (e.g., trustworthiness of system, backups sufficient)

For each of the standards and services respondents were asked to identify the following:

- Authority not assigned or Services not provided
- L has authority or L provides services
- A has authority or A provides services
- RM has authority or RM provides services
- Other (non-LARM unit) (for both authority for setting standards and providing services)

In this section, respondents were allowed to select all that apply if authority or providing services were shared or delegated. As a result responses indicate that authority for setting standards and providing services is shared across multiple units. Therefore, the original categories were modified and then used to summarize results. In general, the modified categories map to the

original categories provided to respondents, but they allow findings about shared authority and responsibility to be highlighted as well.

With respect to authority:

- Authority not assigned
- L has authority
- L shares authority with A, RM, or both
- A, RM, or both have authority
- Other (non-LARM unit) has authority

With respect to services:

- Services not provided
- L provides services
- L provides services with A, RM, or both
- A, RM, or both provide services
- Other (non-LARM unit) provides services

Please note as a consequence of these modifications percentages across the rows of Tables 15-20 do not add up to 100.

Authority for setting standards

Regardless of the branch of government with authority for setting standards, it is most often assigned to units other than the state LARM units. There appears to be one exception to this finding having to do with standards for information retention and disposal for various series/types of digital records and publications for executive agencies. In these cases, authority for setting retention and disposal standards that govern executive agencies is assigned to archives and records management units and in some cases shared among these units and the library.

Table 15. Authority for setting standards for digital information created or maintained by executive agencies									
Standard	Authority not assigned	L has authority alone	L shares authority with A, RM, or both	A, RM, or both have authority alone	L, A, or RM share authority with Other	Only Other has authority			
Setting data management standards and or guidelines for information creation (e.g., metadata, file formats)	11% (4)	3% (1)	5% (2)	11% (4)	34% (13)	37% (14)			
Setting information technology standards and or guidelines for information creation (e.g., state approved software applications)	13% (5)	0% (0)	0% (0)	5% (2)	16% (6)	66% (25)			
Setting standards for information retention and disposal (e.g., retention periods and methods of disposal) for various series/types of digital records and publications	5% (2)	0% (0)	21% (8)	39% (15)	26% (10)	8% (3)			

Table 16. Authority for setting standards for digital information created or maintained by legislative agencies									
Standard	Authority not assigned	L has authority alone	L shares authority with A, RM, or both	A, RM, or both have authority alone	L, A, or RM share authority with Other	Only Other has authority			
Setting data management standards and or guidelines for information creation (e.g., metadata, file formats)	29% (11)	3% (1)	3% (1)	8% (3)	13% (5)	39% (15)			
Setting information technology standards and or guidelines for information creation (e.g., state approved software applications)	26% (10)	0% (0)	0% (0)	3% (1)	3% (1)	63% (24)			
Setting standards for information retention and disposal (e.g., retention periods and methods of disposal) for various series/types of digital records and publications	21% (8)	0% (0)	8% (3)	26% (10)	18% (7)	24% (9)			

Table 17. Authority for setting standards for digital information created or maintained by judicial agencies										
Standard	Authority not assigned	L has authority alone	L shares authority with A, RM, or both	A, RM, or both have authority alone	L, A, or RM share authority with Other	Only Other has authority				
Setting data management standards and or guidelines for information creation (e.g., metadata, file formats)	16% (6)	3% (1)	0% (0)	8% (3)	11% (4)	61% (23)				
Setting information technology standards and or guidelines for information creation (e.g., state approved software applications)	13% (5)	0% (0)	0% (0)	0% (0)	5% (2)	82% (31)				
Setting standards for information retention and disposal (e.g., retention periods and methods of disposal) for various series/types of digital records and publications	13% (5)	0% (0)	11% (4)	18% (7)	18% (7)	39% (15)				

Responsibility for providing services

Responsibility for providing services to executive agencies is most often held by state LARM units. For judicial agencies, however, this responsibility most often falls outside of that state's LARM units. The one exception to this finding is in the area of digital information access. Consultation and training in this area are provided to judicial agencies by various combinations of state LARM units.

Legislative agencies are supported in a more mixed method. Four of the services – digital information creation, consultation and training services on digital information management, consultation and training services on digital information preservation, and preservation (e.g., migration, reformatting) – are the responsibility of a combination of the ARM units sometimes in conjunction with L units. Three of the services – storage for digital information, access (e.g. search engine), and certification (e.g., trustworthiness of system, backups sufficient) – most often reside with units other than LARM.

Table 18. Services provided to executive agencies							
Service	Service not provided	L provides service alone	L provides service with A, RM, or both	A, RM, or both provide service alone	L, A, or RM provide service with Other	Only Other provides service	
Storage for digital information	11% (4)	8% (3)	11% (4)	8% (3)	34% (13)	29% (11)	
Consultation and training services on digital information creation	21% (8)	5% (2)	8% (3)	18% (7)	32% (12)	16% (6)	
Consultation and training services on digital information management	13% (5)	5% (2)	3% (1)	42% (16)	32% (12)	5% (2)	
Consultation and training services on digital information preservation	18% (7)	3% (1)	21% (8)	45% (17)	11% (4)	3% (1)	
Consultation and training services on digital information access	26% (10)	13% (5)	11% (4)	18% (7)	18% (7)	16% (6)	
Preservation (e.g., migration, reformatting)	18% (7)	11% (4)	11% (4)	24% (9)	26% (10)	11% (4)	
Access (e.g., search engine)	13% (5)	21% (8)	8% (3)	11% (4)	26% (10)	21% (8)	
Certification (e.g., trustworthiness of system, backups sufficient)	34% (13)	5% (2)	0% (0)	5% (2)	16% (6)	37% (14)	

Table 19. Services provided to legislative agencies							
Service	Service not provided	L provides service alone	L provides service with A, RM, or both	A, RM, or both provide service alone	L, A, or RM provide service with Other	Only Other provides service	
Storage for digital information	13% (5)	3% (1)	13% (5)	5% (2)	32% (12)	34% (13)	
Consultation and training services on digital information creation	26% (10)	3% (1)	5% (2)	18% (7)	18% (7)	29% (11)	
Consultation and training services on digital information management	24% (9)	3% (1)	3% (1)	24% (9)	21% (8)	26% (10)	
Consultation and training services on digital information preservation	26% (10)	3% (1)	5% (2)	37% (14)	11% (4)	16% (6)	
Consultation and training services on digital information access	32% (12)	3% (1)	3% (1)	21% (8)	13% (5)	29% (11)	
Preservation (e.g., migration, reformatting)	18% (7)	3% (1)	11% (4)	21% (8)	18% (7)	29% (11)	
Access (e.g., search engine)	18% (7)	13% (5)	11% (4)	3% (1)	18% (7)	37% (14)	
Certification (e.g., trustworthiness of system, backups sufficient)	37% (14)	0% (0)	0% (0)	5% (2)	5% (2)	50% (19)	

Table 20. Services provided to judicial agencies							
Service	Service not provided	L provides service alone	L provides service with A, RM, or both	A, RM, or both provide service alone	L, A, or RM provide service with Other	Only Other provides service	
Storage for digital information	13% (5)	3% (1)	5% (2)	11% (4)	24% (9)	45% (17)	
Consultation and training services on digital information creation	18% (7)	3% (1)	0% (0)	21% (8)	16% (6)	42% (16)	
Consultation and training services on digital information management	16% (6)	3% (1)	3% (1)	24% (9)	16% (6)	39% (15)	
Consultation and training services on digital information preservation	26% (10)	3% (1)	0% (0)	26% (10)	16% (6)	29% (11)	
Consultation and training services on digital information access	21% (8)	3% (1)	0% (0)	16% (6)	21% (8)	39% (15)	
Preservation (e.g., migration,	39%	0%	5% (2)	13%	16%	26%	
reformatting) Access (e.g., search engine)	(15) 29% (11)	(0) 5% (2)	(2) 8% (3)	(5) 5% (2)	(6) 18% (7)	(10) 34% (13)	
Certification (e.g., trustworthiness of system, backups sufficient)	37% (14)	0% (0)	0% (0)	3% (1)	5% (2)	53% (20)	

The following additional conclusions can be drawn from the data:

- Responsibility for providing services to executive agencies was found to be assigned most often to LARM units.
- Responsibility for providing services to legislative and judicial agencies was found to be divided among LARM and the agencies themselves, depending on the nature of the service.
- State Libraries are most frequently identified as having responsibility for providing access services (e.g., search engine). In most cases they were identified as having sole responsibility for this service.
- The archives, records management, or a combination of the two are identified most frequently as having responsibility for consultation and training services for digital information management and digital information preservation services.
- Responsibility for providing certification services across the three branches of government was found to lie outside of the LARM units or not provided at all. A small number of ARM units were identified as having this responsibility for legislative agencies in particular.

Section 3. State government digital information preservation activities

One of the best ways to boost digital preservation capabilities, according to the Library of Congress States Workshop participants, is to learn from practical examples of successful digital preservation projects. Section 3 of the survey was designed to identify these practical examples by capturing descriptions of up to five state government digital information preservation activities and the parties involved from each state. Respondents were asked to characterize each activity from among a pre-determined list of activity types and to provide a narrative description of each.

Of the 67 responses, 54 (81%) included at least one example of a recent or ongoing digital preservation activity. The most common types of digital information preservation activities mentioned were the *preservation of digital publications of state governments* and the *harvesting of agency Web sites*. Activities noted also include digitization of paper records, development of digital depositories, development of search engines and Web portals, preservation of historical records, and development of guidelines and metadata standards. Table 21 provides a full list of the types of activities reported.

Table 21. State government digital information preservation activities	
Activity	Times mentioned
Preservation of digital publications	18
Harvesting of state agency Web sites	16
Digitization of paper records	11
Development of digital repositories	9
Search engine / Web portal	7
Preservation of historical records	7
Development of guidelines	5
Development of metadata standards	4
Preservation of e-mail records	4
Research	4
Preservation of geospatial records	3
Migration	3
Development of models	2
Training	2

In many cases, the activity descriptions highlight how partnerships among LARM units, IT and other agencies were established within states as a mechanism for carrying out the digital preservation activity. Overall, however, few examples of collaboration across states were reported.

The activity descriptions also provide some insight into funding for digital information preservation activities. In some cases, in-state support came by way of specific state legislation, in other cases states reported receiving funding from the National Historical Publications and
Records Commission (NHPRC) and the Institute of Museum and Library Services (IMLS) to launch their efforts.

The activity descriptions include information about specific standards, strategies, and software in use in the states. For example, several respondents reported adopting TIFF format for their preservation activities. About a dozen respondents reported subscribing to Online Computer Library Center (OCLC) Digital Archives and Web Archives Workbench services to capture electronic publications and agency Web sites. Other third-party software and services reported as in use in state digital information preservation activities include ContentDM developed by DiMeMa, Inc., LOCKSS by Stanford University, Archive-It by Internet Archives, CEP by University of Illinois at Urbana-Champaign, and DigiTool by Ex Libris.

Section 4. Training needs for digital preservation related activities

Preserving information in digital form requires a new set of individual as well as organizational capabilities. LARM representatives at the Library of Congress States Workshops recognized this need as they expanded their discussions beyond organizational capabilities to individual capabilities. In general, participants identified a lack of knowledge about and support for the necessary training. A focus on training needs in the survey was agreed upon as the best way to gauge these capabilities. Section 4 of the survey was designed to support these efforts. Respondents were asked to indicate the level of training (i.e., basic or advanced) needed to build the capabilities necessary for a successful digital preservation program in their state (see Table 22). To see the training needs of individual respondents, see the "Training Needs for Digital Preservation Capabilities" tables in Appendix \underline{E} .

Table 22 shows the level of training reported as necessary for each of the 12 capabilities. (Respondents were asked to select only one level of training needed.) Of note, respondents indicated a *Basic level of training* was needed in all 12 capabilities. Across the 12 capabilities, a *Basic level of training* was needed most often for "negotiation with key stakeholders" (33 responses, 55%) and "development of mechanisms to monitor the long-term usability of information" (33, 54%). *Advanced training* was needed most often for "management of long-term storage of digital information in a repository" (27, 44%) and "management of digital information (metadata, reformatting, etc)" (24, 40%). The capabilities receiving the most training attention across the states are "identification of key stakeholders related to specific digital information" (21, 34%) and "selection and appraisal of digital information" (15, 24%). However, respondents indicated a general lack of capabilities or skills critical to digital information.

Respondents identified additional digital preservation related capabilities not included in the table for which they either already had training or needed training in, including:

- Public relations and outreach to public records officials and patrons;
- Management of cultural change;
- Digitization of legacy documents and publications; and
- How to secure funding for other training and digital preservation programs in general.

Attending conferences and workshops held by professional associations and academic institutions as well as attending training provided by other external sources such as OCLC were also mentioned as ways individuals were acquiring necessary training.

Of note, several respondents indicated that a lack of training was not their main barrier to undertaking digital preservation related activities; rather, it was the more fundamental lack of personnel and funding.

Finally, and of particular interest, while a *Basic level of training* was needed most for all of the capabilities, there were at least five (5) respondents for each capability that indicated *Training already provided*. Moreover, four (4) respondents indicated *Training already provided* for all 12 capabilities and nine (9) respondents indicated *Training already provided* for at least seven of the 12 capabilities.

Training needs for digital preservation related capabilities				
Capability	Training already provided	Basic training needed	Advanced training needed	
Identify the type and amount of digital information throughout the state	20% (12)	49% (30)	31% (19)	
Select and appraise state government information in digital form	24% (15)	47% (29)	29% (18)	
Identify key stakeholders related to specific digital information (other local/state agencies, other states, private sector, etc.)	34% (21)	43% (26)	23% (14)	
Negotiate and make agreements with key stakeholders to preserve digital information	22% (13)	55% (33)	23% (14)	
Acquire state government information in digital form for holdings	22% (13)	43% (26)	35% (21)	
Manage state government information in digital form (metadata, reformatting, etc.)	17% (10)	43% (26)	40% (24)	
Manage the ingest of digital information into a repository	21% (13)	48% (30)	31% (19)	
Manage the long-term storage of digital information in a repository	8% (5)	48% (30)	44% (27)	
Develop mechanisms to monitor the long-term usability of state government information in digital form	11% (7)	54% (33)	34% (21)	
Make state government information in digital form accessible to users	23% (14)	46% (28)	31% (19)	
Produce a disaster and recovery planning for state government information in digital form	18% (11)	48% (30)	34% (21)	
Manage copyright, security, and other legal issues of relevance to state government digital information	16% (10)	48% (30)	35% (22)	

Table 22.Training needs for digital preservation related capabilities

Section 5. State government digital information currently at-risk

Participants at the Library of Congress States Workshop noted a lack of information about how much digital information is actually at risk of being lost. This gap was discussed as part of the barrier to making a case for the investments necessary to build digital preservation capability.

Section 4 of the survey was designed to fill this gap in knowledge about information considered by respondents to be at-risk of being lost. Respondents were asked to identify up to five examples of state government digital information at-risk of deteriorating or being altered or lost. They were also asked to describe the conditions causing the information to be at-risk, and any strategies being considered to preserve such information. See Tables 23 and 24 for the types of at-risk information mentioned and the conditions for causing them to be at-risk. In addition, respondents were asked to identify digital information previously lost or no longer accessible. See Table 25 for a list of the digital information provided in response.

At-risk information

The two types of at-risk information most frequently mentioned are e-mails and the Web sites of state agencies. Several respondents stated that the electronic correspondence of elected officials, digital publications, information stored in databases, and court records were at risk as well. Other at-risk information included legislative proceedings, electronic filings, GIS (Geographic Information System) records, digital video files, born-digital records without print copies, and data in obsolete format (e.g., 5 ¼ inch floppy disks, magnetic tapes).

Respondents also noted a challenge in responding to this section of the survey due to a lack of knowledge about the kinds of information currently at-risk in their states.

Table 23. At-risk state government digital information				
At-risk Information	Number of times mentioned			
e-mails of state agencies	15			
Web sites of state agencies	11			
Electronic correspondences of elected officials	10			
Digital publications	9			
Information in databases	7			
Legislative records (e.g., legislative proceedings, electronic legislative bill files)	5			
Court records	5			
Data in obsolete format (e.g., 5 ¹ / ₄ inch floppy disks, magnetic tapes)	4			
Born-digital records without print copies	4			
GIS files	4			
Digital video files	4			
Personnel records	3			
Electronic filings	2			
Electronic newsletters	2			

Lack of funding, lack of awareness of the importance of digital preservation, and a lack of standards were identified as the most important conditions causing information to be at-risk. Other frequently mentioned contributing conditions include the lack of individual agency efforts to preserve electronic records (especially the information they post on their Web sites), the lack

of centralized authority, the obsolescence of technology, the lack of statewide plan or policy, and the lack of adequate statutory provisions or requirements (See Table 24 for details).

Conditions causing information to be at risk				
Condition	Number of times mentioned			
Lack of funding	13			
Lack of awareness	12			
Lack of standards	12			
Lack of individual agencies' efforts to preserve their electronic records	11			
Lack of centralized authority	8			
Obsolescence of technology	7			
Lack of statewide plan/policy	7			
Lack of statutory provisions	7			
Lack of staff	6			
Lack of long-term planning	4			
High cost of preservation	4			
Use of proprietary format and software	4			
Lack of skill	3			
No steps taken to preserve information	3			
Large volume of records	3			
Frequent content changes	3			
Lack of training/education	2			
Political changes/turnover	2			
Lack of knowledge	2			
Lack of coordination	1			
Lack of leadership	1			

Table 24.Conditions causing information to be at risk

Several respondents mentioned problems with agency Web sites in particular, related to the practice of publishing official reports and records on agency Web sites without the existence of a plan for capturing and preserving content of long-term or enduring value. Respondents further indicated, in many cases, that agency Web sites are maintained in a decentralized manner without uniform standards or guidelines. As a result, agencies have varying retention policies and often alter or remove items. The large volume of Web documents and frequent content changes also make the capturing of Web sites difficult, even in those states where policies and plans do exist.

Concerns about information in digital video format were also noted by respondents. The use of digital video as the new official transcript or minutes of proceedings is increasing, however, standards for digital video format are not fully established, making preservation of video files difficult.

The findings indicate that a majority of states have no current strategy for the preservation of atrisk digital information. In some instances, strategies are under development. However, several general strategies in place that were identified by the respondents included:

- Developing new legislation;
- Partnering with other state agencies;
- Training and educating digital information creators; and
- Automating the capturing and archiving of digital information using tools such as Digital Archive, ContentDM, Archive-It, and LOCKSS.⁶

Information no longer accessible

As shown in 25, agency Web sites are the type of digital information reported lost most frequently. Other digital information not preserved and no longer accessible include state government electronic publications, information stored in obsolete media (e.g., 5 ¹/₄ inch floppy disks, magnetic tapes), and e-mails. One state reported that the back issues of about 50% of a sample of 165 online serial titles are no longer available.

Some respondents described cases where information was lost due to administration changes. In one case, all server drives were erased and files from a former administration were replaced with content from a new administration after the inauguration of a new governor. One state reported the loss of two years worth of their governor's correspondence during the conversion to a new storage system.

Table 25.Types of state government digital information already lost		
Lost information	Number of times mentioned	
State agency Web sites	10	
Digital publications	7	
Data in obsolete format (e.g., 5 ¹ / ₄ inch floppy disks, magnetic tapes)	6	
e-mails	4	
Do not know	5	

Section 6. Enterprise Architecture

According to a National Association of State Chief Information Officers (NASCIO) report published in October of 2005, over 95% of the responding states have embraced Enterprise Architecture (EA) as a framework for systematically determining needs and demands and reshaping "government processes, organization, and supporting management systems."⁷ During the Library of Congress States Workshops, which included 20 representatives of state IT organizations, there was agreement that EA efforts offers a largely untapped opportunity for

⁶ For more information on these tools visit <u>http://www.oclc.org/digitalarchive/; http://dimema.com/index.html;</u> <u>http://www.oclc.org/contentdm/; http://www.archive-it.org/; and http://www.lockss.org/lockss/Home</u>.

⁷ Thirty seven states and the District of Columbia responded to the NASCIO survey. Download a copy of the NASCIO report *The States and Enterprise Architecture: How far have we come? Findings from the NASCIO 2005 EA Assessment*, NASCIO, October 2005 at http://www.nascio.org/publications/index.cfm.

LARM units to partner with information technology organizations and others in support of digital preservation. Therefore, Section 6 of the survey was designed to gauge awareness of and involvement of LARM professionals in their state EA efforts.

Overall respondents appear to be aware of their state's EA efforts (66.7%) while only 37.1% reported any involvement in those efforts. (see Figure 1).



Figure 1. Awareness of and Involvement in State Enterprise Architecture (EA)

The nature of involvement in EA efforts varies. Many respondents indicated active participation in EA committees and working groups. The majority of specific EA activities in which the respondents were involved focused on standards and policy development. The roles respondents are filling in these committees include influencing elements of the architecture that pertain directly to recordkeeping issues; determining how best to preserve the long-term records needed by the state; and helping to develop the data and electronic records domains of the EA. Several of the respondents indicated a more involved role in their state's EA efforts including activities such as server and e-mail consolidation; redesign of state portals; content management system testing; and developing a comprehensive statewide strategy for the management of all records created by state agencies.

Several respondents indicated indirect involvement in EA efforts through occasional attendance at EA related meetings, informal or "back-channel" communication with other agencies regarding EA, meeting reporting requirements (e.g., submitting return on investment technology plans to the state CIO every two years), participating in surveys, or simply observing their state's EA initiatives.

APPENDIX A. Advisory Committee

Dick Cameron	Director of State Programs, National Archives and Records Administration (NARA)
David Carmicheal	State Archivist, Georgia State Archives and President, Council of State Archivists (CoSA)
Martha Crawley	Senior Program Officer, Institute of Museum and Library Services (IMLS)
Richard Pearce-Moses	Director of Digital Government Information, Arizona State Library, Archives and Public Records and President, Society of American Archivists, SAA
Bob Horton	State Archivist, Minnesota Historical Society
Robbie LaFleur	Director, Minnesota Legislative Reference Library
Butch Lazorchak	Digital Archivist, Library of Congress
Bill LeFurgy	Digital Initiatives Project Manager, Library of Congress
Kris Ogilvie	Head, Government Publications Section, California State Library
Jan Reagan	Head, Documents Branch, State Library of North Carolina
Doug Robinson	Executive Director, National Association of State Chief Information Officers (NASCIO)
Kathleen Roe	Chief, Archival Services, New York State Archives and Immediate Past President, Council of State Archivists (CoSA)
Vicki Walch	Executive Director, Council of State Archivists (CoSA)
GladysAnn Wells	State Librarian, Arizona State Library, Archives and Public Records and Immediate Past President, Chief Officers of State Library Agencies (COSLA)

Appendix B. Survey Process

CTG developed the survey in cooperation with an expert group of individuals representing the Council of State Archivists, Chief Officers of State Library Agencies, the Society of American Archivists, the National Association of State Chief Information Officers, the Library of Congress, National Archives and Records Administration, and the Institute of Museum and Library Services (see Appendix <u>A</u>). This group was brought together by the Library of Congress in late August of 2005 to help CTG develop a national survey.

After the initial meeting and using the general survey plan agreed upon by this group, CTG continued to work collaboratively with the individuals to design the specific survey questions and collect the relevant contact information on the state and territorial librarians, archivists, and records managers. The final survey instrument was Web-based and CTG developed it using SurveyMonkey survey software.⁸

CTG e-mailed the Web-based survey on January 11, 2006 to the state/territorial librarians, archivists, and records managers in all 50 states, the District of Columbia, and four U.S. territories. CTG also provided participants access to a printable PDF version of the survey to help respondents share and discuss responses with other members of their agencies and with other agencies in their states.

The participants had approximately six weeks to complete the survey. However, CTG left the survey open for several weeks beyond the February 20th due date to accommodate those library, archives, and records management units that requested additional time.

Per the survey instructions, each participant was given the ability to decide on the response approach that best suited their own state and organizational conditions. The instructions included the following guidelines to inform this decision:

- The survey should not be responded to by an individual working in isolation from others in their unit, agency, or state.
- For those states where the library, archives, or records management functions fall under separate administrative agencies, those units may decide if one or more responses will best reflect the state government digital information preservation activities of their state.
- For those states where the library, archives, or records management functions fall under the same administrative agency, the agency may decide if one or more responses will best reflect the state government digital information preservation activities of their state.
- In those cases where the library, archives, and records management units are administratively separate, each unit could submit one response. Therefore a state with three separate administrative units might submit three separate responses. A state with the library in one administrative unit and the archives and records management in another, might submit two.

⁸ More information on SurveyMonkey can be found at the following Web site: <u>http://www.surveymonkey.com/</u>.

Appendix C. Summary of Respondents

A link to the Web-based survey was e-mailed to 125 individuals representing state and territorial librarians, archivists, and those records managers who are part of a separate administrative unit from the library or archives. To promote awareness of digital information preservation activities among the various units within each state and to produce the most comprehensive and informative state profiles, collaborative responses were encouraged. One hundred of the 125 survey recipients responded as part of a combined state response or separately for an overall response rate of 80%. Table C1 shows response rate by unit type.

Table C1.Response rate by Unit Type				
Unit type	Percentage of total that responded			
Library	76.4%			
Archives	86.7%			
Records Management	61.5%			
Combined Archives and Records Management	92.9%			

A total of 67 responses were received from 50 states and 3 territories. See Appendix <u>D</u> for a listing of the states and their library, archives, records management, and other units that responded to the survey. Table C2 shows the number of joint and individual responses received as well as the units included in those responses. For example, 23 of the responses include representation from the state LARM units in a single collaborative response. Figure C1 shows the percentage breakdown of the 67 survey responses. Table C3 shows that 108 state units are represented in the 67 responses.

Table C2.Responses and Units Represented					
Units included in a single response Number of responses					
State library, archives, and records management units	23				
State library and archives units	4				
State archives and records management units	14				
State library	15				
State archives	7				
State records management unit	3				
Legislative reference library	1				
Total	67				



Figure C1. Units Represented in the Responses

Table C3. Units represented in the responses				
Unit type Number				
State libraries	42			
State archives	13			
State records management	5			
Combined archives/records management	35			
State IT departments to include offices of the State CIO	8			
Legislative reference libraries	2			
Division of legislative audit	1			
State division of court administration	1			
State law library 1				
Total 108				

Many states invested in the compilation of a joint response. Figures C2 and C3 highlight the number of joint and individual responses received and the units represented in those responses. A full sixty percent of the responses represent a collaborative effort; 13% of the responses represent the only submission from that state and reported on only one unit; 26% of the responses represent one of two received from a single state reporting on the activities of one or more units.



Figure C2. Responses from the States



Figure C3. Responses by Unit(s) Represented

Appendix D. Survey Respondents

The following states and their library, archives, records management, and other units responded to the survey. The shaded sections identify those 37 states and 1 territory that were included in the state-level analysis of Section 2 *Institutional Roles and Responsibilities* of the survey summarized in Chapters 2 and 3.

State or territory	tate or territory Responding unit	
Alabama	Archives, Records Management	Alabama ARM
Alaska	Library, Archives, Records Management	Alaska LARM
American Samoa	Library, Archives, Records Management	American Samoa LARM
Arizona	Library, Archives, Records Management	Arizona LARM
Arkansas	Library, Archives, Records Management, Department of Information Services, Administrative Office of the Courts, Division of Legislative Audit	Arkansas LARM*
California	Archives	California A
Camornia	Library	California L
Colorado	Archives, Records Management	Colorado ARM
Colorado	Library	Colorado L
Connecticut	Library, Archives, Records Management	Connecticut LARM
Delaware	Archives	Delaware A
Delaware	Records Management	Delaware RM
Florida	Library, Archives, Records Management	Florida LARM
Georgia	Archives, Records Management	Georgia ARM
Hawaii	Library, Archives, Records Management	Hawaii LARM
Idaho	Library, Archives	Idaho LA
T11' '	Archives, Records Management	Illinois ARM
Illinois	Library	Illinois L
Indiana	Library, Archives, Records Management, Office of Technology	Indiana LARM*
Iowa	Archives, Records Management	Iowa ARM
Iowa	Library	Iowa L
Kansas	Archives, Records Management	Kansas ARM
Kalisas	Library	Kansas L
Kentucky	Library, Archives, Records Management, Commonwealth Office for Technology	Kentucky LARM*
Louisiana	Archives, Records Management	Louisiana ARM
Louisiana	Library	Louisiana L
Maine	Archives	Maine A
Maryland	Archives, Records Management	Maryland ARM
Massachusetts	Archives, Records Management	Massachusetts ARM
wassachusetts	Library	Massachusetts L
Michigan	Library, Archives, Records Management	Michigan LARM
Minnesota	Archives, Legislative Reference Library	Minnesota A*
Mississippi	Archives, Records Management	Mississippi ARM

State or territory		
Missouri	Library, Archives, Records Management	Missouri LARM
Montana	Library, Archives, Records Management, Law Library, Information Services Technology Division (Department of Administration)	Montana LARM*
Nebraska	Library, Archives	Nebraska LA
Nevada	Library, Archives, Records Management	Nevada LARM
New Hampshire	Archives, Records Management	New Hampshire ARM
New Jersey	Library, Archives, Records Management	New Jersey LARM
New Mexico	Library, Archives, Records Management	New Mexico LARM
New York	Library, Archives, Records Management	New York LARM
North Carolina	Library, Archives, Records Management	North Carolina LARM
North Dakota	Records Management	North Dakota RM
Northern Mariana Islands	Library	Northern Mariana Island L
Ohio	Archives	Ohio A
Ohio	Library	Ohio L
Oklahoma	Library, Archives, Records Management	Oklahoma LARM
0	Archives, Records Management	Oregon ARM
Oregon	Library	Oregon L
Pennsylvania	Library, Archives, Records Management	Pennsylvania LARM
Puerto Rico	Library	Puerto Rico L
Rhode Island	Library	Rhode Island L
South Carolina	Library, Archives, Records Management, Division of the State CIO	South Carolina LARM*
Cauth Dalaata	Archives	South Dakota A
South Dakota	Library	South Dakota L
T	Library, Archives	Tennessee LA
Tennessee	Records Management	Tennessee RM
Texas	Library, Archives, Records Management, Department of Information Resources	Texas LARM*
Utah	Library, Archives, Records Management, Department of Technology Services	Utah LARM*
Vermont	Archives	Vermont A
Virginia	Library, Archives, Records Management	Virginia LARM
Washington	Archives, Records Management	Washington ARM
West Virginia	Library	West Virginia L
Wissensin	Library, Archives	Wisconsin LA
Wisconsin	Legislative Reference Bureau	Wisconsin*
Warning	Archives, Records Management	Wyoming ARM
Wyoming	Library	Wyoming L

Appendix E. Survey Responses Organized by Respondent and Question

The following 45 tables starting on the next page include the survey responses to Section 2. *Institutional Roles and Responsibilities* (Tables E1-E33) and Section 4. *Training Needs for Digital Preservation Related Activities* (Tables E34-E45) of the survey. Each table includes responses to a specific item in the survey sections and is organized by respondent.

Responding Unit	Authority not assigned	Library has authority	Archives has authority	Records Management	Others (See profile)
				has authority	
Alabama ARM Alaska LARM	Х				х
American Samoa LARM	Х				^
Arizona LARM		Х	Х	Х	Х
Arkansas LARM*					Х
California A			Х	Х	
California L	X				
Colorado ARM	Х				
Colorado L Connecticut LARM					Х
Delaware A			Х		~
Delaware RM			X	Х	
Florida LARM			Х	Х	
Georgia ARM			Х	Х	Х
Hawaii LARM					Х
Idaho LA	X				Х
Illinois ARM Illinois L	Х				X
IIIInois L Indiana LARM*	Х			Х	X X
lowa ARM				~	× X
lowa L	Х				
Kansas ARM					Х
Kansas L	Х				
Kentucky LARM*			X		Х
Louisiana ARM			Х	Х	X
Louisiana L	X				Х
Maine A Maryland ARM	Х		X		
Maryand ARM Massachusetts ARM			^		Х
Massachusetts L					X
Michigan LARM			Х	Х	Х
Minnesota A*					Х
Mississippi ARM					Х
Missouri LARM					X
Montana LARM*	X				Х
Nebraska LA Nevada LARM	Х				Х
New Hampshire ARM	X				~
New Jersey LARM	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			Х	Х
New Mexico LARM		Х	Х	Х	Х
New York LARM			Х	Х	
North Carolina LARM			Х	Х	Х
North Dakota RM					Х
Northern Mariana Islands L	Х			V	
Ohio A Ohio L	Х			Х	
Oklahoma LARM	^	Х			
Oregon ARM			Х	Х	Х
Oregon L		Х			Х
Pennsylvania LARM			Х	Х	Х
Puerto Rico L	Х				
Rhode Island L*					
South Carolina LARM* South Dakota A	X				
South Dakota A	X				
Tennessee LA	X				
Tennessee RM					Х
Texas LARM*					Х
Utah LARM*		Х	Х		Х
Vermont A			Х	X	X
Virginia LARM		Х		Х	Х
Washington ARM	X				
West Virginia L Wisconsin LA	Х	Х			Х
Wisconsin*		^			^
Wyoming ARM			X	Х	Х
Wyoming L		Х			

Responding Unit	Authority not assigned	Library has authority	Archives has authority	Records Management	Others (See profile)
				has authority	
Alabama ARM	Х				
Alaska LARM	V				Х
American Samoa LARM Arizona LARM	Х				Х
Arkansas LARM*	Х				Λ
California A	^		X	Х	Х
California L			~	~~~~~	X
Colorado ARM	Х				
Colorado L					
Connecticut LARM					Х
Delaware A			Х		
Delaware RM	Х				
Florida LARM	Х				
Georgia ARM			Х	Х	Х
Hawaii LARM					X
Idaho LA					Х
Illinois ARM Illinois L	Х				v
Illinois L Indiana LARM*					× ×
lowa ARM					X X
lowa ARM lowa L	Х				^
Kansas ARM	X				
Kansas L	X				
Kentucky LARM*					Х
Louisiana ARM			Х	Х	Х
Louisiana L	X				
Maine A	Х				
Maryland ARM			Х		
Massachusetts ARM					Х
Massachusetts L					Х
Michigan LARM				Х	X
Minnesota A*					<u>X</u>
Mississippi ARM					X
Missouri LARM Montana LARM*					X X
Nebraska LA					× X
Nevada LARM					× X
New Hampshire ARM	Х				~
New Jersey LARM					Х
New Mexico LARM					Х
New York LARM			Х	Х	
North Carolina LARM					Х
North Dakota RM				Х	
Northern Mariana Islands L	Х				
Ohio A				Х	
Ohio L	Х				
Oklahoma LARM			V	v	X
Oregon ARM			Х	Х	X X
Oregon L Pennsylvania LARM		Х	X	Х	X X
Puerto Rico L	Х	^	^	^	^
Rhode Island L*	^				Х
South Carolina LARM*					X X
South Dakota A					X
South Dakota L					Х
Tennessee LA					Х
Tennessee RM					Х
Texas LARM*					Х
Utah LARM*					Х
Vermont A			Х	Х	Х
Virginia LARM					Х
Washington ARM					Х
West Virginia L	Х				~
Nisconsin LA					Х
Wisconsin* Wyoming ARM				Х	Х
Wyoming ARM Wyoming L		Х	1	^	X X

 Table E3. Setting Standards for Executive Agencies:

 Setting standards for information retention and disposal (e.g., retention periods and methods of disposal) for various series/types of digital records and publications.

and publications.					
Responding Unit	Authority not assigned	Library has authority	Archives has authority	Records Management has authority	Others (See profile)
Alabama ARM			Х	X	
Alaska LARM			X	X	
American Samoa LARM	X		^	Λ	
Arizona LARM	^		Х	Х	Х
Arkansas LARM*	X		^	Λ	Λ
California A	^			Х	
California L		Х	Х	X	
Colorado ARM		Λ	X	X	
Colorado ARM			~	× X	
Connecticut LARM Delaware A			Х	Х	
				X	
Delaware RM Florida LARM			X	X	
			X	X	
Georgia ARM			X	Х	
Hawaii LARM			X		
Idaho LA			Х	Х	X
Illinois ARM					Х
Illinois L		Х	Х		
Indiana LARM*				Х	
Iowa ARM				Х	
lowa L		Х		Х	
Kansas ARM					Х
Kansas L	Х				
Kentucky LARM*			Х		Х
Louisiana ARM			Х	Х	Х
Louisiana L	Х				
Maine A			Х		
Maryland ARM			Х		
Massachusetts ARM			Х	Х	
Massachusetts L					Х
Michigan LARM		Х		Х	
Minnesota A*					Х
Mississippi ARM			Х		
Missouri LARM				Х	
Montana LARM*		Х	Х	X	
Nebraska LA			X	X	
Nevada LARM			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	Х
New Hampshire ARM	Х				
New Jersey LARM	~ ~			Х	
New Mexico LARM				X	
New York LARM		Х		X	
North Carolina LARM		X	Х	X	Х
North Dakota RM		Λ	X	X	~ ~
Northern Mariana Islands L	X			Λ	
Ohio A	^			v	
			V	Х	
Ohio L Oklahoma LARM			Х		Х
Oregon ARM			Х	Х	^
			X	Å	v
Oregon L		Y		Y	X
Pennsylvania LARM		Х	Х	Х	Х
Puerto Rico L	Х				
Rhode Island L*					
South Carolina LARM*			Х	X	
South Dakota A				Х	
South Dakota L	Х				
Tennessee LA				Х	
Tennessee RM				Х	
Texas LARM*		Х		Х	
Utah LARM*			Х		
Vermont A			Х	Х	Х
Virginia LARM		Х		Х	
Washington ARM			Х	Х	
West Virginia L	Х				
Wisconsin LA				Х	Х
Wisconsin*					
Wyoming ARM			Х	Х	
Wyoming L		Х			
				TION	40

CENTER FOR TECHNOLOGY IN GOVERNMENT: PRESERVING STATE GOVERNMENT DIGITAL INFORMATION

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
Alabama ARM			services	provides services	Х
Alaska LARM					X
American Samoa LARM	X				^
rizona LARM	X				
Irkansas LARM*	~				Х
alifornia A		Х	Х		~
alifornia L		X	X		Х
Colorado ARM		Λ	X		~
olorado L		Х	~		
onnecticut LARM		X			Х
elaware A	Х	A			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
elaware RM			Х		
lorida LARM			~	Х	
Georgia ARM			Х	X	
lawaii LARM			~	~	Х
laho LA			Х	Х	~
linois ARM	Х		~	~	
linois L		Х			
ndiana LARM*		~			Х
owa ARM					X
owa L		Х			
ansas ARM	X				
ansas L	~ ~	Х	Х		
entucky LARM*					Х
ouisiana ARM		Х	Х	Х	X
ouisiana L		X	~	~	~
laine A	Х	~			
laryland ARM	~		Х		
lassachusetts ARM			~		Х
lassachusetts L					X
lichigan LARM		Х		Х	X
linnesota A*		~		~	X
lississippi ARM			Х		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
lissouri LARM			~		Х
Iontana LARM*		Х			X
lebraska LA		X			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
levada LARM		X			Х
lew Hampshire ARM	X				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
lew Jersey LARM	X				Х
lew Mexico LARM	~~~~~	Х		Х	X
lew York LARM		X	Х	X	
lorth Carolina LARM		X	~	Λ	Х
lorth Dakota RM		X			X
lorthern Mariana Islands L	X				~
Dhio A	X				
Phio L	~	Х	Х		
Oklahoma LARM	X	~	~		
Dregon ARM	X				
Dregon L	~	Х	Х		Х
ennsylvania LARM	X	~	~		~
uerto Rico L	~	Х			
thode Island L*		^			
outh Carolina LARM*		Х			Х
outh Dakota A		^			X
outh Dakota L		Х	Х	Х	~
ennessee LA		~	~	~	Х
ennessee RM					X X
exas LARM*				X	A
tah LARM*				^	Х
ermont A				X	A
irginia LARM		Х		^	
Ashington ARM		^			Х
/est Virginia L	X				^
Vest Virginia L Visconsin LA	^	Х	Х	Х	Х
		^	۸	Å	X
/isconsin*					V
/yoming ARM /yoming L		Х			Х

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
	•		services	provides services	
Alabama ARM Alaska LARM				Х	X X
American Samoa LARM	X				^
Arizona LARM	X	Х	Х	X	Х
Arkansas LARM*					X
California A				Х	
California L	Х				
Colorado ARM	Х				
Colorado L					
Connecticut LARM	Х				
Delaware A	Х				
Delaware RM				Х	
Florida LARM	Х			, , , , , , , , , , , , , , , , , , ,	
Georgia ARM		V	V	Х	V
Hawaii LARM daho LA		Х	x x	Х	X X
llinois ARM	X		^	^	^
Ilinois L	^	Х			
ndiana LARM*	X	~			Х
owa ARM					X
owa L		Х			
Kansas ARM	Х				
Kansas L			Х		
Kentucky LARM*			Х	Х	Х
Louisiana ARM			Х	Х	
Louisiana L	Х				
Maine A				Х	
Maryland ARM			Х		× ×
Massachusetts ARM Massachusetts L					X X
Massachusells L Michigan LARM				X	X
Minnesota A*			Х	^	^
Mississippi ARM			X		
Missouri LARM			~		Х
Montana LARM*				Х	Х
Nebraska LA	Х				
Nevada LARM	Х				
New Hampshire ARM	Х				
New Jersey LARM	Х				
New Mexico LARM		Х	Х	Х	
New York LARM		Х		X	
North Carolina LARM			Х	X	Х
North Dakota RM	X			Х	
Northern Mariana Islands L	Х		V		
Ohio L	X		Х		
Oklahoma LARM	A			X	
Oregon ARM			Х	X	Х
Oregon L		Х	- •		X
Pennsylvania LARM			Х	Х	X
Puerto Rico L	Х				
Rhode Island L*		Х			
South Carolina LARM*	Х				
South Dakota A	Х				
South Dakota L		Х			
Tennessee LA					X
Tennessee RM				V	Х
Texas LARM*		×	v	Х	Х
Utah LARM* Vermont A		Х	× ×	X	X
Vermont A			^	X	
Washington ARM			Х	X	
Washington ARM West Virginia L	X		~	^	
Wisconsin LA		Х		X	Х
Wisconsin*		~		~	~
Nyoming ARM				Х	
Nyoming L		Х			

Table E6. Services Provide Consultation and training serv					
Responding Unit		Library provides services	Archives provides	Records Management	Others (See profile)
Alabama ARM			services	provides services	
Alaska LARM				Х	
American Samoa LARM	Х				
Arizona LARM		Х	Х	Х	Х
Arkansas LARM*					Х
California A			Х	Х	
California L	v				Х
Colorado ARM Colorado L	Х				
Connecticut LARM		Х		X	Х
Delaware A	Х	~		Λ	X
Delaware RM				Х	
Florida LARM				Х	
Georgia ARM				Х	
Hawaii LARM					Х
Idaho LA			Х	Х	Х
Illinois ARM	V		Х	Х	
Illinois L	X	V			
Indiana LARM* Iowa ARM	X	Х			Х
Iowa ARM Iowa L		Х			Λ
Kansas ARM		^	Х		
Kansas L			X	Х	
Kentucky LARM*			X	X	Х
Louisiana ARM			Х	Х	
Louisiana L	Х				
Maine A				Х	
Maryland ARM			Х		
Massachusetts ARM				Х	
Massachusetts L					X
Michigan LARM				Х	Х
Minnesota A* Mississippi ARM			X X		
Missouri LARM			^	X	
Montana LARM*				X	
Nebraska LA				X	
Nevada LARM	Х				
New Hampshire ARM	Х				
New Jersey LARM				Х	
New Mexico LARM				Х	
New York LARM				Х	
North Carolina LARM			Х	X	Х
North Dakota RM Northern Mariana Islands L	V			Х	
Ohio A	X X				
Ohio L	X				
Oklahoma LARM			Х	Х	
Oregon ARM			X	X	
Oregon L		Х			Х
Pennsylvania LARM			Х	Х	Х
Puerto Rico L	Х				
Rhode Island L*		Х			
South Carolina LARM* South Dakota A	V		Х	Х	
South Dakota A South Dakota L	Х	Х			
Tennessee LA	X	^			
Tennessee RM	X				
Texas LARM*				Х	
Utah LARM*		Х	Х		Х
Vermont A			Х	Х	Х
Virginia LARM				Х	
Washington ARM			Х	Х	
West Virginia L	Х				
Wisconsin LA				Х	
Wisconsin*					
Wyoming ARM		V		Х	
Wyoming L		Х			

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
			services	provides services	
Alabama ARM			Х	Х	
Alaska LARM	X X				
American Samoa LARM Arizona LARM	X	Х	Х	Х	
Arkansas LARM*		^	^	^	Х
California A		Х	Х		Λ
California L	Х	~	~		
Colorado ARM	Х				
Colorado L					
Connecticut LARM		Х		Х	
Delaware A	Х				
Delaware RM			Х	Х	
Iorida LARM			Х	Х	
Seorgia ARM				Х	
lawaii LARM	Х		~~~~~		
daho LA			X	X	
linois ARM linois L	X		Х	Х	
ndiana LARM*	X		Х		
owa ARM	^		Λ		Х
owa L		Х			~
Kansas ARM			Х		
Kansas L			X	Х	
Kentucky LARM*			Х		
ouisiana ARM			Х	Х	
ouisiana L	Х				
laine A				Х	
laryland ARM			Х		
lassachusetts ARM				Х	
Aassachusetts L				X	Х
Aichigan LARM			X	Х	
/linnesota A* /lississippi ARM			X X		
Alissouri LARM			~	X	
Iontana LARM*				X	
Nebraska LA	Х				
levada LARM	Х				
lew Hampshire ARM	Х				
lew Jersey LARM				Х	
lew Mexico LARM		Х	Х	Х	
lew York LARM			Х	Х	
Iorth Carolina LARM			Х	Х	
lorth Dakota RM				Х	
Northern Mariana Islands L	X				
Dhio A Dhio L	X	V	V		
Dhio L Dklahoma LARM		Х	X X	X	
Dregon ARM			X X	X	
Dregon L			× X	^	Х
Pennsylvania LARM			X X	Х	X X
Puerto Rico L	Х		- •		~
Rhode Island L*		Х			
South Carolina LARM*	Х				
outh Dakota A	Х				
outh Dakota L		Х			
ennessee LA			Х		
ennessee RM			Х		
exas LARM*			X	Х	
Itah LARM*		Х	X		
Vermont A			Х	X	Х
Virginia LARM			v	X	
Vashington ARM	X		Х	Х	
Vest Virginia L Visconsin LA	A	Х	Х		
Visconsin LA		^	^		
Vyoming ARM			Х	X	
/yoming L		Х			

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
	Services not provided	Library provides services	services	provides services	Others (See profile)
Alabama ARM		~	~		~
Alaska LARM American Samoa LARM	V	Х	Х	Х	Х
American Samoa LARM Arizona LARM	X				
Arkansas LARM*	X				Х
California A	Х				
California L		Х			
Colorado ARM	Х				
Colorado L					
Connecticut LARM	X	Х			
Delaware A Delaware RM	X			Х	
Florida LARM		Х	Х	X	
Georgia ARM		~	~	X	
Hawaii LARM					Х
Idaho LA			Х	Х	Х
Illinois ARM	Х				
Illinois L	X				
Indiana LARM*	X				X
Iowa ARM Iowa L		v			Х
Kansas ARM		Х	Х		
Kansas ARM Kansas L			X X	Х	
Kentucky LARM*			X	Λ	Х
Louisiana ARM		Х			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Louisiana L	Х				
Maine A	Х				
Maryland ARM			Х		
Massachusetts ARM				Х	
Massachusetts L	X				X
Michigan LARM Minnesota A*			V		Х
Mississippi ARM			X X		
Missouri LARM			Λ	X	Х
Montana LARM*		Х		X	X
Nebraska LA	Х				
Nevada LARM	Х				
New Hampshire ARM	Х				
New Jersey LARM				Х	
New Mexico LARM		Х	Х	X	
New York LARM North Carolina LARM			X	X X	
North Dakota RM			Λ	X	
Northern Mariana Islands L	X			^	
Ohio A	X				
Ohio L	X				
Oklahoma LARM	Х				
Oregon ARM			Х	Х	Х
Oregon L		Х			
Pennsylvania LARM	X		Х	Х	Х
Puerto Rico L Rhode Island L*	Х	Х			
South Carolina LARM*	X	^			
South Dakota A	X				
South Dakota L		Х			
Tennessee LA	Х				
Tennessee RM					Х
Texas LARM*				Х	
Utah LARM*		Х	X		
Vermont A			X		
Virginia LARM Washington ARM			X X	X X	Х
Washington ARM West Virginia L	X		٨	^	^
Wisconsin LA	^	X			
Wisconsin*		~			
Wyoming ARM			Х	Х	
Wyoming L		Х			

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
labama ARM	X		services	provides services	
laska LARM	X				
merican Samoa LARM	X				
rizona LARM				Х	
rkansas LARM*					Х
alifornia A		Х	Х		
alifornia L	Х				Х
Colorado ARM	Х				
olorado L					
Connecticut LARM	× ×	X			
Delaware A Delaware RM	Х		Х	X	
lorida LARM	X		^	^	
Georgia ARM	~		Х	X	
lawaii LARM	X		~	Λ	
daho LA	~		Х	Х	
linois ARM	Х				
linois L		Х			
ndiana LARM*	Х				Х
owa ARM					Х
owa L		Х			
ansas ARM			Х		
Cansas L		Х	X		
Centucky LARM*			X	N N	
ouisiana ARM	V		Х	Х	
ouisiana L Iaine A	X				
laryland ARM	^		Х		
lassachusetts ARM			X	Х	
lassachusetts L	X		Λ	Λ	
lichigan LARM			Х	Х	Х
1innesota A*			Х		
lississippi ARM			Х		
1issouri LARM				Х	Х
Iontana LARM*		Х			
lebraska LA				Х	
levada LARM	X				
lew Hampshire ARM	X	X			
lew Jersey LARM lew Mexico LARM	Х	X	X	X	
lew York LARM		Х	X X	Х	
Iorth Carolina LARM			× X	X	
lorth Dakota RM			~	X	
Iorthern Mariana Islands L		Х	Х	Λ	
Dhio A	X				
Dhio L			Х		Х
klahoma LARM	Х				Х
Dregon ARM			Х	Х	Х
Dregon L					Х
ennsylvania LARM			Х	Х	Х
Puerto Rico L	Х				
Rhode Island L*					
South Carolina LARM*		Х			X
South Dakota A		V			Х
outh Dakota L ennessee LA		Х	X		
ennessee LA ennessee RM			X X	Х	
exas LARM*	X		~	^	
Itah LARM*	~				Х
ermont A			Х	Х	
/irginia LARM		Х	X		
Vashington ARM	Х				
/est Virginia L	Х				
Visconsin LA			Х		Х
Visconsin*					
/yoming ARM			Х	X	

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
Alabama ARM			services	provides services	
Alaska LARM		Х	Х		
American Samoa LARM	Х				
Arizona LARM		Х			
Arkansas LARM*					Х
California A					Х
California L					Х
Colorado ARM	Х				
Colorado L		Х			
Connecticut LARM		Х			
Delaware A	Х		Y	X	
Delaware RM Florida LARM	X		Х	Х	
Georgia ARM	X				
Hawaii LARM	^				Х
daho LA			X	Х	^
llinois ARM	Х		X	~	
llinois L		Х			Х
ndiana LARM*					X
owa ARM	X				
owa L		Х			
Kansas ARM	Х				
Kansas L		Х	Х		
Kentucky LARM*					Х
₋ouisiana ARM		Х			Х
₋ ouisiana L	Х				
Maine A	Х				
Maryland ARM			X		
Massachusetts ARM	X		Х	Х	
Massachusetts L	Х				X
Michigan LARM			Y		X
Minnesota A* Mississippi ARM			X X		Х
Mississippi ARM Missouri LARM			Λ		Х
Montana LARM*		Х			X
Nebraska LA		X			~
Nevada LARM	Х				
New Hampshire ARM	Х				
New Jersey LARM		Х			
New Mexico LARM		Х			Х
New York LARM			Х		
North Carolina LARM		Х			Х
North Dakota RM				Х	
Northern Mariana Islands L					Х
Dhio A	Х				
Dhio L Dklahoma LARM	X	Х			
Dregon ARM	^		Х	Х	Х
Dregon ARM Dregon L		Х	^	^	۸
Pennsylvania LARM		^	Х		Х
Puerto Rico L		Х	~		~
Rhode Island L*		X			Х
South Carolina LARM*		X			
South Dakota A					Х
South Dakota L		Х			
Fennessee LA					Х
Fennessee RM					Х
「exas LARM*	Х				
Jtah LARM*					
/ermont A			X		Х
/irginia LARM		Х	Х		
Vashington ARM	X				
Vest Virginia L	Х				
Visconsin LA		Х			Х
Visconsin* Vyoming ARM					
Woming ADM		1		Х	Х

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
labama ARM	X		services	provides services	
laska LARM	^				Х
merican Samoa LARM	X				~
rizona LARM				Х	
rkansas LARM*					Х
alifornia A					Х
alifornia L	Х				
olorado ARM	Х				
olorado L					
onnecticut LARM		Х			
elaware A	X				
elaware RM	X				
lorida LARM	X			× ×	
eorgia ARM				Х	X
awaii LARM laho LA	v				Х
inois ARM	X X				
INOIS ARIM inois L	X				
idiana LARM*	^				Х
wa ARM					× X
wa L	Х				~
ansas ARM			Х		Х
ansas L			X		~
entucky LARM*			X		Х
ouisiana ARM	Х				
ouisiana L	Х				
laine A	Х				
laryland ARM			Х		
lassachusetts ARM					Х
lassachusetts L	Х				
lichigan LARM					Х
linnesota A*			Х		Х
lississippi ARM			Х	Х	
lissouri LARM					Х
lontana LARM*	X	Х			
ebraska LA evada LARM	X				
evada LARM ew Hampshire ARM	X X				
ew Jersey LARM	X			V	
ew Jersey LARM ew Mexico LARM				X	Х
ew York LARM	X				^
orth Carolina LARM	^				
orth Dakota RM				Х	Х
orthern Mariana Islands L	Х			~	
Phio A	X				
hio L					Х
klahoma LARM	Х				Х
regon ARM					Х
regon L		Х	Х		Х
ennsylvania LARM			Х		Х
uerto Rico L	Х				
hode Island L*					Х
outh Carolina LARM*	Х				
outh Dakota A					X
outh Dakota L		Х			Х
ennessee LA	X				V
ennessee RM	V				Х
exas LARM* tah LARM*	X				Х
ermont A			Х		X
	v		λ		
irginia LARM /ashington ARM	X X				
est Virginia L	X				
/isconsin LA	X				
/isconsin*	^				
yoming ARM				X	Х
yoming L				^	~

Responding Unit	Authority not assigned		e.g., metadata, file form Archives has authority	Records Management	Others (See profile)
		Library has autionly	Archives has autionty	has authority	Others (dee profile)
labama ARM	Х				
laska LARM	X		Х	Х	Х
merican Samoa LARM	Х	Х	X	Х	
Inzona LARM Irkansas LARM*	Х	X	X	X	
California A	^				Х
California L					X
Colorado ARM	Х				~
Colorado L					
Connecticut LARM					Х
elaware A			Х		
elaware RM			Х	Х	
lorida LARM					Х
Georgia ARM	Х				
lawaii LARM					Х
daho LA			Х		
linois ARM	Х				V
linois L ndiana LARM*	Х				Х
owa ARM	Λ				Х
owa L	Х				^
Cansas ARM	X				
Cansas L	X				
Centucky LARM*			Х		
ouisiana ARM			X	Х	Х
ouisiana L	Х				
1aine A	Х				
laryland ARM			Х		
lassachusetts ARM					Х
lassachusetts L	Х				
lichigan LARM					X
finnesota A*					X
lississippi ARM lissouri LARM					X X
Iontana LARM*					× X
lebraska LA					× ×
levada LARM	Х				^
lew Hampshire ARM	X				
lew Jersey LARM				Х	Х
lew Mexico LARM			Х	Х	Х
lew York LARM	Х				
Iorth Carolina LARM			Х	Х	
lorth Dakota RM	Х				
lorthern Mariana Islands L	Х				
Dhio A					Х
Dhio L	Х	X			
Oklahoma LARM		Х			
Dregon ARM Dregon L					Х
Pregon L Pennsylvania LARM	X				λ
Puerto Rico L	^	Х			
Rhode Island L*		Λ	X		Х
outh Carolina LARM*			~		~
outh Dakota A	Х				
outh Dakota L	X				
ennessee LA	Х				
ennessee RM					Х
exas LARM*					
Itah LARM*					Х
ermont A			Х	Х	Х
irginia LARM	Х				
Vashington ARM	Х				
/est Virginia L	Х				
/isconsin LA					Х
/isconsin*	Х				
Vyoming ARM			1	Х	Х

Responding Unit	Authority not assigned	Library has authority	Archives has authority	Records Management	Others (See profile)
labama ARM	X			has authority	
laska LARM	^				Х
merican Samoa LARM	Х				~
rizona LARM	X				
rkansas LARM*	Х				
alifornia A					Х
alifornia L					Х
olorado ARM	Х				
olorado L					
onnecticut LARM					Х
elaware A			Х		
elaware RM	Х				
orida LARM	X				Х
eorgia ARM	Х				
awaii LARM	X				Х
aho LA	X				
inois ARM inois L	X				Х
diana LARM*					X X
wa ARM					X X
wa ARM wa L	X				^
ansas ARM	X				
ansas L	X				
entucky LARM*					Х
ouisiana ARM					X X
puisiana L	Х				
aine A	Х				
aryland ARM			Х		
assachusetts ARM					Х
assachusetts L	Х				
ichigan LARM					Х
innesota A*					Х
lississippi ARM					Х
lissouri LARM					Х
ontana LARM*					Х
ebraska LA					Х
evada LARM	Х				
ew Hampshire ARM	Х				
ew Jersey LARM					Х
ew Mexico LARM	X		Х	Х	
ew York LARM	Х				X
orth Carolina LARM	Y				Х
orth Dakota RM orthern Mariana Islands L	X X				
hio A	^				Х
hio L	X				^
klahoma LARM	A				Х
regon ARM					~
regon L					Х
ennsylvania LARM	Х				
uerto Rico L	X				
hode Island L*					Х
outh Carolina LARM*					
outh Dakota A					Х
outh Dakota L					Х
ennessee LA	Х				
ennessee RM					Х
exas LARM*					
tah LARM*					Х
ermont A			Х	Х	Х
rginia LARM	Х				
ashington ARM					Х
lest Virginia L	Х				
lisconsin LA					X
isconsin*					Х
yoming ARM				Х	Х
/yoming L					Х

Table E14. Setting Standards for Legislative Agencies: Setting standards for information retention and disposal (e.g., retention periods and methods of disposal) for various series/types of digital records and publications.

and publications.					
Responding Unit	Authority not assigned	Library has authority	Archives has authority	Records Management has authority	Others (See profile)
Alabama ARM			V		
Alabama ARM Alaska LARM			X X	X	
	V		X	X	
American Samoa LARM	Х		N N	X	
Arizona LARM	V		Х	Х	
Arkansas LARM*	Х				N N
California A		N .	N N		X
California L		Х	X		Х
Colorado ARM			Х		
Colorado L				Х	
Connecticut LARM					Х
Delaware A			Х		
Delaware RM			Х	Х	
Florida LARM					Х
Georgia ARM	Х				
Hawaii LARM	Х				
Idaho LA			Х		
Illinois ARM					Х
Illinois L					Х
Indiana LARM*	Х				
Iowa ARM				Х	
lowa L		Х		Х	
Kansas ARM	Х				
Kansas L	Х				
Kentucky LARM*			Х		Х
Louisiana ARM			Х	Х	Х
Louisiana L	Х				
Maine A	X				
Maryland ARM	~		Х		
Massachusetts ARM			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Х
Massachusetts L	Х				~
Michigan LARM	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Х	Х	Х
Minnesota A*			Λ	~	X
Mississippi ARM			Х		^
Mississippi ARM Missouri LARM			^	Х	
Montana LARM*				Λ	
Nebraska LA					Х
Nevada LARM	Х				^
New Hampshire ARM	X				
	^			V	
New Jersey LARM				X	
New Mexico LARM	V			Х	
New York LARM	Х	Y	N N	X	X
North Carolina LARM	N N	Х	Х	Х	Х
North Dakota RM	X				
Northern Mariana Islands L	Х				
Ohio A					Х
Ohio L			Х		
Oklahoma LARM					Х
Oregon ARM					
Oregon L					Х
Pennsylvania LARM	Х				
Puerto Rico L	Х				
Rhode Island L*			Х		Х
South Carolina LARM*			Х	Х	
South Dakota A				Х	
South Dakota L	Х				
Tennessee LA	Х				
Tennessee RM			Х	Х	
Texas LARM*		Х		Х	
Utah LARM*					Х
Vermont A			Х	Х	Х
Virginia LARM		Х		X	
Washington ARM			Х	X	
West Virginia L	Х		~		
Wisconsin LA					Х
Wisconsin*					X
Wyoming ARM			Х	Х	~
Wyoming L			~	~	Х
					^

CENTER FOR TECHNOLOGY IN GOVERNMENT: PRESERVING STATE GOVERNMENT DIGITAL INFORMATION

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
Alabama ARM			services	provides services	X
laska LARM		Х	Х	X	× ×
merican Samoa LARM	Х				
rizona LARM		Х	Х	Х	
vrkansas LARM*	Х				
California A					Х
California L		Х			Х
Colorado ARM			Х		
Colorado L		Х			
Connecticut LARM	N N				Х
Delaware A	X		Y		
elaware RM Iorida LARM			Х	Х	
Georgia ARM				X	
lawaii LARM				^	Х
daho LA			Х	X	× ×
linois ARM	Х		~	~	~
linois L					Х
ndiana LARM*					X
owa ARM					Х
owa L		Х			
ansas ARM	Х				
Cansas L		Х	Х		
Kentucky LARM*					X
ouisiana ARM			Х	Х	Х
ouisiana L	, v	Х			
Anne A	X		X		
Iaryland ARM Iassachusetts ARM			X		Х
lassachusetts L		Х			^
lichigan LARM		~			Х
linnesota A*					X
lississippi ARM			Х	Х	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
lissouri LARM					Х
1ontana LARM*					Х
lebraska LA					Х
levada LARM	Х				
lew Hampshire ARM	Х				
lew Jersey LARM	Х				Х
lew Mexico LARM		X	X	X	Х
lew York LARM		X	Х	Х	
Iorth Carolina LARM	X	Х			Х
Iorth Dakota RM Iorthern Mariana Islands L	X		Х		
Iorthern Mariana Islands L	X		^		
Dhio L	~	Х	Х		
Oklahoma LARM	Х	~	~		
Dregon ARM					
Dregon L		Х	Х		Х
ennsylvania LARM	Х				
Puerto Rico L		Х			
Rhode Island L*					
South Carolina LARM*					Х
outh Dakota A					Х
outh Dakota L		Х			
ennessee LA	Х				V.
ennessee RM				V	Х
exas LARM* tah LARM*			Х	Х	Х
ermont A			^	X	X X
'irginia LARM		Х		^	^
Vashington ARM		^			Х
/est Virginia L	X				~
Visconsin LA					Х
Visconsin*					X
/yoming ARM					X X
/yoming L		Х			

Responding Unit	vices on digital information Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
			services	provides services	
Alabama ARM Alaska LARM	X			Х	× ×
American Samoa LARM	× X				^
Arizona LARM	~	Х	Х	X	
Arkansas LARM*	Х				
California A					Х
California L					Х
Colorado ARM	Х				
Colorado L					
Connecticut LARM					Х
Delaware A				X	
Delaware RM Florida LARM	X			Х	
Georgia ARM	^			Х	
Hawaii LARM				^	Х
Idaho LA			Х	Х	Λ
Illinois ARM	X		~	~	
Illinois L					Х
Indiana LARM*					Х
Iowa ARM					Х
lowa L		Х			
Kansas ARM	Х				
Kansas L			X	Х	
Kentucky LARM*			Х		Х
Louisiana ARM	X				
Louisiana L	X				
Maine A Maryland ARM	Х		Х		
Massachusetts ARM			^	X	
Massachusetts L	X			^	
Michigan LARM	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				Х
Minnesota A*					X
Mississippi ARM			Х		
Missouri LARM					Х
Montana LARM*					Х
Nebraska LA					Х
Nevada LARM	Х				
New Hampshire ARM	Х				
New Jersey LARM	Х				
New Mexico LARM		X		X	Х
New York LARM North Carolina LARM		Х	X	X	X
North Dakota RM	X		^	~	Λ
Northern Mariana Islands L	X				
Ohio A	X				
Ohio L	X				
Oklahoma LARM				X	
Oregon ARM					
Oregon L		Х			Х
Pennsylvania LARM	Х				
Puerto Rico L	Х				
Rhode Island L*					
South Carolina LARM*	X				
South Dakota A	X	V			
South Dakota L		Х	v		
Tennessee LA Tennessee RM			Х		Х
Texas LARM*				X	Λ
Utah LARM*			Х	~	Х
Vermont A			X	X	X X
Virginia LARM				X	
Washington ARM			Х	X	
West Virginia L	Х				
Wisconsin LA					Х
Wisconsin*					Х
Wyoming ARM			Х	Х	

Alabama ARM Alaska LARM American Samoa LARM Arizona LARM Arizona LARM California A California A Colorado ARM Colorado L Colorado L Connecticut LARM Delaware A	Services not provided X	Library provides services	Archives provides services X X X	Records Management provides services X X X X X X X X X	Others (See profile) X X X X X
Alaska LARM American Samoa LARM Arizona LARM Arizona LARM Arkansas LARM* California A California L Colorado ARM Colorado L Connecticut LARM Delaware A Delaware RM Florida LARM Georgia ARM Illinois ARM Illinois L Indiana LARM* Iowa ARM Iowa L Kansas ARM	X X X X X	X	X X	X X X 	X
American Samoa LARM Arizona LARM Arizona LARM* California A California L Colorado ARM Colorado L Connecticut LARM Delaware A Delaware RM Florida LARM Georgia ARM Illinois ARM Illinois L Indiana LARM* Iowa ARM Iowa L Kansas L	X X X X X	X	X	X	X
Arizona LARM Arkansas LARM* California A California L California L Colorado ARM Colorado L Connecticut LARM Delaware A Delaware RM Florida LARM Georgia ARM Illinois ARM Illinois L Illinois L Indiana LARM* Iowa ARM Kansas ARM	X X X X X	X			
Arkansas LARM* California A California L Colorado ARM Colorado L Connecticut LARM Delaware A Delaware RM Florida LARM Georgia ARM Idaho LA Illinois ARM Illinois L Indiana LARM* Iowa ARM Iowa L Kansas ARM Kansas L	X X X X	X			
California A California L Colorado ARM Colorado L Connecticut LARM Delaware A Delaware RM Florida LARM Georgia ARM Idaho LA Illinois L Indiana LARM* Iowa L Kansas ARM Kansas L	X X X X	Image: Section of the sectio	X	Х	
California L Colorado ARM Colorado ARM Colorado L Connecticut LARM Delaware A Delaware RM Florida LARM Georgia ARM Hawaii LARM Idaho LA Illinois L Indiana LARM* Iowa L Kansas ARM Kansas L	X X X	Image:	X	Х	
Colorado ARM Colorado L Connecticut LARM Delaware A Delaware RM Florida LARM Georgia ARM Hawaii LARM Idaho LA Illinois ARM Indiana LARM* Iowa ARM Iowa L Kansas ARM Kansas L	X X X	Image: Section of the sectio	X	Х	X
Colorado L Connecticut LARM Delaware A Delaware RM Florida LARM Georgia ARM Hawaii LARM Idaho LA Illinois ARM Illinois L Indiana LARM* Iowa ARM Iowa L Kansas ARM Kansas L	X X X		X	Х	
Connecticut LARM Delaware A Delaware RM Florida LARM Georgia ARM Hawaii LARM Idaho LA Illinois ARM Illinois L Indiana LARM* Iowa ARM Iowa L Kansas ARM Kansas L	X		X	Х	
Delaware A Delaware RM Delaware RM Florida LARM Georgia ARM Hawaii LARM Idaho LA Illinois ARM Illinois L Indiana LARM* Iowa ARM Iowa L Kansas ARM Kansas L	X		X	Х	
Delaware RM Florida LARM Georgia ARM Hawaii LARM Idaho LA Illinois ARM Illinois L Indiana LARM* Iowa ARM Iowa L Kansas ARM Kansas L	X		X	Х	
Florida LARM Georgia ARM Hawaii LARM Idaho LA Illinois ARM Illinois L Indiana LARM* Iowa ARM Iowa L Kansas ARM Kansas L			X	Х	
Georgia ARM Hawaii LARM Hawaii LARM Hawaii LARM Hawaii LARM Hawaii LARM Hilinois ARM Hilinois L Hawai LARM* Howa ARM Howa L Hansas ARM Kansas L			X		
Hawaii LARM Idaho LA Illinois ARM Illinois L Indiana LARM* Iowa ARM Iowa L Kansas ARM Kansas L			Х	X	
Idaho LA Illinois ARM Illinois L Indiana LARM* Iowa ARM Iowa L Kansas ARM Kansas L			Х		Х
Illinois ARM Illinois L Illinois L Indiana LARM* Iowa ARM Iowa L Kansas ARM Kansas L I			X	Х	Λ
Illinois L Indiana LARM* Iowa ARM Iowa L Kansas ARM Kansas L				Λ	
Indiana LARM* Iowa ARM Iowa L Kansas ARM Kansas L		· · ·			Х
lowa ARM Iowa L Iowa L Kansas ARM Kansas L					X
lowa L Kansas ARM Kansas L					X X
Kansas ARM Kansas L		Х			~
Kansas L	Х				
			Х	Х	
					Х
Louisiana ARM			Х	Х	Х
Louisiana L	Х				
Maine A	Х				
Maryland ARM			Х		
Massachusetts ARM			Х	Х	
Massachusetts L	Х				
Michigan LARM					Х
Minnesota A*					Х
Mississippi ARM			Х		
Missouri LARM	Х				
Montana LARM*					Х
Nebraska LA					Х
Nevada LARM	Х				
New Hampshire ARM	Х				
New Jersey LARM				Х	
New Mexico LARM				X	Х
New York LARM				Х	
North Carolina LARM	~		Х	Х	Х
North Dakota RM	X				
Northern Mariana Islands L	X				
Ohio A Ohio L	X X				
Ohio L Oklahoma LARM	٨		Х	Х	
Oregon ARM			^	^	
Oregon L					Х
Pennsylvania LARM	Х				N
Puerto Rico L	X				
Rhode Island L*	~				
South Carolina LARM*	Х	<u> </u>			
South Dakota A	X				
South Dakota L		Х			
Tennessee LA			Х		
Tennessee RM					Х
Texas LARM*				Х	
Utah LARM*			Х		Х
Vermont A			Х	Х	Х
Virginia LARM				Х	
Washington ARM			Х	Х	
West Virginia L	Х				
Wisconsin LA					Х
Wisconsin*					Х
Wyoming ARM			Х	Х	Х
Wyoming L					

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
Alabama ARM			services	provides services X	
Alaska LARM	X			X	
American Samoa LARM	X			~	
Arizona LARM		Х	Х	Х	
Arkansas LARM*	Х				
California A	Х				
California L					Х
Colorado ARM	X				
Colorado L					
Connecticut LARM	X X				
Delaware A Delaware RM	X		Х	Х	
Florida LARM			× X	X	
Georgia ARM			~	X	
Hawaii LARM				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Х
Idaho LA			Х	Х	
Illinois ARM	Х				
Illinois L					Х
Indiana LARM*	Х				
Iowa ARM					Х
lowa L		Х			
Kansas ARM	Х				
Kansas L			X	Х	
Kentucky LARM*			X	V	V
Louisiana ARM Louisiana L	X		Х	Х	Х
Louisiana L Maine A	X				
Maryland ARM	^		Х		
Massachusetts ARM			~	X	
Massachusetts L	X				
Michigan LARM			Х	Х	Х
Minnesota A*					Х
Mississippi ARM			Х		
Missouri LARM	Х				
Montana LARM*					X
Nebraska LA					Х
Nevada LARM	X				
New Hampshire ARM	Х			V	
New Jersey LARM New Mexico LARM	X			Х	
New York LARM	^		Х	X	
North Carolina LARM			× ×	X	
North Dakota RM	Х		~	~	
Northern Mariana Islands L	X				
Ohio A	X				
Ohio L		Х	Х		
Oklahoma LARM			Х	Х	
Oregon ARM					
Oregon L					
Pennsylvania LARM	X				
Puerto Rico L	Х				
Rhode Island L*	N N				
South Carolina LARM* South Dakota A	X				
South Dakota A	X	X			
Tennessee LA		^	Х		
Tennessee RM			× X		
Texas LARM*			X	Х	
Utah LARM*			X		Х
Vermont A			X	Х	X
Virginia LARM				X	
Washington ARM			Х	Х	
West Virginia L	Х				
Wisconsin LA					Х
Wisconsin*	Х				
Wyoming ARM			Х	Х	
Wyoming L					

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
Alabama ARM			services	provides services	
laska LARM		Х			Х
merican Samoa LARM	Х	~			Λ
rizona LARM	X				
rkansas LARM*	Х				
California A					Х
California L					Х
Colorado ARM	Х				
Colorado L					
Connecticut LARM					Х
Delaware A	Х				
Delaware RM			X	X	
Iorida LARM			Х	X X	
Georgia ARM Iawaii LARM				X	Х
daho LA			Х	Х	^
linois ARM	X		^	^	
linois L	A				Х
ndiana LARM*	X				~
owa ARM	~ ~				Х
owa L		Х			
(ansas ARM	Х				
Kansas L			Х		
Kentucky LARM*					Х
ouisiana ARM					Х
ouisiana L	X				
Naine A	X				
And ARM			Х	N N	
Iassachusetts ARM Iassachusetts L	X			Х	
lichigan LARM	^				Х
linnesota A*					X
lississippi ARM			Х		Λ
/issouri LARM	Х				
Iontana LARM*					Х
lebraska LA					Х
levada LARM	Х				
lew Hampshire ARM	Х				
lew Jersey LARM	Х				
lew Mexico LARM				Х	Х
lew York LARM				X	
North Carolina LARM	X		Х	Х	
lorth Dakota RM	X X				
lorthern Mariana Islands L Dhio A	X				
Dhio L	× X				
Dklahoma LARM	X				
Dregon ARM	~ ~				
Dregon L		Х			Х
Pennsylvania LARM	Х				
Puerto Rico L	Х				
Rhode Island L*					
South Carolina LARM*	Х				
South Dakota A	Х				
outh Dakota L		Х			
ennessee LA	X				· · ·
ennessee RM				V	Х
exas LARM* Itah LARM*		Х	Х	Х	Х
remont A		^	X	Х	X X
/irginia LARM			X	X	^
Vashington ARM			X	X	
Vest Virginia L	X		^	^	
Visconsin LA	A				Х
Visconsin*	X				~
/yoming ARM			Х	Х	
/yoming L		Х			

Responding Unit	Services not provided				
Vahama ARM			Archives provides services	Records Management provides services	Others (See profile)
	Х				X
Alaska LARM American Samoa LARM	X				Х
Arizona LARM	^			Х	
Arkansas LARM*	Х			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
California A	X				
California L					Х
Colorado ARM	Х				
Colorado L					~
Connecticut LARM Delaware A			Х		Х
Delaware RM			× X	Х	
Florida LARM	Х		Λ	~	
Georgia ARM			Х	Х	
Hawaii LARM					Х
daho LA			Х	Х	
Ilinois ARM	Х				
llinois L					X
ndiana LARM*					X
owa ARM owa L		Х			Х
Kansas ARM	X	^			
Kansas L		Х	Х		
Kentucky LARM*			X		
ouisiana ARM			Х	Х	
₋ouisiana L	Х				
Maine A	Х				
Maryland ARM			X		
Massachusetts ARM		N N	Х	Х	
Massachusetts L Michigan LARM		Х	Х	Х	Х
Minnesota A*			^	^	X
Mississippi ARM			Х		Λ
Missouri LARM					Х
Montana LARM*		Х	Х		
Nebraska LA					Х
Nevada LARM				Х	
New Hampshire ARM	Х				
New Jersey LARM		Х		X	V
New Mexico LARM			Х	Х	Х
North Carolina LARM			× X	Х	
North Dakota RM	Х		Λ	X	
Northern Mariana Islands L			Х		
Dhio A	Х				
Dhio L			Х		X
Oklahoma LARM	X				Х
Dregon ARM	V				
Dregon L Pennsylvania LARM	X X				
Puerto Rico L	X				
Rhode Island L*					
South Carolina LARM*					Х
South Dakota A					Х
South Dakota L		Х			
Tennessee LA			Х		
Fennessee RM	V				Х
Гехаs LARM* Jtah LARM*	Х		Х		Х
/ermont A			X	Х	X
/irginia LARM		Х	× X	~	^
Washington ARM			X	Х	Х
Vest Virginia L	Х				
Visconsin LA					Х
Visconsin*	Х				
Nyoming ARM Nyoming L			Х	Х	

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
			services	provides services	· · · /
Alabama ARM Alaska LARM		V	Y	V	
Alaska LARM American Samoa LARM	X	Х	Х	Х	
Arizona LARM	^	Х			
Arkansas LARM*	X	~			
California A					Х
California L					Х
Colorado ARM	Х				
Colorado L		Х			
Connecticut LARM					Х
Delaware A	Х				
Delaware RM			Х	Х	
Florida LARM	X				
Georgia ARM	Х				× ×
Hawaii LARM Idaho LA					X X
Ilinois ARM	Х				
Ilinois L	^				Х
Indiana LARM*					X
lowa ARM					X
lowa L		Х			
Kansas ARM	Х				
Kansas L		Х	Х		
Kentucky LARM*					Х
Louisiana ARM		Х			Х
Louisiana L	Х				
Maine A	Х				
Maryland ARM			Х		
Massachusetts ARM		× ×		Х	
Massachusetts L		Х			Х
Michigan LARM Minnesota A*					X
Mississippi ARM			Х		^
Missouri LARM			A		Х
Montana LARM*		Х	Х		X
Nebraska LA					X
Nevada LARM	Х				
New Hampshire ARM	Х				
New Jersey LARM		Х			
New Mexico LARM					Х
New York LARM			Х		
North Carolina LARM		Х			Х
North Dakota RM	Х				
Northern Mariana Islands L	N N				Х
Ohio A Ohio L	Х	v			
Ohio L Oklahoma LARM	Х	Х			
Oregon ARM	^				
Oregon L		Х			
Pennsylvania LARM	X				
Puerto Rico L	X				
Rhode Island L*					
South Carolina LARM*					Х
South Dakota A					Х
South Dakota L		X			
Tennessee LA	Х				
Tennessee RM					Х
Texas LARM*	X				
Utah LARM*		Х	~		X
Vermont A			X		Х
Virginia LARM	v	Х	Х		
Washington ARM West Virginia L	X X X				
West Virginia L Nisconsin LA	X				Х
Visconsin LA Visconsin*					X
Wyoming ARM				X	X
Nyoming L		Х		~	~

Responding Unit	ness of system, backups s	Library provides services	Archives provides	Records Management	Others (See profile)
	Services not provided	Library provides services	services	provides services	Others (See profile)
Alabama ARM	X				
Alaska LARM American Samoa LARM	X				Х
American Samoa LARM Arizona LARM	X			Х	
Arkansas LARM*	X			X	
California A	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				Х
California L					Х
Colorado ARM	Х				
Colorado L					
Connecticut LARM	X				Х
Delaware A	X				
Delaware RM Florida LARM	X				
Georgia ARM	^			Х	
Hawaii LARM				χ	Х
Idaho LA	Х				~
Illinois ARM	Х				
Illinois L	Х				
Indiana LARM*					Х
Iowa ARM					Х
lowa L	X				
Kansas ARM	Х		V		
Kansas L Kentucky LARM*			x x		Х
Louisiana ARM			^		<u>х</u>
Louisiana L	Х				X
Maine A	X				
Maryland ARM			Х		
Massachusetts ARM	Х				
Massachusetts L	Х				
Michigan LARM					Х
Minnesota A*					Х
Mississippi ARM			Х	Х	X
Missouri LARM Montana LARM*					X X
Nebraska LA					X
Nevada LARM	Х				X
New Hampshire ARM	X				
New Jersey LARM				Х	
New Mexico LARM					Х
New York LARM	Х				
North Carolina LARM					
North Dakota RM	X				
Northern Mariana Islands L Ohio A	X X				
Ohio A Ohio L	^				Х
Oklahoma LARM	X				× X
Oregon ARM					
Oregon L					Х
Pennsylvania LARM	Х				
Puerto Rico L	Х				
Rhode Island L*					
South Carolina LARM*	Х				
South Dakota A South Dakota L					X X
Tennessee LA	X				٨
Tennessee RM	~				Х
Texas LARM*	Х				
Utah LARM*					Х
Vermont A			Х		
Virginia LARM	Х				
Washington ARM	Х				
West Virginia L	Х				
Wisconsin LA					X
Wisconsin*				V	X
Wyoming ARM Wyoming L				Х	Х
Responding Unit	Authority not assigned	Library has authority	Archives has authority	Records Management	Others (See profile)
------------------------------------	------------------------	-----------------------	------------------------	--------------------	----------------------
labama ARM				has authority	v
labama ARM laska LARM					× ×
merican Samoa LARM	Х				Λ
rizona LARM					Х
rkansas LARM*					Х
alifornia A					Х
alifornia L					Х
olorado ARM	Х				
olorado L					
onnecticut LARM					<u> </u>
elaware A			V	X	Х
elaware RM lorida LARM			Х	Х	Х
eorgia ARM					× X
awaii LARM					× ×
laho LA			Х		X X
inois ARM	Х		~		~
inois L					Х
diana LARM*					Х
wa ARM					Х
wa L	Х				
ansas ARM					Х
ansas L	Х				
entucky LARM*			X		
ouisiana ARM			Х	Х	Х
ouisiana L	X				
laine A	Х		X		
laryland ARM lassachusetts ARM			^		Х
lassachusetts L	X				Λ
lichigan LARM	~				Х
linnesota A*					X X
lississippi ARM					Х
lissouri LARM					Х
Iontana LARM*					Х
ebraska LA					Х
evada LARM	Х				
ew Hampshire ARM	Х				
ew Jersey LARM					Х
ew Mexico LARM				Х	
ew York LARM orth Carolina LARM			X	Х	Х
orth Dakota RM			^	^	Х
orthern Mariana Islands L	X				Λ
hio A	~				Х
hio L	Х				X
klahoma LARM		Х			
regon ARM					
Pregon L					Х
ennsylvania LARM	Х				
uerto Rico L	Х				
hode Island L*					
outh Carolina LARM*					
outh Dakota A	X				
outh Dakota L	Х				
ennessee LA ennessee RM			Х	Х	V
ennessee RM exas LARM*					X X
tah LARM*					X X
ermont A			X	Х	× ×
irginia LARM	Х		~	~ ~ ~	~
ashington ARM	X				
/est Virginia L	X				
/isconsin LA					Х
/isconsin*					
/yoming ARM			Х	Х	Х
/yoming L					Х

Responding Unit	y standards and or guidelin Authority not assigned	Library has authority	Archives has authority	Records Management	Others (See profile)
Responding onit	Autionity not assigned	Library has authonity	Archives has authority	has authority	Others (See prome)
Alabama ARM					Х
Alaska LARM					Х
American Samoa LARM	Х				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Arizona LARM					X
Arkansas LARM* California A					X
California L					× ×
Colorado ARM	X				۸
Colorado L	~				
Connecticut LARM					Х
Delaware A					X
Delaware RM	Х				
Florida LARM					Х
Georgia ARM					Х
Hawaii LARM					Х
Idaho LA					Х
Illinois ARM	Х				
Illinois L					Х
Indiana LARM*					Х
lowa ARM					Х
lowa L	Х				
Kansas ARM					Х
Kansas L	Х				
Kentucky LARM*					Х
Louisiana ARM					Х
Louisiana L	Х				
Maine A	Х				
Maryland ARM			Х		
Massachusetts ARM					Х
Massachusetts L	Х				
Michigan LARM					X
Minnesota A*					X
Mississippi ARM					X
Missouri LARM Montana LARM*					X X
Nebraska LA					× × ×
Nevada LARM	Х				Λ
New Hampshire ARM	X				
New Jersey LARM	~				Х
New Mexico LARM					X X
New York LARM					X
North Carolina LARM					X X
North Dakota RM					X
Northern Mariana Islands L	Х				
Ohio A					Х
Ohio L	Х				
Oklahoma LARM					Х
Oregon ARM					
Oregon L					Х
Pennsylvania LARM	Х				
Puerto Rico L	Х				
Rhode Island L*					
South Carolina LARM*					Х
South Dakota A					Х
South Dakota L					Х
Tennessee LA					Х
Tennessee RM					X
Texas LARM*					X
Utah LARM*				~	X
Vermont A			X	Х	Х
Virginia LARM	Х				
Washington ARM					Х
West Virginia L	Х				~
Wisconsin LA					Х
Wisconsin*			Х	Х	Х
Wyoming ARM					

Table E25. Setting Standards for Judicial Agencies: Setting standards for information retention and disposal (e.g., retention periods and methods of disposal) for various series/types of digital records and publications.

and publications.					
Responding Unit	Authority not assigned	Library has authority	Archives has authority	Records Management has authority	Others (See profile)
Alabama ARM				X	Х
Alaska LARM			Х	X	X
American Samoa LARM	X		^	Λ	
Arizona LARM	^				Х
Arkansas LARM*					X
California A		V	N N		X
California L		Х	Х		Х
Colorado ARM	Х				
Colorado L					
Connecticut LARM					Х
Delaware A			Х		
Delaware RM			Х	Х	
Florida LARM					Х
Georgia ARM					Х
Hawaii LARM					Х
Idaho LA			Х		
Illinois ARM	Х				
Illinois L					Х
Indiana LARM*					Х
Iowa ARM				Х	
Iowa L		Х		X	
Kansas ARM		~		~	Х
Kansas ARM Kansas L	V				^
	Х		V		V
Kentucky LARM*			X		X
Louisiana ARM			Х	Х	Х
Louisiana L	Х				
Maine A	Х				
Maryland ARM			Х		
Massachusetts ARM				Х	
Massachusetts L	Х				
Michigan LARM			Х	Х	Х
Minnesota A*					Х
Mississippi ARM			Х	Х	Х
Missouri LARM					Х
Montana LARM*	Х				
Nebraska LA					Х
Nevada LARM	Х				~
New Hampshire ARM	X				
New Jersey LARM	~				Х
New Mexico LARM				Х	^
New York LARM				^	Х
		N N	N N	N/	Å
North Carolina LARM		Х	Х	Х	
North Dakota RM					Х
Northern Mariana Islands L	Х				
Ohio A					Х
Ohio L			Х		
Oklahoma LARM					Х
Oregon ARM					
Oregon L			Х		Х
Pennsylvania LARM	Х				
Puerto Rico L	Х				
Rhode Island L*					
South Carolina LARM*			Х	Х	
South Dakota A				X	
South Dakota L	Х				
Tennessee LA			Х	Х	
Tennessee RM			X	X	
Texas LARM*		Х	~	X	
Utah LARM*		^		^	Х
			V	V	
Vermont A			Х	X	Х
Virginia LARM		Х		Х	
Washington ARM			Х	Х	
West Virginia L	Х				
Wisconsin LA					Х
Wisconsin*					
Wyoming ARM			Х	Х	
Wyoming L					Х
CENTER FOR TECHNOLOGY IN				TION	71

CENTER FOR TECHNOLOGY IN GOVERNMENT: PRESERVING STATE GOVERNMENT DIGITAL INFORMATION

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
Alabama ARM			services	provides services	×
Alabama ARM Alaska LARM		Х	Х	Х	Х
American Samoa LARM	X	~	Λ	~	
Arizona LARM	~ ~				Х
Arkansas LARM*	Х				
California A					Х
California L		Х			Х
Colorado ARM			Х		
Colorado L					
Connecticut LARM					Х
Delaware A	X		X		
Delaware RM			Х	V	
Florida LARM				X X	Х
Georgia ARM Hawaii LARM				^	× X
Idaho LA			Х		^
Illinois ARM	X		~		
Illinois L					Х
Indiana LARM*					X
Iowa ARM					X
lowa L		Х			
Kansas ARM	Х				
Kansas L		X	Х		
Kentucky LARM*					Х
Louisiana ARM			Х	Х	Х
Louisiana L	X				
Maine A	X		X		
Maryland ARM Massachusetts ARM			Х		Х
Massachusetts L	X				Λ
Michigan LARM	^	Х			Х
Minnesota A*		~			X
Mississippi ARM					<i>X</i>
Missouri LARM					Х
Montana LARM*					Х
Nebraska LA					Х
Nevada LARM	Х				
New Hampshire ARM	Х				
New Jersey LARM					Х
New Mexico LARM				Х	Х
New York LARM					X
North Carolina LARM		Х		× ×	X
North Dakota RM	V			Х	Х
Northern Mariana Islands L Ohio A	Х				Х
Ohio L		Х	Х		^
Oklahoma LARM	X	^	^		
Oregon ARM					
Oregon L		Х	Х		Х
Pennsylvania LARM	Х				
Puerto Rico L	Х				
Rhode Island L*					
South Carolina LARM*					Х
South Dakota A					Х
South Dakota L		Х			
Tennessee LA	X				
Tennessee RM					Х
Texas LARM*				Х	V
Utah LARM* Vermont A					X X
Vermont A Virginia LARM		Х			X
Virginia LARM Washington ARM		^			Х
West Virginia L	X				^
Wisconsin LA	A				Х
Wisconsin*					~
Wyoming ARM					Х
Wyoming L					X

Consultation and training ser Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
	Dervices not provided	Library provides services	services	provides services	
Alabama ARM					X
Alaska LARM American Samoa LARM	X				Х
Arizona LARM	^				Х
Arkansas LARM*	X				λ
California A					Х
California L					Х
Colorado ARM	Х				
Colorado L					
Connecticut LARM	Х			N.	
Delaware A Delaware RM				X X	
Florida LARM			Х	X	
Georgia ARM			^	X	Х
Hawaii LARM				X	X
Idaho LA			Х		X
Illinois ARM	Х				
Illinois L					Х
Indiana LARM*					Х
Iowa ARM					Х
lowa L		Х			
Kansas ARM	Х				
Kansas L			X	Х	
Kentucky LARM*			X	V	Х
Louisiana ARM	V		Х	Х	
Louisiana L Maine A	X X				
Maryland ARM	^		Х		
Massachusetts ARM			~	Х	
Massachusetts L	X			~	
Michigan LARM					Х
Minnesota A*					Х
Mississippi ARM			Х		
Missouri LARM					Х
Montana LARM*					Х
Nebraska LA					Х
Nevada LARM	X				
New Hampshire ARM New Jersey LARM	Х				Х
New Mexico LARM				Х	× X
New York LARM				X	× ×
North Carolina LARM			Х	X	X
North Dakota RM	Х		~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~
Northern Mariana Islands L	Х				
Ohio A					Х
Ohio L	Х				
Oklahoma LARM				Х	
Oregon ARM					
Oregon L					Х
Pennsylvania LARM	X				
Puerto Rico L Rhode Island L*	Х				
Rhode Island L [*] South Carolina LARM*	X				
South Carolina LARM	X				
South Dakota L	~	Х			
Tennessee LA	X				
Tennessee RM					Х
Texas LARM*				Х	
Utah LARM*					Х
Vermont A			Х		Х
Virginia LARM				Х	
Washington ARM			Х	Х	Х
West Virginia L	Х				V
Wisconsin LA					Х
Wisconsin* Wyoming ARM			Х	Х	
Wyoming ARM Wyoming L			^	^	Х
					^

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
	Services not provided	Library provides services	services	provides services	Others (See profile)
Alabama ARM					Х
Alaska LARM	X	Х			Х
American Samoa LARM	Х				Х
Arkansas LARM*	X				Λ
California A	^				
California L					Х
Colorado ARM	Х				
Colorado L					
Connecticut LARM	Х				
Delaware A	Х				
Delaware RM				X	
Florida LARM			Х	X	
Georgia ARM				Х	X
Hawaii LARM Idaho LA			X		Х
Illinois ARM	X		^		
Illinois L	^				Х
Indiana LARM*					X
Iowa ARM					X
lowa L		Х			
Kansas ARM	Х				
Kansas L			Х	Х	
Kentucky LARM*			Х		Х
Louisiana ARM			Х	Х	
Louisiana L	Х				
Maine A	Х				
Maryland ARM			Х		
Massachusetts ARM	V			Х	
Massachusetts L	Х				Х
Michigan LARM Minnesota A*					X
Mississippi ARM			Х		^
Missouri LARM			~		Х
Montana LARM*					X
Nebraska LA					Х
Nevada LARM	Х				
New Hampshire ARM	Х				
New Jersey LARM					Х
New Mexico LARM				Х	Х
New York LARM				X	X
North Carolina LARM	N N		Х	Х	Х
North Dakota RM Northern Mariana Islands L	X X				
Ohio A	X				Х
Ohio L	X				^
Oklahoma LARM	~ ~ ~		Х	Х	
Oregon ARM					
Oregon L					Х
Pennsylvania LARM	Х				
Puerto Rico L	Х				
Rhode Island L*					
South Carolina LARM*			Х	Х	
South Dakota A	Х				
South Dakota L		Х			
Tennessee LA Tennessee RM	Х				Х
Texas LARM*				Х	A
Utah LARM*				^	Х
Vermont A			Х		X
Virginia LARM			~	Х	~
Washington ARM			Х	X	
West Virginia L	Х		·	-	
Wisconsin LA					Х
Wisconsin*					
Wyoming ARM			Х	Х	
Nyoming L					Х

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
	Dervices not provided	Library provides services	services	provides services	Others (Gee prome)
Alabama ARM					Х
laska LARM	X				
merican Samoa LARM	X				N N
vrizona LARM vrkansas LARM*	X				Х
California A	X				
California L	X				
Colorado ARM	X				
Colorado L	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
Connecticut LARM	Х				
Delaware A	Х				
Delaware RM			Х	Х	
lorida LARM			Х	Х	
Georgia ARM			Х	Х	
lawaii LARM					Х
daho LA			Х		
linois ARM	Х				
linois L					X
ndiana LARM*					X
owa ARM		V			Х
owa L	V	Х			
ansas ARM ansas L	X		Х	Х	
Kansas L Kentucky LARM*			X	^	
ouisiana ARM			X	Х	
ouisiana L	X		~	~	
laine A	X				
laryland ARM			Х		
lassachusetts ARM				Х	
lassachusetts L	Х				
/lichigan LARM		Х	Х	Х	Х
linnesota A*					Х
/ississippi ARM			Х		
/lissouri LARM					Х
Iontana LARM*					X
lebraska LA	X				Х
levada LARM	X				
lew Hampshire ARM lew Jersey LARM	×				Х
lew Mexico LARM				X	× X
lew York LARM				X	× X
North Carolina LARM			Х	X	X
lorth Dakota RM	Х		Λ	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Λ
Iorthern Mariana Islands L	X				
Dhio A					Х
Dhio L		Х	Х		
)klahoma LARM			Х	Х	
Pregon ARM					
Dregon L	X				
ennsylvania LARM	X				
Puerto Rico L	Х				
Rhode Island L*					
South Carolina LARM*	X				
outh Dakota A	Х	V			
outh Dakota L		Х	Х		
ennessee LA ennessee RM			X		
exas LARM*			× X	Х	
tah LARM*			~	~	Х
ermont A			Х		X
/irginia LARM				Х	
ashington ARM			Х	X	
Vest Virginia L	Х				
Visconsin LA					Х
Visconsin*					
/yoming ARM					Х
/yoming L		i l			Х

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
			services	provides services	
Alabama ARM Alaska LARM		Х	X		X X
American Samoa LARM	X	~	~		Λ
Arizona LARM					Х
Arkansas LARM*	Х				
California A					Х
California L	X				Х
Colorado ARM	Х				
Colorado L Connecticut LARM	X				
Delaware A	X				
Delaware RM				Х	
Florida LARM			Х	Х	
Georgia ARM				Х	Х
Hawaii LARM					Х
Idaho LA	N N		Х		
Illinois ARM Illinois L	X				Х
Indiana LARM*					X
Iowa ARM					× X
Iowa L		X			
Kansas ARM	Х				
Kansas L			Х	Х	
Kentucky LARM*					Х
Louisiana ARM					Х
Louisiana L	X				
Maine A Maryland ARM	Х		Х		
Massachusetts ARM			^	Х	
Massachusetts L	Х			~	
Michigan LARM		Х			Х
Minnesota A*					Х
Mississippi ARM			Х		
Missouri LARM					Х
Montana LARM*					X
Nebraska LA Nevada LARM	X				Х
New Hampshire ARM	× ×				
New Jersey LARM	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				Х
New Mexico LARM				Х	X
New York LARM				Х	Х
North Carolina LARM			Х	Х	Х
North Dakota RM	Х				
Northern Mariana Islands L	Х				
Ohio A Ohio L	V				Х
Ohio L Oklahoma LARM	X X				
Oregon ARM					
Oregon L		Х			Х
Pennsylvania LARM	Х				
Puerto Rico L	Х				
Rhode Island L*					
South Carolina LARM* South Dakota A	X				
South Dakota A South Dakota L	^	X			
Tennessee LA	X	^			
Tennessee RM					Х
Texas LARM*				Х	
Utah LARM*					Х
Vermont A			Х		Х
Virginia LARM			Х		
Washington ARM	×			Х	Х
West Virginia L Wisconsin LA	X				Х
Wisconsin LA Wisconsin*					^
Wyoming ARM				X	Х
Wyoming L				-	X

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
labama ARM			services	provides services	Х
laska LARM	X				~
merican Samoa LARM	X				
rizona LARM	~				Х
rkansas LARM*	Х				
alifornia A	Х				
alifornia L	Х				
olorado ARM	Х				
olorado L					
onnecticut LARM	Х				
elaware A			Х		
elaware RM			Х	Х	
lorida LARM	Х				
eorgia ARM			Х	Х	
awaii LARM	Х		Х		
laho LA inois ARM	Х		X		
INOIS ARM	Λ				
indiana LARM*					Х
wa ARM					X
owa L		Х			~
ansas ARM	X	~			
ansas L		Х	Х		
entucky LARM*			X		
ouisiana ARM			X	Х	
ouisiana L	X				
laine A	Х				
laryland ARM			Х		
lassachusetts ARM			Х	Х	
lassachusetts L	Х				
lichigan LARM			Х	Х	Х
linnesota A*					Х
lississippi ARM			Х		
lissouri LARM					Х
Iontana LARM*					Х
ebraska LA					Х
evada LARM	X				
ew Hampshire ARM	Х				
ew Jersey LARM				, , , , , , , , , , , , , , , , , , ,	X
ew Mexico LARM	N N			Х	Х
ew York LARM	Х		X	Х	Х
orth Dakota RM			X	X	X
orthern Mariana Islands L	X				
Phio A	^				Х
hio L			Х		X
Nilo L Nilahoma LARM	Х		~		X
Pregon ARM					
Dregon L	X				
ennsylvania LARM	X				
uerto Rico L	X				
hode Island L*					
outh Carolina LARM*	Х				
outh Dakota A					Х
outh Dakota L		Х			
ennessee LA			Х		
ennessee RM			Х		
exas LARM*	X				
tah LARM*					Х
ermont A			X		Х
irginia LARM		X	Х		
/ashington ARM	X				
/est Virginia L	X				
/isconsin LA					Х
/isconsin*					
/yoming ARM					Х
Vyoming L					Х

Responding Unit	Services not provided	Library provides services	Archives provides	Records Management	Others (See profile)
			services	provides services	、 · · /
Alabama ARM		Х	V	X	
Alaska LARM American Samoa LARM	Х	X	Х	X	
Arizona LARM	^	Х			
Arkansas LARM*	X	~			
California A					Х
California L					Х
Colorado ARM	Х				
Colorado L					
Connecticut LARM	Х				
Delaware A	Х				
Delaware RM			Х	Х	
Florida LARM	Х				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Georgia ARM					<u>X</u>
Hawaii LARM Idaho LA			Х		Х
Illinois ARM	X		Λ		
Illinois L	^	Х			
Indiana LARM*		~			Х
Iowa ARM					X X
lowa L		Х			
Kansas ARM	X				
Kansas L		Х	Х		
Kentucky LARM*					Х
Louisiana ARM					Х
Louisiana L	Х				
Maine A	Х				
Maryland ARM			X	N.	
Massachusetts ARM	V		Х	Х	
Massachusetts L	Х	v			Х
Michigan LARM Minnesota A*		Х			× X
Mississippi ARM			Х		^
Missouri LARM			X		Х
Montana LARM*					X X
Nebraska LA					X
Nevada LARM	Х				
New Hampshire ARM	Х				
New Jersey LARM					Х
New Mexico LARM				Х	Х
New York LARM	Х				
North Carolina LARM		Х			Х
North Dakota RM				Х	
Northern Mariana Islands L	Х				X
Ohio A		V			Х
Ohio L Oklahoma LARM	X	Х			
Oregon ARM	^				
Oregon L		Х			Х
Pennsylvania LARM	Х				~
Puerto Rico L	X				
Rhode Island L*					
South Carolina LARM*	Х				
South Dakota A					Х
South Dakota L		Х			
Tennessee LA	Х				
Tennessee RM					Х
Texas LARM*	Х				V.
Utah LARM*			V		X
Vermont A		v	X		Х
Virginia LARM Washington ARM	X	Х	Х		
West Virginia L	X				
Wisconsin LA	^				Х
Wisconsin*					^
Wyoming ARM					Х
Wyoming L					X

	iness of system, backups s					
Responding Unit	Services not provided	Library provides services	Archives provides services	Records Management provides services	Others (See profile)	
Alabama ARM	Х					
Alaska LARM	Х					
American Samoa LARM	X					
Arizona LARM					Х	
Arkansas LARM*	X					
California A California L					X X	
Colorado ARM	Х				^	
Colorado L	^					
Connecticut LARM	X					
Delaware A	X					
Delaware RM	X					
Florida LARM	Х					
Georgia ARM			Х	Х	Х	
Hawaii LARM					Х	
Idaho LA	Х					
Illinois ARM	Х					
Illinois L	Х					
Indiana LARM*					Х	
Iowa ARM					Х	
Iowa L	Х					
Kansas ARM	Х					
Kansas L			X			
Kentucky LARM*			Х		X	
Louisiana ARM					Х	
Louisiana L	X					
Maine A	Х		V			
Maryland ARM	V		Х			
Massachusetts ARM Massachusetts L	X X					
Michigan LARM	^				Х	
Minnesota A*					× X	
Mississippi ARM					~	
Missouri LARM					Х	
Montana LARM*					X	
Nebraska LA					X	
Nevada LARM	Х					
New Hampshire ARM	Х					
New Jersey LARM					Х	
New Mexico LARM				Х	Х	
New York LARM					Х	
North Carolina LARM						
North Dakota RM						
Northern Mariana Islands L	Х					
Ohio A					X	
Ohio L	V				X	
Oklahoma LARM	Х				Х	
Oregon ARM Oregon L					Х	
Pennsylvania LARM	X				^	
Puerto Rico L	X					
Rhode Island L*						
South Carolina LARM*	X					
South Dakota A					Х	
South Dakota L					X	
Tennessee LA	Х					
Tennessee RM					Х	
Texas LARM*	Х					
Utah LARM*					Х	
Vermont A			Х		Х	
Virginia LARM	Х					
Washington ARM	Х					
West Virginia L	Х					
Wisconsin LA					Х	
Wisconsin*						
Wyoming ARM					X	
Nyoming L					Х	

Table E34. Training Needs for Digital Preserva	ation Related Activities:		
Identify the type and amount of digital information the	hroughout the state.		
Responding Unit	Training already provided	Basic training needed	Advanced training needed
Alabama ARM	Х		
Alaska LARM		X	
American Samoa LARM		Х	
Arizona LARM			X
Arkansas LARM*		Х	
California A		Х	
California L			Х
Colorado ARM		Х	
Colorado L			
Connecticut LARM		Х	
Delaware A			Х
Delaware RM			Х
Florida LARM			Х
Georgia ARM			X
Hawaii LARM			
Idaho LA		Х	
Illinois ARM		Х	
Illinois L	Х		
Indiana LARM*		Х	
Iowa ARM		×	
lowa L	X		
Kansas ARM	· · · ·	Х	
Kansas L	X	<i>x</i>	
Kentucky LARM*	~		X
Louisiana ARM	X		^
Louisiana L	^ 	×	
		X	
Maine A		Х	
Maryland ARM	Х	~	
Massachusetts ARM		X	
Massachusetts L		Х	
Michigan LARM	X		
Minnesota A*	Х		
Mississippi ARM	Х		
Missouri LARM			
Montana LARM*			Х
Nebraska LA		Х	
Nevada LARM			X
New Hampshire ARM	Х		
New Jersey LARM		Х	
New Mexico LARM		Х	
New York LARM			Х
North Carolina LARM			Х
North Dakota RM			
Northern Mariana Islands L		Х	
Ohio A		X	
Ohio L		×	
Oklahoma LARM		~~~~~	Х
Oregon ARM			
Oregon L			X
Pennsylvania LARM		Х	
Puerto Rico L		× X	
Rhode Island L*	+ +	<u>х</u> Х	
South Carolina LARM*		× X	
South Carolina LARM [*] South Dakota A		<u>х</u> Х	
South Dakota L		Х	
Tennessee LA			X
Tennessee RM			X
Texas LARM*			Х
Utah LARM*	Х		
Vermont A			X
Virginia LARM		Х	
Washington ARM	Х		
West Virginia L		Х	
Wisconsin LA			Х
Wisconsin*		Х	
Wyoming ARM			Х
Wyoming L			

Shet any parts with some networks with so	Table E34. Training Needs for Digital Preservation Related Activities:					
Nates an ARMXIAmerican Saroad LARMXXAmerican Saroad LARMXXManeta LARMXXKanana LARMXXKanana LARMXXCalonado ARMXXCalonado ARM				· · · · · · · · · · · · · · · · · · ·		
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Northern Mariana Islands L X Ohio A X Ohio L X Ohio L X Oklahoma LARM X Oregon ARM X Oregon L X Pennsylvania LARM X Puerto Rico L X Rhode Island L* X South Carolina LARM* X South Carolina LARM* X South Dakota A X South Dakota L X Tennessee LA X Tennessee RM X Virginia LARM* X Vermont A X Virginia LARM X Washington ARM X Washington ARM X Wisconsin LA X Wisconsin LA X Wisconsin* X				X		
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Ohio LXXOklahoma LARMXXOregon ARMXXOregon LXPennsylvania LARMPuerto Rico LXXRhode Island L*XXSouth Carolina LARM*XXSouth Carolina LARM*XXSouth Dakota AXXSouth Dakota LXXTennessee LAXXTennessee RMXXUtah LARM*XXVermont AXXWeshington ARMXXWashington ARMXXWisconsin*XXWisconsin*XXWorming ARMXX						
Oklahoma LARMXOregon ARMXOregon LXPennsylvania LARMXPuerto Rico LXRhode Island L*XSouth Carolina LARM*XSouth Dakota AXSouth Dakota LXTennessee LAXTennessee RMXUtah LARM*XVermont AXVirginia LARM*XVermont AXWashington ARMXWashington ARMXWisconsin*XWorming ARMXKisconsin*XWorming ARMX						
Oregon ARMXImage: constraint of the system of the sy			^	Y		
Oregon LXXPennsylvania LARMXPueto Rico LXRhode Island L*XSouth Carolina LARM*XSouth Carolina LARM*XSouth Dakota AXSouth Dakota LXTennessee LAXTennessee RMXTexas LARM*XVermont AXVermont AXVirginia LARMXWashington ARMXWisconsin LAXWyoming ARMXWooming ARMX				^		
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Puerto Rico LXRhode Island L*XSouth Carolina LARM*XSouth Dakota AXSouth Dakota LXTennessee LAXTennessee RMXTexas LARM*XUtah LARM*XVermont AXVirginia LARMXWashington ARMXWisconsin LAXWyoming ARMXWyoming ARMX		~	X			
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South Dakota A X South Dakota L X Tennessee LA X Tennessee RM X Texas LARM* X Utah LARM* X Vermont A X Virginia LARM X Washington ARM X Wisconsin LA X Wisconsin* X Wyoming ARM X			~	x		
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		Desite (set al. set al. set al. set	A 1
Responding Unit	Training already provided X	Basic training needed	Advanced training needed
laska LARM	^	Х	
merican Samoa LARM		X	
rizona LARM	X	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
rkansas LARM*		Х	
alifornia A			Х
alifornia L		Х	
olorado ARM		Х	
olorado L			
onnecticut LARM	Х		
elaware A			Х
elaware RM	Х		
orida LARM		Х	
eorgia ARM	X		
awaii LARM			
aho LA		X	
inois ARM		Х	
diana LARM*	X	×	
diana LARM*		X X	
wa ARM wa L	X	^	
ansas ARM	^		X
ansas ARM ansas L	X		^
entucky LARM*	^		X
puisiana ARM	Х		^
puisiana L	~	Х	
aine A	X	~	
aryland ARM	X		
assachusetts ARM	^	Х	
assachusetts L		X	
lichigan LARM	Х		
linnesota A*	X		
lississippi ARM	Х		
lissouri LARM			
ontana LARM*	Х		
ebraska LA	X		
evada LARM			X
ew Hampshire ARM	Х		
ew Jersey LARM			Х
ew Mexico LARM		X	
ew York LARM			Х
orth Carolina LARM			Х
orth Dakota RM			
orthern Mariana Islands L		Х	
hio A			X
hio L		~	Х
klahoma LARM		Х	
regon ARM			
regon L	Х	~	
ennsylvania LARM		Х	V
uerto Rico L hode Island L*		Х	Х
outh Carolina LARM*		<u>х</u> Х	
outh Dakota A		X X	
outh Dakota L		× X	
ennessee LA	X	Λ	
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ermont A			X
rginia LARM		Х	
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lest Virginia L		Х	
/isconsin LA	X		
lisconsin*		Х	
/yoming ARM			X
/yoming L			1

Table E37. Training Needs for Digital Preservation Related Activities:				
Negotiate and make agreements with key stakehole				
Responding Unit	Training already provided	Basic training needed	Advanced training needed	
Alabama ARM			X	
Alaska LARM		X		
American Samoa LARM		Х		
Arizona LARM			Х	
Arkansas LARM*		Х		
California A			Х	
California L		Х		
Colorado ARM		Х		
Colorado L		Х		
Connecticut LARM		Х		
Delaware A			Х	
Delaware RM	Х			
Florida LARM				
Georgia ARM	Х			
Hawaii LARM				
Idaho LA		X		
Illinois ARM		X		
Illinois L	X			
Indiana LARM*	^	Х		
Indiana LARM [®]		X X		
		^	× ×	
lowa L			Х	
Kansas ARM	X			
Kansas L	X			
Kentucky LARM*			Х	
Louisiana ARM			Х	
Louisiana L		Х		
Maine A			Х	
Maryland ARM	Х			
Massachusetts ARM		Х		
Massachusetts L		Х		
Michigan LARM	Х			
Minnesota A*	Х			
Mississippi ARM	Х			
Missouri LARM				
Montana LARM*		Х		
Nebraska LA		X		
Nevada LARM		<u> </u>	X	
New Hampshire ARM	X		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
New Jersey LARM	~	Х		
New Mexico LARM		× X		
		^	× ×	
New York LARM		N N	Х	
North Carolina LARM		Х		
North Dakota RM				
Northern Mariana Islands L		X		
Ohio A		Х		
Ohio L		Х		
Oklahoma LARM		Х		
Oregon ARM				
Oregon L	Х			
Pennsylvania LARM		Х		
Puerto Rico L		Х		
Rhode Island L*		Х		
South Carolina LARM*		Х		
South Dakota A		Х		
South Dakota L		Х		
Tennessee LA			X	
Tennessee RM				
Texas LARM*			Х	
Utah LARM*		Х	~	
Vermont A			X	
Virginia LARM		Х	^	
	~	^		
Washington ARM	X			
West Virginia L		Х		
Wisconsin LA	X			
Wisconsin*		Х		
Wyoming ARM			~	
Wyoming L			X	

Table E38. Training Needs for Digital Preservation Related Activities:				
Acquire state government information in digital for			i	
Responding Unit	Training already provided	Basic training needed	Advanced training needed	
Alabama ARM		~	X	
Alaska LARM		X		
American Samoa LARM		Х		
Arizona LARM		~	X	
Arkansas LARM*		X		
California A		X		
California L	N N	X		
Colorado ARM	X			
Colorado L			Х	
Connecticut LARM		Х		
Delaware A			X	
Delaware RM			X	
Florida LARM			Х	
Georgia ARM	Х			
Hawaii LARM				
Idaho LA		Х		
Illinois ARM			Х	
Illinois L	Х			
Indiana LARM*		Х		
Iowa ARM		Х		
Iowa L	Х			
Kansas ARM			X	
Kansas L	Х			
Kentucky LARM*			X	
Louisiana ARM		Х	~	
Louisiana L		X X		
Maine A		× X		
Maryland ARM	Х	^		
	^	Y		
Massachusetts ARM		X		
Massachusetts L		Х		
Michigan LARM	X			
Minnesota A*			X	
Mississippi ARM	X			
Missouri LARM				
Montana LARM*			Х	
Nebraska LA			Х	
Nevada LARM			Х	
New Hampshire ARM	Х			
New Jersey LARM		Х		
New Mexico LARM		Х		
New York LARM	Х			
North Carolina LARM			Х	
North Dakota RM				
Northern Mariana Islands L		Х		
Ohio A		Х		
Ohio L			Х	
Oklahoma LARM		Х		
Oregon ARM				
Oregon L	Х			
Pennsylvania LARM		Х		
Puerto Rico L		X X		
Rhode Island L*				
South Carolina LARM*			Х	
South Dakota A		X	A	
South Dakota L		× X		
Tennessee LA	X	^		
Tennessee RM	^			
			×	
Texas LARM*		Y	Х	
Utah LARM*		Х		
Vermont A			X	
Virginia LARM			Х	
Washington ARM	X			
West Virginia L		Х		
Wisconsin LA			Х	
Wisconsin*		Х		
Wyoming ARM			Х	
Wyoming L				

Responding Unit	form (metadata, reformatting, etc.). Training already provided	Basic training needed	Advanced training peeded
labama ARM	Training alleady provided	Basic training needed	Advanced training needed X
laska LARM		Х	~
merican Samoa LARM		X	
rizona LARM		^	X
rkansas LARM*		Х	~
alifornia A		× X	
alifornia L		× X	
olorado ARM		× X	
olorado L		^	
onnecticut LARM		Х	
elaware A		^	Х
elaware RM			
lorida LARM			X
	N N		X
eorgia ARM	X		~
awaii LARM			Х
laho LA		Х	
inois ARM			X
inois L	X		
idiana LARM*		Х	
wa ARM		Х	
wa L	Х		
ansas ARM			Х
ansas L	Х		
entucky LARM*			Х
ouisiana ARM		Х	
ouisiana L		Х	
laine A			Х
laryland ARM	X		
lassachusetts ARM	~~~~~	Х	
lassachusetts L		×	
lichigan LARM		~	X
linnesota A*			
	× ×		Х
lississippi ARM	Х		
lissouri LARM			~
Iontana LARM*			X
ebraska LA			X
evada LARM			X
ew Hampshire ARM	Х		
ew Jersey LARM		Х	
ew Mexico LARM		Х	
ew York LARM			Х
orth Carolina LARM			Х
orth Dakota RM			
orthern Mariana Islands L			
hio A		Х	
hio L			Х
klahoma LARM		Х	
Pregon ARM			
iregon L			Х
ennsylvania LARM		Х	
uerto Rico L		X	
hode Island L*	X	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
outh Carolina LARM*	~	Х	
outh Dakota A		× X	
outh Dakota L	X	^	
outh Dakota L ennessee LA	^		
		Х	
ennessee RM			
exas LARM*			X
tah LARM*			X
ermont A			X
irginia LARM		Х	
/ashington ARM	Х		
/est Virginia L		Х	
/isconsin LA			Х
/isconsin*		Х	
/yoming ARM		-	Х
/yoming L			~

Table E40. Training Needs for Digital Preservation Related Activities:				
Manage the ingest of digital information into a repos				
Responding Unit	Training already provided	Basic training needed	Advanced training needed	
Alabama ARM	X	~		
Alaska LARM		X		
American Samoa LARM		Х		
Arizona LARM			Х	
Arkansas LARM*		Х		
California A		Х		
California L		X		
Colorado ARM		Х		
Colorado L			Х	
Connecticut LARM		X		
Delaware A		Х		
Delaware RM			Х	
Florida LARM			Х	
Georgia ARM	Х			
Hawaii LARM			Х	
Idaho LA		Х		
Illinois ARM			Х	
Illinois L	Х			
Indiana LARM*		Х		
Iowa ARM		X		
Iowa L	X	~~		
Kansas ARM	X			
Kansas L	X			
	^		×	
Kentucky LARM* Louisiana ARM		Y	Х	
		X		
Louisiana L		X		
Maine A		Х		
Maryland ARM	X			
Massachusetts ARM		X		
Massachusetts L		Х		
Michigan LARM			Х	
Minnesota A*			Х	
Mississippi ARM	Х			
Missouri LARM				
Montana LARM*			Х	
Nebraska LA		Х		
Nevada LARM			Х	
New Hampshire ARM	Х			
New Jersey LARM		Х		
New Mexico LARM		Х		
New York LARM			Х	
North Carolina LARM			X	
North Dakota RM			~	
Northern Mariana Islands L		Х		
Ohio A		X X		
Ohio L	X	~		
Ohio L Oklahoma LARM	^	Х		
Oregon ARM	+	~		
	X			
Oregon L	^			
Pennsylvania LARM		X		
Puerto Rico L		X		
Rhode Island L*	_	X		
South Carolina LARM*		X		
South Dakota A		Х		
South Dakota L	X			
Tennessee LA		Х		
Tennessee RM				
Texas LARM*			Х	
Utah LARM*			Х	
Vermont A			Х	
Virginia LARM			Х	
Washington ARM	Х			
West Virginia L		Х		
Wisconsin LA			X	
Wisconsin*		Х		
Wyoming ARM			X	
Wyoming L			~	

Deers an alian Unit	tion in a repository.	Denia trainina a sederal	
Responding Unit labama ARM	Training already provided	Basic training needed	Advanced training needed
labama ARM laska LARM		V	Х
		X X	
merican Samoa LARM rizona LARM		X	X
		V	×
rkansas LARM*		X X	
alifornia A		Χ	X
alifornia L		~	Х
olorado ARM		Х	X
olorado L		~	X
onnecticut LARM		<u>X</u>	
elaware A		Х	
elaware RM			X
lorida LARM			X
eorgia ARM			Х
awaii LARM			Х
laho LA		X	
inois ARM			Х
inois L			X
diana LARM*		Х	
wa ARM		Х	
wa L			Х
ansas ARM			Х
ansas L	Х		
entucky LARM*			Х
ouisiana ARM		Х	
ouisiana L		X	
laine A			X
laryland ARM	X		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
lassachusetts ARM	~	Х	
lassachusetts L		X	
lichigan LARM		^	Х
linnesota A*		Х	Х
lississippi ARM		X	
lissouri LARM			~
Iontana LARM*			Х
ebraska LA		Х	
evada LARM			Х
ew Hampshire ARM	Х		
ew Jersey LARM		Х	
ew Mexico LARM		X	
ew York LARM			Х
orth Carolina LARM			Х
orth Dakota RM			
orthern Mariana Islands L		Х	
hio A		Х	
hio L	Х		
klahoma LARM		Х	
regon ARM			
regon L			Х
ennsylvania LARM		Х	
uerto Rico L		X	
hode Island L*		X	
outh Carolina LARM*		X	
outh Dakota A		X	
outh Dakota L		X	
ennessee LA		× X	
ennessee LA		^	
exas LARM*			~
			X
tah LARM*			X
ermont A			X
irginia LARM			Х
ashington ARM	X		
/est Virginia L		Х	
isconsin LA			Х
/isconsin*		Х	
/yoming ARM			Х
yoming L			

	usability of state government informatio		
Responding Unit	Training already provided	Basic training needed	Advanced training needed
labama ARM		~	Х
laska LARM		X	
merican Samoa LARM		X	
rizona LARM		X X	
Irkansas LARM* California A		<u>х</u> Х	
California L		^	Х
colorado ARM		Х	*
olorado L		^	
onnecticut LARM		Х	
elaware A		X	
elaware RM		~	X
lorida LARM			X
eorgia ARM			X
awaii LARM			X
aho LA		X	
inois ARM		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	X
inois L	X		
idiana LARM*	~	Х	
wa ARM		X	
waL		- •	Х
ansas ARM			X
ansas L	X		
entucky LARM*			X
puisiana ARM		Х	^
puisiana L		X	
laine A			X
aryland ARM	Х		
assachusetts ARM	<u>^</u>	Х	
assachusetts L		X	
lichigan LARM			X
linnesota A*			X
lississippi ARM		Х	
lissouri LARM			
ontana LARM*			Х
ebraska LA		Х	
evada LARM			X
ew Hampshire ARM	Х		
ew Jersey LARM		Х	
ew Mexico LARM		X	
ew York LARM			X
orth Carolina LARM		Х	
orth Dakota RM			
orthern Mariana Islands L		Х	
hio A		Х	
hio L	Х		
klahoma LARM		Х	
regon ARM			
regon L			X
ennsylvania LARM		Х	
uerto Rico L		Х	
hode Island L*		Х	
outh Carolina LARM*		Х	
outh Dakota A		Х	
outh Dakota L		Х	
ennessee LA	Х		
ennessee RM			
exas LARM*			Х
tah LARM*			Х
ermont A			Х
irginia LARM		Х	
ashington ARM	Х		
/est Virginia L		Х	
/isconsin LA		Х	
'isconsin*		Х	
/yoming ARM			X
/yoming L			

Deenending Unit	Training already provided	Decis training needed	
Responding Unit	Training already provided	Basic training needed	Advanced training needed
Alabama ARM Alaska LARM	X	Х	
American Samoa LARM		× X	
Arizona LARM	X	~	
Arkansas LARM*	~~~~~	Х	
California A		X	
California L		Х	
Colorado ARM		Х	
Colorado L			
Connecticut LARM		Х	
Delaware A			Х
Delaware RM			Х
Florida LARM			X
Georgia ARM	X		
Hawaii LARM			Х
Idaho LA		X	
Illinois ARM	X	Х	
Illinois L	X	v	
Indiana LARM*		X X	
lowa ARM lowa L	X	^	
Kansas ARM	× ×		
Kansas L	X		
Kentucky LARM*	~		X
Louisiana ARM		Х	~
Louisiana L		X X	
Maine A		X	
Maryland ARM	Х		
Massachusetts ARM		Х	
Massachusetts L		Х	
Michigan LARM	Х		
Minnesota A*			Х
Mississippi ARM	Х		
Missouri LARM			
Montana LARM*			Х
Nebraska LA			Х
Nevada LARM			X
New Hampshire ARM	X		
New Jersey LARM		X	
New Mexico LARM		Х	
New York LARM			X
North Carolina LARM			Х
North Dakota RM		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Northern Mariana Islands L		X X	
Ohio L		^	X
Ohio L Oklahoma LARM		Х	^
Oregon ARM		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Oregon L	X		
Pennsylvania LARM		Х	
Puerto Rico L		X X	
Rhode Island L*		X	
South Carolina LARM*			Х
South Dakota A		Х	
South Dakota L		Х	
Tennessee LA			Х
Tennessee RM			
Texas LARM*			Х
Utah LARM*	Х		
Vermont A			Х
Virginia LARM			Х
Washington ARM	Х		
West Virginia L		Х	
Wisconsin LA			X
Wisconsin*		Х	
Wyoming ARM			X
Nyoming L			

Table E44. Training Needs for Digital Preservation Related Activities:				
Produce a disaster and recovery planning for stat			1	
Responding Unit	Training already provided	Basic training needed	Advanced training needed	
Alabama ARM		~	X	
Alaska LARM		X		
American Samoa LARM		Х		
Arizona LARM			X	
Arkansas LARM*		X		
California A		Х		
California L			Х	
Colorado ARM		Х		
Colorado L			X	
Connecticut LARM		Х		
Delaware A			X	
Delaware RM		Х		
Florida LARM			Х	
Georgia ARM			Х	
Hawaii LARM			X	
Idaho LA		Х		
Illinois ARM		Х		
Illinois L			Х	
Indiana LARM*			X	
Iowa ARM		X	1	
Iowa L		X		
Kansas ARM		X X		
Kansas L	X	~		
Kentucky LARM*	~		X	
Louisiana ARM			× X	
		×	A	
Louisiana L	X	Х		
Maine A	X			
Maryland ARM	X			
Massachusetts ARM		Х		
Massachusetts L		Х		
Michigan LARM	Х			
Minnesota A*			Х	
Mississippi ARM		Х		
Missouri LARM				
Montana LARM*	Х			
Nebraska LA		Х		
Nevada LARM			Х	
New Hampshire ARM	Х			
New Jersey LARM		Х		
New Mexico LARM		Х		
New York LARM			X	
North Carolina LARM			X	
North Dakota RM			<i>n</i>	
Northern Mariana Islands L		X		
Ohio A	X	~		
Ohio L	× ×			
Ohio L Oklahoma LARM	^	Х		
		^		
Oregon ARM				
Oregon L			X	
Pennsylvania LARM	X			
Puerto Rico L		X		
Rhode Island L*		X		
South Carolina LARM*		Х		
South Dakota A		Х		
South Dakota L		Х		
Tennessee LA	Х			
Tennessee RM				
Texas LARM*			Х	
Utah LARM*			Х	
Vermont A			Х	
Virginia LARM		Х		
Washington ARM	X		1	
West Virginia L		Х		
Wisconsin LA		X X		
Wisconsin*		X X		
Wyoming ARM		~	X	
Wyoming L			<u>^</u>	

nanago oopyngni, oooaniy, ana oinor logar loc	ues of relevance to state government dig		
Responding Unit	Training already provided	Basic training needed	Advanced training needed
Alabama ARM			Х
Alaska LARM		Х	
American Samoa LARM		Х	
rizona LARM			Х
vrkansas LARM*		Х	
California A	Х		
California L			Х
Colorado ARM		Х	
olorado L			
Connecticut LARM		Х	
elaware A			Х
elaware RM		Х	
lorida LARM			X
eorgia ARM			Х
awaii LARM			Х
laho LA		Х	
inois ARM		X	
inois L	X		
idiana LARM*	~ ~ ~	Х	
wa ARM		X X	
wa ARM		~	Х
ansas ARM	X		^
	X		
ansas L	Å		
entucky LARM*		X	Х
ouisiana ARM		<u>X</u>	
ouisiana L		Х	
laine A			Х
laryland ARM	Х		
lassachusetts ARM		X	
lassachusetts L		Х	
1ichigan LARM	X		
1innesota A*			X
lississippi ARM	Х		
1issouri LARM			
Iontana LARM*			Х
lebraska LA			Х
levada LARM			Х
lew Hampshire ARM	Х		
lew Jersey LARM		Х	
lew Mexico LARM		X	
lew York LARM			Х
orth Carolina LARM			X
orth Dakota RM			~
orthern Mariana Islands L		X	
phio A		× X	
hio L		X	
klahoma LARM		Х	
Pregon ARM			
Dregon L	Х	~	
ennsylvania LARM		X	
uerto Rico L		Х	
hode Island L*		Х	
outh Carolina LARM*		Х	
outh Dakota A		Х	
outh Dakota L		Х	
ennessee LA		Х	
ennessee RM			
exas LARM*			Х
tah LARM*		Х	
/ermont A			Х
irginia LARM			X
/ashington ARM	X		
/est Virginia L	^	Х	
/isconsin LA		^	X
/isconsin LA /isconsin*		Х	^
		λ.	v v
/yoming ARM			X
Vyoming L			Х

APPENDIX F. State Government Digital Information Preservation Survey



State Government Digital Information Preservation Survey Survey Description

INTRODUCTION

This survey is a project of the Center for Technology in Government, University at Albany – State University of New York and is supported by the U.S. Library of Congress under the National Science Foundation grant # ITR-0205152. It is designed to gather data about state government digital information preservation activities.

Participants of the three Library of Congress Consultation Workshop with States held in the spring of 2005 expressed strong interest in this information. Those workshops, held as part of the Library of Congress' National Digital Information Infrastructure and Preservation Program (NDIIPP) brought together representatives from all 50 states and several of the territories to explore issues related to the preservation of state government digital information. Workshop participants and the Library of Congress are interested in fostering partnership efforts and collaborative strategies toward preserving state government digital information.

During those workshops participants identified the need for access to basic information about the existence and nature of ongoing preservation activities in other states. To this end, this survey asks questions that allow states to describe their environments, successes, challenges, and opportunities for improving capabilities regarding digital preservation.

WHAT IS THE SCOPE OF THIS SURVEY?

For the purpose of this survey, digital preservation is defined broadly as the management of government digital information for long term access and use. Not included in the scope of this survey are activities related to the transformation of information from an analog or physical format into a digital format (e.g., scanning of paper records and converting text on paper into text in computer files).

WHY SHOULD MY STATE COMPLETE THIS SURVEY?

The information collected through this survey will be compiled into a report that summarizes state government digital information preservation activities by state and across states. The report is intended to be a vehicle for sharing knowledge and identifying opportunities for digital preservation partnerships. It will not be a "Report Card" on states' digital preservation activities. The report will be posted on the web and electronic copies will be sent to all respondents and workshop participants.

WHO IS RECEIVING THIS SURVEY?

The survey is being sent to State and Territorial Librarians, Archivists, and those Records Managers who are part of a separate administrative unit from the Library or Archives in their state.

Survey Instructions

WHO SHOULD RESPOND?

Each state should decide the response approach that best suits its own conditions. The following are provided as guidelines to inform this decision:

- The survey should not be responded to by an individual working in isolation from others in their unit, agency, or state.
- For those states where the Library, Archives, or Records Management functions fall under separate administrative agencies, those units may decide if one or more responses will best reflect the state government digital information preservation activities of their state.
- For those states where the Library, Archives, or Records Management functions fall under the same administrative agency, the agency may decide if one or more responses will best reflect the state government digital information preservation activities of their state.
- In those cases where the Library, Archives, and Records Management units are administratively separate, each unit could submit one response. Therefore a state with three separate administrative units might submit three separate responses. A state with the library in one administrative unit and the archives and records management in another, might submit two.

WEB-BASED SURVEY INSTRUCTIONS

The survey tool allows you to complete the survey over multiple sessions. You may review or change your survey answers by using the "Previous" and "Save and Continue" buttons on the bottom of each survey page. To avoid losing data that you have entered, please **do not** use your browser's "Back" and "Forward" buttons. If you would like to leave the survey and resume it at a later time, click on the "Save and Continue" button at the bottom of the page you are working on. You can enter the survey again by clicking on the link provided in our email to you. You will be taken to the question you last answered and can continue to complete the survey. If an interruption occurs (e.g., the browser freezes) please reenter the survey by clicking on the link provided in the email as well. When you have completed the entire survey, be sure to click "Submit Completed Survey" at the end of the last screen.

A PDF version of the survey is available if you would like a printable copy to help you complete the Web-based survey at <u>www.ctg.albany.edu/static/statessurvey.pdf</u>.

SURVEY TIMELINE

Respondents will have six weeks to complete the survey. Please submit your completed survey no later than **February 20**, **2006**.

SURVEY CONTACT

G. Brian Burke, Project Manager Center for Technology in Government University at Albany, SUNY 187 Wolf Road-Suite 301, Albany, NY 12205 Phone: 518-442-3895, Fax: 518-442-3886 bburke@ctg.albany.edu

Section 1. Responding Unit(s)

1. Name of state or territory responding.

2. Name and affiliation of individual(s) responding on behalf of the state or territory.



From this point forward in the survey the term "state" will be used to refer to states, territories, and the District of Columbia.

3. Survey response covers the following units for this state (check all that apply):

Library

Archives

Records

Other (please specify)

Section 2. Institutional Roles and Responsibilities

This section asks about the extent of authority for setting standards for digital information created or maintained by EXECUTIVE, LEGISLATIVE, and JUDICIAL agencies and about the services provided by the responding unit(s) to these agencies.

In this section, you will see separate pages with questions pertaining to:

- EXECUTIVE Agencies (Sections 2.1a-b);
- LEGISLATIVE Agencies (Sections 2.2a-b); and
- JUDICIAL Agencies (Sections 2.3a-b)

Section 2.1a. Setting Standards for EXECUTIVE Agencies

4. Please indicate which unit(s), if any, has authority for setting standards for digital information created or maintained by EXECUTIVE agencies. If authority is shared or delegated please check all boxes that apply. If you would like to list other standards and/or provide additional descriptive information related to these authority relationships, spaces are provided in the next two questions.

	Authority not assigned	Library has authority	Archives has authority	Records Management has authority	Others (Please specify below)
Setting data management standards and or guidelines for information creation (e.g., metadata, file formats).					
Setting information technology standards and or guidelines for information creation (e.g., state approved software applications).					
Setting standards for information retention and disposal (e.g., retention periods and methods of disposal) for various series/types of digital records and publications					

5. Please list other standards and the units with authority over setting them.

Section 2.1b. Services Provided to EXECUTIVE Agencies

7. Please indicate which unit(s), if any, provides the services, specified below, to EXECUTIVE agencies. If services are provided by multiple units please check all boxes that apply. If you would like to list other services and/or provide additional descriptive information about the service relationships, spaces are provided in the next two questions.

	Services not provided	Library provides services	Archives provides services	Records Management provides services	Others (Please specify below)
Storage for digital information.					
Consultation and training services on digital information creation.					
Consultation and training services on digital information management.					
Consultation and training services on digital information preservation.					
Consultation and training services on digital information access.					
Preservation (e.g., migration, reformatting).					
Access (e.g., search engine).					
Certification (e.g., trustworthiness of system, backups sufficient).					

8. Please list other services provided and the unit(s) that provides them.



Section 2.2a. Setting Standards for LEGISLATIVE Agencies

10. Please indicate which unit(s), if any, has authority for setting standards for digital information created or maintained by LEGISLATIVE agencies. If authority is shared or delegated please check all boxes that apply. If you would like to list other standards and/or provide additional descriptive information related to these authority relationships, spaces are provided in the next two questions.

	Authority not assigned	Library has authority	Archives has authority	Records Management has authority	Others (Please specify below)
Setting data management standards and or guidelines for information creation (e.g., metadata, file formats).					
Setting information technology standards and or guidelines for information creation (e.g., state approved software applications).					
Setting standards for information retention and disposal (e.g., retention periods and methods of disposal) for various series/types of digital records and publications.					

11. Please list other standards and the units with authority over setting them.

~ . .

12. Please provide additional descriptive information.

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Section 2.2b. Providing Service to LEGISLATIVE Agencies

13. Please indicate which unit(s), if any, provides the services, specified below, to LEGISLATIVE agencies. If services are provided by multiple units please check all boxes that apply. If you would like to list other services and/or provide additional descriptive information about the service relationships, spaces are provided in the next two questions.

	Services not provided	Library provides services	Archives provides services	Records Management provides services	Others (Please specify below)
Storage for digital information.					
Consultation and training services on digital information creation.					
Consultation and training services on digital information management.					
Consultation and training services on digital information preservation.					
Consultation and training services on digital information access.					
Preservation (e.g., migration, reformatting).					
Access (e.g., search engine).					
Certification (e.g., trustworthiness of system, backups sufficient).					

14. Please list other services provided and the unit(s) that provides them.



Section 2.3a. Setting Standards for JUDICIAL Agencies

16. Please indicate which unit(s), if any, has authority for setting standards for digital information created or maintained by JUDICIAL agencies. If authority is shared or delegated please check all boxes that apply. If you would like to list other standards and/or provide additional descriptive information related to these authority relationships, spaces are provided in the next two questions.

	Authority not assigned	Library has authority	Archives has authority	Records Management has authority	Others (Please specify below)
Setting data management standards and or guidelines for information creation (e.g., metadata, file formats).					
Setting information technology standards and or guidelines for information creation (e.g., state approved software applications).					
Setting standards for information retention and disposal (e.g., retention periods and methods of disposal) for various series/types of digital records and publications.					

17. Please list other standards and the units with authority over setting them.



Section 2.3b. Providing Service to JUDICIAL Agencies

19. Please indicate which unit(s), if any, provides the services, specified below, to JUDICIAL agencies. If services are provided by multiple units please check all boxes that apply. If you would like to list other services and/or provide additional descriptive information about the service relationships, spaces are provided in the next two questions.

	Services not provided	Library provides services	Archives provides services	Records Management provides services	Others (Please specify below)
Storage for digital information.					
Consultation and training services on digital information creation.					
Consultation and training services on digital information management.					
Consultation and training services on digital information preservation.					
Consultation and training services on digital information access.					
Preservation (e.g., migration, reformatting).					
Access (e.g., search engine).					
Certification (e.g., trustworthiness of system, backups sufficient).					

20. Please list other services provided and the unit(s) that provides them.


21. Please provide additional descriptive information.

This section of the survey will capture up to five descriptions of past or current digital preservation activities in your state. Table 1 provides examples of types of preservation activities of interest.

TABLE 1: EXAMPLES OF PRESERVATION ACTIVITIES				
Capture or acquisition of digital information				
Selection of digital information				
Arrangement/Description (metadata) of digital information				
Creation of administrative metadata for digital information				
Reference for/Access to digital information				
Managing digital information				
Policy development/implementation				
Education/Outreach (within state government)				
Implementation of technical infrastructure (e.g., computer software, hardware, and networks)				

The following three descriptions are provided as examples of the types of digital preservation activity of interest in this section:

DIGITAL PRESERVATION ACTIVITY DESCRIPTION EXAMPLE #1

The State of Alpha has digital images of 3500 Public Land Survey plot maps drawn by the U.S. Surveyor General's Office over the years 1848-1907. They are the official, legal land records for the entire state; all property titles and descriptions stem from them. These images, and their accompanying metadata, present a preservation challenge. Together, they comprise nearly 2 TB of data stored on over 200 CDs. Managing that volume of information and media stretched the resources and the technology of Alpha's State Archives. The prospect of migrating to a new storage medium for that collection alone was daunting. These challenges encouraged the State Archives to work with the University Supercomputer Center to test its Storage Resource Broker and grid technology in replicating and storing both data and metadata in a distributed environment.

DIGITAL PRESERVATION ACTIVITY DESCRIPTION EXAMPLE #2

The State of Beta is mandated to acquire official reports issued by state agencies. This mandate includes official state agency reports created in digital formats so the State Library extended its depository program to include reports in digital format. To support this extension the Library created a web page describing the depository program, promoted it through its outreach efforts, and solicited the submission of electronic reports through a specific email address "reports@betalibrary.gov.

DIGITAL PRESERVATION ACTIVITY DESCRIPTION EXAMPLE #3

The State of Gamma is implementing a central repository for all state publications called GSPACe. The primary responsibility for the system belongs to the Gamma State Historical Society (State Archivist) and the State Library of Gamma, but the project team involves all three branches of government. In the first phase they implemented an ongoing pilot project targeting 25 publications identified in statute. As part of phase two, they are currently working to expand the project to all publications on agency web sites. In the final phase, they will include all state publications. The GSPACe system uses DSpace software, and is

designed on the OAIS Reference Model. From this work they have now started on a project plan and system design. They hope to have this completed late in 2006 so it can be presented to the legislature in January, 2007.

Please use the space below to describe up to five past or current state government digital information preservation activities in your state.

22. TITLE OF THE STATE GOVERNMENT DIGITAL INFORMATION PRESERVATION ACTIVITY:



Please provide 1-3 paragraphs describing the state government digital information preservation activity and the parties involved (e.g., other local/state/federal agencies, other states, and the academic and private sectors)



24. LINKS:

Provide links to related Web sites or project documents.

25. CONTACT FOR THIS ACTIVITY:

Provide links to contact information or enter the contact information directly.

- O Yes
- O No

27. TITLE OF THE STATE GOVERNMENT DIGITAL INFORMATION PRESERVATION ACTIVITY:

28. SHORT DESCRIPTION:

Please provide 1-3 paragraphs describing the state government digital information preservation activity and the parties involved (e.g., other local/state/federal agencies, other states, and the academic and private sectors)



30. CONTACT FOR THIS ACTIVITY:

Provide links to contact information or enter the contact information directly.

- O Yes
- O No

32. TITLE OF THE STATE GOVERNMENT DIGITAL INFORMATION PRESERVATION ACTIVITY:

33. SHORT DESCRIPTION:

Please provide 1-3 paragraphs describing the state government digital information preservation activity and the parties involved (e.g., other local/state/federal agencies, other states, and the academic and private sectors)



Provide links to related Web sites or project documents.

35. CONTACT FOR THIS ACTIVITY:

Provide links to contact information or enter the contact information directly.

- O Yes
- O No

37. TITLE OF THE STATE GOVERNMENT DIGITAL INFORMATION PRESERVATION ACTIVITY:

38. SHORT DESCRIPTION:

Please provide 1-3 paragraphs describing the state government digital information preservation activity and the parties involved (e.g., other local/state/federal agencies, other states, and the academic and private sectors)



40. CONTACT FOR THIS ACTIVITY:

Provide links to contact information or enter the contact information directly.

- O Yes
- O No

42. TITLE OF THE STATE GOVERNMENT DIGITAL INFORMATION PRESERVATION ACTIVITY:

43. SHORT DESCRIPTION:

Please provide 1-3 paragraphs describing the state government digital information preservation activity and the parties involved (e.g., other local/state/federal agencies, other states, and the academic and private sectors)



44. LINKS: Provide links to related Web sites or project documents.

45. CONTACT FOR THIS ACTIVITY:

Provide links to contact information or enter the contact information directly.

Section 4. Training Needs for Digital Preservation Related Activities

46. Drawing on your examples of digital preservation activities described in the last section or your plans for future activities, what level of training does your unit(s) need to build the necessary capabilities for a successful digital preservation program in your state?

	Training already provided	Basic training needed	Advanced training needed
Identify the type and amount of digital information throughout the state.	0	0	0
Select and appraise state government information in digital form.	0	0	0
Identify key stakeholders related to specific digital information (other local/state agencies, other states, private sector, etc.).	0	0	0
Negotiate and make agreements with key stakeholders to preserve digital information.	0	0	0
Acquire state government information in digital form for holdings.	0	0	0
Manage state government information in digital form (metadata, reformatting, etc.).	0	0	0
Manage the ingest of digital information into a repository.	0	0	0
Manage the long-term storage of digital information in a repository.	0	0	0
Develop mechanisms to monitor the long-term usability of state government information in digital form.	0	0	0
Make state government information in digital form accessible to users.	0	0	0
Produce a disaster and recovery planning for state government information in digital form.	0	0	0
Manage copyright, security, and other legal issues of relevance to state government digital information.	0	0	0
Other (Please specify in the next question).	0	0	0

47. Please specify any other digital preservation capability that you have had or need training in.



48. If you are currently developing any of the above mentioned capabilities for digital preservation, please provide a 1-3 paragraphs description of how you are developing it. Also, please include whether this involves other agencies within your state, other states, or the private or academic sectors. If available, please provide links to sites that describe the capabilities identified or that point to resources to support staff development in these areas.



Please provide up to five examples of state government digital information that is at-risk of deteriorating or being altered or lost through format or technological obsolescence, policy or procedural gaps, or financial constraints. Please give examples that are both content type and originator specific (e.g., electronic correspondence of the State Attorney General, state agency web sites, court records, legislative proceedings in digital form).

49. AT-RISK STATE GOVERNMENT DIGITAL INFORMATION:

Please provide 1-3 sentences describing the state government digital information that is at-risk.



50. SHORT DESCRIPTION OF CONDITIONS CAUSING INFORMATION TO BE AT-RISK:

Please provide 1-3 paragraphs describing the conditions putting the state government digital information at-risk.



51. STRATEGIES BEING CONSIDERED TO PRESERVE AT-RISK STATE GOVERNMENT DIGITAL INFORMATION:

Please provide 1-3 paragraphs characterizing the strategies being considered for reducing the risk to this information, include policy development efforts, partnership efforts, and technology investments.



- O Yes
- O No

53. AT-RISK STATE GOVERNMENT DIGITAL INFORMATION:

Please provide 1-3 sentences describing the state government digital information that is at-risk.



54. SHORT DESCRIPTION OF CONDITIONS CAUSING INFORMATION TO BE AT-RISK:

Please provide 1-3 paragraphs describing the conditions putting the state government digital information at-risk.



55. STRATEGIES BEING CONSIDERED TO PRESERVE AT-RISK STATE GOVERNMENT DIGITAL INFORMATION:

Please provide 1-3 paragraphs characterizing the strategies being considered for reducing the risk to this information, include policy development efforts, partnership efforts, and technology investments.



- O Yes
- O No

57. AT-RISK STATE GOVERNMENT DIGITAL INFORMATION:

Please provide 1-3 sentences describing the state government digital information that is at-risk.



58. SHORT DESCRIPTION OF CONDITIONS CAUSING INFORMATION TO BE AT-RISK:

Please provide 1-3 paragraphs describing the conditions putting the state government digital information at-risk.



59. STRATEGIES BEING CONSIDERED TO PRESERVE AT-RISK STATE GOVERNMENT DIGITAL INFORMATION:

Please provide 1-3 paragraphs characterizing the strategies being considered for reducing the risk to this information, include policy development efforts, partnership efforts, and technology investments.



- O Yes
- O No

61. AT-RISK STATE GOVERNMENT DIGITAL INFORMATION:

Please provide 1-3 sentences describing the state government digital information that is at-risk.



62. SHORT DESCRIPTION OF CONDITIONS CAUSING INFORMATION TO BE AT-RISK:

Please provide 1-3 paragraphs describing the conditions putting the state government digital information at-risk.



63. STRATEGIES BEING CONSIDERED TO PRESERVE AT-RISK STATE GOVERNMENT DIGITAL INFORMATION:

Please provide 1-3 paragraphs characterizing the strategies being considered for reducing the risk to this information, include policy development efforts, partnership efforts, and technology investments.



- O Yes
- O No

65. AT-RISK STATE GOVERNMENT DIGITAL INFORMATION:

Please provide 1-3 sentences describing the state government digital information that is at-risk.



66. SHORT DESCRIPTION OF CONDITIONS CAUSING INFORMATION TO BE AT-RISK:

Please provide 1-3 paragraphs describing the conditions putting the state government digital information at-risk.



67. STRATEGIES BEING CONSIDERED TO PRESERVE AT-RISK STATE GOVERNMENT DIGITAL INFORMATION:

Please provide 1-3 paragraphs characterizing the strategies being considered for reducing the risk to this information, include policy development efforts, partnership efforts, and technology investments.



68. Please provide examples of government digital information in your state that was not preserved and is no longer accessible.

Section 6. Enterprise Architecture

According to a National Association of State Chief Information Officers (NASCIO) report published in October of 2005 over 95% of the responding states have embraced Enterprise Architecture (EA) as a framework for systematically determining needs and demands and reshaping "government processes, organization, and supporting management systems."

Please answer the below questions to assess your unit's or units' awareness of and involvement in your state's Enterprise Architecture efforts.

69. Is your unit(s) aware of your state's Enterprise Architecture efforts?

- O Yes
- O No

70. Is your unit(s) involved in your state's Enterprise Architecture efforts?

- O Yes
- O No

71. If your unit is involved in your state's Enterprise Architecture efforts, please describe the nature of that involvement.



72. Please include links to relevant documentation that describes your unit's involvement in your state's Enterprise Architecture efforts.



Section 7. Additional Thoughts or Comments

73. If you have additional thoughts or comments about your state's digital preservation activities, please enter them in the space provided below.

Thank you for your time and effort in completing this survey.