

Preserving State Government Digital Information

Minnesota Historical Society

Digital File Preservation Options

The Preservation Options grid is structured with "good, better, best" to emphasize that appropriate methods of digital preservation vary between record sets. A full appraisal of your records must be completed to determine what is needed. Lumping all records into the highest level of preservation will reduce the cost-effectiveness of your records management program as you will be preserving many records that do not need to be preserved on a long-term basis. Conversely doing only the minimum will reduce chances that your vital records will be available when needed.

Organization of the Preservation Grid



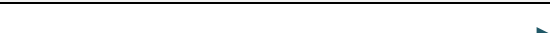
	Simple	Better	Best	
Good For:	Records with short term value (less than five years)	Records with a longer retention schedule, but not intended for permanent retention	Ideal for records vital to the organization. Records that must be kept permanently.	
Costs	lower			higher
Level of Effort	lower			higher
Level of Trustworthiness	lower			higher

Figure 1: Graphic representation of preservation grid characteristics.

In moving across the grid from left to right reviewing the 'Simple', 'Better' and 'Best' solutions (short-term to long-term solutions), the requirements become more complex, and the costs increase, as does the necessary level of effort; however, with this comes an increase in the trustworthiness and authenticity of your records, which in itself has value.

Digital File Preservation Options

Issue ↓ Response →	Simple	Better	Best
Policy Framework	<ul style="list-style-type: none"> • Identification of legal requirements and industry best practices for records retention, access, and use 	<ul style="list-style-type: none"> • Analysis and prioritization of records based on legal and management requirements and value to the organization and others 	<ul style="list-style-type: none"> • Sustainable collaborations to meet legal requirements and to support expectations of principal constituencies
Documentation	<ul style="list-style-type: none"> • Approved record retention schedule • System documentation retained for life of system 	<ul style="list-style-type: none"> • Record retention schedule • System documentation • Documentation of record-related policies and procedures 	<ul style="list-style-type: none"> • Record retention schedule • System documentation • Documentation of record-related policies and procedures • Documentation of all preservation-related actions over time
Storage Media	<ul style="list-style-type: none"> • Any kind 	<ul style="list-style-type: none"> • Nearline removable media (e.g., optical jukebox) • Online network server storage 	<ul style="list-style-type: none"> • Network server storage • Migration plan for moving files to new storage media over time
File Format	<ul style="list-style-type: none"> • Any kind 	<ul style="list-style-type: none"> • Non-proprietary • Open source 	<ul style="list-style-type: none"> • Non-proprietary • Open source • Conversion plan for moving files to new formats as necessary
Metadata	<ul style="list-style-type: none"> • System-generated 	<ul style="list-style-type: none"> • System-generated • Discovery/access metadata for indexing • Use of appropriate recognized metadata standard 	<ul style="list-style-type: none"> • System-generated • Discovery/access metadata for indexing • Use of appropriate recognized metadata standard • Metadata to facilitate preservation activities over time
Security	<ul style="list-style-type: none"> • Basic best-practice system security 	<ul style="list-style-type: none"> • Basic best-practice system security • Level commensurate with applicable privacy requirements for content 	<ul style="list-style-type: none"> • Appropriate security level for content • Audit trail logs • Security control of management actions
Recovery Copies	<ul style="list-style-type: none"> • Periodic backups on removable media stored at location separate from immediate system environment 	<ul style="list-style-type: none"> • Periodic backups on removable media stored off-site 	<ul style="list-style-type: none"> • Periodic backups on removable media stored off-site • QA checks for completeness and file integrity • Comprehensive disaster recovery plan
Staff Skills/Time	<ul style="list-style-type: none"> • IT staff time to manage system • Records staff time to manage retention schedules • Records staff time to oversee disposal of records 	<ul style="list-style-type: none"> • IT staff time to manage system • Records staff time to manage retention schedules • Records staff time to oversee disposal of records • Records staff time to manage/communicate policies and procedures • Staff time for metadata/indexing 	<ul style="list-style-type: none"> • IT staff time to manage system • Records staff time to manage retention schedules • Records staff time to oversee disposal of records • Records staff time to manage/communicate policies and procedures • Staff time for metadata/indexing • Staff time to maintain and implement back-up procedures, migration, conversion, and disaster recovery plans