



NATIONAL
ARCHIVES

OFFICE *of the*
CHIEF RECORDS
OFFICER

Success Criteria for Digitizing Permanent Records

National Archives and Records Administration
November 2023

NARA's new digitization regulations represent a major milestone toward meeting NARA's vision and goals to move federal agencies to a fully electronic environment. The importance of preserving and providing access to permanent digital records cannot be overstated. By embracing the latest imaging science standards in these regulations, we can unlock the full potential of these records and secure our nation's history for future generations.

- Laurence Brewer, Chief Records Officer for the U.S. Government, NARA

Introduction

NARA issued regulations with digitization standards for permanent records for a specific purpose -- to help the federal government transition to fully electronic records management. To achieve the vision of a fully digital government, it is crucial that digital records can fulfill the same functions as their analog source records. These digitized records will be transferred to the holdings of the National Archives of the United States and preserved as a valuable part of our nation's history.

The benefits of an all-digital government are clear. By converting business processes into fully digital workflows and by digitizing paper and analog records to support those workflows, agencies will be better able to meet their missions and serve their customers. Transitioning to digital business processes helps agencies meet customer needs faster and more efficiently. Other benefits include reducing duplication of effort and allowing agencies to focus their resources on the management of digital records. Finally, it also enables agencies to interact with the public online and reduces the need to conduct business in person or through the mail.

Background

In 2014, Public Law 113-87 amended the Federal Records Act, 44 U.S.C. § 3302, and mandated that NARA issue standards for digitally reproducing records “with a view toward the disposal of original records.” The [Transition To Electronic Records \(OMB/NARA M-19-21\)](#) and [Update to Transition to Electronic Records \(OMB/NARA M-23-07\)](#) memoranda require that:

- By June 30, 2024, federal agencies must manage all permanent records in an electronic format.

Success Criteria for Digitizing Permanent Records

- After June 30, 2024, federal agencies must transfer all permanent records in an electronic format and with appropriate metadata.

To comply with the law and the memoranda, NARA issued regulations with digitization standards for permanent records. The regulations are in 36 CFR Chapter XII, Subchapter B, Part 1236, [subpart E -- Digitizing Permanent Federal Records](#). When agencies follow the digitization standards in these regulations, they may transfer the digitized records to the National Archives and destroy the source records.

For questions about digitization standards for record types not yet covered by regulations, please contact the Records Management Policy and Standards Team at rmstandards@nara.gov.

Purpose

This document is intended to support the agency officials responsible for digitizing, managing, and transferring their agency's permanent records to the National Archives' holdings. It provides high-level success criteria for digitizing permanent records, which are organized around four key concepts: *Policies, Access, Systems, and Disposition*.

This document represents NARA's continued efforts to assist agencies in digitizing permanent records and meeting federal records management requirements in laws, regulations, and NARA-issued policy. NARA also published [Criteria for Successfully Managing Permanent Electronic Records](#), which explains other aspects of electronic records management.

If not properly managed, digitization can result in digital records that are either incomplete or of insufficient quality to serve all of the same business purposes as the originals. Some records might be overlooked, some information might not be properly captured, or the relationships between records that are obvious when records are organized in boxes, folders, or binders could be lost due to poor file naming practices, insufficient metadata, or poor management.

The digitization standards included in 36 CFR Part 1236, Subpart E contain robust requirements to ensure that agency digitization yields digital records that are complete, contain all of the information of the source records, and can be used for all of the same purposes as the originals. Adhering to the requirements in 36 CFR 1236 Subpart E, and

other recordkeeping requirements will help mitigate many of the risks inherent in digitization.

Success Criteria

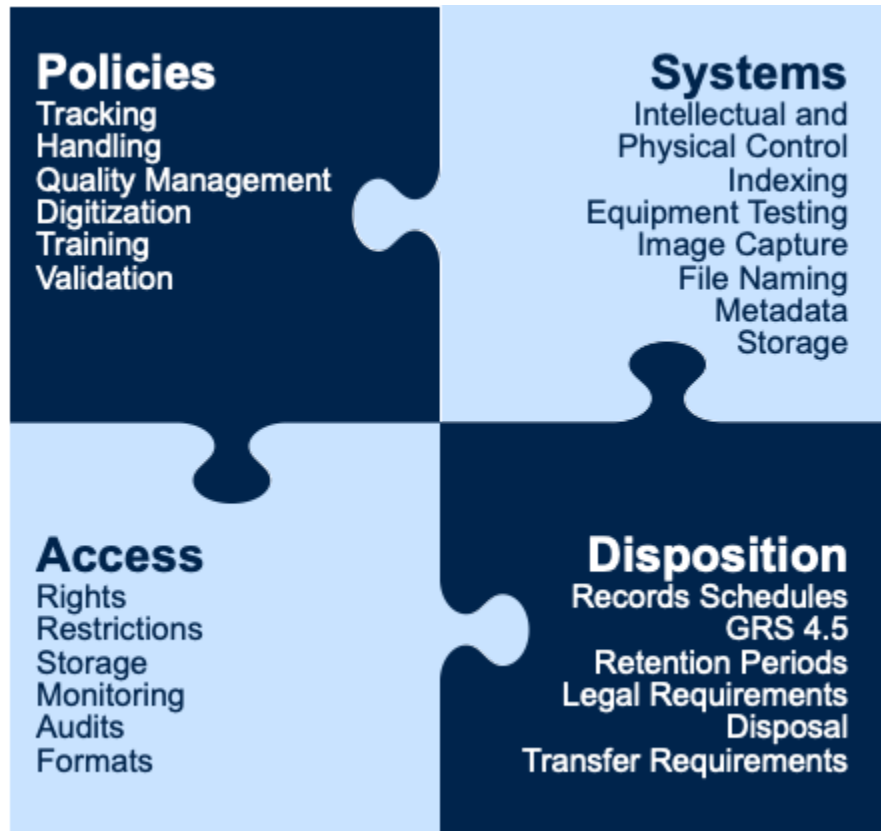


Figure 1: Success criteria categories

NARA measures success in recordkeeping through agencies' ability to address the four key concepts of policies, systems, access, and disposition. When agencies apply these concepts to digitization projects they should:

- Develop effective digitization *policies* that integrate digitization activities into existing recordkeeping processes and inform the development of training materials.
- Utilize *systems* capable of digitizing permanent records to stated technical parameters without damaging them and then managing the resulting digital records and metadata until their eventual transfer to the National Archives.

Success Criteria for Digitizing Permanent Records

- Maintain the ability to provide *access* to the digital records over time to support the agency's business needs, ensure successful migration of data and records between systems, as well as response to FOIA and e-discovery requests.
- Validate that the digitization process has met the requirements of 36 CFR 1236 Subpart E and that the *disposition* of both the source records and the digital records is executed according to an applicable GRS or agency records schedule.

Policies and Procedures

When agencies digitize records to comply with the requirements in 36 CFR 1236 Subpart E, it is important to have clear policies and procedures in place. This ensures that everyone involved understands their responsibilities and that the resulting digital records are accurate, reliable, and accessible. Policies and procedures should be developed with input from all relevant stakeholders and follow the requirements specified by the Federal Records Act, [Title 36 CFR Chapter XII Subchapter B](#), and NARA guidance.

What Success Looks Like

Policies for roles and responsibilities: Your agency policies explain staff responsibilities relating to digitizing records in compliance with NARA's regulations. Your agency training on these policies ensures that staff involved in digitization projects understand their roles and responsibilities.

Policies and procedures for handling source records: Your agency procedures explain how to properly manage source records throughout the digitization process including their removal and return to storage. Your agency procedures address all applicable recordkeeping requirements. For example, there may be handling instructions for Controlled Unclassified Information (CUI) or Privacy Act records that impact how source records are retrieved, stored, and refiled.

Procedures for digitizing source records: Your agency procedures explain how your records will be digitized according to the requirements in NARA's regulation.

Procedures for quality management: Your agency procedures explain the quality management procedures that your staff or contractors will follow. Your agency can demonstrate that it followed the quality management procedures after digitization projects are completed.

Success Criteria for Digitizing Permanent Records

Policies for managing digital records: Your agency policies and contracts require the secure storage of digital records so that they remain free from corruption, alteration, or deletion.

Policies for validating digitization processes: Your agency policies identify how your digitization process will be validated to ensure that the digital records meet the requirements in 36 CFR 1236 Subpart E.

Policies and procedures for disposition: Your agency policies and procedures explain how source records will be properly disposed of after the digital records have been validated.

Systems

Agencies must have systems in place capable of digitizing, managing, accessing, preserving, and transferring permanent records in acceptable digital formats with required metadata.

What Success Looks Like

Systems for managing source records: Your agency's systems for managing permanent paper or analog records are capable of maintaining intellectual and physical control, including tracking records when they are removed from storage for digitization and generating an electronic index for use in quality management during digitization.

Systems for creating digitized records: Your agency's systems and processes meet all applicable requirements in 36 CFR 1236 Subpart E. Digitization equipment (scanners and cameras) is appropriate for the material type, condition, and size of the records to be digitized and is capable of achieving the required parameters and capturing the necessary level of detail without damaging the source records. Your agency follows a documented quality management plan to monitor system performance and correct defects.

Systems for managing digitized records: Your agency's systems maintain metadata, whether embedded in files or held in a recordkeeping system, consistently over time. Your agency's systems generate and use checksums (or other methods) to monitor for corruption, deletion, or unauthorized alteration once digital records are no longer being modified during a business process.

Access

Records must remain usable and retrievable. Access is dependent on agencies establishing and maintaining intellectual and physical control of records throughout their lifecycle to support an agency's ability to carry out its business functions. Your agency can provide access to meet internal agency needs and accommodate responses to requests for information.

What Success Looks Like

Access for source records: Your agency can identify and locate all records included in the scope of a digitization project. Your agency can identify any missing records or gaps in records and has documented and implemented a method to indicate what records are missing.

Access for digitized records: Your agency's digital records are maintained in a system that preserves their content, context, and structure and protects against their unauthorized use, loss, or destruction. Your agency's digital records remain discoverable, retrievable, and usable for the period specified in their retention schedule.

Disposition

Agencies should work with their NARA appraisal archivist to ensure that the records are scheduled before beginning a digitization project. This is important since the requirements for digitizing records differ depending on their disposition. Temporary records must be digitized according to the regulations in [36 CFR 1236 subpart D—Digitizing Temporary Federal Records](#). Permanent paper records and photographic prints must be digitized according to regulations in [36 CFR 1236 subpart E—Digitizing Permanent Federal Records](#).

Your agency must have a NARA-approved schedule in place to carry out the disposition of both the source records and resulting digitized versions of records. After validation, the digitized record becomes the permanent record and the source record becomes a temporary record. The digitized records will be transferred to the National Archives according to the agency records schedule. The source records will be destroyed according to [General Records Schedule \(GRS\) 4.5](#) or an agency records schedule.

What Success Looks Like

Paper and analog source records: Your agency has records schedules identifying all permanent paper and analog records. Once the source records have been digitized and validated, they are disposed of according to GRS 4.5 or an agency records schedule.

Digital records: Your agency knows the retention period for the digital records you create and has implemented systems and policies to maintain them until they are transferred to the National Archives. Your agency maintains digital records in one of the specified file formats for transfer to NARA for preservation and the source records to be disposed of according to an appropriate disposition authority. This document highlights aspects of *Policies, Access, Systems, and Disposition* that agency officials should consider when planning their agency's digitization strategy. This success criteria will help agencies meet the goals of digital transformation laid out in OMB/NARA memoranda (M-19-21) and (M-23-07).

Appendix A: Discussion Questions on Success Criteria for Digitizing Permanent Records

This appendix provides discussion questions related to the requirements for digitizing permanent records. These questions are provided for agencies' officials, records management, and digitization staff to facilitate discussions. You may have additional digitization questions that go beyond the scope of this document.

Questions to ask as you decide to digitize permanent records

Have you reviewed your agency records schedules and determined if the records are permanent or temporary?

Does your agency have a business need to continue creating, maintaining, or transferring permanent records in paper or analog format past the June 30, 2024 deadline?

If so, should your agency SAORM submit an exception request to NARA that makes a business case for sending records to NARA's federal records centers past the deadline or making direct offers to transfer the records to NARA's accessioning units past the deadline? Does your exception request follow the guidance in [NARA Bulletin 2020-01, Guidance on OMB/NARA Memorandum Transition to Electronic Records \(M-19-21\)](#)?

Success Criteria for Digitizing Permanent Records

If you have already digitized your permanent records before the publication of NARA's standards, can you incorporate the digital records into your business processes and transfer the source records to the National Archives before the June 30, 2024 deadline?

If you have already digitized permanent records before the publication of NARA's standards, do you understand what options are available to manage or transfer the digital records to the National Archives?

If you have determined that your agency needs to digitize permanent records, have you planned when to digitize them?

Will you be contracting out the digitization services? Will you be digitizing permanent records with current agency resources?

Questions to ask as you inventory records for digitization

Do you have an inventory of the records that will be digitized? What level of detail is described? Does the inventory list the individual records, folders, or boxes?

Is your inventory sufficiently detailed to support the quality management requirements in the regulation?

Does your inventory of records to be digitized include information you must capture to meet NARA's metadata requirements?

Do your records include photographic prints? Do they represent the majority of the records in boxes or are most records paper documents with printed photographs intermingled? Which set of digitization requirements in 36 CFR 1236.50 will you use for intermingled records?

Are there any gaps or missing records? Do you understand how to document gaps so that future researchers will know that records were not skipped or mistakenly destroyed but instead were never created in the first place? For example, perhaps no records were created over the winter holidays when staffing was low.

Are there any relationships that exist between the source records that must be captured? For example, are there case files whose component parts will need to remain

Success Criteria for Digitizing Permanent Records

together when they are in digital form? Is the order of the files in the box important? Will you retain the organization of records using a folder structure, capture metadata indicating the relationships between digital records, or a combination of both?

Do you need to capture information written on the boxes or folders and associate it with the digitized records from the folder as metadata?

Do your records have access or usage restrictions that you will need to capture as metadata so that the resulting digital records can be properly managed?

Questions to ask as you prepare to digitize your records:

Do you know where all of your records are stored? Are they all in one place or have the records been stored in several different offices or locations?

Do you know if any records have been physically pulled in response to a FOIA request or due to a legal hold? Do you know if the permanent records are being actively pulled and used and how that may impact your digitization plans?

If so, do you plan to retrieve the pulled records and digitize them along with the related records? Do you plan to digitize the pulled records at a later date?

Will you need to refile the source records so that they can continue to be used until the digital records can be validated and incorporated into your business processes?

How are the source records safeguarded now? What safeguards must be maintained during digitization? For example, do the source records need to be secured in a container when they are not in use? Do the records need to stay on-site for digitization or can they be sent off-site?

How will you track records during the digitization process? For example, will staff use a recordkeeping system to indicate which boxes were removed from storage for digitization and when they were returned? Will you use paper charge-out cards that will be left on the empty shelves?

Do you plan to scan blank pages or will you skip them? Have you documented that decision and trained your staff so that it is done consistently?

Success Criteria for Digitizing Permanent Records

What are the physical characteristics of your source records, such as the type of paper, the type of printing, or the size of the records? Is there any damage to the records that would impact the type of equipment needed to successfully capture all information? Are these records only created on modern office paper?

Do your records have information represented by colors? Is the presence of color important to using and understanding the records? If so, which one of the acceptable color modes identified in 36 CFR 1236.50 will be used in digitization?

How much document preparation will be needed to digitize the permanent records? Are there binders, staples, or clips that will need to be removed to facilitate the use of a sheet-fed scanner?

Based on all the physical characteristics, have you determined the best type of equipment to digitize your permanent records?

Has the digitization equipment been tested to confirm that it is capable of achieving the requirements in 36 CFR 1236.50 before acquisition?

Do you have contracts in place to repair or replace equipment that breaks or fails to achieve project goals?

Questions to ask about documenting your digitization projects:

Has your agency decided what information you will record in your digitization project's documentation?

Do you have a plan to retain the required documentation so that it remains accessible for as long as it is needed?

Questions to ask about quality management:

Have you established and documented a quality management plan that includes your quality control and quality assurance processes?

Have you acquired appropriate test targets and analysis software to support your QC process?

Success Criteria for Digitizing Permanent Records

Do your staff and contractors know how to set up and test digitization equipment (scanners, cameras, workstations with calibrated monitors) to ensure compliance with NARA's regulations?

Are agency staff and contractors trained on procedures for monitoring the performance of digitizing equipment during digitization?

Are agency staff and contractors trained on what to do if digital images fail to meet the required parameters?

Questions to ask about file formats and metadata:

Have you determined which combination of acceptable file formats and compression codecs best fits your project needs? Have you created sample files to ensure that your choices are suitable for your project and comply with the requirements in 36 CFR 1236.50?

If using PDF as your file format, have you tested your PDF creation software to ensure that all required metadata is retained?

Have you reviewed your processes to ensure that transcoding or interpolation (upsampling) is not used to achieve the parameters in the regulation?

Have you developed a process that ensures all required metadata can be captured from digitization equipment, agency recordkeeping systems, or data entry?

Is required metadata properly embedded in each digital record or captured in a recordkeeping system?

Can the metadata specified in regulations be output as a comma-separated values (CSV) file when the digital records are transferred to the National Archives?

What steps will you take to ensure that metadata remains accurate and consistent until your records are transferred to the National Archives?

If you will use the digital records in an ongoing business process, have you identified what metadata might be changed as a result of continued use? Have you taken steps to

Success Criteria for Digitizing Permanent Records

ensure that any metadata changes do not impact the authenticity, reliability, and usability of the records?

Have all access or usage restrictions that apply to the source records been captured as metadata and associated with the digital records?

Have any relationships that exist between source records been reproduced in the digital records either by capturing the relationship metadata elements or creating a folder structure with a logical naming system that makes the relationships between records clear?

Questions to ask about mixed-media records:

Are agency staff and contractors trained on their responsibilities for analyzing all physical media (CDs, DVDs, tapes, or thumb drives) found in boxes of records to determine if they contain permanent, temporary, or non-record materials?

Are staff trained on what to do if they discover born-digital records or records on physical media that are related to the records being digitized?

Do you have a process for addressing temporary records that might be discovered during digitization?

Questions to ask about validation:

Have you met with your Records Officer, SAORM, and General Counsel to determine how your agency will validate your digitization projects?

Have you developed a process that the individual in that role will follow to determine if your digitization project meets the requirements of 36 CFR 1236 Subpart E?

What steps will you take if you cannot validate that your digitization project complies with the requirements in 36 CFR 1236 Subpart E?

Questions to ask about disposition:

What processes have you put in place to implement the records disposition authority?
When will you destroy the source records?

Success Criteria for Digitizing Permanent Records

Do you know what records disposition authority you will use to dispose of source records after your digitization process has been validated?

If you decide to retain source records after validation, are your general counsel and FOIA staff aware that they will be required to conduct discovery against both the digital and paper records?

Have you determined how you will ensure that the digital records remain free from corruption, unauthorized alteration or deletion until they are eligible for transfer to the National Archives per their records disposition authority?