

### Image construction information

- Whether the images are continuous-tone gray scale (8-bit) or color (24-bit raster images)
  - Image size in terms of megapixels and/or ppi
  - Any compression schemes used (e.g., LZW, ITU Group 4)
  - For JPEG files, what compression level is used (i.e., low, medium, high)
  - Image enhancements/camera settings routinely used (e.g., contrast adjustment, noise reduction)
- ☞ Contact agency photography staff to determine if the agency requires minimum quality levels for digital photographic records, including scanned photos and photos from digital cameras.
- ☞ If technical information is not available from agency sources, you can analyze the digital photographic records themselves for image construction and quality attributes. These attributes are often embedded in the header of image files (as TIFF tags or JPEG markers) by certain digital cameras (e.g., make and model of the digital camera).
- ☞ To access header information you can open the file in software that renders digital photos. These include web browsers, image editing and organizing programs, and some printer drivers. The information captured on the file header depends on the camera used.

### What if technical information is sparse?

Obtain representative samples of the records, finding aids and/or other documentation and work with your NARA appraiser to determine if NARA can process them and provide future access.

### How do I get more information from NARA about electronic records?

#### Transfer instructions for records appraised as permanent

For transfer instructions (e.g., acceptable formats, file construction parameters, metadata requirements, and transfer documentation), visit the NARA web site at: [www.archives.gov/records-mgmt/initiatives/transfer-to-nara.html](http://www.archives.gov/records-mgmt/initiatives/transfer-to-nara.html)

#### Toolkit for managing electronic records

For a collection of guidance resources (“tools”) developed by NARA and other organizations, visit <http://toolkit.archives.gov> on the NARA web site.

### NARA contacts

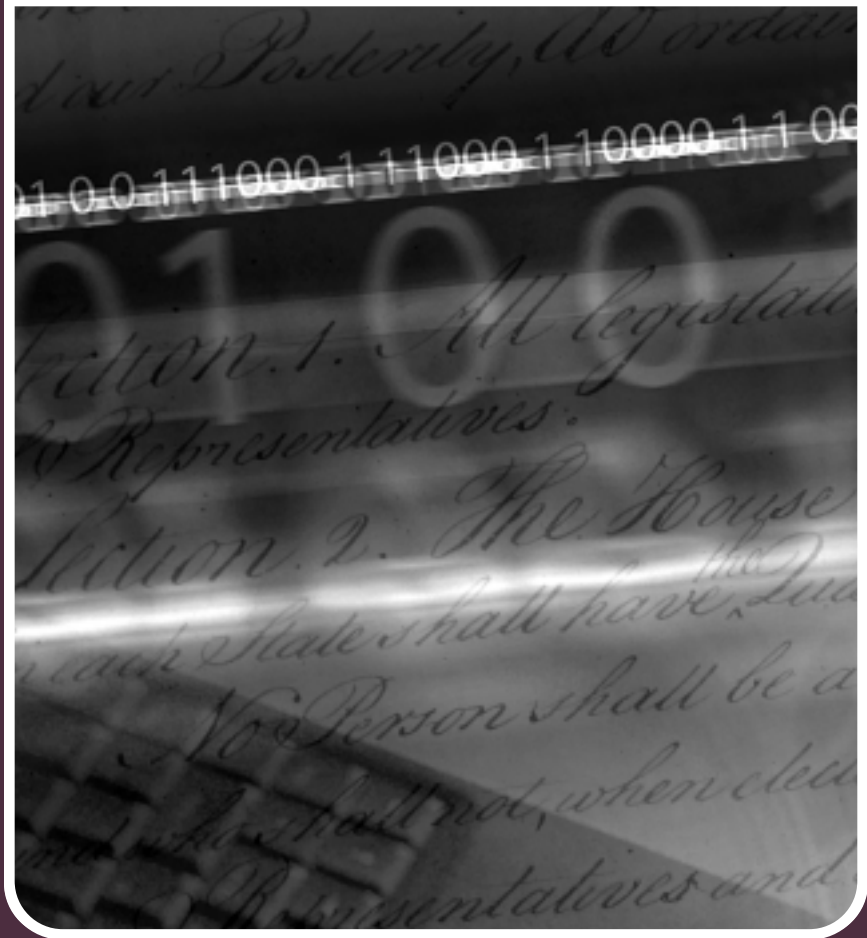
- In the Washington, DC, area, the Life Cycle Management Division can provide assistance. See *List of NARA Contacts for Your Agency* at [www.archives.gov/records-mgmt/appraisal/index.html](http://www.archives.gov/records-mgmt/appraisal/index.html)
- In NARA’s regional offices, the Records Management Staff can provide assistance. A complete list of NARA’s regional facilities can be found at [www.archives.gov/facilities/index.html](http://www.archives.gov/facilities/index.html)

*This brochure is directed solely to Federal agencies to assist them in meeting their records management responsibilities under 44 U.S.C. Chapter 31.*



NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

## *Tips for Scheduling Potentially Permanent Digital Photographic Records*



## Why does NARA need technical information to appraise potentially permanent electronic records?

NARA evaluates technical information as part of the scheduling process to determine if the records can be transferred to NARA in accordance with applicable transfer instructions, and to determine if any technical considerations might impede NARA's ability to process and provide future access to the records.

## How does NARA request technical information from agencies?

NARA appraisal staff (appraisers) provide agency records officers with questionnaires of technical questions about each potentially permanent electronic records format.

## Who can provide this technical information?

Agency staff members who can answer technical questions about records collections and/or systems typically include:

- Business process manager(s)
- Systems/software developers
- Systems/network/database administrators
- Process specialists and/or systems operators who create documents
- CIO staff members
- Network specialists
- Security specialists and/or privacy act specialists
- For web-based records, web program staff who maintain the agency internet and intranet
- Contractors
- Program staff

☞ Initiate a data gathering meeting with identified information sources, your NARA appraiser, and other technical experts (e.g., NARA stakeholders).

## What kind of information is needed to appraise electronic records?

NARA evaluates the following types of technical information, when applicable, to appraise potentially permanent electronic records. When the records are appraised as part of a system, NARA needs to review technical information about the system. Additionally, technical information specific to digital photographic records is identified later in this brochure.

### Basic descriptive information

- The name of the system, if applicable
- Names and versions of the software, hardware, and operating systems
- System architecture description, if applicable
- Total size of the records collection or system (megabytes, terabytes, etc) and the growth rate (e.g., annually)
- Name and version of the records management application used, if applicable

### Technical documentation

- Operational guidelines, work instructions, workflow manuals, process maps, or other documentation of business processes affecting the records
- Systems documentation, if applicable (e.g., user manuals, database schemas, data dictionary, design documents, requirements specifications)
- Documentation of historical or planned system upgrades, data migrations, and other changes to the system or records
- Documentation of quality control inspections performed on the records

☞ Contact the records owner and/or the IT staff who maintains the system, as applicable, to request basic descriptive information and technical documentation.

### File format information

- File format(s) and version(s)
- Software/hardware used to create the record, including version
- File format conversion/migration procedures, if applicable

☞ Contact the records owner and/or creator to gather file format information.

### Finding aids

- Finding aids, metadata, indexing and retrieval systems
- Search technologies used by the agency

### Protection mechanisms

- Computerized mechanisms used to safeguard the records against unauthorized access, alteration, or deletion such as passwords, digital signatures, and/or encryption

☞ For information on finding aids and security protections contact the records owner and/or IT staff who manages and controls access to the records.

## What additional information is needed for digital photographic records?

### Camera information

For photographs produced from a digital camera, identify the manufacturer and model of camera used.

### Metadata information

- Structure of the file header (e.g., standard TIFF, proprietary)
- File naming conventions used
- Metadata elements used and how the metadata is linked to the photos
- If captions are used, the information captured in the caption

☞ Metadata may be maintained separately from the digital photographic records. Contact the business unit that owns and manages the records to identify separate metadata information.