

DIGITAL PHOTOGRAPHIC IMAGES GUIDELINES

INTRODUCTION

Digital photography is a priority electronic content format for the University Archives. The archives house already thousands of analog negatives, prints, and slides from the university's past. As the university documents its activities visually by means of digital technology, the archives also works with units to preserve and promote access to their most important images.

SCOPE AND SELECTION

Just as the archives are highly selective of textual records (retaining only a small percentage of all records created), so too does the archives recommend a very strategic approach to long-term retention of digital images.

Individuals and offices that have created the images under consideration for the archives are best able to recognize and describe their importance. Important images document:

- significant activities and events

- individuals and groups

- places and views associated with the university and its environs
and objects associated closely with the University of Michigan campus and community.

The importance of these images is noted in their accompanying description. Least valuable are images with no description; the archives discourages their retention since they would most likely be inaccessible over time.

The archives recommends regular transfers of digital images at intervals ranging from yearly to every three years. Prior to transfer, a series of steps should be followed. These steps are outline in this portion of the University Archives and Records Program Manual. This guidance applies to digital photographic records that may be transferred to the University Archives for inclusion in an academic or administrative record group as well as in a personal collection from an individual faculty member, student, or alumnus/a. Included under the scope of this guidance are still photographs that are produced from digital camera (born digital) and images that have been scanned from photographic prints, slides, and/or negatives.

Inclusions

These guidelines apply to master digital files that are created using medium to high quality resolution settings and that reflect significant activities of the academic or administrative unit. The records must be organized as either a discrete collection of

photographs or by groupings of photographs organized into distinct categories.

Exclusions

The following digital photographic records will not be accepted for transfer under this guidance:

- Low-resolution photographs typically created for posting on academic or administrative web sites.
- Digital photographs captured within office automation applications (e.g., word processing, spreadsheet, and presentation applications).
- Vector-based images, such as records created using graphic arts software or computer-aided design (CAD) applications.

DESCRIPTIVE INFORMATION RECOMMENDATIONS

The University Archives prefers that this information be captured for each image or a group of images* in the image header or within the directory (descriptive information may be created and stored in a database or Excel file---for purposes of the transfer, export the related descriptive information to a text file with line breaks and store the metadata file inside the directory that it applies to), but will accept transfers of records with this information in the accompanying documentation. Specific information required includes, but is not limited to:

**Unique photograph identification number.*

Identify each individual photograph with a unique identification number and/or file name. If specific naming conventions are used, documentation must be provided describing these standards.

**Date, original date of creation.*

**Caption or Description*

Provide narrative text describing each individual image in order to understand and retrieve it. Standard caption information typically includes the "who, what, when, where, why" about the photograph.

Photographer. Identify the full name if available.

Copyright.

Indicate for each image whether there is a restriction on the use of that image because of a copyright or other property rights.

If the digital files are organized into discrete directories of images, the metadata can be included at the directory level.

**Required information.*

TECHNICAL DOCUMENTATION RECOMMENDATIONS

The University Archives prefers that this information be captured for each image in the image header, but will accept transfers of records with this information in the accompanying documentation. Specific information required includes, but is not limited to:

- *File format.* List the file format and version of each image file transferred to University Archives. If this information is the same for all of the files, then this only needs to be noted once.
- *Indexes.* Provide all external finding aids/indexes for the transferred digital photographic records. Finding aids include database files, thumbnail indexes, shelf lists, caption cards, and other documentation necessary or helpful in properly identifying, retrieving, and using the records.

DIGITAL PRESERVATION

The University Archives will make every effort to ensure that photographs in digital form are fully accessible in the future. To do this, it is best practice to create and maintain digital images in formats that have been found to be more stable. Preferences for image file formats (in order of preference):

- TIFF uncompressed
- TIFF compressed
- JPEG

IMAGE QUALITY GUIDELINES

A. Guidelines for Photographs Born Digital (e.g. taken with digital camera)

Images should be taken at the highest resolution possible and stored in an uncompressed format. Preference would be a 2 mega pixel file or greater with a minimum pixel array of 1,600 pixels by 1,200 pixels. Different cameras offer different capture formats for storing images in-camera. Most offer different levels of JPEG (lossy) compression as well as uncompressed TIFFs and sometimes uncompressed RAW.

If uncompressed TIFF is an in-camera option, this is the best option.

As an alternative option, the RAW format may be used in-camera but should be converted to TIFF once transferred to the computer. The RAW format is uncompressed and of high quality and will allow quick transfer from camera to computer. However, the RAW format is not standardized and is proprietary to the camera manufacturer and sometimes to the specific model of camera.

B. Guidelines for Digitizing Film Media (e.g. negatives, slides)

Original Format	Bit Depth & Color	Spatial Resolution (pixel h x w)	Spatial Resolution DPI	File Size
35 mm	8 bit grayscale or 24 bit color	2800 x 4000	Min. 2000	11 MB/32 MB
Medium format	8 bit grayscale or 24 bit color	5000 on long dimension	Min. 600	Depends on negative size
4" x 5"	8 bit grayscale or 24 bit color	4800 x 6000	Min. 600	27 mb/82 mb
8" x 10"	8 bit grayscale or 24 bit color	4800 x 6000	Min. 600	27 mb/82 mb

C. Guidelines for Digitizing Print Media (e.g. photographs, black & white or color)

Original Format	Bit Depth & Color	Spatial Resolution (pixel h x w)	Spatial Resolution DPI	File Size
4" x 6"	8 bit grayscale or 24 bit color	2700 x 4000	Min. 600	10mb/31mb
5" x 7"	8 bit grayscale or 24 bit color	2850 x 4000	Min. 600	11 mb/33 mb
8" x 10"	8 bit grayscale or 24 bit color	3200 x 4000	Min. 600	12mb/37mb
11" 14"	8 bit grayscale or 24 bit color	4700 x 6000	Min. 600	27mb/81mb

TRANSFERRING IMAGES TO THE UNIVERSITY ARCHIVES

Transfer digital photographs to the university archives on standard CD-ROM or DVD disks. Disks should be labeled with the name of the unit, contact person and number of files contained on the disk.

Digital photographic files can also be transferred via secure File Transfer Protocol. Contact the University Archives to arrange this type of transfer.

CONTACT INFORMATION

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