Maine Memory Network
Equipment Specifications

PRIMARY COMPONENTS

The hard- and software components listed below are the *primary* items you will need for creating a single "scanning station." How many stations you need will depend on the size of your group and the distribution of the work.

These items will satisfy most, if not all, of the digitizing and cataloging needs you will have during the life of the project. (Artifacts that need to be digitally photographed will require a digital camera; that is listed in "Equipment Specifications – Secondary.")

LAPTOP/DESKTOP COMPUTER

Mac (recent operating system) or PC (Windows 10). Most teams will find it convenient to have at least one portable scanning station, necessitating a laptop. The computer must have at least 8 GB RAM memory, the hard drive should have at least 100 GB of storage available, and it must be wireless-ready. The bigger the screen, the better.

INTERNET BROWSER

You should be using the latest version of Edge, Chrome, Firefox or Safari.

SOFTWARE

Maine Memory Network uses the Epson Scan drivers that come with the scanners to scan the images. VueScan (www.hamrick.com) is also a very versatile program that interfaces with most scanners and gives a high level of control. Adobe Photoshop or Photoshop Elements is what we recommend to edit and format digital images. While other imaging software will work, Photoshop Elements is affordable and offers a high level of control and features, and will be the easiest software for our technical team to support. Any recent version will work.

SCANNER

MMN uses and highly recommends Epson brand flatbed scanners. However, if your team currently has access to another brand that scans at 2400 dpi (optical) x 4800 dpi (interpolated) and has a USB connector, it should work fine. Hand scanners are not practical for MCHP.

To scan glass plate negatives, you will need a transparency adaptor and might consider the Epson V850. For slides and small negatives, a slide scanner is recommended because the transparency adaptors don't do an adequate job.

Original	Scanner
Documents and photos, 8.5” x 11” and smaller	Epson Perfections V850 https://epson.com/For-Work/Scanners/Photo-and-Graphics/Epson-Perfection-V850-Pro-Photo-Scanner/p/B11B224201 Also Epson Perfection V39 Scanner https://epson.com/For-Home/Scanners/Photo-Scanners/Epson-Perfection-V39-Scanner/p/B11B232201
Transparent items like glass negatives or transparencies or slides	Epson Perfections V850 https://epson.com/For-Work/Scanners/Photo-and-Graphics/Epson-Perfection-V850-Pro-Photo-Scanner/p/B11B224201
Oversized flat documents/photos up to 12” x 17”	Epson Expression 12000XL Graphic Arts Scanner https://epson.com/For-Work/Scanners/Photo-and-Graphics/Epson-Expression-12000XL-Graphic-Arts-Scanner/p/12000XL-GA
Larger oversized maps/architectural drawings that we can put through a roller. Up to 44” wide.	WideTEK 44 https://www.imageaccess.com/widetek44
Large oversized items we can’t put through a roller	Outsource to Osher Map Library at USM or NEDCC in Andover, MA
Small items that we can’t scan (bound in a book maybe)	Photograph using a copy stand and a digital camera

ADDITIONALLY

Don't forget external harddrives for storage, surge protectors, extension cords, and USB/connector cables. Keep a local copy of your master files on your hard drive, server, or some other storage device. We no longer recommend storing files on CDs or Flash drives for long term storage.

SECONDARY COMPONENTS

Depending on the scope of your project, you may need some or all of this additional equipment.

DIGITAL CAMERAS

The digital cameras on the market are endless. You maybe also try to use your cellphone's camera. Keep these facts in mind:

- The higher the megapixels, the better.
- A memory card with plenty of storage (determine whether you can transfer files onto your computer with a USB cord or if you'll need a card reader).
- Lithium rechargeable batteries to avoid constantly replacing AA batteries.
- A built-in stabilizer to reduce blurry or shaky images.

In addition, a **tripod** is recommended for shooting oversized and 3D objects.

AUDIO RECORDERS (for Oral History or other projects)

Compact-flash (solid-state) digital recorders are recommended. While tape and minidisk are still viable options (and if you have them, use them), they are older technologies.

Digital recorders produce digital files that can be quickly and easily loaded onto your computer. They also produce excellent sound quality with no generational degradation (each copy you make from the original file is the same quality as the original).

Other audio options:

- *Your cellphone*. Just make sure you can transfer the audio file from your phone to a computer.
- *Your laptop computer.* BUT beware that the microphone can pick up machine noise, especially the computer's fan. Also, if your computer crashes you could very well lose your recording.

- *Final Note:* Always use an external microphone (see recommendations below) to get the best sound. Everyone speaking on the recording should have a microphone so that both the questions and answers can be heard clearly. The better the sound captured, the more versatile your audio file.

AUDIO SOFTWARE

Audacity for PC or Mac is a free software that should work fine for your needs. You can also try some higher end software programs like SoundForge.

VIDEO RECORDERS

Most mass market video recorders will work fine but you can also use your phone or tablet. Remember to use an external microphone so that you can clearly record the speaker—especially if this is for oral history interviews. Otherwise you'll hear the questioner clearly and the speaker less clearly, in addition to room noise. In any interview or oral history the sound is of prime importance. A tripod is also essential for steady, viewable video.

VIDEO SOFTWARE

iMovie for Macs is popular—easy to use and powerful enough for the MCHP. You can also use Adobe Premiere or Premiere Elements. Final Cut is another good program.

MICROPHONES

Look for a decent quality omni microphone. Suggestions: the Shure SM58 and with the Electrovoice RE50B. Both are durable general-use microphones on the reasonable end of the price scale. Microphones vary greatly according to price and there are different microphone types for different purposes. Avoid mics with an on/off switch or cardio or shotgun microphones unless you know what you're doing or need them for a specific purpose.

You might choose to go with lapel (lavaliere) mics because they can be pinned to the speaker's shirt and are less obtrusive. Beware that these can be fragile and the cords are prone to splitting and breaking. Careful storage is important.

ADDITIONALLY

Don't forget back-up batteries (or make sure your rechargeable is charged!) as well as flash drives and external harddrives to make backup copies or to send to MMN for uploading.