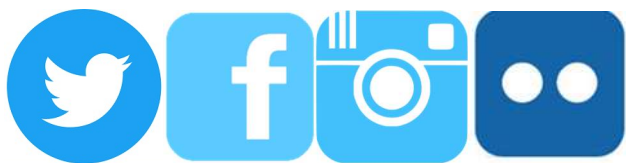**AUSTIN ARCHIVES BAZAAR**

Learn more at:
http://www.austinarchivesbazaar.org/

Information Resources Available

Access more information about personal digital preservation using this QR code. First, you need a QR-code app and a smartphone or tablet equipped with a camera. iOS users should check out RedLaser. Android fans can try either RedLaser or QR Droid. All of these apps are free to download, and each one should handle any standard QR code just fine.

Contact us at:
austinarchivesbazaar@gmail.com

AUSTIN ARCHIVES
BAZAAR

PRESERVATION 101:
HOW TO MANAGE
YOUR PERSONAL ARCHIVE

Table of Contents

IF YOU WANT TO DONATE YOUR RECORDS TO AN ARCHIVES, WHAT SHOULD YOU DO?

If you are interested in donating your collection to an archival repository, be sure to contact that institution before discarding any records. Archivists are experts in identifying materials that should be transferred to an archival repository or manuscript library. Because the research value of records may be diminished if items are removed or if the records are rearranged, donors are encouraged to contact the repository staff before weeding, discarding, or reorganizing their papers and other records.

WHY DO YOU WANT TO KEEP YOUR RECORDS FOREVER? Consider your own preservation goals. Who are you saving your records for: your family; your organization's current or future members; your community; or historical researchers?

WHICH RECORDS ARE WORTH KEEPING FOR POSTERITY? Appraise your records. Consider what types of materials to save and the importance of their content to the organization. The lists of records at the end of this guide can help you decide which materials to retain. Keep in mind that these are just suggested levels of importance and your organization may have different needs.

HOW SHOULD YOU ORGANIZE WHAT YOU KEEP? Whenever possible, arrange and file the records in the order in which they were originally created, maintained, and used, not according to any artificial or arbitrary arrangement.

Preservation Resources

Local Vendors for Archival Supplies and Storage

Paper Place 4001 N. Lamar Suite 540 Austin, TX 78756 512-451-6531 http://www.paperplaceaustin.com/

Jerry's Artarama 6010 North IH 35 Austin, Texas 78753 phone: 512-420-9359 http://austin.jerrysartaramastores.com/

Precision Camera 2438 W. Anderson Lane Austin, TX 78757 512-467-7676 / 800-677-1023 http://www.precision-camera.com

Digitization Vendors

Access Video & Photo (film, video tapes, audio tapes, slides) http://www.accessvideophoto.com/index.html

Dub King (film, video tapes, photos, audio tapes) http://www.dubking.com/

Holland Photo Imaging (digital photo restoration) http://www.hollandphoto.com/

Texas Archive of the Moving Image (film) http://www.texasarchive.org/

Find a Conservator (American Institute for Conservation): https://www.culturalheritage.org/about-conservation/find-a-conservator

National Vendors for Archival Supplies and Storage

Gaylord Archival www.gaylord.com
Hollinger Metal Edge https://www.hollingermetaledge.com/
University Products https://www.universityproducts.com/

Preserving Your History Dos and Don'ts

Preserving family photographs, personal papers, and other precious materials provides a valuable legacy for future generations. Many methods and materials traditionally used to store and display these heirlooms, however, can cause them to deteriorate and fade before their time. These guidelines help keep your family memories vivid.

Do
- Store precious materials in a stable environment, below 75 degrees Fahrenheit and 50% humidity. Keep the temperature and humidity constant.
- Protect materials with acid-free boxes, sleeves, and folders.
- Mount items on acid-free paper using archival-safe mounts.
- Copy newspaper articles onto acid-free paper.
- Interleave acidic items, like newsprint, with buffered tissue.
- Use only PVC-free page protectors: polypropylene or polyester.
- Use adhesives like wheat starch paste or methyl cellulose.
- Identify and date each item (in pencil); identify each person in photographs.
- Use soft pencils and use only acid-free matting material and a window mat to hold photos and drawings away from glass.
- Provide acid-free supports behind large or brittle photos.
- Unfold or unroll items flat for storage (generally).

Don't
- Don't expose materials to unnecessary light.
- Don't store precious materials in hot or damp spaces.
- Don't store items in wood cabinets or cardboard boxes.
- Don't use 'magnetic' pages in albums.
- Don't use tape of any kind (even removable) or rubber cement.
- Don't use staples, metal paper clips, straight pins, or rubber bands.
- Don't use ballpoint pens for marking.
- Don't press a book's spine to force it completely open.
- Don't touch the image side of a photo or the emulsion (dull) side of a negative.

Caring for Books & Papers

1. Always handle books and papers with clean hands or while wearing clean gloves. Dirt can damage paper and natural oils on skin can affect paper, as well.
2. Store books and papers in a cool, dry environment away from direct sunlight, which causes fading. Humidity can cause mold and mildew to form on the materials. Storage in a garage, basement, or attic typically is not good.
3. Physically support books when handling them. Take care not to force a book to lie flat.
4. Never remove a book from its shelf by pulling on the top of its spine or headcap, which damages the structure of the book. Instead, grasp the fore edge of the book.
5. Store materials away from food and water in order to prevent damage from insect infestations. Cockroaches, ants, termites, silverfish, booklice, and firebrats are pests often found in collections of books and papers.
6. Place books on shelves alongside books of similar height and weight. Placing a small book next to a taller one can create tension and cause damage.
7. Store large books flat. Atlases, scrapbooks, and other large, heavy books should be stored flat to avoid damage to spines, bindings, and covers.
8. Improve the storage of fragile materials by enclosing them in wrappers, folders, or boxes. Look for paper and carboard enclosures that are acid-free or plastic enclosures that are PVC-free (such as Mylar, polypropylene, and polyethylene.) With plastic materials, be sure to leave an opening for air and moisture to escape.
9. Remove items like metal paper clips, rubber bands, staples, and acidic wrapping paper and folders, which can stain materials. Try alternative methods for keeping papers together, such as inserting them in a Mylar sleeve or acid-free folder.
10. Isolate newsprint because it is highly acidic, stains adjacent paper, and deteriorates quickly. Clippings can be photocopied on alkaline or acid-free paper or placed in Mylar sleeves and scrapbooks can be interleaved with acid-free tissue.
11. Unfold and flatten papers whenever possible without causing damage to the folds. Remove letters from envelopes.

How to Use this Guide

The preservation guidelines presented here are by no means an exhaustive compilation of resource material.

Much of the information presented here is taken from more extensive preservation guides created by the Library of Congress and Austin History Center to help you manage your digital assets:

http://digitalpreservation.gov/personalarchiving/

https://library.austintexas.gov/ahc/preserving-your-history

E-Mail

Like paper letters, your e-mail messages document important events, transactions, and relationships. Saving an e-mail involves keeping it separate from your e-mail program. This is because e-mail programs are not meant to keep information for a long time: they can change or stop providing support.

Identify **all your e-mail sources.**
- Identify your personal e-mail accounts.
- Within each account, find all folders or other separate groupings of messages; include any "archived" messages.

Decide **which messages have long-term value.**
- Pick the messages you feel are especially important.
- Save attachments that are part of the selected messages.

Export **the selected messages.**
- If saving a few messages, you can use the "save as" command in your e-mail browser or software program to export them as individual files.
- If saving many e-mails, investigate automatically exporting them using the email program.
- If possible, save messages in an open format.
- Save metadata for the messages, including the message "header" (the subject, from, to, and time and date).

Organize **the saved messages.**
- Give individual messages and attachments descriptive file names.
- Create a directory/folder structure on your computer to put the saved messages and attachments.
- Write a brief summary of the directory structure and its files.

Make copies and *manage* them in different places.

Caring for Printed Photographs

1. **Always identify and date every photograph**. Write the information on the back of the photo using a soft lead pencil and a light hand. Some surfaces will not take pencil markings - in these cases, use a permanent ink marker made especially for photographic materials available from local photo supply businesses. Do not use Sharpies or ball-point pens.

2. **Temperature, humidity, and light are the three greatest enemies of photographic materials**. Keep photos in an area where you are comfortable – not too hot, cold, wet, or dry. Most importantly, keep them in locations where changes in temperature and humidity are not severe or rapid (NOT attics, basements, garages or sheds). Keep photos in the dark as much as possible to prevent fading. Color photographs fade much faster than black and white photos.

3. **When handling photos, never touch the image side**. Even clean hands leave oils that attract dirt and mold. Use light cotton, latex, or nitrile gloves if possible to minimize contact with the emulsion.

4. **Never use glue, tape, staples, rubber bands, or paper clips on photos**. These can cause stains, scratches, and dents to the photo. Wood and non-archival-quality wood products (paper and cardboard) are harmful to photographic material.

5. **Never store photos and negatives in "magnetic" photo pages**. "Magnetic" pages are actually adhesive-covered cardboard with a plastic cover. They are dangerous to your photos.

6. **For mounting photos, use acid-free paper and corner mounts**. If you frame your photos, be sure to use an acid-free mat to keep the photos from touching the glass and an acid-free backboard to prevent deterioration of the image.

7. **The best way to store photos is in PVC-free polyester or polypropylene sleeves inside acid-free cardboard boxes.** Plastic sandwich bags (like Ziplock) are PVC-free and can protect photos temporarily. A fairly inexpensive way to store a large number of photographs is to layer them between sheets of 100% cotton bond acid-free typing paper in a metal or acid-free cardboard box. Metal boxes offer a certain amount of fire and insect protection, but acid-free cardboard boxes prevent condensation of moisture due to changes in temperature and humidity. Look for the words "acid-free" and "lignin-free" for paper and cardboard products, polyester or polypropylene type plastics, or the label "passed P.A.T." for any photo storage product.

Scanning Your Personal Collections

Prepare the scanner, documents/photos:
Clean the scanner glass; remove any paper clips, tape, or staples; and carefully remove any dust, dirt, or smudges on the paper/photos.

Select scanner settings:
In general, scan documents and photos (4"X6" and 5"X7") at 300 dpi/ppi. To enlarge 4"X6" and 5"X7" photos to 8"x10" or greater, scan at 400 or 600 dpi. Dots per inch (DPI) or pixels per inch (PPI) are a measure of how many dots of color or shading are contained within one inch, which affects the image resolution.

Scan and save:
If you are offered the option to save a scan as a low-, medium- or high-quality JPEG, save as medium-quality JPEG. If you want to re-print the photo or make an 8"X10" enlargement, save instead with the high-quality JPEG setting. You can also save documents as PDF files.

Access and storage:
Organize the scanned images. Give scanned photos descriptive file names to help you identify them, such as "0915201-wedding.jpg" (using a "yyyymmdd" date-structure). Create your own naming system, but be consistent.
Create and organize a folder-within-folder structure on your computer in which to store the files.

Example of a folder-within-folder directory/folder structure:
 \My Documents
    \Family
        \ophelia_ wedding
           20100914-Rehearsal-001.jpg
           20100915-Ceremony-001.jpg

Social Media

You may use social media to store and curate your photos and videos. Many social media platforms now provide access to download your data so that you can keep copies of your data in other locations, or you can share files across other social media platforms to help you work smarter.

You can download your data from:

Be aware that when receiving a digital download of your data from providers like Facebook, you will receive a Zip file of your photos, videos, instant messages, etc. in folders without intuitive names (file names are long numeric codes).

How to open a Zip file:
1. Install the WinZip application on your computer.
2. Download any zipped files you receive as an e-mail attachment in the usual way.
3. Double click on the file icon.
4. Double click on the file that you want to open.
5. The file will open.

What you get for free:

With a Dropbox Basic account you get **2GB free**, though this can be boosted by referring others to Dropbox. For every person who signs up via your referral link, you'll both get an extra 500MB, up to a maximum of 16GB. Accessed via: your browser, iOS, Android, Windows Phone, OS X, and Windows. Dropbox now uses two-step verification (in the form of a text to your mobile) for logins from new devices.

What you get for free:

All Amazon Prime customers get **5GB** of free storage for videos, music, and documents, as well as free unlimited storage for their photos. Accessed via: iOS, Android, OS X, and Windows. For photo backup, accessed via: iOS and Android.

What you get for free:

Anyone with a (free) Yahoo account gets **1TB** of space. One benefit over Google Photos is there's no limit to the resolution of the images and videos you upload. Accessed via: your browser, iOS, Android apps, OS X, and Windows.

Digital Photographs

Focus attention on organizing your important photos by placing them into related groups.

Identify where you have digital photos:
• Identify all your digital photos on cameras, computers, and removable media, such as memory cards, and include your photos on the Web.

Decide which photos are most important:
• Pick the images you feel are especially important. If there are multiple versions of an important photo, save the one with highest quality.

Organize the selected photos:
• Give individual photos descriptive file names.
• Tag photos with names of people and descriptive subjects.
• Create a directory/folder structure on your computer to store your images.

Make copies and store them in different places:
• Make at least two copies of your selected photos. One copy can stay on your computer or laptop; store other copies on portable hard drives, thumb drives, or cloud storage. Store copies in different locations that are as physically far apart as practical. If disaster strikes one location, your photographs in the other place should be safe.
• Put a copy of the photo inventory with your important papers in a secure location.
• Check your photos at least once a year to make sure you can read them.
• Create new media copies every five years or when necessary to avoid data loss.

File Type	Good Points	Bad Points
JPG	Zooming in is good quality Millions of colours Compresses well	Not good for sharp edges Not great for text Some colour detail is lost when compressed
TIFF	Features millions colours No colours are lost No or little compression	Not compatible with all applications Large file sizes
GIF	Compresses well Very small file size	Only has 256 colours Doesn't show all colours
PNG	Millions of colours Compresess well Sharp edges	Not compatible with all applications Can only use in a few particular places

Digital Audio

Make sure that the audio files you select for saving are in an open, non-proprietary file format. This will ensure the greatest flexibility for future use.

Identify your digital audio files:
- I.D. your audio files on computers, audio players, phones, and removable media, such as memory cards and DVDs.
- Include audio files that you manage through audio software.

Decide which audio recordings have long-term value:
- Pick the recordings that you feel are important.
- If there are multiple versions of an important recording, save the one with highest quality.

Export the selected audio recordings:
- If saving a few recordings, you can use the "save as" command in your web browser or software program to export them as individual files.
- If saving many recordings, check into automatically exporting them.
- If possible, save recordings in an open format.
- Save metadata for the audio files, like the creator, title, and date it was exported.

Organize the selected audio recordings:
- Give individual audio files descriptive file names.
- Tag the files with information about the recording.
- Create a directory/folder structure on your computer to store the recordings.
- Write a brief summary of the directory structure and the recordings.

Make copies and *manage* them in different places

Common Audio File Formats:
WAV, FLAC, MP3, AIFF, APE, AAC
WAV file format (large file size/high quality)
MP3 file format (compressed smaller size/lower quality)

Free Cloud Storage

In addition to monthly paid subscription storage services, a number of FREE services may meet your needs:

What you get for free: 15GB
This allowance is spread across three Google services: Google Drive, Gmail. and Google Photos (for high-res photos – Google Photos gives free unlimited storage for photos of 16 megapixels or less). Accessed via: Your browser, iOS, Android, and Windows programs.

What you get for free: 10GB
Accessed via: iOS, Android, and Windows Phone apps, OS X and Windows programs. Box for Office also lets you access and edit your files from within Office.

You need to have:
A Hotmail or Live e-mail account, but as these email services are free, it's worth setting one up just for the free storage.
What you get for free: 5GB. Students get 1TB of storage free.
Accessed via: iOS, Android, Windows Phone, OS X, and Windows.

What you get for free: The free version comes with 5GB of storage which you can use to backup photos, videos, mail, notes, calendars, app data, contacts, and documents. Accessed is integrated into iOS and OS X; and Windows.

If you're an iPhone or iPad user, you most likely use Apple iCloud to back up at least some of your data. It's well integrated into iOS – though it also runs on Mac and now Windows – and automatically updates and stores your files across all connected devices.

Digital File Storage Options

Many options for cloud storage are available.

Online storage systems, or "**cloud**" services, allow you to store digital media online by uploading files via your computer or mobile device. Though transferred and accessible via the web, the data is actually physically held on mammoth servers, often owned by whoever provides the particular service you use (Google, Microsoft, etc.).

Once you've downloaded and installed the relevant software, any files (such as photos, for example) that you move into the preselected "**backup**" folder will automatically be uploaded and stored in the cloud. You can usually change the settings so that your data syncs to other devices too.

It's also possible to access your data via your browser by logging into your online storage account at the company's website. Additionally, most offer free mobile apps for uploading and downloading files.

Online services let you share your photos and documents with friends and family via special links.

Cloud storage companies typically use encryption to keep your information safe and two-step verification to ensure the right person has access to the account.

Encryption scrambles your data so that only authorized people can access it. Encryption strength ranges from low to high: 128-bit, 192-bit, and 256-bit. Two-step verification sends you a message to confirm your identity during login.

Audio History

1877 Phonograph Cylinder
These cylinder shaped objects had an audio recording engraved on the outside surface which could be reproduced when the cylinder was played on a mechanical phonograph.

1883 Music Roll
A roll of paper with perforations (holes) punched in it. The position and length of the perforation determines the note played on the piano.

1895 Gramophone record
An analogue sound storage medium consisting of a flat disc with an inscribed, modulated spiral groove. The groove usually starts near the periphery and ends near the center of the disc.

1930s Reel-to-Reel
A form of magnetic tape recording which is held on an open reel. The reel is mounted on a spindle while the tape is pulled through mechanical guides and a tape head assembly. A second takeup reel collects the played tape.

1963 Compact Cassette
Consist of two miniature spools, between which a magnetically coated plastic tape is passed and wound. These spools are held inside a protective plastic shell.

1965 8-Track
A magnetic tape sound recording technology. It was a further development of the similar Stereo-Pak four-track cartridge created by Earl "Madman" Muntz.

1982 Compact Disc
An optical disc used to store digital data. Standard CDs have a diameter of 120 millimetres (4.7 in) and can hold up to 80 minutes of uncompressed audio (700 MB of data).

1993 MP3
Greatly reduce the amount of data required to represent the audio recording and still sound like a faithful reproduction of the original uncompressed audio for most listeners.

1997 DVD
An optical disc storage media format, invented and developed by Philips, Sony, Toshiba, and Time Warner. Its main uses are video storage and is capable of storing just under seven times as much data as the CD.

2006 Blu-ray Disc
An optical disc storage medium designed to supersede the DVD format. Blu-ray Discs contain 25 GB per layer, with dual layer discs (50 GB) the norm for feature-length video discs and additional layers possible in the future.

Graphic source:
https://visual.ly/community/infographic/social-media/digitalized

Digital Video

File quality is an important consideration for digital video. Save the highest-quality versions of your videos along with good descriptive information.

When locating digital video files (step 1, below,) you may need to transfer the video files off a camera, tape, or DVD and onto your computer or cloud storage as soon as possible.

The procedure for archiving digital video is the same as for any other digital content:

1. Locate the files.
2. Gather them into a single folder.
3. Back up that collection.
4. Migrate the collection approximately every five years to new media.

VOB (Video Object) is the container format in DVD-Video media. VOB can contain digital video, digital audio, subtitles, DVD menus, and navigation contents gathered together into a stream form. Files in VOB format may be encrypted.

Save Pages with Your Notes App's Web Clipper.
If you use a modern notes app like Evernote, OneNote, Google Keep, or Bear, then you have access to a web clipper that saves the entire contents of a page to your notes. When you save a site using the web clipper extension, the site's contents and images can also be saved.

The Wayback Machine
The Internet Archive is a non-profit digital library that collects as much digital knowledge as possible, including web pages. Using the Internet Archive's **Wayback Machine,** you can look up an old version of a site or manually save specific web pages, including all of the assets on that page. You can also download that page as a PDF.

To save a site, head to the Wayback Machine, then paste a URL into the box that says Save Page Now. You can also use the Wayback Machine's browser extensions (Chrome/Firefox) to save any pages you're currently looking at with a couple of clicks.

Web Archiving Software
There are many software systems for crawling and archiving web sites. It is not always easy to tell which features different software systems possess or how software systems differ from each other. There are subscription service software tools and open-source software tools.

To learn more about web archiving tools:
   http://netpreserve.org/web-archiving/tools-and-software/

Websites

If you have a blog, website, Facebook page, or other way to share information on the Internet, you also have a rich source of information that you should think about saving for the future.

Identify where you have Websites.
- Locate all your content on the Web, including personal websites and social media sites and services.
- Be sure to include current information as well as any older (archived) content.

Pick the information that you feel is especially important.
- You can pick individual pieces of information or you can select whole pages or websites.

Export the selected information.
- If saving a limited amount of information, you can use the "save as" command in your web browser to export the website as individual files.
- If saving entire pages or sites, check into automatically exporting them as a series of linked files.
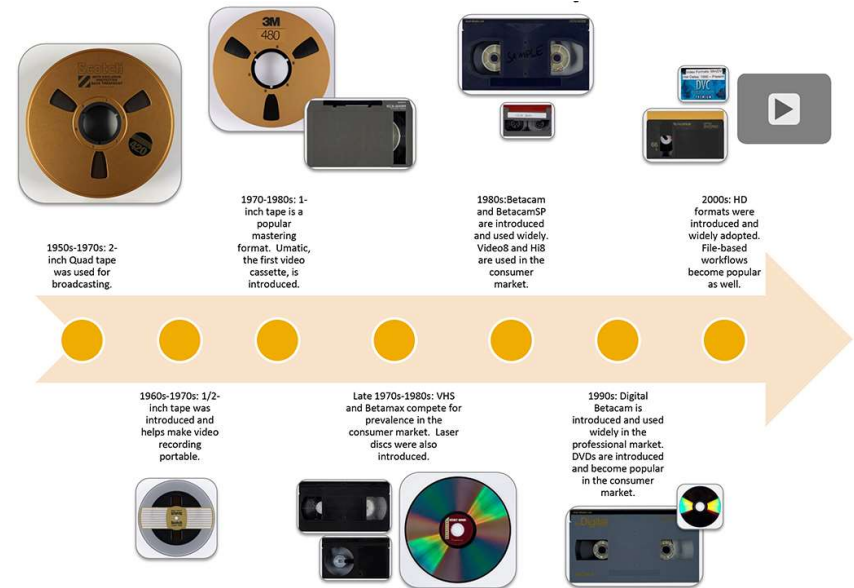- Save metadata for your Web content information, such as site name or date created.

Organize the information.
- Give individual files descriptive file names.
- Create a directory/folder structure on your computer to store the saved information.
- Write a brief summary of the directory structure and its files.

Screen Capture Pages
If downloading raw HTML files of a site isn't necessary, then screen captures might do the trick. If you're a Google Drive user, the Save to Google drive extension can instantly convert a page to a screenshot, then save it to Drive. If you don't use Drive, Full Page Screen Capture does the same thing but saves to your local drive. A desktop tool like PicPick on Windows or Skitch on Mac will do the trick. Most web browsers also have an Export to PDF option as well.

Video History

1950s-1970s: 2-inch Quad tape was used for broadcasting.

1970-1980s: 1-inch tape is a popular mastering format. Umatic, the first video cassette, is introduced.

1980s:Betacam and BetacamSP are introduced and used widely. Video8 and Hi8 are used in the consumer market.

2000s: HD formats were introduced and widely adopted. File-based workflows become popular as well.

1960s-1970s: 1/2-inch tape was introduced and helps make video recording portable.

Late 1970s-1980s: VHS and Betamax compete for prevalence in the consumer market. Laser discs were also introduced.

1990s: Digital Betacam is introduced and used widely in the professional market. DVDs are introduced and become popular in the consumer market.

Preservation and Access
There is no single accepted format.

Common Video Formats
3GP, AVI, MXF, MKV, MOV, MP4, MPEG, VOB, WMV, FLV
MOV and AVI played by many common players like Apple Quick Time

MP4 – most widely used online

Personal Digital Records

You probably have resumes, school papers, financial spreadsheets, presentation slides, or other digital documents. You might also have digital copies of original hard-copy documents, such as letters, maps, or family histories. For this type of information, it is important to decide which documents to save. Think about different versions, such as drafts and earlier copies. Drafts, for example, can provide important details that do not appear in final versions.

Identify **where you have your digital document files:**
- Locate all digital document files on computers and removable media, such as CD-ROMs and floppy disks, and include any of your individual documents on websites.

Decide **which documents have long-term value:**
- Pick the documents you feel are especially important.
- You can pick final versions of documents only; or you can also include drafts and revisions.

Organize **the selected documents**
- Give individual documents descriptive file names and create a directory/folder structure on your computer to store the documents you picked.

Make **copies and** *manage* **them in different places:**
- Make at least two copies of your selected documents.
- One copy can stay on your computer or laptop; put other copies on separate media, such portable hard drives, thumb drives, or cloud storage.
- Store copies in different locations that are as physically far apart as practical. If disaster strikes one location, your important documents in the other place should be safe.
- Put a copy of the summary description with your important papers in a secure location.
- Check your document files at least once a year to make sure you can read them.
- Create new media copies every five years or when necessary to avoid data loss.

Text Messages

Options for Android

SMS Backup & Restore is a FREE app.

It can back up your text messages and save them locally on your Android device, export them to a computer, or upload them to an online storage service such as Google Drive.

It's made to fulfill the needs of people who want to save their messages to multiple places quickly.

You can also back up text messages to your Gmail account. https://www.howtogeek.com/112852/how-to-backup-your-text-messages-to-your-gmail-account/

Options for IOS

Step 1: Make backups and saving texts using iTunes.

Making an iOS backup will save most of the data stored on your device, including iMessages, SMS messages, and MMS messages.

Step 2: Access your backed-up messages using iExplorer. Your messages are now saved, but that's only the first part of the process.

iExplorer allows you to sort and sift through your backed-up messages. It's $40 for the basic version.