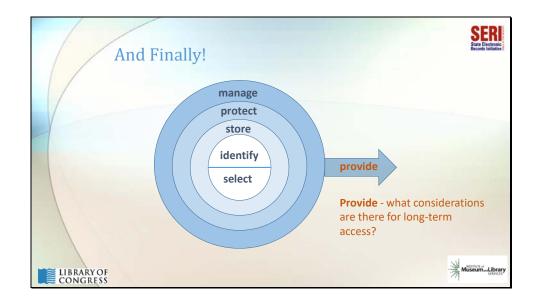
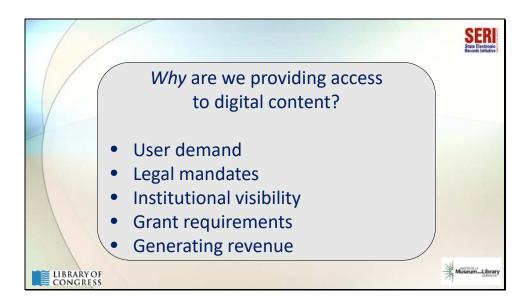


Welcome to Managing Digital Content Over Time. This training was produced by the State Electronic Records Initiative in coordination with the Council of State Archivists. It was developed under a grant from the Institute for Museums and Library Services and based primarily on training created by the Library of Congress. It is designed to help archivists and others who manage digital content understand the necessary steps of digital preservation. This is module 6, Provide.



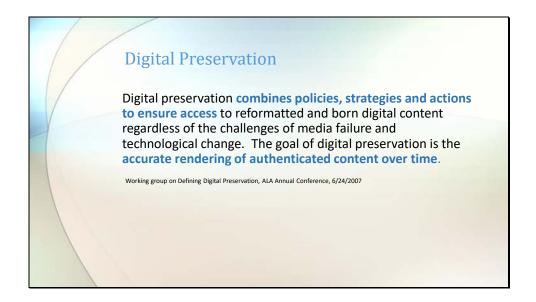
Last but not least, we should provide access to records.



So I wanted to start by taking a step back to look at the bigger picture. Why are we doing this in the first place? Why is your organization providing access to digital content? Keeping in mind WHY we're doing what we're doing can help guide us and motivate us to dig into doing the more challenging work, like writing policies and managing legal issues.

It's what users want The law tells me I have to My grant funding requires it It's a good way to advertise my organization It can be a money-maker

All of these are great reasons for making content available now, and presumably these reasons, and possibly many more, will still be true and relevant 5, 10, or 50 years from now. You want to get in the mindset of long-term access, access that you can sustain over time.



We are looking to digital preservation for an answer because we realize that being in digital form is not the same as being digitally preserved.

With books or documents – We can read it and put it on the shelf and continue to open it and read it for decades with proper handling.

Digital preservation combines policies, strategies and actions to ensure access to reformatted and born digital content regardless of the challenges of media failure and technological change. The goal of digital preservation is the accurate rendering of authenticated content over time.



Ongoing digital preservation programs carry digital content across generations of technology, so that you're able to provide content that's useful and understandable to your current users and future users.

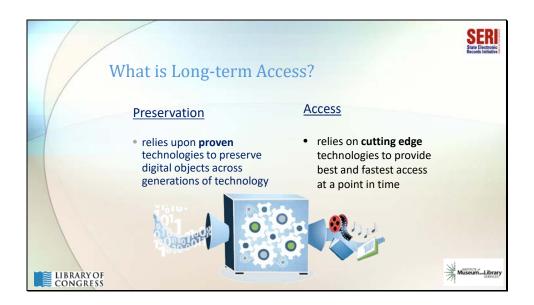
There are some big differences between what you need your preservation tools to do and what you want an access system to do. Preservation is a little like canning vegetables —you've got things stored in a relatively stable state, and as long as you monitor and protect them to make sure the cans don't freeze, or explode, or get contaminated, you're in pretty good shape.



But your users don't want bland stuff in cans, they want the freshest, most delicious vegetables they can get.

Preservation is stable and reliable.

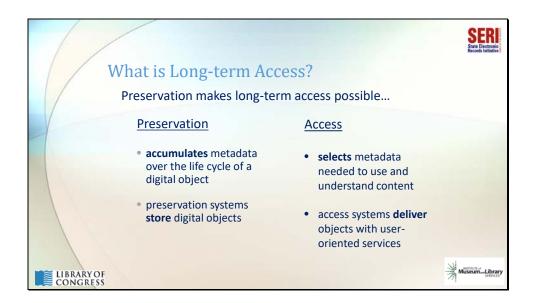
Access is, ideally, the latest and greatest.



Access delivery systems use cutting edge technology to make content available in the most expedient ways using the latest technology available at any point in time. Preservation systems use proven, reliable - even stodgy – technologies to make sure digital content remains readable and understandable into the future.

For example, think about the changing ways your patrons have accessed digital resources in the past ten or 15 years. Maybe you once offered a database resource where users had to come in to the library and access it using CDs. Then that database was licensed for online access and your patrons could access it from their home computers. And now your patrons are saying, well this is great, but we really want this database to work well on our smart phones.

So there's a dance between preservation and access, and you need to think about how to preserve your information in such a way that it can be made available now AND so that you can make the exact same content available 20 years down the road in whatever format your users will expect.



Here's some more ways in which preservation and access are different, yet complementary. Preservation systems collect metadata that not only describe the object but record actions that have been taken on the object throughout its life cycle, and information that helps make it accessible over time—for example, your preservation metadata might include the checksum data we talked about earlier. That's very valuable information for your ongoing preservation work, but probably not something your users are going to find valuable.

Access systems focus on descriptive metadata – what does the user need to know to understand the content?

Access systems deliver content to users immediately using current technology (handhelds, laptops, iPads), while preservation systems store original versions and all their metadata, + they produce access versions of content



Preservation tools ensure a handshake from one generation of technology to the next, making it possible to move digital content into a future that is unknown to us in the present.

The challenge here is that there's no one tool—no magic ring—that can effectively solve all your preservation needs and your access needs at once. So no matter what tools and systems you choose to use for one side of the equation, you'll want to consider how that can complement and support the other side so that preservation and access are tuned together, working hand in hand.



These are the elements you want to aim for when planning for providing access to your content over time.

Easily: this will change over time and will depend a lot on your staff, users, nature of your institution

Coherently: document what you're doing, provide context

Completely, Correctly, Reliably: these all relate to how you manage the technology

Consistently, Fairly: write good policies and procedures and stick to them



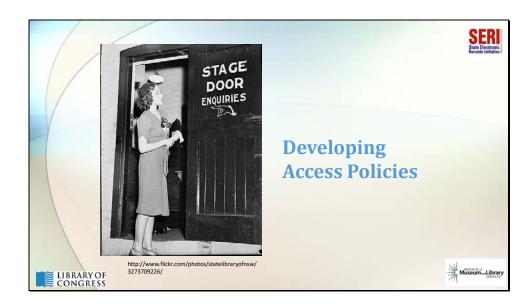
If we preserve our digital content effectively, at some point it will be accessed long after you and I still work for our current institutions.

Your organization can take on some specific responsibilities now to help make that happen. This will ensure that you're creating the documentation and functionality that will be needed to provide access to and usage of your digital content in the future.

Policies are often the most effective and long-term method for defining organizational responsibilities. These policies must be transparent, easy to understand, and accessible to anyone who might need them.

Policies must address and manage any legal issues that may be associated with your collections. Do you have any legal mandates to make these accessible, do any of your records include personal information that can't be shared? How will you ensure all laws are followed?

Over time, policies will need to adapt to technological advancements, legal matters, and changes in user needs and expectations. We'll look more closely at all of these issues today.



In this section, I'm going to

- 1. Talk about issues to consider when developing an access policy
- 2. Discuss how to go about implementing that policy
- 3. Go over some of the team members you might need to establish and maintain an access policy



To start developing a policy for long-term access, think about your existing access policies for current users.

Are access policies the same for all of your content, or do you have different categories, with different restrictions? This is particularly at issue with copyrighted content, redacted or restricted material, and datasets which may have personal information included.

If you do have categories of restricted materials, and most of you probably do, how do you handle that? Is some of the material password protected, open to certain IP addresses, behind a paywall?

How do you manage exceptions and special requests?

What about internal access? Materials restricted to certain levels of staff clearance?

Consider using existing FAQs as a step to develop formal policies. Look not only to existing information regarding digital content, but existing information regarding access to physical holdings, meaning things like donor agreements or deeds of gift.



Policies don't do any good if they're not documented and implemented.

Remember that software and hardware will keep changing, and discovery and delivery methods must be monitored. Policies will need to change to reflect needs that emerge, and preservation tools and procedures should respond to those changes. Documenting policies now provides future decision makers with an understanding of the past so they can best evaluate their current situations.

Policies should address not only access rights, but address what components of digital objects are the most important and must be preserved long-term. For example, if you have a letter that explains the history of your organization – does only the textual information matter, or does the image that captures the original handwriting and signature also matter to you. You need to address what features and functionalities need to be preserved. Images, documents, databases, web pages, could all have different polices. This is a good time to refer back to your inventory—which we discussed way back in the first session of this series—to consider access policies for your different types of content.



Ideally, you won't be developing and implementing these policies on your own, but as part of a team. If you represent a smaller organization, the roles discussed here may be performed by only a small set of people, but it's always helpful to consider the different skills and expectations associated with each of these roles. In other words, when you're wearing many hats, it's important to check which hat you should have on at a given time.

## Access service managers

Who defines what will be accessible? Building on existing polices, deeds of gifts, other legal documents that address these issues.

## Policy developers

How are these decisions recorded so when you reevaluate your plan or policy in the future you do not need to start over?

Access system developers

Who is responsible for determining what access mechanisms, processes or methods are best for the materials at hand?

## Access system managers

Who is in charge of making sure the system is working for the users? What happens if the system itself fails? What are the back up plans?

## User support staff

Of course, you must also be able to support your users. User guides and access policies must be made available. How do you share these with your users? How do you answer their questions? What types of support are available?

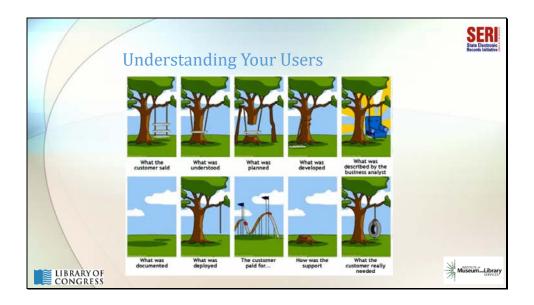
You might consider ways your organization might collaborate with other institutions to meet some of these requirements. Are you part of a consortium that could share responsibility for assisting users? Can you borrow and adapt existing access policies that sister organizations have created?



Access platform considerations include:

- Existing legacy data and systems
- Organizations support, such as budget, IT staff, and training
- Hosting options, such as local third party, or cloud
- Open source or proprietary and
- Functionality





It can be very easy to lose sight of the reason that we do this at all. We get so focused on managing the content that we lose sight of the fact that our ultimate goal is providing access to our preserved materials for some designated community of users.

So let's take a moment and talk about the importance of understanding your users -- both present users and future users.

In this section, we will

- 1. Identify some ways to gain an understanding of your current users and
- 2. Consider some strategies for thinking about the needs of future users



Think of potential audiences. These could include specialists, such as people interested in a particular facet of your local history.



They also might be stakeholders and other partners, such as staff, local experts, community members, Chamber of Commerce, etc.



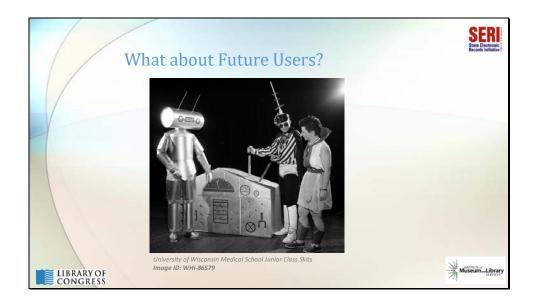


Now we can't predict future technologies with any certainty, but we do know that expectations are often driven by things like popular and emerging platforms. So, paying attention to new devices, browsers, web software and services is an important part of your future planning.

At the end of the day keep in mind that there is likely going to be a lag between your current level of access and the level of access that is most desired by your users. And of course, it's entirely possible that the whole paradigm for access can suddenly shift on us.

So that's where preservation comes back into the picture. Be mindful that as you are repackaging or reformatting your digital objects to meet the standards for relevant access for a given platform, to the best of your ability, you want to not lose sight of the chain of preservation. Hold on to your original objects, your master files, and your various versions of repackaged and reformatted files. They may have all sorts of qualities about them that do a better job of retaining the information that constitutes the real content that is of value and demanded by your users.

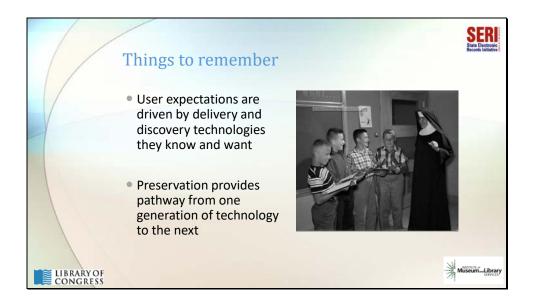
Preservation can provide that pathway from one generation of technology to the next.



How do we begin to anticipate the needs of future users?

So, you may get very good at serving your digital collections up to your current stakeholders through these different monitoring measures. But what about new users, different users, users who could really benefit from exposure to your materials but may require it in a different form or through different means, on mobile devices, tablets, cell phones. Maybe near-future users will want to run all sorts of sophisticated services over top your materials along with materials from all sorts of other institutions. How might you be able to track down trends or use cases from other similar institutions to find out where access needs are heading?

So the question really is how do we begin to anticipate the needs of future users?



Some things to remember include user expectations which are driven by delivery and discovery technologies they know and want. Sometimes you have to create them. You don't have to know how to program, as just one example, in order to understand what programming languages are trying to accomplish in relationship to a broader technology environment. Get yourself a Drupal for Dummies book, or make a little side project around setting up a software environment on your personal machine, installing Apache, MySQL, and PHP. Maybe get yourself set up for running Linux. Wade in little by little and you'll get bit by the bug and start paying attention to how things work and where things might be heading and why. But check-in with your existing users – ask them what their preferred means of access might be. And be sure that you are prepared to move in a new direction if that's the feedback you get.

At the end of the day keep in mind that there is likely going to be a lag between your current level of access and the level of access that is most desired by your users, and it's not outside the realm of possibility that the whole paradigm for access could shift on you suddenly. Entire hardware platforms could drop out of usage and change the way we interface with digital content. So be mindful that as you are repackaging or reformatting your digital objects to meet the standards for high-quality and relevant access for any given platform, that to the best of your ability you want to not lose sight of the chain of preservation.



Reach out to the various special interest groups within ALA and SAA, or other regional associations that are focusing on areas of access. Start up a group within one of these associations. Get on the various digital preservation listservs and keep an eye out for workshop announcements and conferences that provide breakout sessions. One valuable conference is THATCamp (The Humanities and Technology Camp).

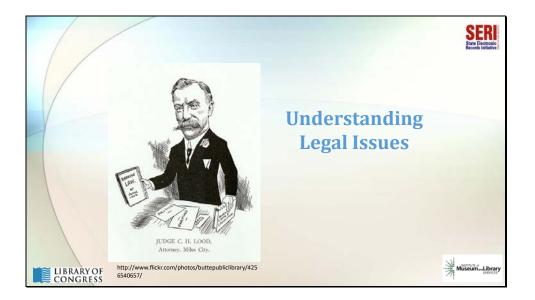


What are some ways of tracking the users of your digital content that you are working so hard to preserve access for? Tracking usage of your digital collections has a ton of value for helping you to know what additional elements of your physical collections could be digitized. It can tell you a lot about how you might enhance your infrastructure and the services that you build up around access. And it can also be a springboard for making the case to funders about the demand for your institution's materials, and the importance of directing investments toward their support.



Some ideas: Think about providing an online survey instrument at various strategic points within your access environment. Implement some free web analytics – find out where people are linking into your site, what are they requesting, how much time do they spend on what materials. If you have email subscribers – solicit some inquiries from your regular users about their visits to your digital collections and how they might be finding them useful, as well as ways of improving upon your existing levels of service. If you are only providing access on-site, make sure you add some lines on your visitor forms that account for their use of your digital collections.





Why are we talking about the Legal issues here? Because it is usually here, when materials become accessible to the public, that legal issues rise to the surface. The legal side of digital content can be overwhelming, especially for small organizations that don't have dedicated legal resources available to them on site. But it doesn't have to be.

In this next section, we will

- 1. Identify where legal issues may arise
- 2. Talk about some simple things you can do to avoid legal issues
- 3. Give you some ideas about where to find extra help if you need it.

We will start by taking a look at the digital content that exists in your world...and it generally falls into two categories.





First are the "Free as in Beer" items in your collection. These are the objects, series or collections that are yours free and clear and are easy to make available over the long-term through whatever method you choose.

- Digital content you created to begin with
- Gifts that have no strings attached...and you have the documentation to prove it
- Digital content that you have a legal mandate to hold, preserve and make available to the public
- Digital content with no copyright issues



On the other side – are the rest. These are the ones you have to be aware of. These are the objects, series or collections that come with restrictions or may contain information that you can't make available.

- 1. Does the digital content contain PII (Personally Identifiable Information) that you are restricted from showing?
- 2. Federal/State Laws that limit or restrict access?
- 3. A donation that specifically states that you can't share it for 25 years
- 4. Copyright issues
- 5. Did the source have the right to give you the collection in the first place?

Up until this point, your digital content has been pretty much contained within your organization.

So when you finally let it outside and make it available to the public... It comes back to bite you...!



The main thing to be aware of is that many of these problems never have to be problems. How? By managing potential problems from the time you first acquire the digital content all the way through to the point that you provide access to it – regardless of staff size at your organization.

Copyright is one part of the legal issues surrounding digital content but only a small part. There are a number of other legal questions that can emerge throughout the lifecycle of digital objects. Aside from copyright restrictions, some of your digital content may come with other restrictions or may contain information that you can't make available.

Have a good understanding of your content.

Every professional group (such as libraries, government archives, and universities) collects specific types of information (photos, publications, manuscripts, public records, etc). Get a general understanding of the content you collect and the potential legal roadblocks for each type of information. Each time you add to your collection, you should be able identify what the legal issues could be for that item.

Managing these issues of privacy and intellectual property from as close to creation of the digital content as possible will make it easier to preserve and provide digital content throughout its lifecycle. Waiting to address rights issues until you want to provide content increases the possibility that you will encounter legal barriers. Acquiring preservation rights at the time of acquisition (the right to copy and transform the digital content to be able to preserve it over time) also makes providing content over time much easier.

**Documentation:** Once you know what you have – Document, Document, Document Your best protection is to have well-formed, standardized, valid documentation for your digital content.

- Standard agreements that transfer ownership, copyright licenses

- Clarify any restrictions in agreements or contracts and file it in a centralized location that more than one person knows about.

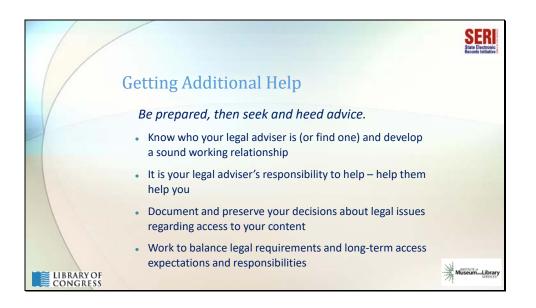
- Make note of legal restrictions in your inventory as well as note where the agreement is filed.

- In your organizational policies, you can specify how you will handle specific types of content so that everyone does it the same way.

Taking these steps will actually streamline your organization and leave more time for all of the other things on your plate. The one caveat here, is that you <u>must</u> periodically review your documentation and processes to ensure they stay up to date.



So you've got two main responsibilities in managing legal issues. Understanding of your content is one key. Get a general understanding of the content you collect and the potential legal roadblocks for each type of information. You may have content that you are legally mandated to preserve; you may also have content for which you do not have the legal rights to duplicate or provide access. Each time you add to your collection, you should be able identify what the legal issues could be for that item.



Even following the previous steps, you may still need additional help

- To interpret new laws
- To help you to standardize agreements with outside parties
- To determine legal issues with new items
- Maybe there is an odd restriction on a gift and you are not sure how to write that into an agreement

Management of digital content is doable even without a law degree, but it's important to make connections with someone who can legally advise you from time to time. This is another case where collaborating with other institutions can be very valuable.

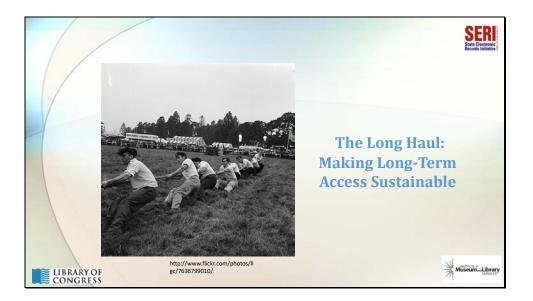
Do you have legal help available in your organization? If so, take them to lunch and get to know them.

If you don't have anyone on staff, what are other options? Who might be available for free? (or nearly so?)

- What other organizations in your area could provide some support? (universities, larger companies)
- Do you have board members or volunteers that are lawyers? ...or do they know any who may want to volunteer?

- Are there any lawyers in your area willing to do any pro-bono work?
- Can you partner with other similar organizations to share the periodic services of a professional?

Once you have that person's ear, give them as much information as possible to help them help you. This includes all of that great documentation you previously created. Take their advice and document all decisions made regarding access to your content. Incorporate that advice into your policies and procedures for future use. By doing that, you will be better able to balance those legal requirements with providing long-term access to your digital content.



What steps can you take now to help ensure that your preservation and access programs are in place for the long haul? We've addressed this issue in various ways throughout this series, but I'll revisit it here as we head to wrapping up since it's so important.



To implement an effective and sustainable program, you will need to understand and be able to communicate the value of the content you want to preserve and provide access to. Why should an administrator care? They might prioritize access over preservation because it's more visible. Talk to them in terms of the access that will be lost if digital preservation is not implemented.

Identify the stakeholders. Do researchers care about your digital content? Do departments at your university depend on use of your content in teaching classes? Do donors want to ensure that what they donated can be accessed and used for years and years to come? Involve stakeholders in building your case for digital preservation.

Figure out what the incentives or "carrots" are to preserving and providing long term access. Does your donor want his grandchildren to be able to see his documents? Will researchers a hundred years from now need this material to be able to study culture for this time period?

Think about all the time, effort, expertise and other resources your institution has invested in developing your digital program. Think about clarifying what the benefits are for protecting your institutional investment, and the benefits in the future that will be reaped by continuing to provide access to your valuable material.

This report looked at economic concerns related to digital preservation.

The report points out three key strategies that relate to access.

- 1. We should be leveraging the access side of our digital preservation strategy to better understand the value of our content to our designated communities and use that information to communicate value to internal and external stakeholders.
- 2. We should involve those stakeholders and get them invested in the promotion of our digital preservation activities
- 3. And we should start identifying the benefits of our digital preservation activities and promoting them in clever ways to procure further investment

What are some ways you can promote the value of digital preservation to your stakeholders?





Outcome number 1: Clear policies that address long-term access.



Outcome number 2: Awareness of and control over relevant legal issues.





Outcome number 3: Create a balance between preservation and access over time.





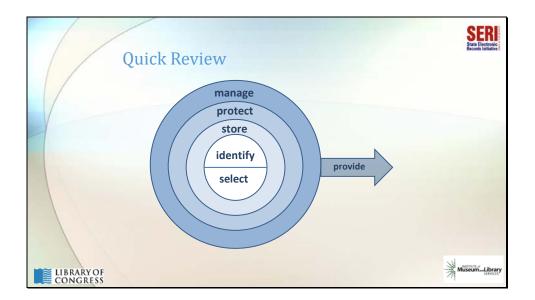
And outcome number 4: Don't forget your users and stakeholders.





Digital preservation takes careful planning, some effort, and a lot of funding to accomplish. If we put the right wheels into motion, future generations of archivists will be able to pick up where we left off, adjusting policies, technologies, and other critical decisions that make preservation and access possible.





Let's do a quick review of each of these segments.



Identify - Define the digital content within your scope of responsibility.



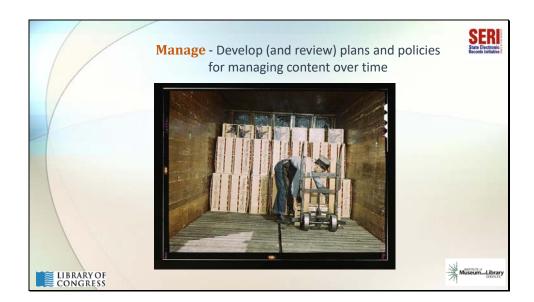
Select - specify the digital content you need or want to preserve. Select one orange out of numerous. The selection process requires that one choose only a small percentage of their content for full long-term storage to keep management costs in control. Specify the digital content you need/want to preserve.



Store - establish requirements for storing files in preservation formats. This man is bringing oranges into refrigerated storage. Establish requirements for storing files in preservation formats and determine and review your best option for storing your content.



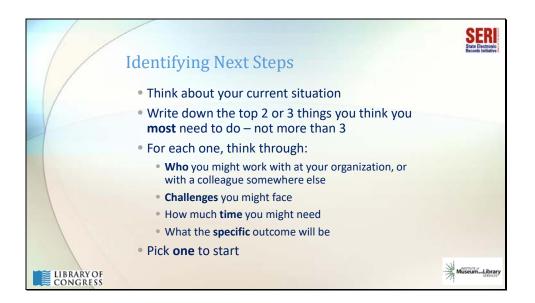
Protect - ensure that your content is secure during day-to-day activities. This women is packing oranges to protect them from damage during transit. Work to ensure that your content is prepared for an emergency.



Manage - develop and review plans and policies for managing content over time. This man is stacking and organizing content in storage in a pattern to fit the most in the truck. Here you see all the elements that need to be supported for orange storage: labor, equipment, space, packaging, and of course basic organizational skills to get it to all work together. Use policies to contain and develop your preservation program



Provide - remember that long-term access is the purpose of preservation. Here, oranges are for sale at a store, the ultimate goal of the process. Make sure the means to deliver content to users remains.



Identifying next steps: Think about your current situation and write down the top 2 or 3 things you think you need to do most (but not more than 3). For each one, think through all of these different elements. Pick one to start.





This completes module 6, Provide. If you are using these modules in order, this is the last presentation. For additional resources on electronic records preservation and management, please visit the State Electronic Records Initiative webpage which is shown on your screen.