

# Digital Preservation Concepts



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Ohio Historical Society

Connecting to Collections  
Preservation Bootcamp



OHIO HISTORICAL SOCIETY

# DPOE's Mission

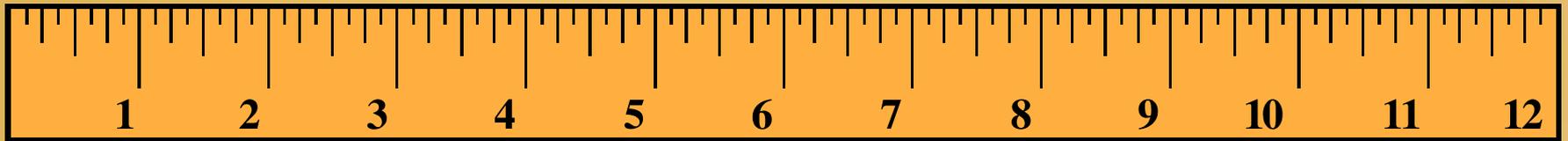
“The mission of the Digital Preservation Outreach and Education (DPOE) program of the Library of Congress is to foster national outreach and education to encourage individuals and organizations to actively preserve their digital content, building on a collaborative network of instructors, contributors, and institutional partners.”



# Agenda

- Identify: what digital content do you have?
- Select: what portion of that content will be preserved?
- Store: what issues are there for long term storage?
- Protect: what steps are needed to protect your digital content?
- Manage: what provisions are needed for long-term management?
- Provide: what considerations are there for long-term access?

# Outcomes



- Provide an overview of digital content management stages
- Suggest concrete steps for each stage
- Help identify specific next steps for your organization
- Recommend additional sources to consult

**Identify:**      **what digital content do you have?**

Select:            what portion of that content will be preserved?

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Manage:          what provisions are needed for long-term management?

Provide:          what considerations are there for long-term access?

# Why do we identify content?

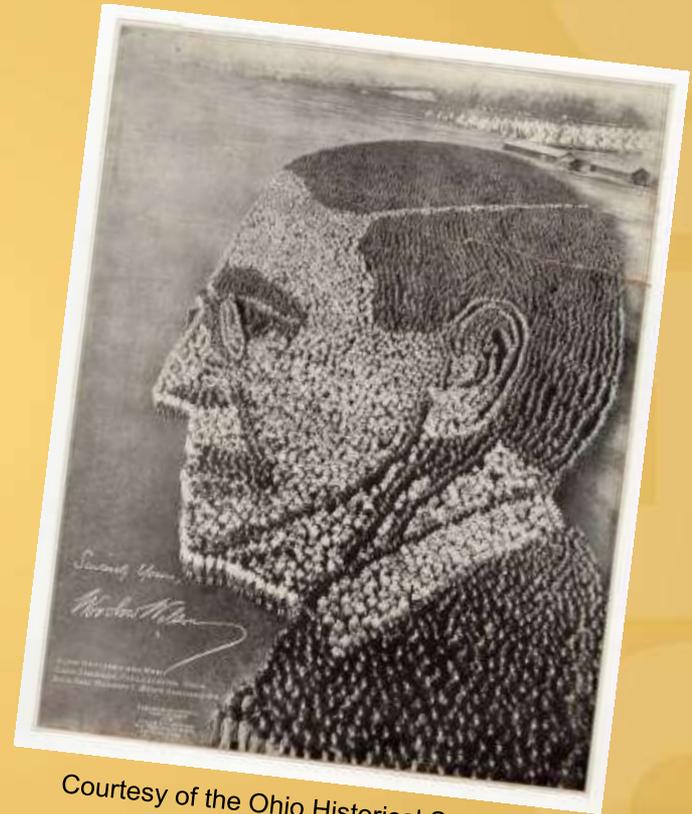
- Preservation requires an explicit commitment of resources
- Effective planning is based on knowing the extent of what will be preserved
- Identifying content is a first step to planning for current and future preservation needs
- Not all digital content in and around an organization will be preserved

# Inventory results should be:

- Focus on **SUBSTANCE** over *Style*
- Documented
- Usable
- Available
- Scalable
- Current

# Your Inventory

- Determine the appropriate level of detail for your organization
- Consider
  - Extent of content
  - Nature and location of content
  - Available resources
  - Timeframe

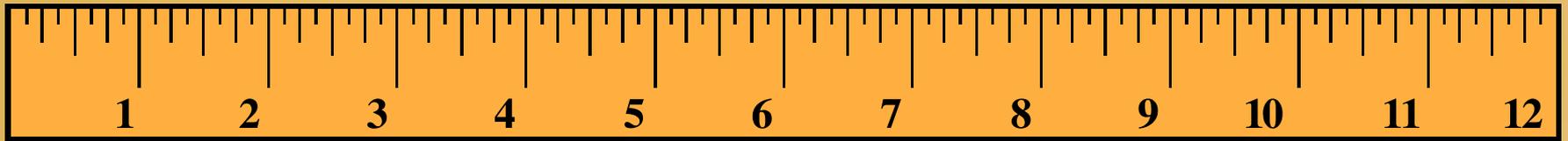


Courtesy of the Ohio Historical Society

# Inventory Example

Category	Title/ Description	Creation Date(s)	Type	Location	Extent	Format(s)
SP [special collections]	Railroad Photograph s: Railroad Bridges in the Northeast, 1950-1956	January – July 2006	Images	Special Collections Archival Storage Server in Rack Storage Room of Central IT	242 GB; 2, 250 images	TIFF

# Identify - Outcomes



- Identifies digital content you may need to preserve
- Use as a management and planning tool
- Provides a basis for acquiring content and creating plans

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# Why select content to preserve?

- Storage may be cheap, management is not
  - Especially over time
- Sustaining quality of content takes **effort**
- Discovery and dissemination services
  - Scale, scope, performance, sustainability



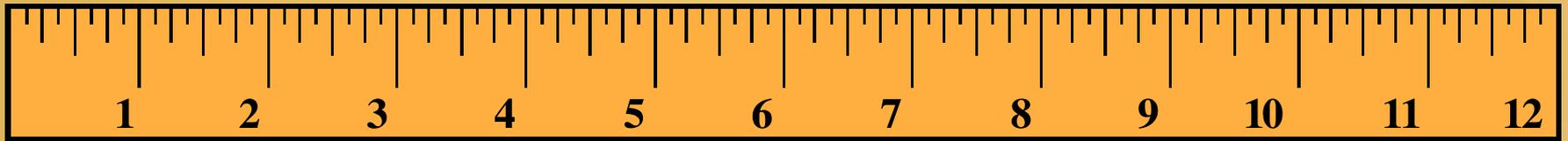
# Selection Steps

- Review your potential digital content
  - May benefit from a team-based approach
- Define and apply your selection criteria
  - If necessary set priorities
- Document (and preserve) selection decisions
  - Review and add detail to the inventory you created
- Implement your decisions

# Practical Considerations

- Reconsider selection if the answer is “no”
  - Content
    - **Does content meet selection criteria?**
    - **Can you sample/weed?**
  - Technical
    - **Is it feasible for you to preserve the content?**
  - Access
    - **Is it possible to make the content available?**

# Select – Outcomes



- Gain control of content to inform planning of a sustainable program
- Defines selection criteria
- Creates guidelines for content creators

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Protect: what steps are needed to protect your digital content?

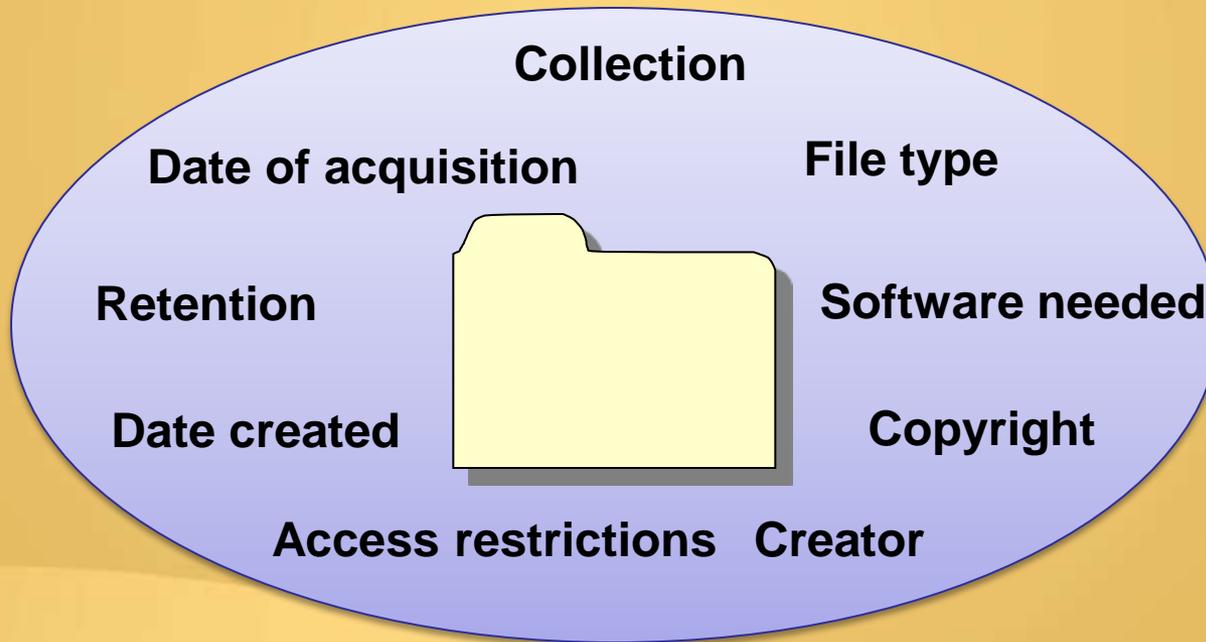
Manage: what provisions are needed for long-term management?

Provide: what considerations are there for long-term access?

# What are storage needs?

Archival Storage manages digital content as objects, not just data

**File + Metadata = Object**



# Well-managed Collections

Well-managed status makes preservation easier

- Sample characteristics of well-managed:
  - Basic information about each deposit
    - Minimal metadata for objects
  - Common (or normalized) file formats
  - Controlled and known storage of content
  - Multiple copies in at least 2 locations

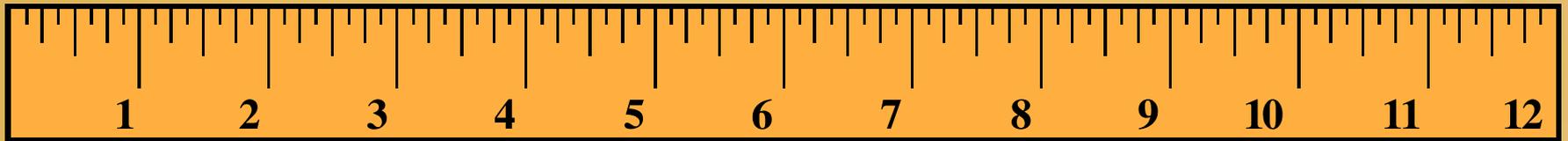
# Storage Media Options

- Multiple, geographically distributed copies
- Storage Partners
- Hosted services



*Services and collaborations can make it easy for organizations to use cloud services to manage content over time*

# Store – Outcomes



- Develop a storage management policy
  - E.g., number of copies, locations, fixity means
- Specify storage service or partner agreements
- Monitor copies of content for errors/change
- Plan for media replacement

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**Protect:** **what steps are needed to protect your digital content?**

Manage: what provisions are needed for long-term management?

Provide: what considerations are there for long-term access?

# What are we protecting content from?

- Change and loss
- Obsolescence
- Inappropriate access
- Non-compliance
- Disasters



# Everyday Protection

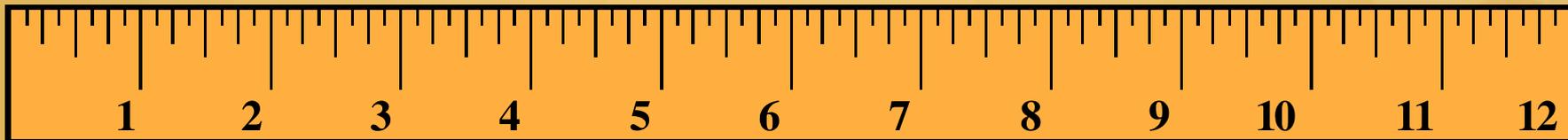
- Know where your content is located
- Know who can have access to it
- Manage authentication information
- Track and review usage then adjust practices



# What needs to be available soonest?

- Identify core functions as part of planning
- Determine allowable downtime for each
- Consider steps to re-establish each function
- Develop relevant documents
- Make sure planning documents are accessible

# Protect – Outcomes



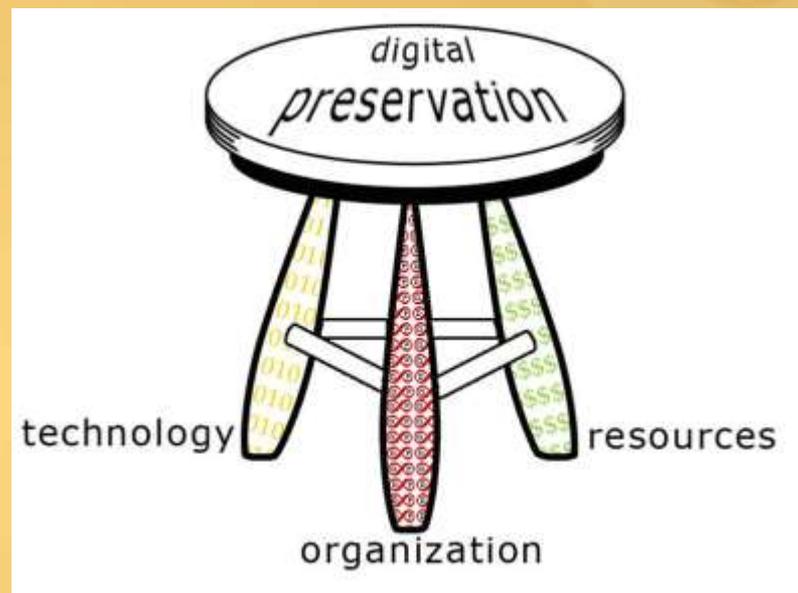
- Practices in place to manage day-to-day protection – an implemented security plan
- Disaster planning in place to prevent, predict, detect, respond, repair – preparation in the event of an emergency

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# Balanced Management

An effective approach will address:

- Organizational requirements and objectives
- Technological opportunities and change
- Resources – funding, staff, equipment, etc.



Kenney and McGovern, 2003

“The Five Organizational States of Digital Preservation”

<http://www.dpworkshop.org/>

# Benefits of a Preservation Policy

- Identifies issues and challenges
- Raises awareness
- Specifies institutional commitment
- Manages expectations of stakeholders
- Defines roles and responsibilities

# Investing in Technology

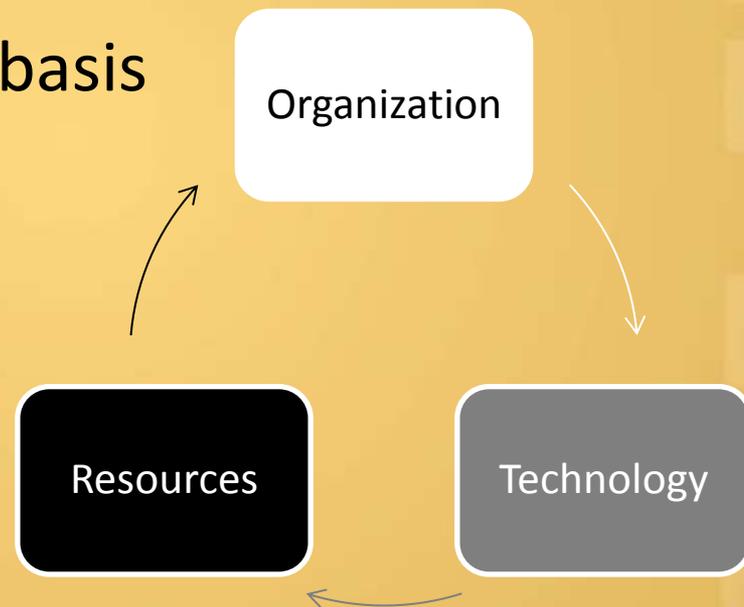
- Prioritize project requirements
- Define criteria to select appropriate technology
- Develop a project workflow
- Decide when to own/join/share
- Evaluate project outcomes and success

# Resources

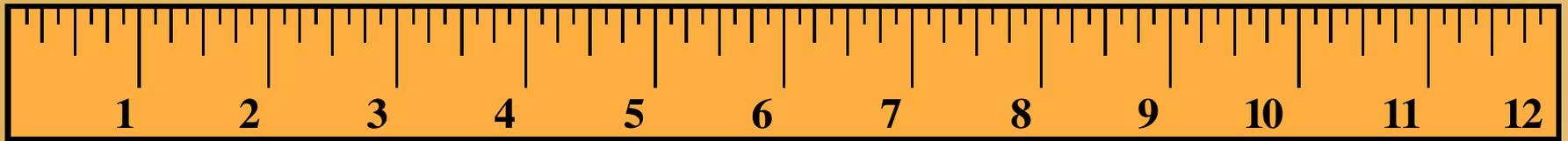
- Staffing
- Equipment
- Succession Planning
- Institutional Knowledge
- Funding

# Planning

- Preservation planning is ongoing
- Use the standards and best practices to help guide your planning
- Review plan on a regular basis
  - Internal review
  - External review



# Manage – Outcomes



- What will standards conformance and good practice look like for your organization?
- How will your organization demonstrate good practice?

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- Provide:** **what considerations are there for long-term access?**

# What is Long-term Access?

Preservation makes long-term access possible...

## Preservation

- Preservation systems **create** new versions of digital objects for access to deliver as needs change over time
- Purpose: ensure long-term access
- Focus: **future users**

## Access

- Access systems **deliver** objects with user-oriented services
- Purpose: provide content to users
- Focus: **current users**

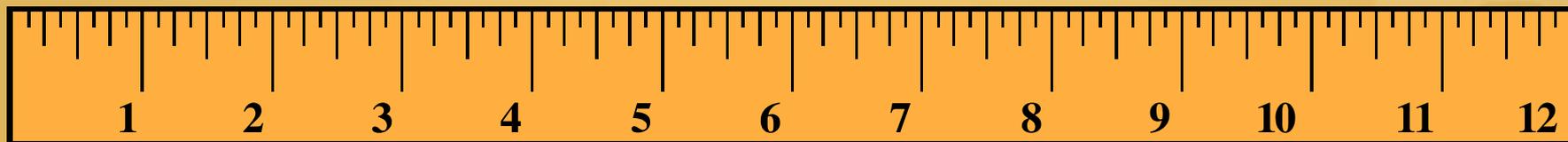
# Organizational Responsibilities

- Developing and maintaining comprehensive access policies
- Planning for current and future users
- Adapting to new technologies for discovery and delivery
- Managing legal issues throughout lifecycle

# Managing Legal Issues

- Legal issues appear throughout the lifecycle of the content
  - Understand your content to address relevant legal issues for preservation and access from the beginning
- Keep well-formed, valid documentation
  - agreements, contracts, licenses, policies, etc.
  - review

# Provide – Outcomes



- Clear access policies that address long-term access
- Links between preservation and access over time that current access and long-term access
- Understand your users
- Awareness of and control over relevant rights management issues from creation and/or deposit on

# Thank you!

## Questions?

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