

## MAJOR FINDINGS:

1. Sustainable preservation requires a **sound repository technological infrastructure** plus **creation and distribution practices that support long-term access**.
2. Sustainable preservation requires **ongoing, reliable, sufficient financial support**
3. Proper preservation will **add value to assets** over time
4. The benefits of preservation **will outweigh the costs** if properly managed
5. The costs of long term preservation can be **feasible and manageable** if seen as a long-term investment
6. There are a variety of **repository operating models** that **can maximize efficiency** and allow costs to be shared
7. The needs for preservation are **not in competition with program production**, but are complimentary in an all-digital workflow.

### Why is US Public Television Unique?

- Not a centrally-controlled national network
- Over 350 stations produce and broadcast content
- Multiple national program distributors (PBS, APT)
- Varied governance and licensing
- Funding from multiple sources - a large percentage is from voluntary viewer contributions
- Not the dominant content provider in the US

# TECHNICAL, PROCEDURAL, AND ORGANIZATIONAL REQUIREMENTS OF A SUSTAINABLE PRESERVATION REPOSITORY (OAIS<sup>1</sup> + TRAC<sup>2</sup>)

## 1 BIT PRESERVATION

requires a repository with...

### System Infrastructure

- ▶ Replicated, geographically distributed storage
- ▶ Auditing of bits and reporting bit loss
- ▶ Repair corrupted bits using backups
- ▶ Ability to perform mass file migration

### Appropriate Technologies

- ▶ Software and hardware to maintain access
- ▶ Appropriate bandwidth for large file delivery

### Security

- ▶ Protection against security breaches
- ▶ Disaster recovery planning
- ▶ Appropriate permissions and access procedures

## 2 ONGOING ACCESS TO DIGITAL CONTENT

requires new production practices...

### Selection

- ▶ Identifying appropriate content for long-term preservation
- ▶ Retention policies and procedures

### Creating Video Content

- ▶ High resolution preservation master files
- ▶ Open, widely-supported formats and codecs
- ▶ No transcoding during production
- ▶ Information Life Cycle Management

### Metadata

- ▶ Quality metadata captured at creation
- ▶ System-wide standards (i.e. PBCore)

### Technical and Use Policies

- ▶ Submission and Dissemination Agreements
- ▶ Archival Information Package Creation
- ▶ Preservation Planning and Strategies

## 3 ORGANIZATIONAL INFRASTRUCTURE will have appropriate...

- ▶ Governance and Organizational Viability
- ▶ Infrastructure and Staffing
- ▶ Procedural Accountability and Policy Framework
- ▶ Financial Sustainability and Operating Agreements
- ▶ Licenses and Liabilities

For more information, please visit <http://www.thirteen.org/ptvdigitalarchive/>

### Contact us!

**Nan Rubin, Project Director:**  
RubinN@thirteen.org

**Kara Van Malssen, Senior Researcher:**  
kvm211@nyu.edu

**Karen Cariani:**  
karen\_cariani@wgbh.org

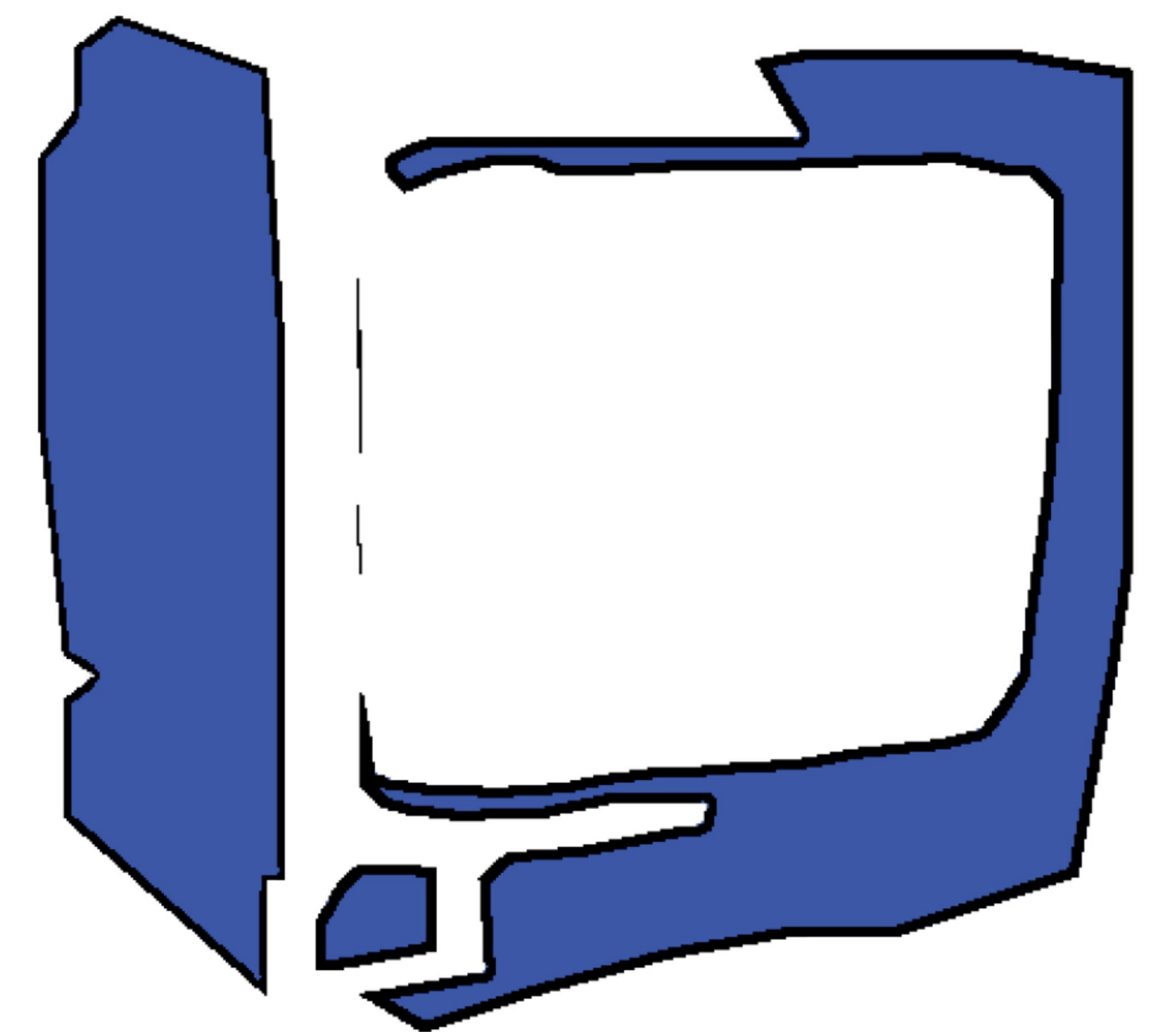
# Strategies for Sustainable Preservation of Born Digital Public Television

A Report By: Preserving Digital Public Television, An NDIIPP Project

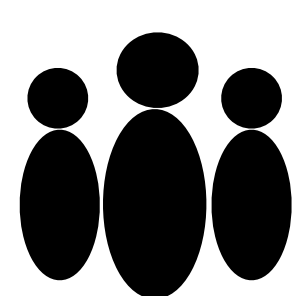
Kara Van Malssen, New York University

Karen Cariani, WGBH Media Library and Archives

With Nan Rubin (WNET), Yvonne Ng (Witness), Howard Besser (NYU), Irene Taylor (Washington University), Winter Shanck (WNET), Jeff Ubois  
Thanks to Joe Pawletko (NYU), David Ackerman (NYU), B Morse (PBS), and Alicia Kubas (NYU)



## BUSINESS MODELS TO SUPPORT ONGOING PRESERVATION



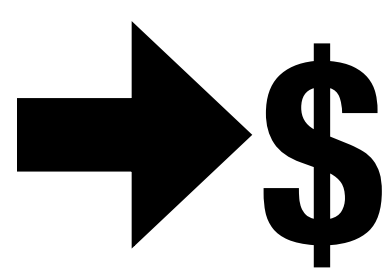
### Community Model

Rights holders pool resources to financially sustain a repository to provide preservation services



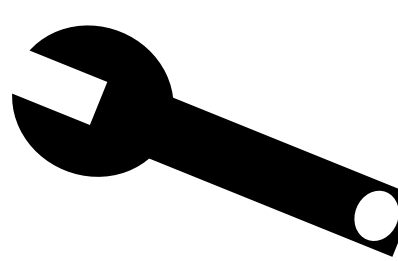
### Joint Venture Between Rights Holder and Archive

Rights holder(s) and repository enter into a financial agreement in exchange for ongoing access and/or preservation services



### Submitter Fee-for-Service

Rights holders pay a repository to provide preservation services on a fee-for-service basis



### Services/Consulting

Services and technical assistance are provided to outside organizations on a straight contract basis to produce revenue to support preservation



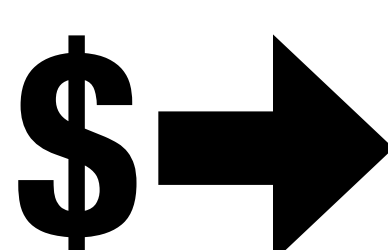
### Corporate Sponsorship/Advertising

Commercial entity funds the repository directly, or indirectly supports preservation through ads



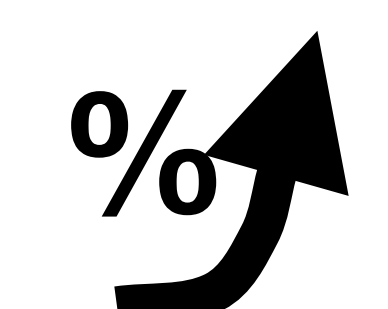
### Public Sponsorship/Philanthropy

Public body or philanthropist funds the repository to provide services that further the public good



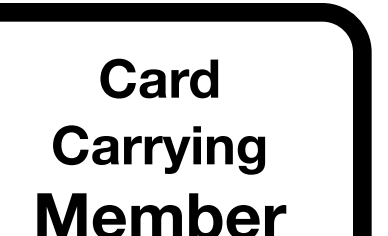
### User Fee-for-Service

Users pay the rights holder(s) and/or the repository to access preserved digital content at the point of use



### Endowment

An endowment is created to fund long-term operations



### Membership/Subscription

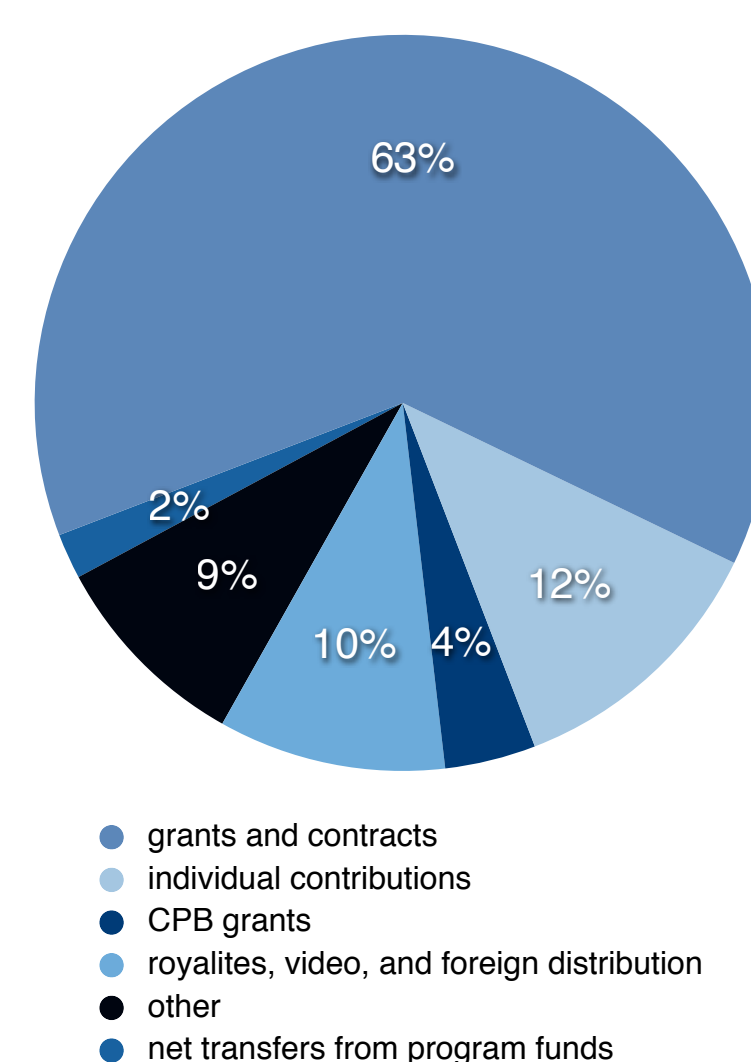
Users and/or rights holders pay dues to the repository in exchange for ongoing access and/or preservation services

## Many Repository Operating Scenarios

- Centralized, repository is part of public TV system
- Centralized, 3rd party repository
- Individual stations maintain their own repositories
- Disaggregated repository shared between public television entities
- Disaggregated repository with 3rd party services
- Disaggregated repository shared among public television entities, 3rd party administration

### WGBH Funding Sources FY08<sup>4</sup>

Public television is experienced in diversifying revenue....



Sustainable projects, "experiment with different revenue models to find the ones that are the best fit for the project; show willingness to try new models; cultivate the ability to identify and communicate the value of the resource to the target audience (of customers, authors, subscribers and so forth)."

- Ithaka S+R Case Studies in Sustainability, 2009<sup>3</sup>

<sup>1</sup> Consultative Committee for Space Data Systems, Reference Model for an Open Archival Information System (OAIS), CCSDS 650.0-B-1, Blue Book, Issue 1 (Washington, DC: CCSDS Secretariat, 2002).  
<sup>2</sup> RLG-National Archives and Records Administration Digital Repository Certification Task Force, Trustworthy Repositories Audit and Certification: Criteria and Checklist (Chicago and Dublin: Center for Research Libraries/OCLC, 2007).  
<sup>3</sup> Nancy L. Maron, K. Kirby Smith and Matthew Loy, "Sustaining Digital Resources: An On-the-Ground View of Projects Today," (n.p.: Ithaka S+R, 2009) 21.  
<sup>4</sup> WGBH, Challenging Times, Critical Impact: WGBH Annual Report 2008-2009 (Boston: WGBH, 2009).