

DIGITAL DISASTER PLANNING

LESSONS LEARNED FROM DISASTER PLANNING
FOR THE PAUL V. GALVIN LIBRARY



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NEED FOR A DIGITAL DISASTER PLAN

- “Disasters happen. You plan for them, work to prevent them, or turn a blind eye and hope one will never occur. Sooner or later, **you must deal with one.**”

Kahn, Miriam. *Protecting Your Library's Digital Sources: The Essential Guide to Planning and Preservation*. Chicago: American Library Association, 2004. Print. Page 1.

- “Disaster recovery strategies and **backup systems are not sufficient to ensure survival and access to authentic digital resources over time.**”

JISC. *Digital Preservation: Continued Access to Authentic Digital Assets*. November, 2006.

RESEARCH FOR GUIDANCE

- Library and digital archive community
- LIS and IT publications
- Library and university policies
- Inventory of digital assets and supporting systems
- Survey of data storage and backup routines

Digital Curation

[Defining Digital Curation](#)[Selection and Appraisal](#)[Ingest](#)[Digital Preservation](#)[> Policies and Planning](#)[> Standards Compliance](#)[> Roles and Responsibilities](#)[> Glossary](#)[> Resources](#)[> Research and Training](#)[Access and Dissemination](#)[> Data Citations](#)[Disaster Planning](#)

Disaster Planning

Effective disaster planning is essential for ensuring the safety of a digital repository's staff and the sustainability of digital content and services. Disaster preparedness is also a primary responsibility of trusted digital repositories.

Community Standards and Practice

In researching the area of disaster planning, ICPSR recently compiled an extensive list of [Disaster Planning Resources](#), some relevant to ICPSR's location at the University of Michigan and others that are of broader interest for those undertaking disaster planning activities.

ICPSR's Approach to Disaster Planning

To protect its staff and digital resources, ICPSR recently put into place several components of a comprehensive disaster plan. Below we provide a series of these disaster planning documents with the objective of offering examples to the community.

We provide a series of documents to demonstrate ICPSR's approach to disaster preparedness and to serve as examples to the community of what effective disaster planning involves.

[ICPSR Disaster Planning Policy Framework, 2009](#): This is the high-level policy document that defines the purpose, scope, and components of the disaster planning program at ICPSR. The framework used a [model document](#) (PDF 91K) based on a scan of community examples.

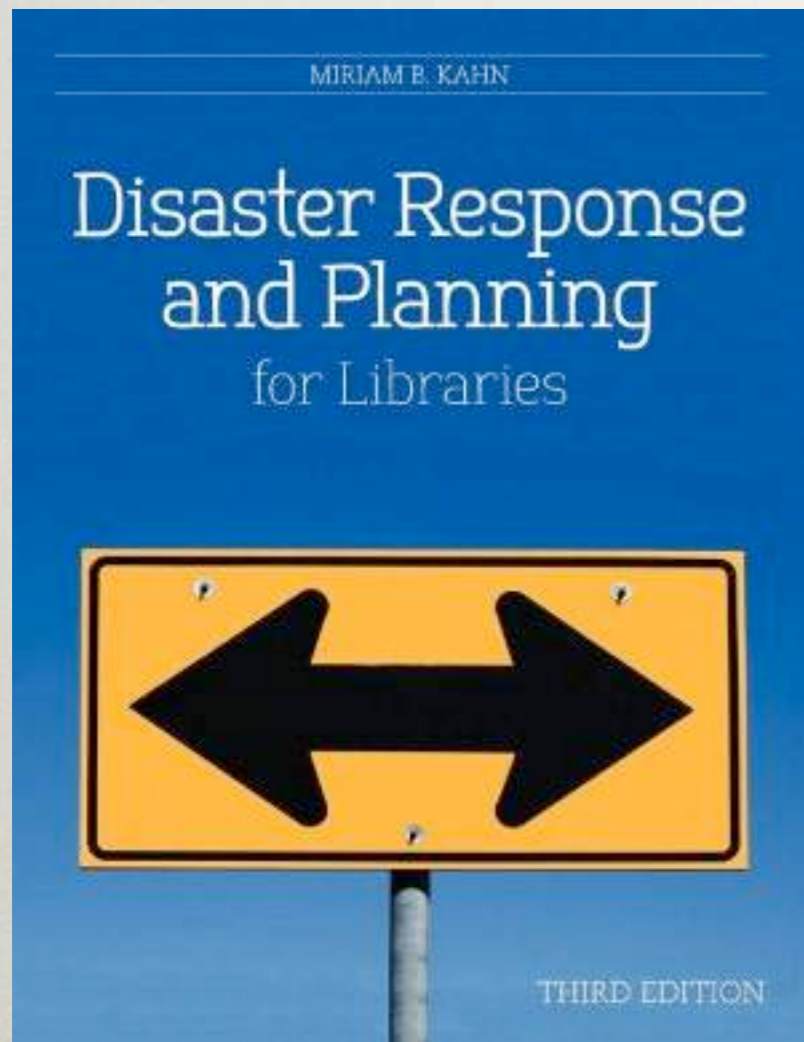
[Disaster Planning at ICPSR: Short-Term Action Plan, 2009](#): This plan identifies core areas for development and attention in implementing ICPSR's disaster planning program.

[ICPSR Roles and Responsibilities](#): This document defines the roles and responsibilities for ICPSR's disaster planning program, as informed by a [scan of community examples](#) (PDF 70K).

[ICPSR Crisis Communications Plan](#): The plan addresses requirements for internal and external communications during and after an emergency using a [model document](#) (PDF 160K) of community examples.

[ICPSR Disaster Planning Training Plan](#): This document provides guidance on appropriate training for current and future staff at ICPSR using a [model document](#) (PDF 114K) of community examples.

[ICPSR Web Services Continuity Plan](#): This is a three-phase plan to deploy a replica of our Web server to ensure client access during a failure of ICPSR's primary Web services; redeploy ICPSR's primary Web services to another location; and explore alternative methods for delivering ICPSR Web services.



FINDINGS: NEED FOR A SUITE OF PLANS

- “Ultimately, an organization would use a suite of plans to properly prepare response, recovery, and continuity activities for disruptions affecting the organization’s IT systems, business processes, and the facility.”

Elements of a Disaster Planning Suite

**Business
Continuity Plan**

**Digital
Disaster
Recovery Plan**

**Business
Recovery Plan**

**Occupant
Emergency
Plan**

**Physical
Collections
Recovery Plan**

**Continuity of
Operations
Plan**

**Digital
Preservation
Plans**

**IT Contingency
Plan**

**Crisis
Communication
Plan**

**Physical
Collection
Preservation
Plans**

**Cyber Incident
Response Plan**

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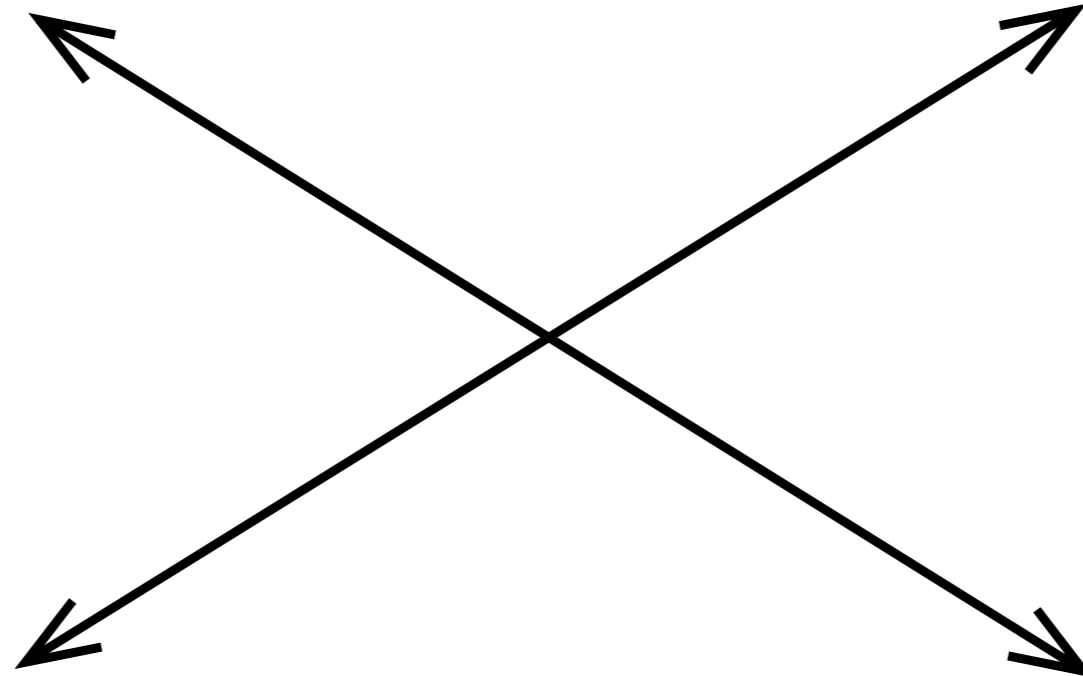
**Cyber Incident
Response Plan**

Mitigation

Preservation

Service

Recovery



GALVIN'S PLAN

- Introduction
- Disaster Preparedness and Mitigation
- Digital Disaster Recovery
- Appendices

*The plan reflects Galvin's current state but recommendations are included in orange

ROLES AND RESPONSIBILITIES

- **Digital Preservation Committee**

- Proactive
- Standing members:
 - Systems Librarian
 - Metadata & Digitization Librarian
 - Head of Collection Development
 - Head of Reference
- 1 - 2 Appointed members, 2 year terms, at least one member from Archives

- **Digital Disaster Recovery Team**

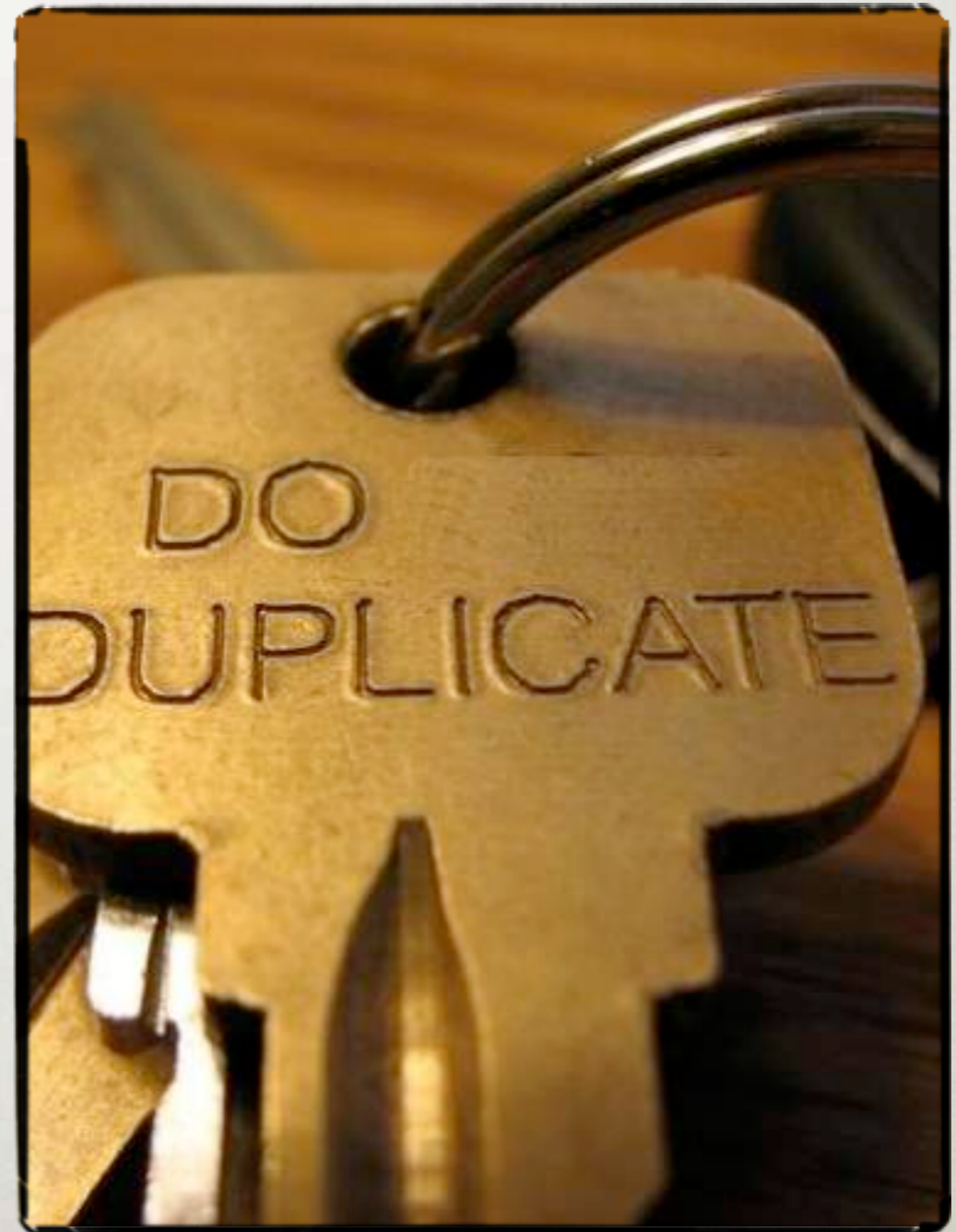
- Reactive
- Sub-group of Library Disaster Response Team
- Standing members:
 - Systems Librarian
 - Metadata & Digitization Librarian
 - Systems Support Specialist
- 1 Appointed member from Library Disaster Response Team, 2 year terms

OTHER KEY ELEMENTS

- Digital preservation planning principals
- Backup routines
- Inventory of digital assets and supporting systems
- Galvin specific recovery priorities
- Recovery scenarios

RECOMMENDATIONS

- Monthly meetings of Digital Preservation Committee
- Test backups
- Implement checksum system in Dspace
- Maintain at least 6 copies of digital objects
- Use share.iit as a dark archive for other digital collections
- Adopt an environmental control monitoring system and uninterrupted power supply for the server room
- Reflect commitment to preserving unique materials in mission statement and other policies



by wief70, on flickr

CONCLUSION



zirconicusso / FreeDigitalPhotos.net

Digital preservation programs and disaster planning go **beyond backups** to address current and **future** organizational issues, technological concerns, and funding questions.