#### States of Sustainability: A Review of State Projects funded by the National Digital Information Infrastructure and Preservation Program (NDIIPP)

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Cal Lee University of North Carolina at Chapel Hill



SCHOOL OF INFORMATION AND LIBRARY SCIENCE

#### **Preserving State Government Information**

- Initiative of National Digital Information Infrastructure and Preservation Program (NDIIPP)
- In 2000, U.S. Congress authorized \$100 million to LC for "a major undertaking to develop standards and a nationwide collecting strategy to build a national repository of digital materials"
- In 2005, LC sponsored workshops involving all 50 states and three territories to discuss preservation of state government digital information
- LC issued Request for Expression of Interest (RFEI) on May 5, 2006, with responses due on June 15
- On January 7, 2008, LC announced four projects, each involving multiple states

#### Four NDIIPP State Projects\*

Project	Lead Institution
Persistent Digital Archives and Library System	Arizona State Library, Archives and Public Records
A Model Technological and Social Architecture for the Preservation of State Government Digital Information	Minnesota Historical Society
Geospatial Multistate Archive and Preservation Project (GeoMAPP)	North Carolina Center for Geographic Information and Analysis
Multi-state Preservation Partnership	Washington State Archives

\*Although not one of the four NDIIPP state projects, Kansas Enterprise Electronic Preservation (**KEEP**) also received NDIIPP funding through an arrangement with the MTSA project

#### States Represented in NDIIPP States Projects\*

States Participating in <u>No</u> Projects 15
States Participating in <u>One</u> Project 26
States Participating in <u>Two</u> Projects 10

\*Includes District of Columbia (no territories represented); does <u>not</u> reflect any participation by entities in the state in other NDIIPP projects (see: http://www.digitalpreservation.gov/partners/partners\_state.html

# **Project Review Process**

- Kick-off discussion at Best Practices Exchange in October 2010
- Analysis of project deliverables and documentation
- Visits to each of the project's lead partner sites
- Monitoring of project activities and announcements – mailing lists, project spaces (BaseCamp), conference calls

#### Main Questions Guiding State NDIIPP Project Review

- What are the main <u>factors</u> that drove you to undertake this project?
- <u>Who</u> is involved and <u>why</u>?
- What were the related activities and relationships of the participating parties <u>before</u> the project?
- How does the project fit into the missions, goals and plans of the participating parties (i.e. what are their <u>incentives</u> for participating)?
- What are the plans for advancing the activities <u>after</u> the grant?
- Which of the products and lessons from the project are <u>most</u> likely to be applicable in other states and which are <u>least</u> likely to be applicable in other states?

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# Appendices to Report

- Project summaries and timelines
- Descriptions of software used by project partners
- Selective chronologies of previous electronic records and digital preservation activities in participating states

## Findings and Recommendations

### Lead Partners

- Each of the NDIIPP state projects has benefited from a lead partner who already had:
  - successful record of electronic records or digital preservation projects
  - established strong relationships with allied professionals

#### Primary Roles of NDIIPP State Project Lead Partners

Role	Explanation	Lead Partners
Digital Preservation Service Provider	Development, maintenance and support of a centralized preservation environment where other parties can transfer resources (within the state or across states)	Kansas Historical Society (KEEP) – funded through MTSA sub-grant Washington State Archives (MSPP)
Digital Preservation Enabler	Development, maintenance and support of software tools and systems that other institutions can install and run in their own environments	Arizona State Library, Archives and Public Records (PeDALS)
Digital Preservation Facilitator	Convening of forums for discussion and interaction among interested professionals, support for development of communities of practice, local testing of technical approaches to share experiences with others, development and dissemination of guidance documents	Minnesota Historical Society (MTSA) North Carolina Center for Geographic Information and Analysis and State Archives of North Carolina (GeoMAPP)

Personnel and Leadership Changes (Retirements, Leaves from Positions and Job Changes Precluding Participation)\*

# Lead State Participant Changes1Other Key Personnel Changes in Lead State10Other State Partner Changes28TOTAL59

\*Based on information I've been able to collect, so actual numbers likely to be higher

# **Building on Strengths**

- Stewardship of digital information is a complex and multifaceted endeavor
- No single model or approach that will be successful in all states
- Successful initiatives have attended to specific opportunities, resources and constraints of local environments
- NDIIPP advanced efforts already underway in lead states

#### Building Bridges Across Professional Communities

- NDIIPP states program was designed to involve both archivists and librarians from participating states, reinforcing digital preservation as an endeavor shared across both state records and state publications
- Many projects' accomplishments were only possible because of extensive interaction with professionals who are neither librarians nor archivists

#### Persistence in the Face of Dramatic Changes and Challenges

- Many states faced serious internal challenges
  - significant budget cuts
  - staff turnover
  - major restructuring of parent institutions
  - restructuring of a key partner agency
  - complete state government shutdown
- Some challenges resulted in readjustments and delays, and several partner states substantively reduced involvement
- But none of the disruptions either shutdown or completely derailed the projects - projects adapted
- Multi-year, multi-state NDIIPP projects often provided motivation and authority to continue initiatives

# Beginning with Prototypes and Building Incrementally

- Digital preservation is not a single task to be performed in a short amount of time
- Progress generally comes from small victories that build on other small victories
- NDIIPP state projects pursued incremental development in a variety of ways

#### Focusing on Specific Content Types

- Progress in digital preservation above the basic set of functions often comes from focusing on a limited set of materials, in order to better understand: associated characteristics, requirements, behavioral patterns, technological dependencies, genre conventions and institutional norms.
- Much of success from NDIIPP state projects has come from focusing on specific content types

# Adopting Modular and Decomposable Approaches

- When engaging in design and modeling of large, complex systems, modularity can be extremely valuable
- Limiting interdependencies between subsystems can make a design more robust against disruptions and support system evolution, sustainability and innovation
- Modularity was an opportunity and challenge for projects

#### Preparing for Formal Agreements and Flexibility of Arrangements

- Many agencies unaccustomed to interstate or interagency arrangements, and development of required provisions can involve significant effort and delay
- Project plans should allow for progress even while parties involved are awaiting resolution of formal agreements
- It can be beneficial to have a backup plan in case formal approval is unsuccessful
- NDIIPP states project grants provided financial incentives for entities to establish formal relationships
- States' legal personnel are likely to become more accustomed to entering into new institutional agreements, contracts and arrangements

#### Implications and Recommendations for States

Adopt Robust Strategies	Cast collaboration nets widely. Partnerships with chief information officers, software vendors, advocacy groups, and domain experts from data-intensive units of agencies can be just as important as partnerships with librarians and archivists. Someone who is a partner now may lose his/her job, shift to other duties or otherwise become unable to participate in further collaboration. Effective programs involve social networks that are robust and diverse enough to withstand shifts in state politics, finances and priorities.
Continue to Look Outward	Engage in and monitor professional forums and events is a valuable way to learn about trends, innovations and opportunities. Outreach activities are essential for informing and revising work practices and approaches. Interstate sharing of experiences and lessons can also help to determine which options and strategies are appropriate in a variety of contexts. Collaboration does not require conformity to a single approach across all states.
Pick a Mode of Contribution and Act on It	Have something valuable to offer the other collaborators. Contributions can take a variety of forms. Each role implies its own set of strategies and risk factors. Identifying which role one is likely to play in the collaboration can be an important step toward formulating a plan of action.

Implications and Recommendations for Funding Agencies

- Multi-year projects are a major benefit in a state government context
- Alliances can bring legitimacy
- Providing for multiple forms of participation is essential

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http://www.ils.unc.edu/callee/ndiipp-states-report.pdf