Sharing Services for Long-Term Management of Geospatial Data

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Framing a National Strategy for the Appraisal and Selection of Geospatial Data
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Services for Long-Term Management of Geospatial Data

• Preservation for future Use
  – Maintaining the original data
  – Migration to current media platforms
  – Conversion to current formats

• Continuing dissemination to enable use
  – Enabling discovery
  – Providing capabilities for access and analysis
  – Offering expertise when needed

• Need related services for other digital research resources
  – Scientific data and products representing various disciplines
  – Unpublished scholarship and research-related resources
Providing Long-Term Data Management

• Organizational commitment to preserving scientific data and research-related information for future use
  – Mission compatible with geospatial data preservation
  – Demonstrated long-term stewardship of scholarship and research artifacts

• Sustainable infrastructure for managing geospatial data
  – Management, Staff, Information and Communication Technologies
  – Capacity to Foster Ongoing Use
  – Organizational Structure to manage research resources
  – Data stewardship plans for that are consistent with mission
Examples of Organizational Longevity

Based on Downs and Chen (2010), *Journal of Digital Information*

http://journals.tdl.org/jodi/article/view/753
A Model for Shared Academic and Government Stewardship of Digital Research Resources

• Collaboration between stakeholder entities
  – Shared resources enhance capabilities
  – Shared risks and benefits

• Academic and government partnerships
  – Shared legacy of research and scholarship artifacts
  – Shared history of partnerships
SEDAC Long-Term Archive: an example of shared academic and government data stewardship

• Collaborating Entities
  – Columbia University Libraries, Columbia University’s Earth Institute, and the NASA Socioeconomic Data and Applications Center

• SEDAC LTA Mission
  – The SEDAC Long-Term Archive acquires, preserves, and maintains the content of selected high-quality data, data products, documentation, and services relevant to human dimensions of global change in a digital form to support the discovery, access, and use of archived resources by scientific, educational, and decision-making communities for at least the next 50 years.
The SEDAC Long-Term Archive

- Experiment in sustainable governance for stewardship of interdisciplinary scientific data
- Initiated in 2004 to preserve scientific data and research-related information disseminated by the NASA-supported Socioeconomic Data and Applications Center (SEDAC) for future access and use
- Managed collaboratively by SEDAC, the Columbia University Libraries, and the Earth Institute of Columbia University

Organizational Representation on the SEDAC Long-Term Archive Board

- NASA SEDAC (chair & 2 members)
- Columbia University Libraries (2 members)
- The Earth Institute, Columbia University (2 members)

- In the event of a lapse in SEDAC funding:
  - Libraries will replace chair and one of the SEDAC members
  - CIESIN will name the other SEDAC member
  => Libraries and CUIT will have majority of members
  - Columbia University will appoint the Long-Term Archive Manager and other staff as needed

Derived from: SEDAC Long-Term Archive Implementation Plan (Draft revised 2008)
Continuous Improvement of the LTA

- Implemented a VITAL / Fedora digital repository
  - Migrating from traditional procedures to archiving in digital repository
  - Developing capabilities to test transfer between repositories
- Continuing Review