



*Geospatial Content Work Group*

[http://www.digitalpreservation.gov/ndsa/working\\_groups/content.html](http://www.digitalpreservation.gov/ndsa/working_groups/content.html)

## Geospatial Data Archiving

### Quick Reference for GIS Practitioners: Data Creators, Managers, Clearinghouses

Sites last accessed: August-Sept. 2013 (Diane Papineau, Montana State Library, [dpapineau@mt.gov](mailto:dpapineau@mt.gov))

There is increasing demand for older content to support historical and temporal analyses related to change in earth's natural and human landscape, including physical infrastructures. Examples of applications that require historic content include the study of climate change, disaster planning, environmental impact analysis, industry site location planning, and the resolution of legal challenges.

GIS Practitioners preserving the data they create and host is the necessary first step to support historical and temporal analysis. The resources below provide guidance for GIS practitioners on how to preserve geospatial data using state-of-the-art archiving best practices.

### Geospatial Archiving Reference

- Geoarchiving Glossary <http://www.geomapp.net/using.htm>

### Broad, Full Overview of Geospatial Data Archiving

- Geospatial Multistate Archive and Preservation Partnership (GeoMAPP) Final Report [http://www.geomapp.net/docs/GeoMAPP\\_FinalReport\\_final\\_20111231.pdf](http://www.geomapp.net/docs/GeoMAPP_FinalReport_final_20111231.pdf)
- GeoMAPP Key Findings and Best Practices [http://www.geomapp.net/docs/GeoMAPP\\_ProjectFindings\\_BestPractices20111231.pdf](http://www.geomapp.net/docs/GeoMAPP_ProjectFindings_BestPractices20111231.pdf)
- Library of Congress: "Platforms for Digital Stewardship" <http://blogs.loc.gov/digitalpreservation/2013/09/platforms-for-digital-stewardship/>

## **Business Planning**

- GeoMAPP GeoArchiving Self-Assessment Tool  
[http://www.geomapp.net/docs/GeoMAPP\\_GeoArchiving\\_SelfAssessment\\_20100914.xls](http://www.geomapp.net/docs/GeoMAPP_GeoArchiving_SelfAssessment_20100914.xls)
- GeoMAPP GeoArchiving Business Planning Toolkit  
[http://www.geomapp.net/publications\\_categories.htm#busplan](http://www.geomapp.net/publications_categories.htm#busplan)
- State of Utah Business Plan For Archival Preservation of Geospatial Data Resources  
[http://www.geomapp.net/docs/Utah\\_Business\\_Plan\\_Geospatial\\_%20Archive\\_2008.pdf](http://www.geomapp.net/docs/Utah_Business_Plan_Geospatial_%20Archive_2008.pdf)

## **Collection Development Policy Examples**

- Collection Development Policy for the National Geospatial Digital Archive  
[http://www.ngda.org/research/Collections/NGDA\\_Collection\\_Development\\_Policy\\_11\\_06\\_final.doc](http://www.ngda.org/research/Collections/NGDA_Collection_Development_Policy_11_06_final.doc)
- Collection Development Policy for Montana State Library  
[http://apps.msl.mt.gov/About\\_the\\_Library/Policies/22\\_colldev.pdf](http://apps.msl.mt.gov/About_the_Library/Policies/22_colldev.pdf)
- Collection Policy - Cornell University Geospatial Information Repository  
[http://cugir.mannlib.cornell.edu/CUGIRCollectionDevtPolicy\\_20060825.pdf](http://cugir.mannlib.cornell.edu/CUGIRCollectionDevtPolicy_20060825.pdf)
- Library of Congress Collections Policy Statements: Cartographic and Geospatial Materials  
<http://www.loc.gov/acq/devpol/cartog.pdf>

## **Geospatial Data Archiving Best Practices**

### ***Selection and Appraisal***

- GeoMAPP: Appraisal of Geospatial Data  
[http://www.geomapp.net/docs/InfoPartner\\_Appraisal\\_presentation\\_final\\_20110728.pdf](http://www.geomapp.net/docs/InfoPartner_Appraisal_presentation_final_20110728.pdf)
- NDSA: Appraisal and Selection of Geospatial Data  
Not posted online yet, but internet search soon should find it.
- FGDC Users/Historical Data Working Group "Guidance on the Selection and appraisal of Geospatial Content of Enduring Value"  
Not posted online yet, but internet search soon should find it.

### ***Metadata/Record Keeping***

- GeoMAPP: Archival Metadata Elements for the Preservation of Geospatial Datasets  
[http://www.geomapp.net/docs/GIS\\_OAIS\\_Archival\\_Metadata\\_v1.0\\_final\\_20110921.pdf](http://www.geomapp.net/docs/GIS_OAIS_Archival_Metadata_v1.0_final_20110921.pdf)
- GeoMAPP: Utilizing Geospatial Metadata to Support Data Preservation Practices  
[http://www.geomapp.net/docs/GeoMetadata\\_Items\\_for\\_Preservation\\_2011\\_0110.pdf](http://www.geomapp.net/docs/GeoMetadata_Items_for_Preservation_2011_0110.pdf)
- FGDC: Managing Historical Geospatial Data Records: Guide for Federal Agencies  
<http://www.fgdc.gov/library/factsheets/documents/histdata.pdf>

### ***Transferring Data to an Archive***

- GeoMAPP: Best Practices for Archival Processing for Geospatial Datasets  
[http://www.geomapp.net/docs/GIS\\_Archival\\_Processing\\_Process\\_v1.0\\_final\\_20111102.pdf](http://www.geomapp.net/docs/GIS_Archival_Processing_Process_v1.0_final_20111102.pdf)
- GeoMAPP: Best Practices for Geospatial Data Transfer for Digital Preservation  
[http://www.geomapp.net/docs/Geo\\_Data\\_Transfer\\_BestPractices\\_v1.0\\_final\\_20111201.pdf](http://www.geomapp.net/docs/Geo_Data_Transfer_BestPractices_v1.0_final_20111201.pdf)
- GeoMAPP: Geospatial Data File Formats Reference Guide  
[http://www.geomapp.net/docs/GeoMAPP\\_Geospatial\\_data\\_file\\_formats\\_FINAL\\_20110701.xls](http://www.geomapp.net/docs/GeoMAPP_Geospatial_data_file_formats_FINAL_20110701.xls)
- Library of Congress: “Bagger” Data Transfer Tool  
<https://github.com/LibraryOfCongress/bagit-java>

### ***Archive Storage***

- GeoMAPP Storage Primer  
[http://www.geomapp.net/docs/GeoMAPP\\_Storage\\_Primer\\_final\\_20111231.pdf](http://www.geomapp.net/docs/GeoMAPP_Storage_Primer_final_20111231.pdf)

### ***Discovery and Access of Archived Data (examples)***

- North Carolina State University Libraries GIS Data Collection  
<http://www.lib.ncsu.edu/gis/datalist.html>
- North Carolina Digital Collections  
<http://www.digital.ncdcr.gov/cdm/search/collection/p15012coll6/searchterm/carolina/field/all/mode/exact/conn/and/order/title/ad/asc/cosuppress/1>
- Kentucky Department for Libraries and Archives (browse by title)  
<http://dspace.kdla.ky.gov:8080/jspui/handle/10602/1166>
- Utah Department Of Administrative Services: Online Catalog  
<http://archives.utah.gov/research/catalog.html> (search for “geospatial”)

## Interagency Agreements

- Libraries as Distributors of Geospatial Data: Data Management Policies as Tools for Managing Partnerships [http://muse.jhu.edu/journals/library\\_trends/v055/55.2steinhart.html](http://muse.jhu.edu/journals/library_trends/v055/55.2steinhart.html)
- Legal Agreements Governing Archiving Partnerships: The NGDA Approach [http://www.ngda.org/docs/Pub\\_Sweetkind\\_Arch2009%20\\_09.pdf](http://www.ngda.org/docs/Pub_Sweetkind_Arch2009%20_09.pdf)

## Managing/Curating Geospatial Archive Collections

- Advancing Geospatial Data Curation: <http://www.ukoln.ac.uk/events/pv-2005/pv-2005-final-papers/030.pdf>

## Examples: Geospatial Data Archiving Systems

- California's Geospatial Records: Archival Appraisal, Accessioning, and Preservation <http://salt.unc.edu/eLegacy/>

## Early Efforts/Rationale for Geospatial Data Archiving

- ESRI UC Lightning Talk: The Benefits of Preserving Digital Geospatial Data <http://www.youtube.com/watch?v=dgPAvRK91lo>
- Update on Geospatial Data Preservation Efforts [http://www.lib.ncsu.edu/ncgdap/presentations/2009\\_Mountain\\_View\\_Opening\\_Plenary\\_Morris\\_Preservation.ppt](http://www.lib.ncsu.edu/ncgdap/presentations/2009_Mountain_View_Opening_Plenary_Morris_Preservation.ppt)
- GeoArchiving 101 for Fun, Profit, and Peace of Mind [http://proceedings.esri.com/library/userconf/proc10/UC/papers/pap\\_1202.pdf](http://proceedings.esri.com/library/userconf/proc10/UC/papers/pap_1202.pdf)
- North Carolina Geospatial Data Archiving Project <http://www.lib.ncsu.edu/ncgdap/>
- Next Generation Archives: The NC Geospatial Data Archiving Project [http://www.geomapp.net/docs/200903\\_geotools\\_JE\\_ZN.pdf](http://www.geomapp.net/docs/200903_geotools_JE_ZN.pdf)
- Preservation of Digital Geospatial Resources: A Team Climb [http://www.geomapp.net/docs/geomapp\\_pres\\_nsgic2008.pdf](http://www.geomapp.net/docs/geomapp_pres_nsgic2008.pdf)

## Geospatial Archiving Organizations/Projects

### *Geospatial Data Preservation*

<http://geopreservation.org>

Hosted and maintained by the Center for International Earth Science Information Network (CIESIN) at Columbia University. Browse by Topic or by Resource Type.

### *GeoMAPP*

<http://www.geomapp.net/>

Multi-year project involving four full-partner states and many more “informational partners states.” Project concluded in December 2011. Online reports and best practices are available for data creators and data archivists.

### *National Digital Information Infrastructure and Preservation Program (NDIIPP)*

and

### *National Digital Stewardship Alliance (NDSA) Geospatial Content Work Group*

<http://www.digitalpreservation.gov/>

NDIIPP was established in 2000. NDIIPP launched Geospatial Multistate Archive and Preservation Project (GeoMAPP). The NDSA Geospatial Content Work Group was formed at the close of the GeoMAPP project. The NDSA Geospatial Content Team is interested in exploring challenges and solutions to the long-term preservation, stewardship and accessibility of digital mapping information.

### *FGDC Historic Data Working Group*

<http://www.fgdc.gov/participation/working-groups-subcommittees/hdwg>

The Users/Historical Data Working Group is established under the auspices of the Federal Geographic Data Committee (FGDC) to promote and coordinate activities among Federal agencies who are primarily users of, not generators of, geospatial data.

### *OpenGeoPortal*

<http://opengeoportal.org>

The Open Geoportal is a collaboratively developed, open source, federated web application to rapidly discover, preview, and retrieve geospatial data from multiple repositories.

***FGDC “GeoPlatform”***

<http://www.geoplatform.gov/>

GeoPlatform is an internet-based capability providing shared and trusted geospatial data, services, and applications for use by the public and by government agencies and partners to meet their mission needs. This is currently in development by the FGDC. An archiving community may be developed within this site.

***The National Geospatial Digital Archive***

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

This archive project was active between 2005-2009. As partners in the project, the university libraries of University of California, Santa Barbara and Stanford University led the formation of the National Geospatial Digital Archive (NGDA), a collecting network for the archiving of geospatial images and data.

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