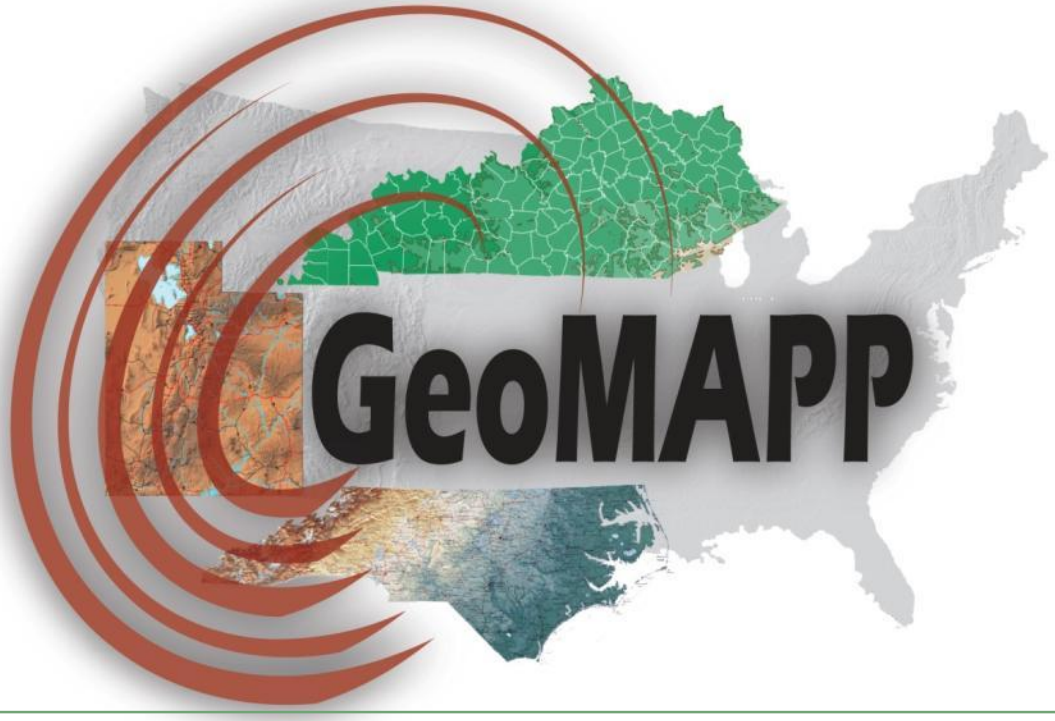


GeoMAPP: Using Metadata to Help Preserve Geospatial Content

Matt Peters, Utah's Automated Geographic Reference Center
Glen McAninch, Kentucky Department for Libraries and Archives
Alec Bethune, North Carolina's Center for Geographic Information and Analysis

NDIIPP Partners Meeting| Washington, DC| June 25, 2009|

What is GeoMAPP?

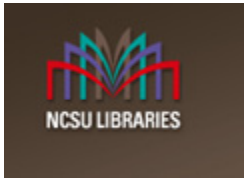
- Preservation of "at risk" superseded geospatial content
- Building the relationship between State GIS and Archives staff
- Interstate partnerships
- Exploration of business case drivers
- Data replication among several states
- Implementation of a geographically disperse content-exchange network
- Local, state and national outreach

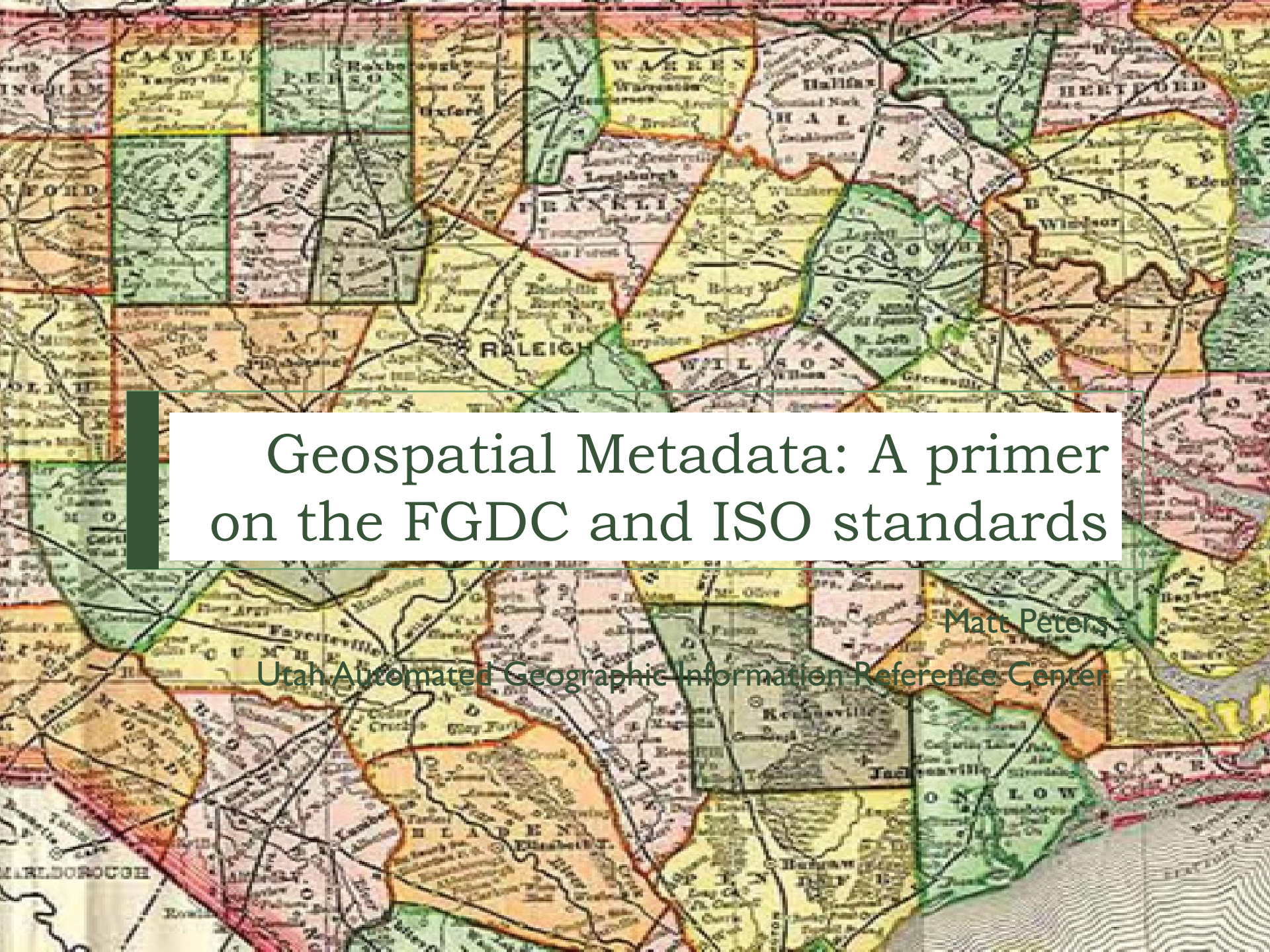
Who is GeoMAPP?

- Kentucky Department of Libraries and Archives (KDLA)
- Kentucky Division of Geographic Information (DGI)

- NC Center for Geographic Information and Analysis (CGIA)
- North Carolina State Archives
- NC State University Libraries

- Utah Automated Geographic Reference Center (AGRC)
- Utah State Archives





Geospatial Metadata: A primer on the FGDC and ISO standards

Matt Peters

Utah Automated Geographic Information Reference Center

Overview of Two Geospatial Metadata Standards

- Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata
  - Version one (1994) mandated for use by federal agencies in 1995
  - Descriptive metadata, plus some administrative and technical
  - Extensive use at state level, spotty use at local level
  - Problem: content standard without an encoding specification
  - FGDC profiles: ESRI, NBII, Remote Sensing, etc.
- ISO Standards
  - ISO 19115: Geospatial Information – Metadata (2003)
  - ISO 19139: Geospatial Information – Metadata – XML (2007)
  - North American Profile of ISO to replace FGDC CGDSM
  - Not yet widely implemented in the U.S.

What's in a Geospatial Metadata Record

- Identification Information
- Data Quality Information
- Spatial Data Information
- Spatial Reference Information
- Entity and Attribute Information
- Distribution Information
- Metadata Reference

What Info Might be Important for an Archivist

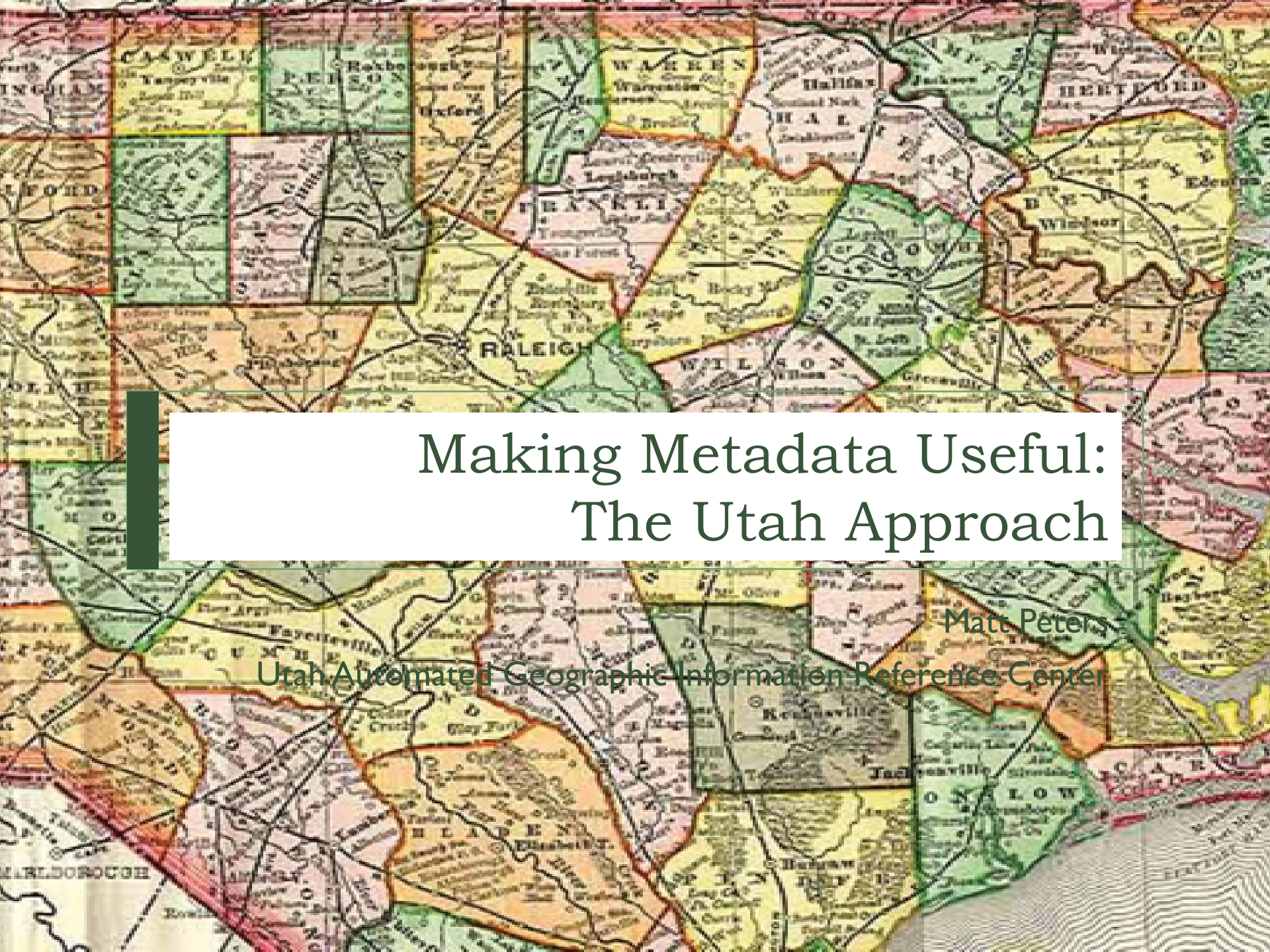
SGID93.TRANSPORTATION.Roads

Metadata:

Identification_Information:
Citation:
Citation_Information:
Originator: Utah Automated Geographic Reference Center
Publication_Date: May, 2009
Title:
SGID93.TRANSPORTATION.Roads
Geospatial_Data_Presentation_Form: vector digital data
Online_Linkage: Server=direct_connect; Service=sde:sqlserver:168.177.18.211\AGRC; Database=SGID93; User=Transportation; Version=sde.DEFAULT
Description:
Abstract:
Utah street centerline data for address location, cartography, routing. Uses the unnormalized Utah Transportation Data Model. Data is contibuted regularly from local, county, state, federal, and tribal governments and is aggregated and improved by AGRC
Purpose:
Represent street centerlines for address location, cartography, inventory, and eventually routing purposes.
Supplemental_Information:
http://sgidinfo.utah.gov (look under Transportation sub category for information on latest updates.)
Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: May, 2009
Currentness_Reference:
publication date

For Preservation and Discovery, Data must have Metadata that tells:

- Who: creator of data,
- What: title and description of data,
- Where: geographical extent of data,
- Why: reason the data was created,
- When: when the data was created,
- How: how the data was created.
- Definition of data attributes.



Making Metadata Useful: The Utah Approach

Matt Peters

Utah Automated Geographic Information Reference Center

Draft of Utah's GIS to Archives Data Flow

AGRC exports data from SGID and splits out datasets by series.
Metadata occasionally incomplete complete

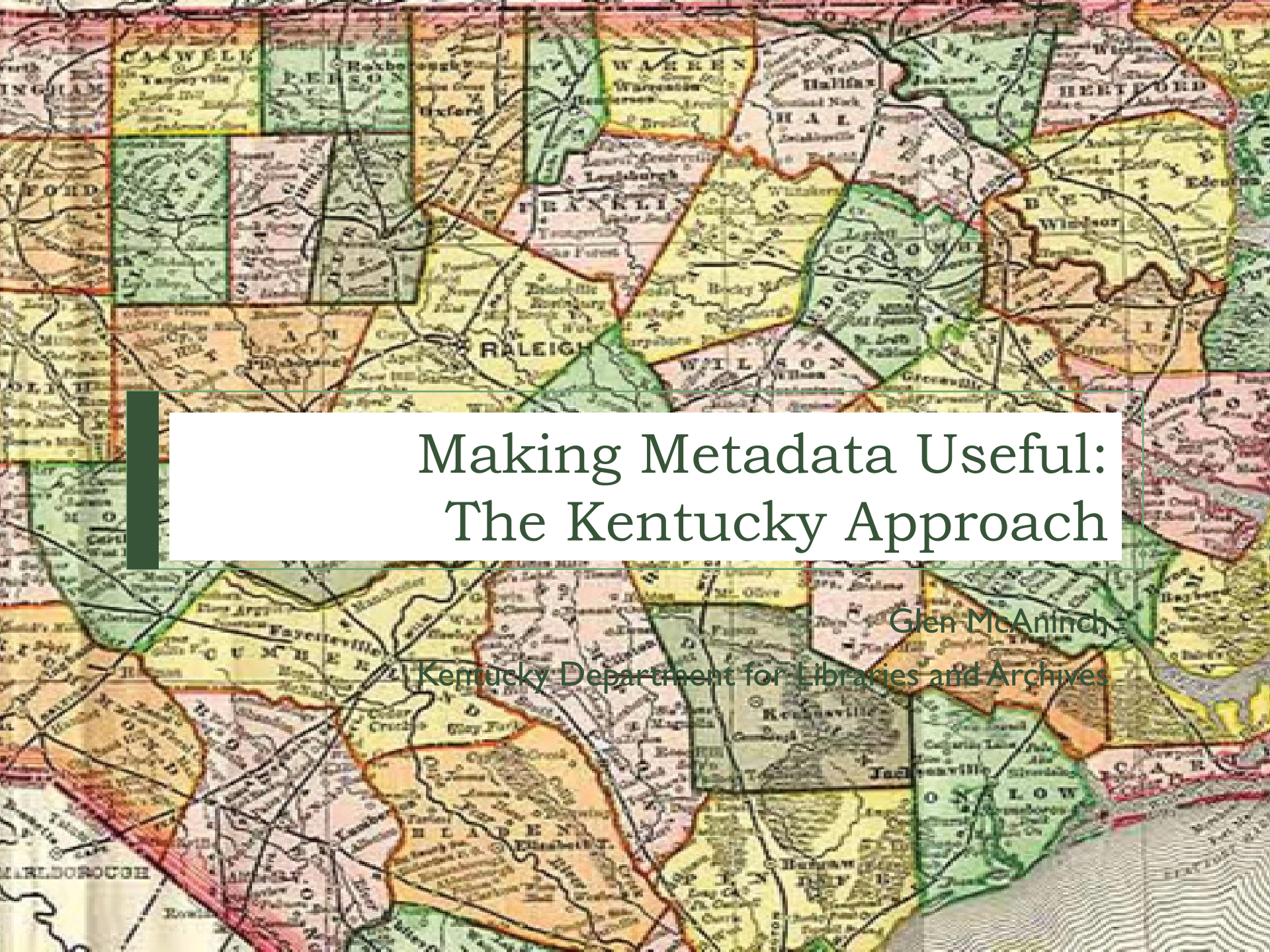
Local governments supply GIS datasets on CD/DVD to AGRC.
Metadata often missing

- All Metadata is completed to FGDC Standards
- AGRC creates geoPDF files of individual datasets, plus ZIP files of the native format.
- One ZIP file would contain all the pieces belonging to one shapefile or, alternatively, the file would contain a geodatabase.
- Geodatabases would not be just one big database with everything in it (multiple series and years).
- Instead, the native files would be composed of a single downloadable file per series per year.

AGRC copies these files to Archives' FTP server.

Example FTP Site Structure:

- ftp.archives-agrc.utah.gov/Archives Metadata harvested to populate Archive's Finding Aids
  - Biota Dublin Core Metadata
  - Boundaries Dublin Core Metadata
    - MunicipalityRecords-*Series-26846* Dublin Core Metadata
      - 2000
        - MunicipalBoundaries.zip FGDC Metadata
        - MunicipalBoundaries.pdf FGDC Metadata
      - 2001
      - 2002
      - 2003
    - CountyBoundaries-*Series-26845* Dublin Core Metadata
      - 2003
      - 2004

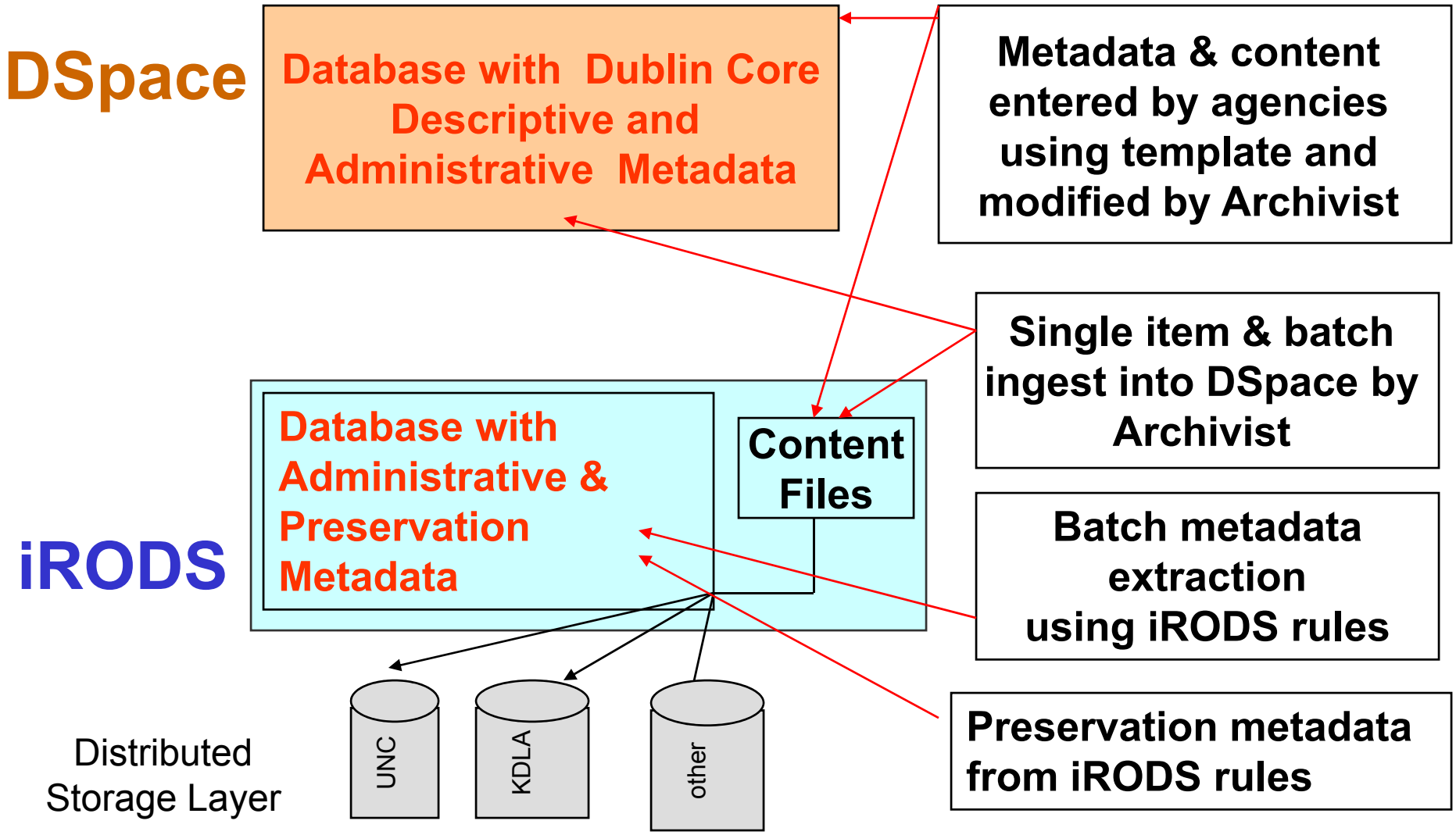


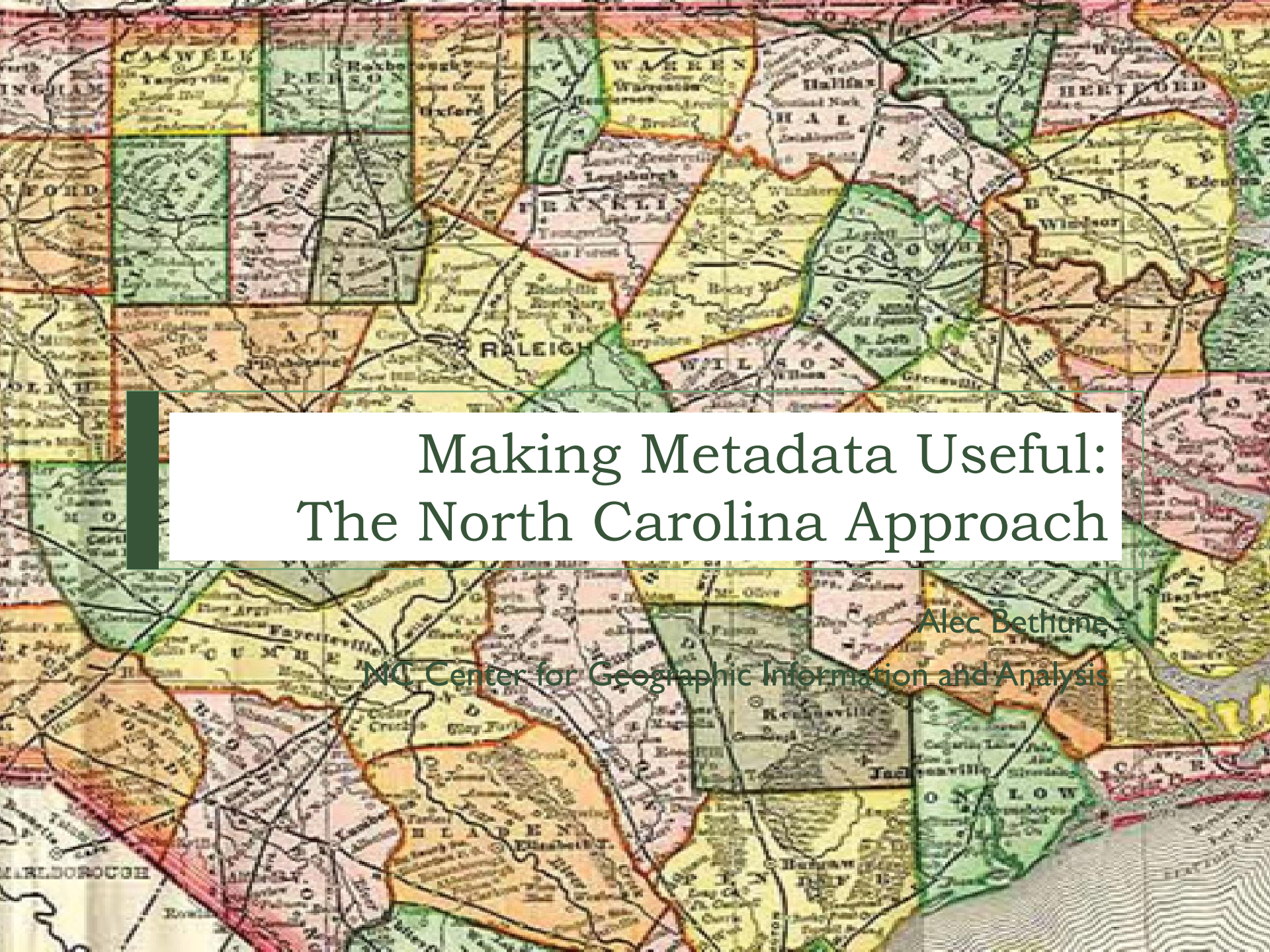
Making Metadata Useful: The Kentucky Approach

Glen McAninch

Kentucky Department for Libraries and Archives

Kentucky Metadata Workflow into DSpace and iRODS Environment



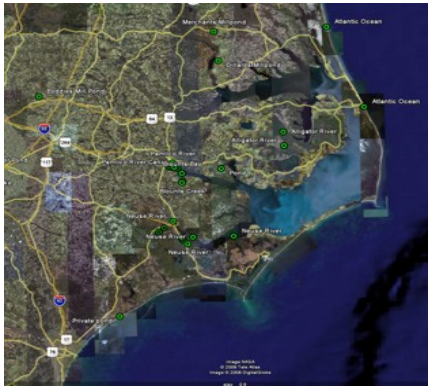


Making Metadata Useful: The North Carolina Approach

Alec Bethune
NC Center for Geographic Information and Analysis

NC: From FGDC to MARS

- GIS metadata processing for NC OneMap
  - Geospatial metadata has lots of great info, but who as the time to fill it all out?
- Using ISO Categories to organize data in our demonstration repository
- Extracting preservation elements from FGDC metadata to allow data access with MARS cataloging



Discussion/Questions