

GeoMAPP Interstate Data Transfer Design Overview

The purpose of this document is to provide an initial framework to guide the movement of archived geospatial data between the three GeoMAPP project partners: Kentucky, North Carolina, and Utah. Each state will receive data from the other two partners, validate that the data was transferred successfully and attempt to ingest it (temporarily) into their state's geoarchive. Each step of this process will be documented. Issues that are encountered will be noted and recommendations and lessons learned will be created by each state. The purpose of this exercise will be threefold:

- 1) validate the data transfer methodologies of the other state partners
- 2) test the ingest of "foreign" data into the state's geoarchive to validate internal methodologies and procedures
- 3) investigate the viability and create best practices and recommendations for sharing data for distributed archives or continuity of operations/ disaster recovery purposes.

Demonstration Datasets for Transfer:

- Local Government: Select several datasets (3-6) from one locality that have been ingested into the archive.
- Centralized Data: Select 2 or three framework datasets that are common between partners for transfer (e.g. statewide roads, municipal boundaries, hydro). Select 2 or 3 other non-framework datasets unique to the host state for transfer. KY will transfer its full collection of public KY Vector data as a file geodatabase. Recipient states can try to ingest the entire FGDB into their archive and/or export individual shapefiles that meet the above requirements.
- Imagery: Each state will select one set of imagery to send. If multiple formats exist (TIFF v/s SID, tiles v/s mosaic, B&W v/s color, or varying scales) it might be interesting to send the different varieties as part of the transfer.
- Project Files: Select one consolidated project to transfer
- Digitized Products: Select one set of scanned/digitized maps or aerial photos to transfer

Data Transfer Methodology

- Each state will use the Bag-It toolset to hash, manifest, and package data before transfer and will validate any bags of data it receives
- Each state will need to make transferrable data available via FTP or other online access for other states to download.

- Each state will provide physical media for the transfer of larger data (e.g. orthoimagery). These large data can be exchanged during the face to face meeting in Raleigh in September in lieu of sending through the mail.
- The content group will explore other data transfer options such as 3rd party SAN “landing areas” or other “drop-services” for data transfer as well as possibly using Rsync or Rcopy for moving content. This is not a required element, however each state should look into the feasibility of implementation of one or several of these alternate transfer methodologies. If issues are encountered with the request, set-up or implementation of these technologies, or with the required state to state FTP or physical transfer, then it should be noted in that state’s findings write-up to share the experience with other states.
- Each state will document their experience with data transfer (transfer rates and issues encountered), and data validation.
- After the data is validated, each state will attempt to ingest the other two states data into its geocache and will document the steps taken and issues encountered.

Final Products

The result of this effort will be a consolidated write-up discussing the processes each state implemented and issues encountered, as well as providing general best practices and lessons learned from moving data between states.