Expanding Sustainable Metadata Development for County and Local Government, Schools, and the Private Sector

Final Report 2004

**Federal Geographic Data Committee
Competitive Cooperative Agreements Program Project
2003 Category 3: "Don't Duck Metadata" Metadata Outreach**

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Project Narrative

CAST staff developed an online form-based FGDC metadata entry form that allows users to add metadata records to the Arkansas GeoLibrary node of Clearinghouse. By using form controls the users are required to enter sufficient information to make the metadata records compliant to the minimum requirements of FGDC CSDGM (FGDC-STD-001-1998). The resulting metadata records are stored in an Oracle database, and then managed by Intergraph's Spatial Metadata Management System software. The form includes an ArcIMS-driven map interface that allows users to specify the bounding box for their data interactively. Future plans involve re-deploying the form and map interface to accommodate metadata entry from Central American countries as part of a separate NASA-funded project which includes a goal of disseminating Central American data and metadata over the internet.

CAST staff developed protocols for non-automated metadata intake from outside organizations, which allows the organizations to send previously created metadata records directly to the appropriate staff members. The protocols allow for metadata transfer in XML, SGML, HTML, and TXT formats so that the metadata records can be developed in a variety of COTS software packages. Metadata records are submitted via email, and then processed by CAST staff for incorporation into the Arkansas GeoLibrary node of Clearinghouse. The online metadata entry form and the metadata submission protocols can be found by visiting http://www.cast.uark.edu/local/isite/ and clicking on "Submit Metadata Records".

In addition, metadata creation training was completed for a variety of organizations, using the metadata tools provided in ESRI's ArcGIS as well as Intergraph's Spatial Metadata Management System (SMMS).

Metadata Training and Outreach Assistance

CAST staff provided metadata creation training and technical support to individuals from several organizations, including the Arkansas Center for Health Information, Arkansas Geographic Information Office, Benton County Department of Emergency Management, Benton County Assessors Office, Benton County Office of Environmental Enforcement, City of Alma, City of Fayetteville, City of Fort Smith, McGoodwin Williams and Yates Engineering Inc., Morrison Shipley Engineers Inc., and the Northwest Arkansas Regional Planning Commission. Many of the individuals trained were familiar with metadata in general, but needed help defining some of the specific metadata requirements for their datasets. Some of the individuals had little or no exposure to metadata, or even to geospatial technologies in general.

Some training sessions were conducted in conjunction with certified ESRI shortcourses to maximize the number of individuals and organizations reached. These training sessions were conducted in a formal, instructor-led classroom lecture/exercise format, and included exposure to FGDC materials such as the FGDC CSDGM Metadata Workbook. Other training sessions were conducted in a more informal, worksite-based format where the trainers observed and aided directly in the creation of metadata records.

Status of Metadata Service

Approximately 50 metadata records resulted from this project, and are being served in multiple ways. Some of the records are being served along with the associated geospatial data through Arkansas GeoStor data warehouse (http://www.cast.uark.edu/cast/GeoStor). All of the resulting records (along with hundreds of previously created metadata records) are open to harvesting by Geospatial One-Stop through a web-accessible folder (http://www.cast.uark.edu/fgdc_xml/). A total of 670 records were harvested by Geospatial One-Stop. The metadata records will be added to the Arkansas GeoLibrary node of the Clearinghouse. The online metadata entry form and metadata submission protocols were in development during the project timeframe, and were therefore not in place until the end of this project. As a result, there were no records ingested through these methods but we anticipate increased utilization once their existence has been publicized.

Next Steps

Many of the activities from this project will be continued on a perpetual basis. The incorporation of metadata training into ArcGIS shortcourses will continue, as will metadata outreach activities. The online metadata entry form will continue to operate and accept new entries from registered organizations and individuals. CAST will continue to accept offline metadata submissions to be imported into the Arkansas GeoLibrary. Future issues that will be encountered are software and hardware maintenance issues, maintenance of existing connections when software products are upgraded, and support for ongoing promotion of metadata activities.