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2003 CAP Category 4: Clearinghouse integration with OpenGIS Services

Final Report

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Coordination activities:

The groundwork for this project was laid by a cooperative effort including Geo Information Systems, the Oklahoma GIS Council, the Oklahoma Conservation Commission, the Oklahoma Water Resources Board, the Oklahoma Tax Commission, the Oklahoma Department of Education, and the Oklahoma Election Board. The specific contractual requirements for the enhancements to the Oklahoma Data Warehouse Mapper will be carried out by Geo Information Systems, an applied research department of the University of Oklahoma.

Project Narrative:

OKDWM will allow download of any vector layer in the OKDW based on the current extent. This will allow users to retrieve only the data necessary for their particular project and fill the gap left between statewide and individual county datasets allowing a user to download either several counties worth of data (where county is too small and state is too large) or several townships (where even county datasets are too large). OKDWM will be available as a WMS Server. This will allow users of any 1.0.0 (or higher) WMS Client to access one or more data layers in its most current form from the OKDWM via their own mapping software. This will prove most useful for large raster datasets that are unwieldy to download, store, and reference. Prepare PDF documentation to be available online detailing the use of the OKDWM as a WMS Server.

All areas of the project were completed successfully. Users are now able to download vector data based on viewable extent in the OKDWM, the OKDWM is available via WMS, and documentation in its use is available online (HTML format was chosen over PDF though). These developments allowed Geo Information Systems to partner with the USGS on the National Map. Oklahoma is now on the National Map as a result of this project's accomplishments.

Program feedback:

The CAP Program facilitated necessary work that would not have been possible otherwise. Everyone we worked with was helpful.

Clearinghouse node:

Oklahoma Data Warehouse. <http://geo.ou.edu>. Approximately 40 entries. Will be adding WMS references to all entries in the near future. Metadata management and services have become a part of our business process and are not an issue.

Status of web service:

Mapserver 4.0. No Issues with Setup. <http://geo.ou.edu/okwmsalbers.php>. Various vector coverages are present. Primary focus is on Administrative boundaries and transportation.

Integration:

N.A. We have implemented data warehousing via different methods.

Next steps:

We would like to provide users with the ability to download raster layers for visible extent and possibly upgrade hardware to support serving of projected raster layers via WMS. At this time, we only allow WMS of raster layers in their native projection.