

2008 NSDI (CAP) INTERIM REPORT
Category 5: Building Data Stewardships for The National Map and NSDI

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INTERIM REPORT

Agreement Number: Cooperative Agreement No. 08HQAG0061

Proposal Title: Building Stewardship of Integrated Statewide Structure and Transportation Geospatial Databases in West Virginia.

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Collaborating Organization(s): U.S. Forest Service, WV Division of Homeland Security and Emergency Management, WV Department of Transportation, WV GIS Office of Coordination, WV Statewide Addressing and Mapping Board (SAMB), WV Association of Geospatial Professionals

USGS Geospatial Liaison for West Virginia: Craig Neidig, email: cneidig@usgs.gov, phone: (304) 347-5130 Ext: 237

Data Themes: Structures and transportation road network

Project Narrative: The goal of this project is to lay the foundation for the development of stewardships that will provide the long term maintenance of structures and transportation geospatial information in West Virginia that will serve federal, state, regional, and local community needs. The intent will be to integrate the structure and road network data themes produced in West Virginia into consistent, seamless, nationwide geographic databases.

Accomplishments: Progress was made on data sharing and procedures for integrating state-produced road data into national databases.

DATA SHARING: Meetings were held with the U.S. Forest Service, WV Department of Transportation, and Statewide Addressing and Mapping Board to facilitate the exchange of local resolution (1:4800 scale) structure and transportation datasets to the public domain. Data sharing activities are listed below:

1) Transportation Road Network

- a) *CENSUS TIGER ROADS:* In spring 2008, Census TIGER roads re-aligned to 1:4800-scale geometry were released for 70% of State. The next TIGER release for all counties (100%) is scheduled for December 2008.
Link: <http://wvgis.wvu.edu/data/dataset.php?action=search&ID=300>
- b) *U.S. FOREST SERVICE ROADS:* In July 2008 the USFS made available 1,500 miles of forest service roads (Monongahela National Forest) collected at 1:24,000-scale. Link: <http://wvgis.wvu.edu/data/dataset.php?action=search&ID=263>
- c) *WV DOT MAJOR ROADS:* 37,000 miles of major roads are maintained by WV DOT. In 2008 major roads (Interstates, U.S. Highways, State Routes, & County Routes) of 1:4,800-scale or better were made available by WV DOT. Link: <http://gis.wvdot.com/> or <http://gis.wvdot.com/GTI/DataCatalog.aspx>

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d) *E-911 ROADS*: E-911 road geometry is available to authorized users; the validation of geometry and attributes is in progress. Link: <http://www.addressingwv.org/>

2) Structures

a) *E-911 STRUCTURES*: Statewide building centroids and footprint (structures > 7500 square feet) geometry was made available to the public and provided to the U.S. Geological Survey. <http://wvgis.wvu.edu/data/dataset.php?action=search&ID=288>

b) *OTHER STRUCTURES*: Dams, locks, bridges, tunnels, and other structures from the statewide addressing and mapping project were made available to the public. <http://wvgis.wvu.edu/data/dataset.php?action=search&ID=289>

c) *ADDRESSES*: The Statewide Addressing and Mapping Board provided the WV GIS Technical Center access to point addresses and street address ranges. This data will be used to build a statewide enterprise geocoding service for generating critical infrastructure datasets.

ROAD NETWORK - DATA INTEGRATION and MAINTENANCE: West Virginia does not have the operational capacity to integrate state-produced road databases into a seamless, comprehensive, nationwide road database. Although data *sharing* of transportation data occurs at the state level, the *integration* of multiple road databases into consistent, seamless, nationwide databases will occur at the national level by the federal government or private sector. For example, the Census Bureau is almost done updating the Census TIGER road network with 1:4800-scale roads provided by West Virginia. In the future, to continually *maintain* the TIGER database with new road information, the Census will have access to updated road databases maintained by the WV DOT or state E-911 office to update their national database. Likewise, private sector companies like TeleAtlas and NAVTEQ will have access to transportation databases that reside in the public domain to update their road networks.

DATA PROVIDED TO THE NATIONAL MAP: This project serves as a catalyst for integrating locally produced, high resolution, spatially and temporally accurate geographic databases into the National Spatial Data Infrastructure. It will more clearly define procedures for sharing these data assets and will result in publicly accessible data and map services to the public. Through applied research involving cooperative partners, this and other funded projects will result in the creative and improved utilization of the statewide structures and transportation data themes for the Nation.

FUTURE DIRECTIONS: This project satisfies and builds upon the primary need for structures and relevant geospatial location, classification, and related characteristics of manmade facilities, primarily based on homeland security requirements. It will also provide locally produced statewide transportation updates for incorporation into federal databases such as the Census MAF/TIGER and commercial nationwide databases. To accomplish these objectives, future directions include (1) developing a business plan for sharing geospatial data among local, state, and national stewards and for (2) setting up a centralized geocoding service with the best available statewide addressing data.