

WV Elevation Highlight - 04/17/06

West Virginia is the first state in the Nation to have complete statewide coverage of 1/9 arc-second (3-meter) resolution digital elevation data as part of the USGS National Elevation Dataset (NED).

This accomplishment is a major milestone in the ongoing development of new high resolution datasets for the State of West Virginia and for the Nation, and directly supports the vision of the National Spatial Data Infrastructure (NSDI). Availability of the completed elevation dataset through the Seamless Data Distribution System <http://seamless.usgs.gov> is anticipated in May 2006.

In partnership with the USGS and the West Virginia State Geographic Information System Coordinator, the West Virginia GIS Technical Center collaborated with the USGS to develop and implement procedures to convert the raw mass points and breaklines into the high resolution grid. The data will also serve in planned follow-up projects at the Technical Center including the delineation of improved watershed boundaries and in the conflation of the state's National Hydrographic Dataset to 1:4800 scale.

The elevation dataset is compiled from detailed planimetric data developed in conjunction with the West Virginia Statewide Addressing and Mapping Program. The West Virginia Department of Transportation also contributed funding in order to achieve a nominal vertical accuracy of +/- 10 feet. The entire cost of the elevation effort is valued at two million dollars.

This high resolution elevation data has already been used in multiple applications including wastewater treatment analysis by the Canaan Valley Institute and mine permitting by the West Virginia Department of Environmental Protection. In addition, FEMA will use the data as input to the Flood Insurance Rate Map modernization effort. The Census Bureau will also use the data to readjust block boundaries defined along ridgelines in many parts of the state. Many other GIS services and benefits for the citizens of the Mountain State are anticipated from use of the new elevation data.

The State GIS Coordinator also presides as the Chairman of the West Virginia State Addressing and Mapping Board (WVSAMB). The Board has implemented a program to establish uniform city-style addresses for the entire state in order to provide the highest level of emergency response to insure the safety, security and peace of mind of all citizens of West Virginia. Use of the latest technologies, including digital mapping of key basemap data themes, including the elevation data, global positioning, and geographic information systems is key to the success of the WVSAMB program.

More information on this cooperative effort can be found at:
<http://wvgis.wvu.edu/stateactivities/WVSAMB/sambelevation.html>

USGS Point of Contact:
Bruce Bauch
Geospatial Liaison KY, TN, WV
Phone: 502-493-1945
Email: bbauch@usgs.gov