WV GIS Technical Center
(July 1, 2025 – June 30, 2026)
2026 Annual Report

WV GIS Technical Center

The West Virginia GIS Technical Center, located in the Department of Geology and Geography, West Virginia University, provides focus, direction, statewide coordination, and leadership to users of geographic information systems (GIS), digital mapping and remote sensing within the state of West Virginia. The Center was established by Executive Order 4-93 to provide coordination and technical support in the development and operation of geographic information systems (GIS) for the state' spatial data infrastructure. Listed below are key **statewide GIS services** the Center provides for West Virginia, coordinated through the WV Office of GIS Coordination, WV Geological and Economic Survey.

* *State GIS Clearinghouse:* Serves critical spatial data to state users via the State GIS Clearinghouse. The Center currently provides nearly 200 TB of storage space in a virtualized environment configured to maximize availability and access. The system must have a large capacity to allow for downloading large datasets, such as such as LiDAR-derived digital elevation data, high spatial resolution aerial imagery, and other base maps.
* *GIS Data Development:* Plays a crucial role in not only serving critical spatial data to state users but in updating and integrating local geospatial data within state and national geospatial databases. These data layers are utilized by state agencies, communities, and the public for applications that include emergency response, risk assessments, economic development, energy resource exploitation and management, transportation, natural resources, community planning, tax assessments, real estate appraisals, health studies, and election management. For example, the Center updates statewide mapping data layers (tax parcels, E-911 addresses, political and public boundaries, aerial imagery, elevation data, etc.) that support the various critical infrastructure sectors like broadband, water, sewer, transportation, and flood mitigation.
* *State GIS Services Support:* Provides hosting and e-government services that support **operational map layers** for 14 state agencies covering critical layers like broadband, hazard, historical, hunting/fishing, property, transportation, and voting geospatial data. In addition, key GIS support for various local governmental offices includes E-911 (addresses), county assessor (tax parcel), and county clerk (elections and boundaries). The most popular web map services supporting the state's geospatial data infrastructure are tax parcels, E-911 addresses, leaf-off imagery, and boundaries. Driven by this demand, annual traffic to *www.mapwv.gov* surged 42% last year to 5.6 million visits, averaging over 15,000 visits daily.
* *State Base Layer Map Services:* Provides a publicly accessible gateway to essential **base map layers** and geoprocessing services (e.g., aerial imagery, elevation, address geocoding) utilized by many organizations in the state for their mapping activities. This includes redacting privacy information from select mapping files for state residents in accordance with Daniel's Law privacy requests.
* *State Outreach Support*: Provides the West Virginia Geospatial Community with advisory, training, and outreach services that advance the state's spatial data infrastructure. The Technical Center responds to an estimated 12 calls per week from the public and clients regarding GIS data and applications.

STATEWIDE GIS SERVICES	BASE MAP LAYERS	AGENCY MAP LAYERS
• State GIS Data Clearinghouse • State GIS Data Development • State GIS Services Support • State Base Map Services • State Data Privacy Requests • State Outreach Support	• Addresses & Locator services • Aerial Imagery • Boundaries – Election, Legal, Public Lands, Tax District • Building Footprints • Elevation • Tax Parcels (Surface)	• Archaeological & Historical • Broadband • Delinquent Properties • Hazards Flood & Landslides • Hunting & Fishing • Mineral parcels • Trails • Voter Points & Polling Sites

Past and Future Accomplishments: During this reporting cycle, the Center completed the WV Hazard Library (https://wvfrf.org/library) of the WV Flood Resiliency Framework for organizing and accessing hazard information relevant to West Virginia. It also submitted boundary changes to the U.S. Census Bureau for 58 legal entities and migrated the Highway Archival Plans electronic retrieval system to WV DOT Servers. In the future, the Center plans on finishing the modernization of the State GIS Clearinghouse and reviewing Cloud Storage options.