

Note: the following document was developed by Bob Beard, GIS Coordinator for Newberry County, South Carolina. It provides a listing and description of GIS usage/benefit by department. Some of the benefits to the residents of the county actually come from use of the data by organizations outside the county (such as Probation, Parole and Pardon - PPP). In this particular example, PPP is able to use the data to determine if offenders under supervision are in a restricted area.

Newberry County GIS Department

Geographic Information Systems, commonly referred to as GIS, is the collection of various datasets or layers in digital format to give a visual picture of geographic components. Newberry County's data is being used to benefit all County Departments. This data uses State Plane coordinates that facilitates the sharing of data with neighboring counties, other governmental entities, as well as public and/or private utilities and industries.

Newberry County's GIS department is charged with the maintenance of all existing datasets as well as the creation of additional datasets as the need arises. The department coordinates and integrates the datasets to enable all departments to utilize said data. This enables GIS to use analysis, presentation, and problem solving to assist the needs of the County. This data is dispersed to the County and the general public through paper maps, the County's intranet, and soon through the internet.

The following entities are using applications of Newberry County's GIS data:

- Assessor
 - Maintains parcel data
 - Maintains municipal boundary data
- E911
 - Locates 911 calls on map
 - Assists emergency services to locate and route to call locations
 - Displays various locations that facilitate the response of emergency services using map coordinate such as landing zones, cross roads, etc.
 - Defines Emergency Service Areas including fire, rescue, and patrol zones and stations
 - Visual representation of emergency location using aerial photograph
- Public Safety including Fire, Rescue, and EMS
 - Defines Emergency Service Areas including fire, rescue, and patrol zones and stations (in progress of redefining these areas)
 - Hydrant locations (within limited areas; plans to be countywide coverage)
 - Secondary response zones (in progress)
 - Visual representation of emergency location using aerial photograph
- Sheriff's Office
 - Defines Patrol Zones
 - Address layer with point located at the building coordinates (in progress)

- Visual representation of emergency location using aerial photograph
 - GPS capabilities using accurate and up-to-date centerline data
 - Future AVL resource
- Public Works
 - Locates transfer station and recycling centers
 - Routing to and from transfer station and recycling centers
 - Locates county maintained roads and bridges
- Economic Development
 - Provides data needing for Newberry County Comprehensive Plan
 - Analysis and presentation of property for interested businesses and industries
- Planning and Zoning
 - Zoning regions for County and some municipalities (in progress)
 - Map location for field work and rezoning
- Building
 - Locates mobile homes parks and individual mobile homes on parcels
- Delinquent Tax
 - Creation of service areas
 - Location of parcels for posting
- County Council
 - Creation of Council district layer
 - Provided district maps
- Administration
 - Created Airport area map
 - Provided Routing map to and from transfer station and recycling centers
 - Various maps for the relocation of Newberry Rescue Squad
 - Various maps for the relocation Sheriff's Office
 - Various other maps as the need arises
- Central Court
 - Created Magistrate Area layer
- SC Voter's Registration
 - Created layers of governmental voting districts
 - Provided road address ranges for location of voter's district
- SC EMD (Emergency Management Division)
 - Location of accessed storm damage
 - Provide location of emergency areas including location of homes, flood areas, protection zones, etc. during emergency situations - Member of the County's EOC staff
 - Hazus MH management system
 - Hurrevac 2000
- SC PP&P (Pardon, Probation, and Parole)
 - Located parks, child care centers, school for location of residence of Sex Offenders
- US Census Bureau

- Boundary annexation
 - Address verification and location within Census tract and block group boundaries
- FEMA
 - Location of accessed storm damage
 - Provide location of EOC, emergency service facilities, and bridges
- VC Summer Nuclear Facility
 - Locate sirens, traffic control points, evacuation routes and protective zones within 10-miles of the facility

All the datasets created and maintained from the entities uses basic Newberry County GIS data such as the County boundary, municipality boundaries, road centerlines including the road names and ranges, water bodies including lakes, rivers, and creeks, and railroads. These layers have further been enhanced using data from DNR, USGS, the State Budget and Control Board, US Census Bureau, etc. The GIS office has contacted various other entities for data information to strengthen this basic data. Such entities include local municipal agencies, Newberry County Water and Sewer Authority, local electrical companies, local telephone companies, and Newberry County School District.

The datasets now available has increased from the beginning of the creation of the Newberry County GIS office as departments have learned to integrate GIS into their current procedures. Any and all of the datasets can be combined in a multitude of way to offer highly customizable solutions for the needs of Newberry County as well as the public. As GIS data use increases it is anticipated that other datasets will be created to better provide for the growth of the County.