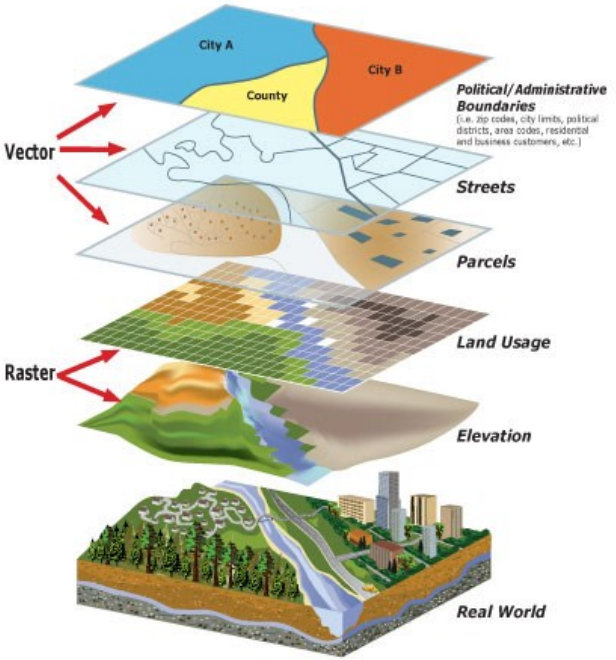
# How GIS Visuals Convey Info

As on a paper map, a digital map created by GIS will have dots, or points, that represent features on the map such as cities; lines that represent features such as roads; and small areas that represent features such as lakes.

The difference is that this information comes from a database and is shown only if the user chooses to show it. The database stores where the point is located, how long the road is, and even how many square miles a lake occupies.

Each piece of information in the map sits on a layer, and the users turn on or off the layers according to their needs. Some examples of layers are:




# Where Do I Find My GIS Info?

To find GIS information pertaining to parcels in Alamance County and its municipalities, including Burlington, log on to www.alamance-nc.com/gis.

**This brochure produced by:**


City of Burlington
GIS Division
425 South Lexington Avenue
Burlington, North Carolina

Phone: 336-222-5103
Fax: 336-513-5410

www.burlingtonnc.gov


An Introduction To

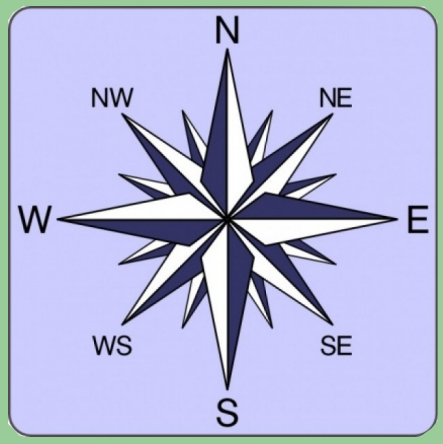
# GIS

**Municipal**

**Geographic**

**Information**

**Systems**



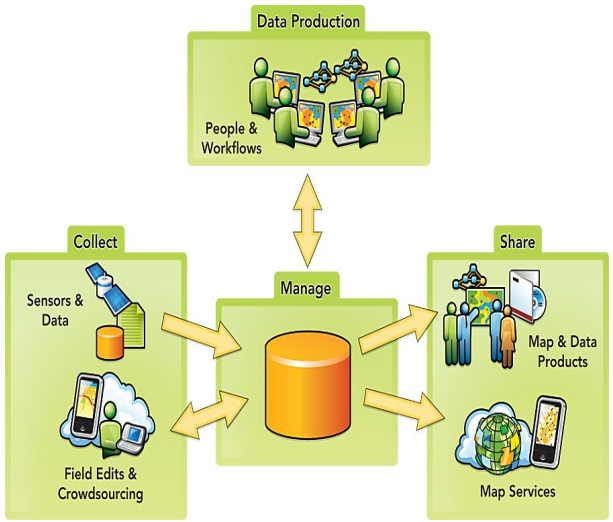
# What is GIS?

A geographic information system (GIS) integrates hardware, software and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information.

GIS allows us to view, understand, question, interpret, and visualize data in many ways that reveal relationships, patterns, and trends in the form of maps, globes, reports, and charts.

In local government, GIS brings geographic data from surveys, plats, spreadsheets, GPS units and paper files together within a computer network that is available to employees, officials and citizens for:

- Generating visual maps and reports
- Tracking permits, fees & licenses
- Modeling, projecting & analyzing geographic data trends




# How Local Governments Use GIS

- Land Use and Urban Planning
- Permit Tracking
- Infrastructure Planning/Management
- Transportation Planning/Management
- Tax Analysis and Record-keeping
- Emergency Management/Response
- Public Information Services
- Districting
- Economic Development Planning
- Public Health Risk Analysis

Although the roots of GIS are found in cartography (map-making), today's GIS field is much more than the generation of maps. In fact, part of the difficulty in defining GIS is due to the fact that it is incorporating and enveloping many capabilities that once were separate fields of study. Some of these fields include:

- Statistics
- Network Analysis
- Computer-Assisted Design (CAD)
- Automated Mapping/Facilities Mapping (AM/FM)
- Geocoding/Global Positioning Systems (GPS)
- Database Management Systems (DBMS)
- Land Information Systems (LIS)

# Why GIS?

Citizens are increasingly demanding better information from local government which shows that public policy decisions will result in greater efficiency, equity, community viability and environmental health.

At least 70 to 80 percent of the average local government's work involves land or geography-related issues or tasks.

Geography-related items that local governments deal with regularly include:


- Land Use Zones
- Tax Parcels
- Street Addresses
- Water Meters
- Sewer Manholes
- Water and Sewer Lines
- Pavement Markings
- Fire Hydrants
- Emergency Response (Police, Fire, EMT)
- Signs

Local government is responsible for the long-term health, safety and welfare of its citizens, and many issues cannot be boiled down to a simple calculation of short-term costs and benefits. GIS enhances the ability of local government to look at the long-term effects of decisions.