



Thomas County Board of Commissioners



Geographic Information Systems G.I.S.

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Manager

Vocabulary

Geographic Information Systems (G.I.S.) is any system that captures, stores, analyzes, manages, and presents data that are linked to location. In the simplest terms, GIS is the merging of cartography, statistical analysis, and database technology

Hardware is a general term for the physical artifacts of the technology. It may also mean the physical components of computer, in the form of computer hardware

Software the collection of computer program and related data that provide the instructions telling a computer what to do

Data information that represent the qualitative or quantitative attributes of a variable or set of variables. We have two types: **Spatial data** (x y z coordinates) and **Attribute data** (what we know about it)



Vocabulary

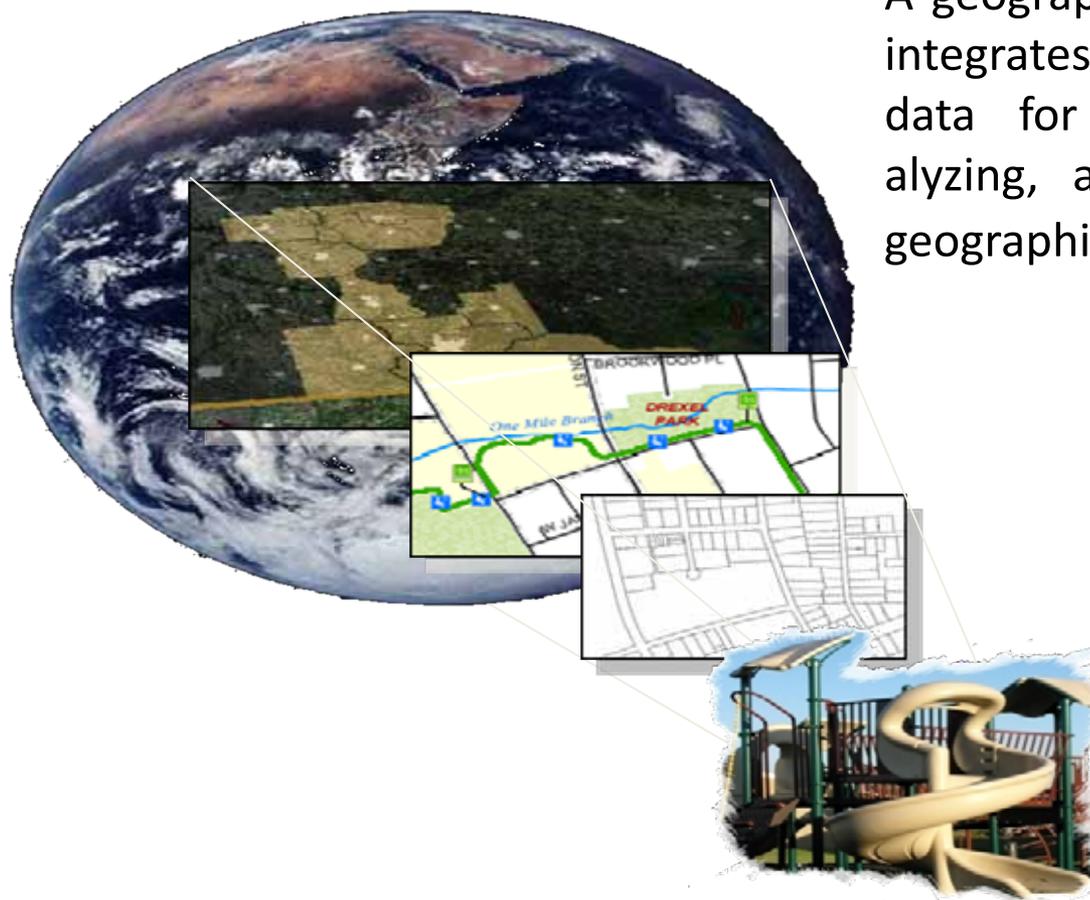
Spatial data the data or information that identifies the geographic location of features and boundaries on Earth, such as natural or constructed features, oceans, and more (x y z coordinates)

Attribute data what we know about it, L x W x H, surface, make, model

Thematic layer a map showing the spatial distribution of a particular geographic feature or phenomenon that can be categorized and symbolized by using three basic symbol types: point symbols (such as symbols in Public Places layer), line symbols (such as symbols in Sewer Mains layer) and area symbols (such as symbols in Zoning District layer)



What is G.I.S.?



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

Components of a GIS:

- Hardware
- Software
- Data
- People



What is G.I.S.?

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.

A GIS helps you answer questions and solve problems by looking at your data in a way that is quickly understood and easily shared.

GIS technology can be integrated into any enterprise information system frame-work.



A picture is worth.....

Day_of_Wee	Match_addr	Crime_Desc	Beat	Case_	Call_Type	GCIC_Cod
Tuesday	2101 W HILL AVE	THEFT OTHER	1	90300532	LARCENY	23
Sunday	2001 W HILL AVE	SHOPLIFTING	1	90300053	LARCENY	23
Tuesday	1508 HAWTHORNE AVE	BURGLARY FORCED ENTRY TO A RESIDENCE	2	90300503	BURGLARY	23
Saturday	813 S PATTERSON ST	THEFT OTHER	2	90205601	LARCENY	23
Saturday	2 MEETING PL	THEFT OTHER	7	90205472	LARCENY	23
Saturday	1501 W HILL AVE	THEFT OTHER	1	90205549	LARCENY	23
Sunday	2 SHARPER CIR	RAPE - STRONGARMED	2	90300028	FORCIBLE RAPE	11
Friday	807 S FRY ST	THEFT OTHER	2	90205279	LARCENY	23
Tuesday	340 NORMAN DR	THEFT OTHER	4	90300515	LARCENY	23
Wednesday	601 FLOYD ST	BURGLARY (LARCENY FROM BUILDING)	4	90204968	BURGLARY	23
Sunday	312 HOLLIDAY ST	BURGLARY (LARCENY FROM BUILDING)	2	90300057	BURGLARY	23
Thursday	1531 WEAVER CIR	THEFT OTHER	3	90205179	LARCENY	23
Wednesday	319 E HILL AVE	THEFT OTHER	3	90204931	LARCENY	23
Wednesday	510 YORK ST	AGGRAVATED ASSAULT NON FAMILY MEMBER OTHER WEAPON	3	90204869	AGGRAVATED ASSAUL	13
Saturday	509 E HILL AVE	THEFT OTHER	2	90205558	LARCENY	23
Tuesday	1545 LINZE DR	AGGRAVATED ASSAULT NON FAMILY MEMBER OTHER WEAPON	2	90300494	AGGRAVATED ASSAUL	13
Thursday	511 ROBERTS ST	BURGLARY FORCED ENTRY TO A RESIDENCE	7	90205070	BURGLARY	23
Tuesday	811 W MARY ST	BURGLARY NON FORCED ENTRY NON-RESIDENCE	3	90300440	BURGLARY	22
Saturday	1181 N SAINT AUGUSTINE RD	SHOPLIFTING	7	90205608	LARCENY	23
Tuesday	1181 N SAINT AUGUSTINE RD	SHOPLIFTING	7	90300506	LARCENY	23
Saturday	1105 N OAK ST	THEFT OTHER	3	90205627	LARCENY	23
Sunday	1007 SLATER ST	THEFT OTHER	6	90300101	LARCENY	23
Tuesday	1006 MARION ST	THEFT OTHER	8	90300418	LARCENY	23
Thursday	1219 WAINWRIGHT DR	BURGLARY FORCED ENTRY TO A RESIDENCE	3	90205170	BURGLARY	22
Saturday	1400 BAYTREE DR	BURGLARY FORCED ENTRY TO A RESIDENCE	6	90205497	BURGLARY	22
Thursday	1301 WILLIAMS ST	ROBBERY OF AN INDIVIDUAL - STREET - STRONGARMED	6	90205168	ROBBERY	12
Sunday	1403 BAYTREE DR	THEFT BY ENTERING AUTO	3	90300006	LARCENY	23
Friday	1709 BAYTREE RD	SHOPLIFTING	7	90205335	LARCENY	23

OR



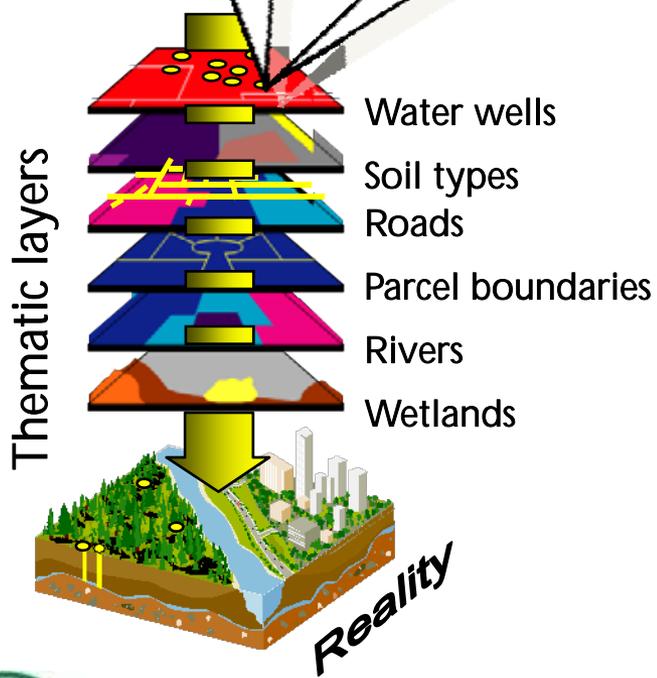
A geographic information system (GIS) helps paint your decision-making picture.



Looking through G.I.S.

Latitude: 33 44 58.9584 N
Longitude: 84 23 05.99513 W
Elevation: 172.39 feet

Watanks_id	Capacity	Wells
1	0.3 MG TANK	NO



A GIS stores information in thematic layers that are linked together by geography.

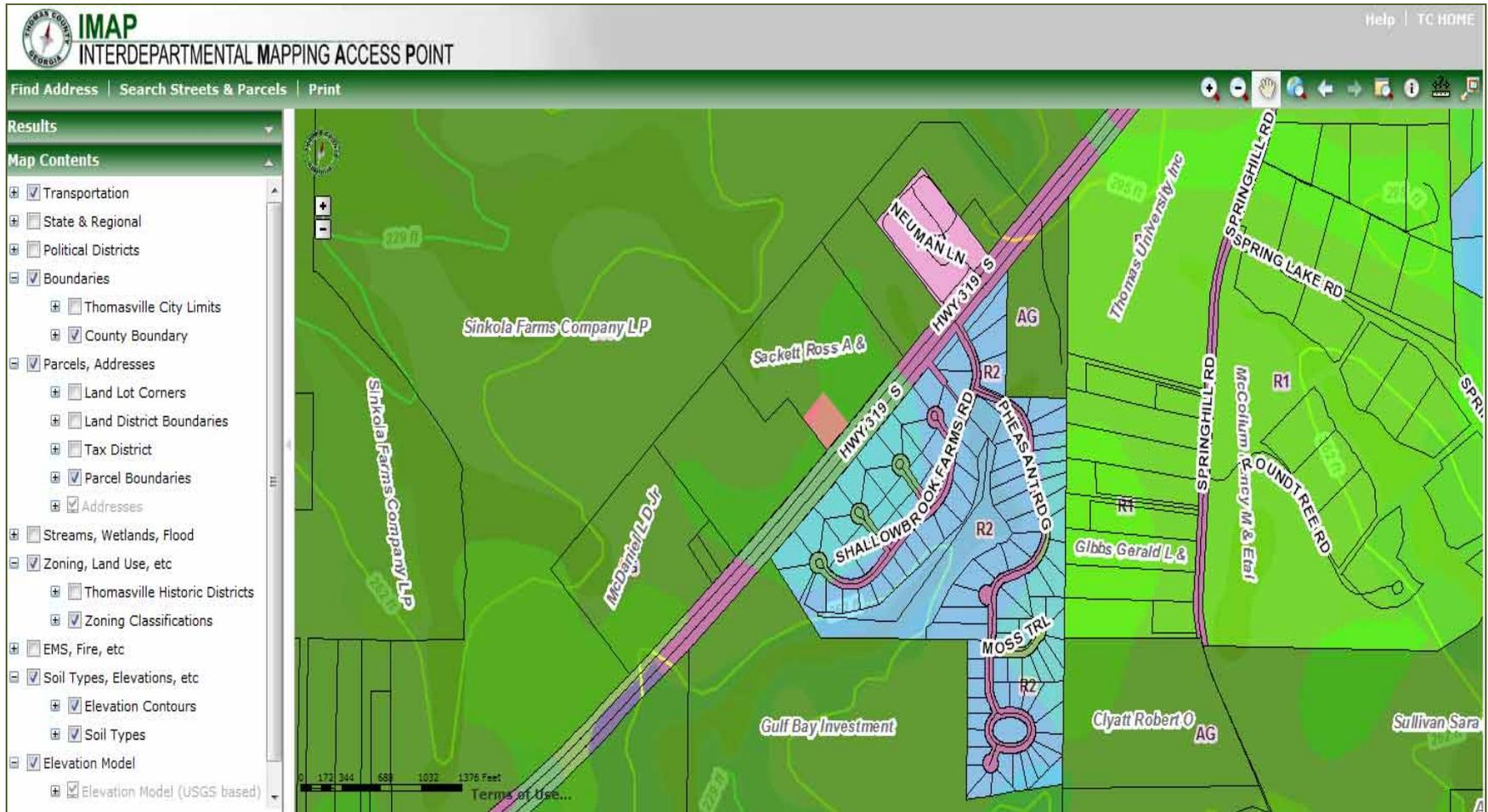
Each layer has 2 components:

- **Spatial data** (x y z coordinates)
- **Attribute data** (what we know about it)

Each feature of each layer is represented in both ways



Looking at G.I.S.



How many Layers are turned on?

Who uses G.I.S.?

Business:

Banking

Financial analysts employ GIS for targeting their markets by visualizing service needs. Companies including Metropolitan Life and Chase Manhattan Bank rely on GIS software to help them improve operational excellence and profitability.



Retail

Companies such as Sears have saved millions of dollars by managing deliveries with GIS. Gold's Gym Enterprises uses GIS to study new franchise locations. Smaller companies, such as Ultra Marine Kayaking of Santa Cruz, California, find GIS useful and cost-effective for creating accurate and attractive maps for promotional materials.



Who uses G.I.S.?

Government:

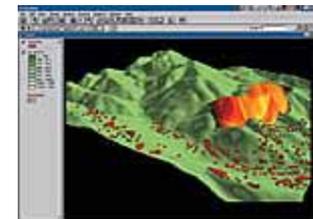
Local

Local governments around the world—from the 200 largest cities in the United States to hundreds of smaller local governments—use Esri GIS. It benefits public works and elections departments, 911, law enforcement, assessor's offices, and many more divisions.



Fire/Emergency Medical Services/Disaster

GIS allows public safety personnel to effectively plan for emergency response, determine mitigation priorities, analyze historical events, and predict future events. Wilson Fire/Rescue Services in Wilson, North Carolina, uses GIS to get critical information to incident responders upon dispatch or while en route to an emergency to assist in tactical planning.



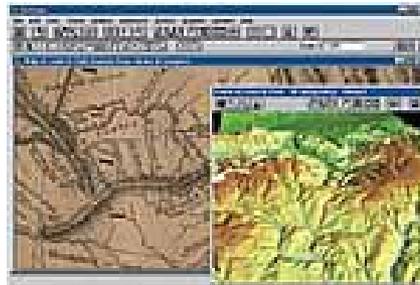
Who uses G.I.S.?

Education and Science: Research

GIS is an ideal tool to help researchers model the real world, classify and observe phenomena, and predict changes over time. Ready-made data models make it easy to work with layers of data to observe relationships and explore new methods to represent the world around us.



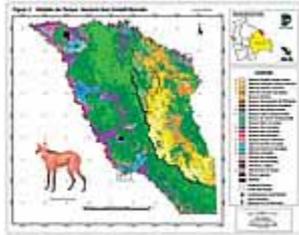
K-12 and Higher Education



Who uses G.I.S.?

Environment and Conversation:

Wildlife



Water

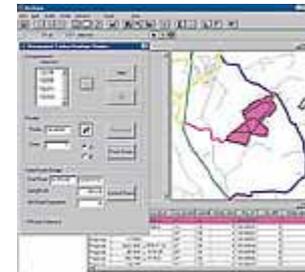


Natural Resources:

Oil and Gas



Forestry



Utilities:

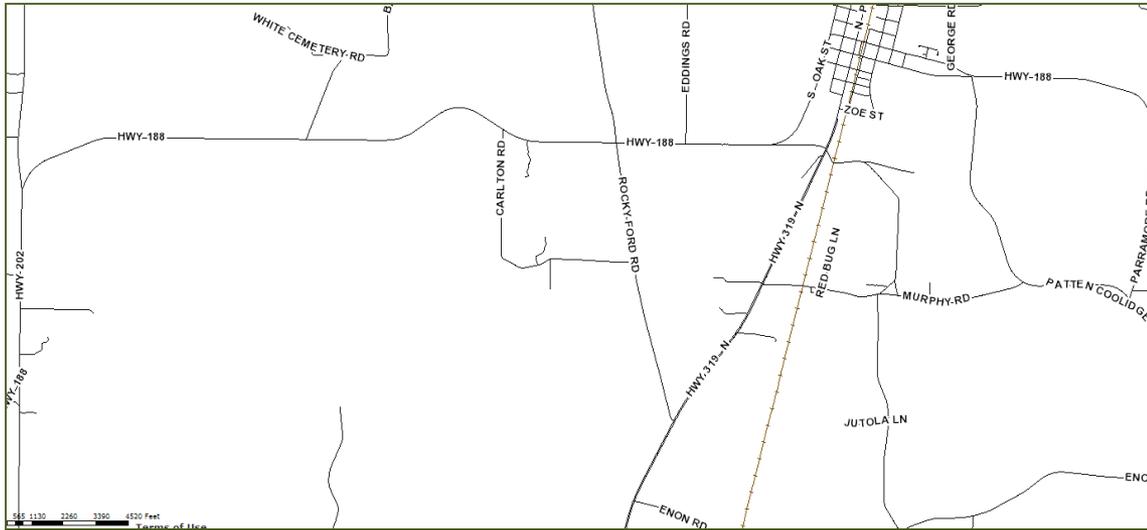
Water and Wastewater



Gas



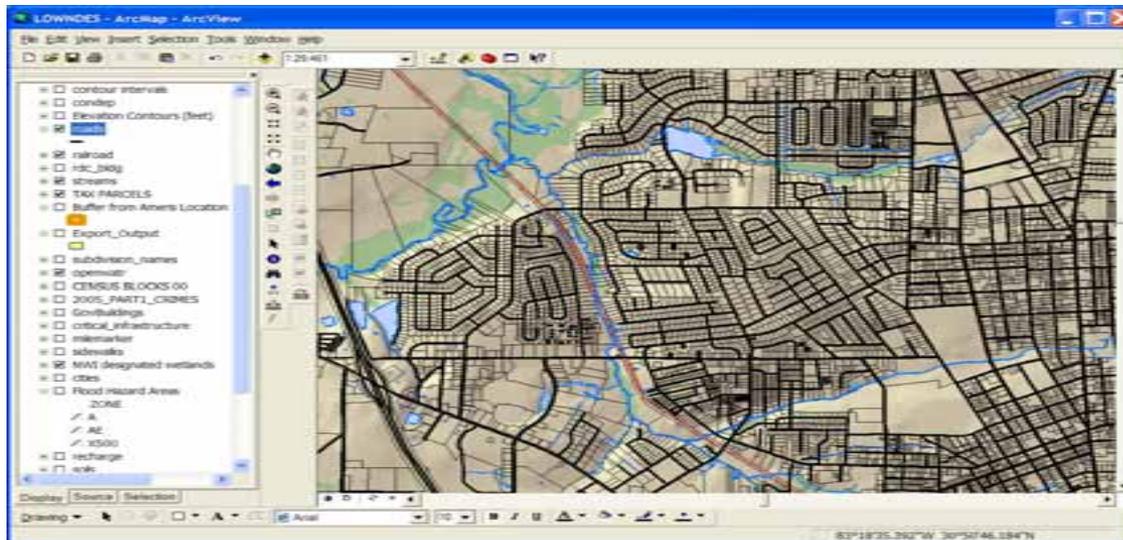
Maps v/s G.I.S.



Maps are really just **static** spatial data

GIS allows the input from many sources in a dynamic way, and makes spatial information (in a map on the screen) reactive to the users needs or specifications

Tools and your imagination make the difference powerful !



So where are you?

THOMAS COUNTY GEORGIA

IMAP

INTERDEPARTMENTAL MAPPING ACCESS POINT

Help | TC HOME

Find Address | Search Streets & Parcels | Print

Results

Map Contents

- Transportation
- State & Regional
- Political Districts
- Boundaries
- Parcels, Addresses
- Streams, Wetlands, Flood
- Zoning, Land Use, etc
- EMS, Fire, etc
- Soil Types, Elevations, etc
- Elevation Model
- Aerial Photography

You are here !

0 17 34 68 102 136 Miles

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