Introduction to Geospatial Technologies



What is Geography?

The study of the Earth's surface, the connections between places, and the relationships between people and their environment.



Spatial

Contextual

Holistic

Cultural

Physical

Space

Place

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CUSTOMS

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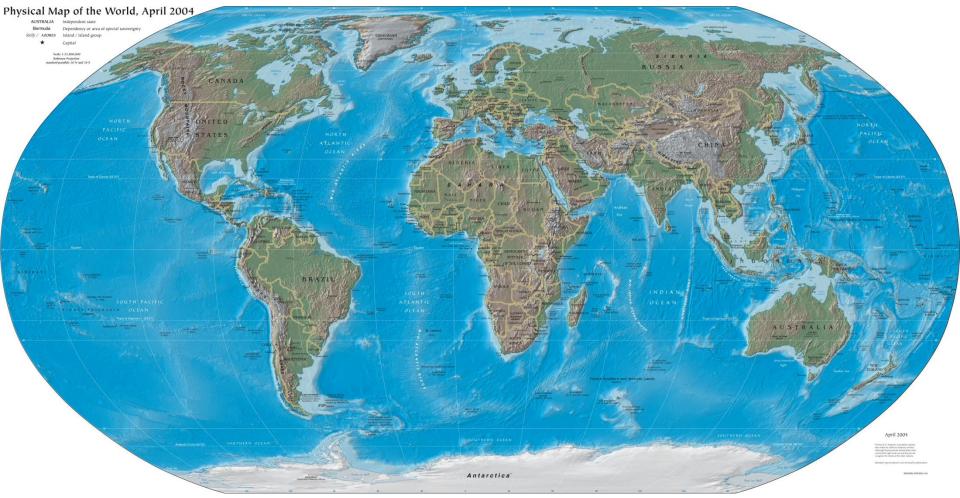
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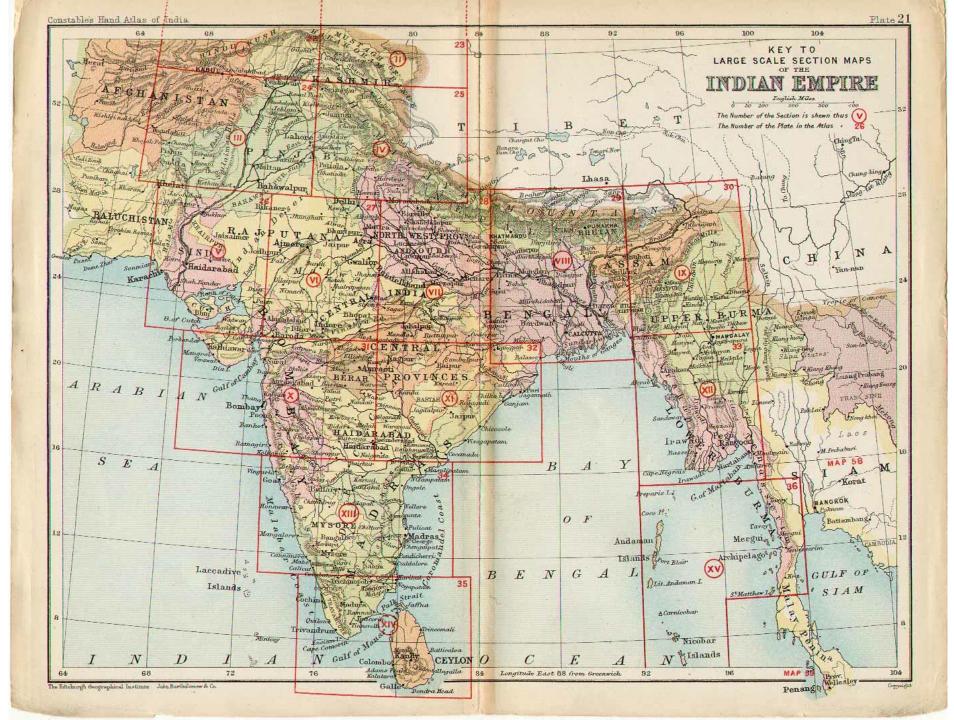
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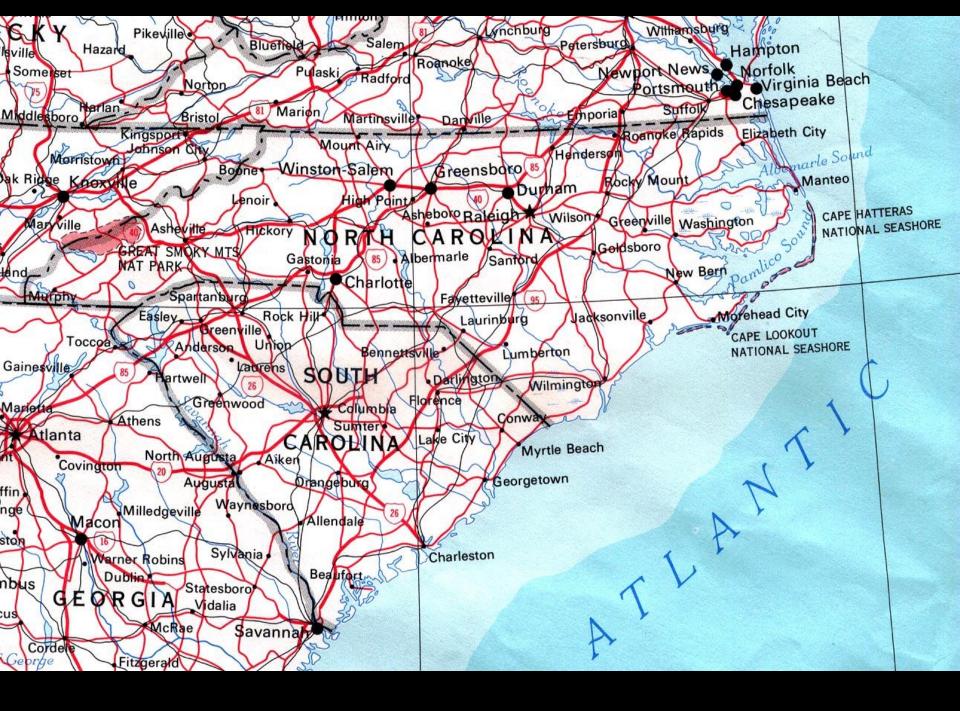
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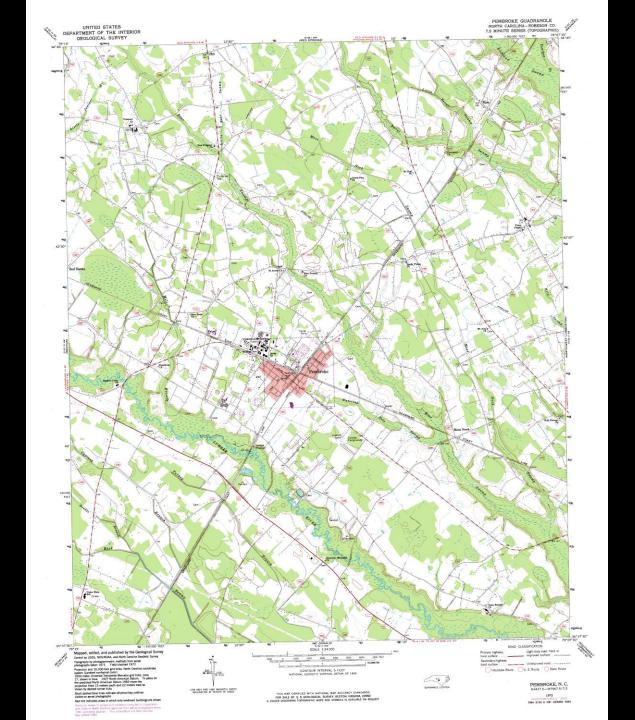
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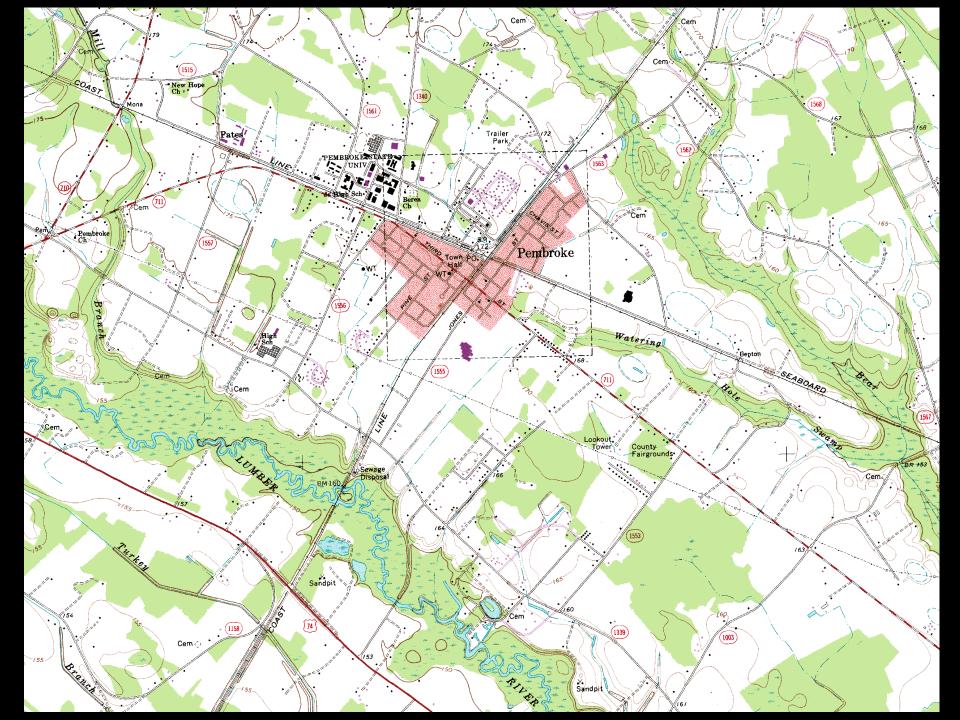


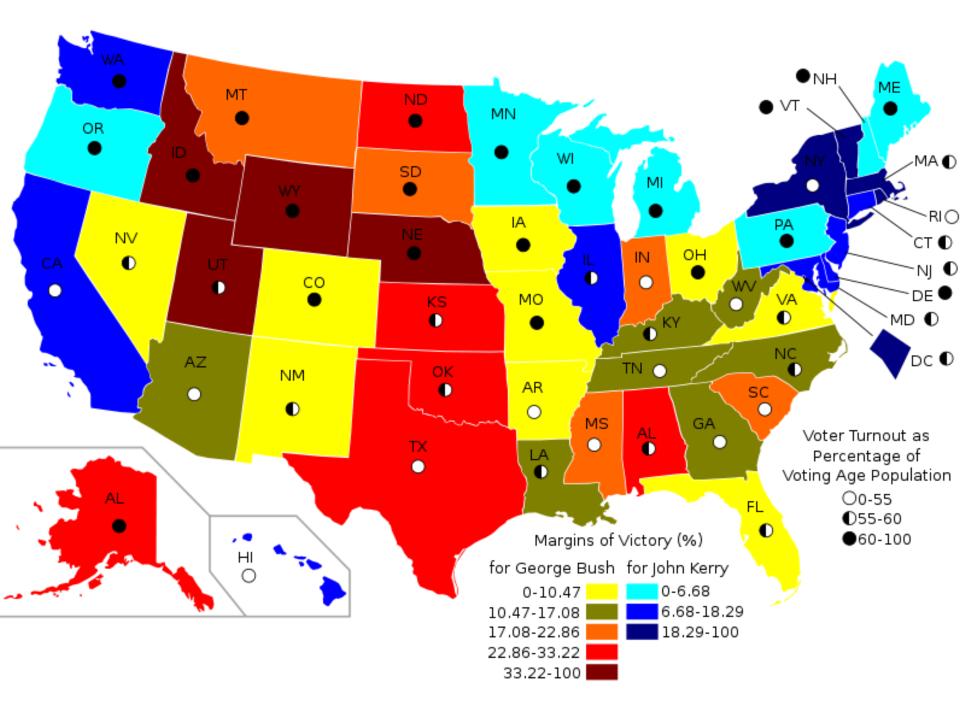


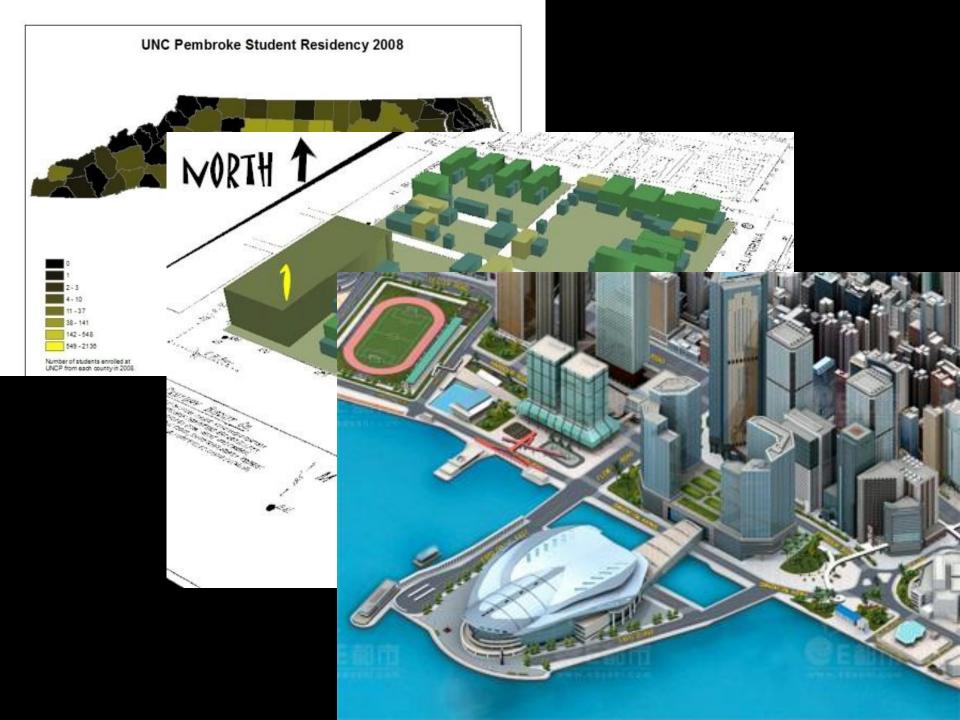




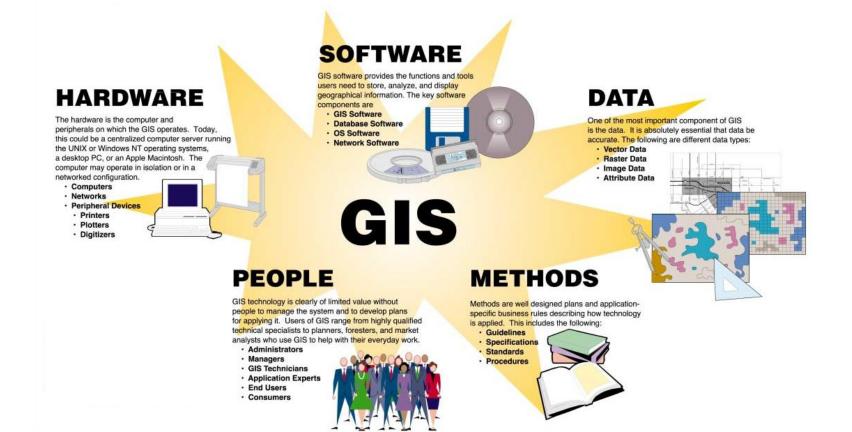








Geographic Information Systems



Geographic Information Science

Geospatial Technologies

- Geographic Information System
- Global Positioning System
- Remote Sensing
- Web Maps
- Mash-up
- Virtual Globe
- Digital Cities

Google Maps

- Your turn!
- Go to maps.google.com
- Type in your home address.
- Look through the roads, image, and terrain views.
- How close is the pin to your house?





- Go to http://bing.com/maps
- In the search box type in Charlotte, NC
- Zoom in to downtown and play around with different perspectives.
- Can you tell the difference between the 3D buildings and the images of buildings?



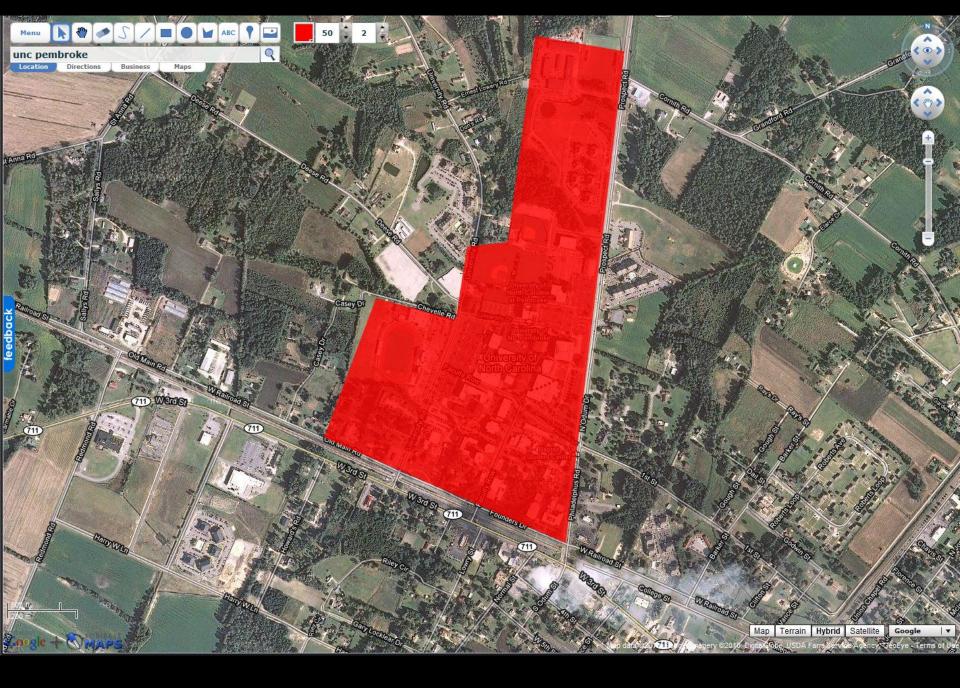
Geospatial Data

- Vector discreet information represented as a point, line or polygon
- Raster continuous information represented in pixels
- Attributes values connected to spatial features

Scribble Maps

- Go to scribblemaps.com
- Play with the tools and options
- Zoom into campus and use the draw
 shapes tool to create a polygon around UNCP.





GeoCommons

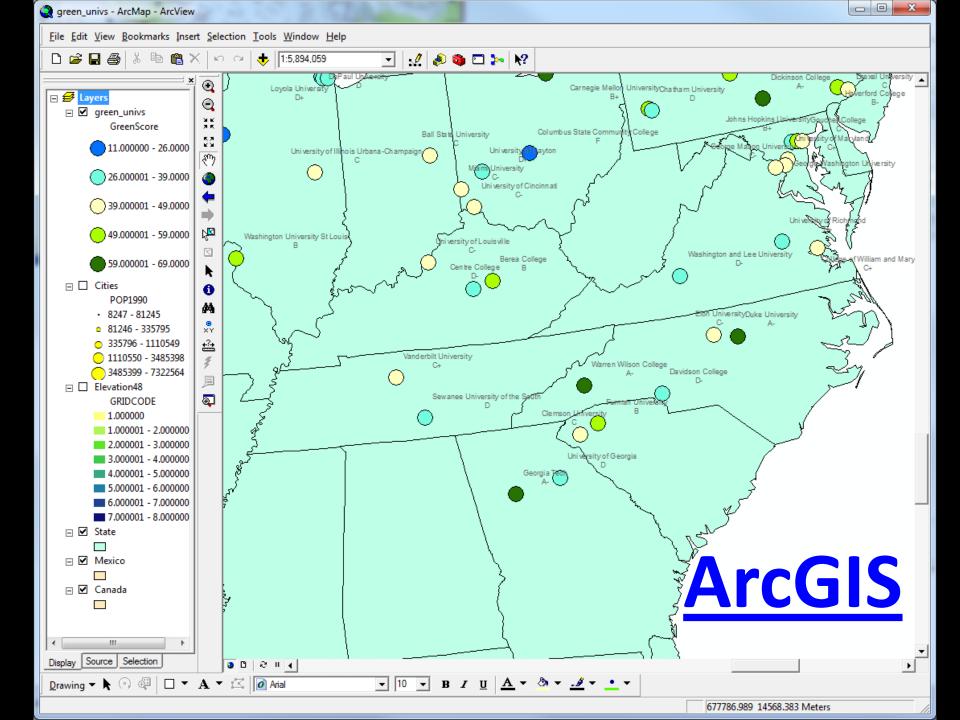
- Go to http://geocommons.com
- Click on Finder! and search for a data topic relevant to you, or browse through the categories
- Choose a dataset and click on _____.
- Note the different formats the file is available in and the presence/absence of metadata





- Visit http://www.nconemap.com/
- Click on 'Data Explorer'
- In the upper left, click on Find Data
- Type in a data topic of interest and see what is available from NC





Extensions

- Spatial Analyst raster analysis and manipulation
- Network Analyst great for roads, waterways...
- 3D Analyst ArcScene and ArcGlobe
- Geostatistical Analyst ...

ArcGIS Online

- Go to http://arcgis.com/home
- In the search box type a data theme that is relevant to you
- Take a minute to see how others have shared their information.
- All of these maps can be accessed on iOS, Android, & Windows Phone via the ArcGIS app

ArcGIS Online

ESRI Virtual Campus

- Free online training available to anyone affiliated with UNCP
- Beginner-Intermediate content
- Request course codes
 - <u>Courses we have free access to</u>

