## **Data Resources**

- PostGIS (www.postgis.net)
- National Geospatial Program
- Geographic Resources Analysis Support System (GRASS)
- OpenGeoportal
- ServirGlobal
- DIVA-GIS
- Natural Earth
- OpenStreetMap
- The National Geospatial Digital Archive
- National Historical Geographic Information System (NHGIS)
- Geography and American Community Survey (US Census)
- Center of Excellence for Geospatial Information Science (CEGIS)

Open source platforms like <u>OpenStreetMap</u> allow us to zoom into a level of detail, revealing structures in the landscape, and add attributes to our analysis. There are Python packages like OSMnx that allow OpenStreetMap downloads into a Jupyter Notebook independent of a specific application or tool..

OSMnx is a Python package that lets you download spatial data from OpenStreetMap and model, project, visualize, and analyze real-world street networks. You can download and model walkable, drivable, or bikeable urban networks with a single line of Python code, and then easily analyze and visualize them. You can just as easily download and work with other infrastructure types, amenities/points of interest, building footprints, elevation data, street bearings/orientations, and speed/travel time.

Google Earth Engine, a variety of open-source GIS tools and a brief introduction to ArcGIS API for Python.