

## Resources for Continued GIS Work:

### **More advanced work with QGIS:**

QGIS Tutorials and Tips: <http://www.qgistutorials.com/en/>  
Documentation (v2.18.13): <https://docs.qgis.org/2.18/en/docs/index.html>

### **Critical Cartography**

Crampton, J. (2010). *Mapping: A Critical Introduction to Cartography and GIS*. Malden, MA: Wiley-Blackwell.

### **Map Design**

Brewer, C. (2005). *Designing Better Maps: A Guide for GIS Users*. Redlands, CA: ESRI Press.  
Krygier, J., & Wood, D. (2016). *Making Maps: A Visual Guide to Map Design for GIS* (2<sup>nd</sup> Ed). New York, NY: Guilford Publications.

### **Spatial Statistics**

Isaaks, E. & Srivstava, R. (1989). *An Introduction to Applied Geostatistics*. New York, NY: Oxford University Press.

### **Web Resources**

ColorBrewer: <http://colorbrewer2.org/#> (Produced by Cynthia Brewer/UPenn)  
The GIS Stack Exchange: <https://gis.stackexchange.com>

### **Other mapping applications (often with GIS-like capabilities):**

*This is a rapidly growing field, with many options available to you- you will likely find many different recommendations depending on who you ask, and geographers may first point you to these types of programs before using something like ArcGIS or QGIS. Below we are including software that we've found to be useful and that is free and/or open-source.*

Google MyMaps: Use your Google account to upload and map your own data, which can then be shared online. Also has an extensive API <https://www.google.com/mymaps/>

MapBox: A small company that offers free accounts; you can create maps, upload your own data, and create tile sets (basemaps) <https://www.mapbox.com/>

Leaflet.js: An open-source library of javascript with an active community, originally developed by MapBox. Requires ability to host a website, has APIs for interfacing with R Shiny <https://www.leafletjs.com/>

### **For collecting data:**

Fulcrum App: Fulcrum isn't free beyond a 30-day trial period. However, it is a very useful tool for collecting certain types of linguistic data (particularly data that would be used in linguistic landscape analysis, although there are now options for capturing and georeferencing audio and video data). Also allows for large-scale collaboration <http://www.fulcrumapp.com/>

**Other locations for data** (*\*not linguistic data; it is possible to pull data from WALS and [potentially] Glottolog*):

*Internationally:*

ArcOnline (download shapefiles from some providers)

NASA's EarthData: <https://earthdata.nasa.gov>

GeoFabrik: <https://www.geofabrik.de/data/shapefiles.html>

USGS's GloVis: <https://glovis.usgs.gov>

DIVA-GIS: <http://www.diva-gis.org/gdata>

Another collection of links: <http://freegisdata.rtwilson.com>

*You can also use the OpenStreetMaps plugin in QGIS to download data from OpenStreetMap and then clip the data to a particular area if you cannot find an already existing shapefile with the data you want/need; this will allow you to control what aspects of the map will appear in your own project. Tutorial here:*

[http://www.qgistutorials.com/en/docs/downloading\\_osm\\_data.html](http://www.qgistutorials.com/en/docs/downloading_osm_data.html)

*Within the U.S.:*

American Community Survey: <https://www.census.gov/programs-surveys/acs/>

Data: <https://tinyurl.com/y8q456dy>

American Fact Finder: <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

Census Bureau's TIGER: <https://www.census.gov/geo/maps-data/data/tiger-line.html>

We also strongly recommend checking to see if your state has a functional GIS website where you can get data. Some municipalities will also have geographic files (shapefiles) available with area and demographic data.