## **Digital Mapping Guide: When To Use What**

A rough guide to figuring out what tool you need for whatever type of map you want to make.

Needs	Tools	Notes	Examples
<ul> <li>Preserve underlying geometry</li> <li>Global and/or street-level viewing</li> <li>Accessible on web</li> <li>Zooming and panning support</li> <li>Maximum/granular base-level customizability</li> </ul>	Load basemap from Stamen, CartoDB, or OSM, load basemap tiles from Leaflet.js or mapbox.js, manipulate with javascript	Want customized base tiles? Make your own using <b>TileMill</b> or <b>MapBox</b> (need an account/subscription)	<u>Tor Map</u> <u>LAFD</u>
<ul> <li>All of the above PLUS:</li> <li>Don't want to mess with programming</li> <li>Working with super large datasets</li> <li>Fine with limited customization</li> <li>Prioritizing speed over detail and distinction</li> </ul>	Use CartoDB web interface or Mapbox for loading in data on top of existing tiles		Buzzfeed spy planes Note: for this example they are also using Juxtapose.js
<ul> <li>High level of support for viewing, projections, maps, vector/raster layers, adding data, analysis</li> <li>Don't mind slightly clunky software</li> <li>Good for easily working with shapefiles</li> <li>Interested in manipulating both the map and the</li> </ul>	<b>QGIS</b> desktop program	There's a command line version of QGIS as well	

underlying data			
<ul> <li>High level of customization/freedom with projections</li> <li>Okay with steep learning curve</li> <li>Javascript-savvy</li> <li>Work with SVG (mainly)</li> <li>No need for street-level or extensive zooming/panning</li> </ul>	Use <b>d3.js</b>		Chloropleth
<ul> <li>Create your own styles, tiles</li> <li>Want ability to export images of maps, work on design</li> <li>Easily layer data on top of maps</li> </ul>	If you want maximum control, open- source, and don't mind old software: Tilemill desktop	For more polished/powerful interface, use <b>Mapbox Studio Classic</b> (will need an account to use the things you create in web apps, but not for exporting images)	Note the tiles, these are custom made
Working with satellite/aerial imagery	USGS Earth Explorer for finding and accessing data using web interface (need to register to get the data)  Landsat on AWS for just accessing data easily  landsat-util for downloading and working	People often use photoshop or other tools for stitching images together	LandSat Bot  Glittering Blue

with the data	
on the	
command line	