Notes on Software for the Austin Gerrymandering Workshop February 1 & 2 Mapmaking Sessions

(Products listed in the order they appear in the schedule)

Please note that QGIS (#2, below) is the only required install to participate in the hands-on sessions. All the other tools can run in a browser, but browser compatibility varies, so if you want to try them out, or use them as an alternative, we recommend checking your browser versions and plug-ins.

1. For the GIS material she'll be covering, Anita Palmer recommends using the <u>latest version of</u> <u>Firefox</u>.

2. The hands-on breakout sessions will use <u>QGIS</u>, a free, open source, robust, cross-platform GIS that participants will need to have downloaded and installed on their own computers:

- There's a good installation how-to document at <u>https://arset.gsfc.nasa.gov/sites/default/files/disasters/SAR-17/Introduction%20to%20QGIS.pdf</u>
- One extra note for Mac users: be sure to read and follow the instructions on the KyngChaos QGIS download page as well as the ones in the "Read Me" document.
- QGIS provides an extensive array of tools, but does not include specific redistricting functionality.

3. Azavea, the creators of the <u>DistrictBuilder</u> web-based, open source software for collaborative redistricting, also recommend the <u>latest version of Firefox</u> running on a Mac as the best option, but the current Firefox running on Windows should work as well.

4. <u>Dave's Redistricting App</u> (DRA) is a free, easy-to-use web application first created in 2011 that uses the Microsoft Silverlight plugin, which is no longer supported by some browsers. As such:

- On Windows, the browsers to use are Internet Explorer, and <u>Firefox ESR</u> (not Firefox 52 or above).
- On MacOS, best results are with Safari or <u>Firefox ESR</u>, and on El Capitan or earlier versions of the operating system. Folks with Sierra or later may experience problems.
- <u>Launching the app</u> will request the plugin download if you don't already have it.

5. The <u>Python</u> presentation, and subsequent breakout session(s), will be using the Python console that comes included with a standard QGIS installation (see #2). Mary Barker will be providing some of <u>her own Python libraries</u> for working with shapefiles.

6. <u>Maptitude for Redistricting</u> is a professional-grade redistricting application, which is available in both a Windows desktop product, and an online product (called <u>Maptitude Online Redistricting</u>), both of which will be presented.

- The break-out sessions for this software will be held in a computer lab, so participants will not be expected to use the applications on their own personal devices.
- For those who are interested, <u>Caliper</u> (the company that makes Maptitude) does recommend <u>Firefox Quantum</u> as a browser for their online product.