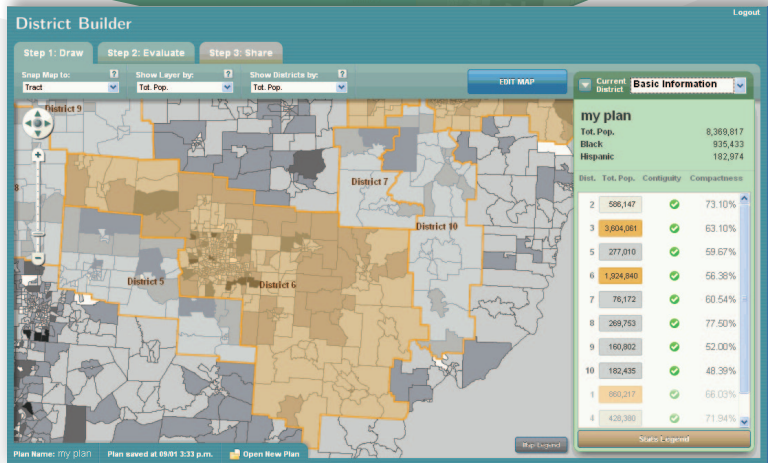# District Builder
Open Source Redistricting Web Application for Public Participation

The drawing of electoral districts is among the least transparent processes in democratic governance. All too often, redistricting authorities maintain power by obstructing public participation. The resulting districts embody the goals of politicians to the detriment of the representational interests of communities and the public at large.

District Builder is an open source software application designed to give the public transparent, accessible and easy-to-use mapping tools to draw the boundaries of their communities or to generate redistricting plans for their state and localities.

Why Open Source, Web-based Software?

Cost and Extensibility

▪ **Anyone can use the software**

Currently anyone interested in redrawing district boundaries must use costly specialized software to sift through tremendous amount of data in order to draw districts that satisfy the complex legal requirements of redistricting.

▪ **Low installation and hosting cost**

The software is implemented using open source software components, meaning there is no license fee to implement the software. It has been designed to run on the Amazon cloud server infrastructure. Amazon charges only for the amount of server time used, which makes the software extensible for small to large projects.

▪ **Easily configurable settings**

Each instance of the software can be configured to meet each use case, such as developing a unique set of redistricting criteria.

Accessibility

▪ **Open, Transparent Programming Code**

The code behind the software is open and available for inspection and modification by anyone. This ensures that no one has masked a hidden agenda by subtly manipulating the code.

▪ **Easy access through a web browser**

An easy-to-use web interface allows any computer with a supported browser to access the and is compatible with industry standard browsers including Firefox, Internet Explorer, and Chrome.

▪ **Simple access to complex data**

Public users of the software do not have to manage GIS file formats or do complex spatial analysis. The software stores and analyzes the data behind the scenes, allowing the user to focus on creating balanced districts.

▪ **Familiar map editing and viewing tools**

The tools were designed to enable someone familiar with popular web-based mapping software, such as Google Maps or Bing, to begin drawing their districts immediately.
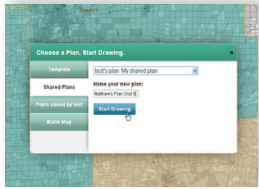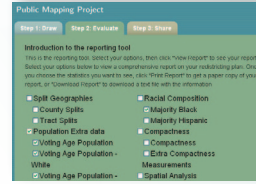
Application Features

Map Editing Tools
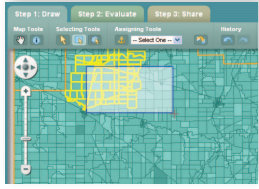
Select various types of geographies (counties, tracts, blocks, etc.) and assign to districts. As districts are edited, users can view real-time statistics for demographics, population count, and geometry.

Reporting Tools

Generate plan summary reports using the BARD statistical reporting application.

Save and Share Plans

Start the editing process by selecting from the system's template plans or from plans shared by other users. Save and share your edited plans with other users.

User Account Registration and Anonymous Login

To edit plans a user logs in to their registered account. To simply view plans, the user can enter the application as an anonymous user.

Participants

Principal Investigators

Dr. Michael McDonald, Associate Professor of Government and Politics at George Mason University and a non-resident Senior Fellow at the Brookings Institution.

Dr. Micah Altman, Senior Research Scientist at Harvard University and Non-Resident Senior fellow at the Brookings institution.

Software Development

azavea

Azavea, an award-winning Geographic Information Systems (GIS) software design and development firm

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ALFRED P. SLOAN FOUNDATION

The Joyce Foundation

CHRISTOPHER NEWPORT UNIVERSITY'S JUDY FORD WASON CENTER FOR PUBLIC POLICY

Interested in District Builder?

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