



## METHODOLOGY: FAIR VOTING 2012 & MONOPOLY POLITICS 2012 HOW FAIR VOTE CREATED PLANS AND ANALYZED PARTISANSHIP OF DISTRICTS

Following is a summary of how FairVote found and analyzed the partisan and racial data that is featured in our *Fair Voting 2012* and *Monopoly Politics 2012* reports.

## **Data Collection**

Gathering data for FairVote's analysis of existing U.S. House districts, the 2010 congressional districts and our proposed fair voting plans was a three-step process: we needed the official congressional map, political data and demographic data.

**The map**: With very few exceptions (for instance, Texas, which provides political and demographic data for its new districts), an accurate official map is vital to interpret the rest of the data. Many states provide a usable copy of the map, either in block equivalency format or shapefile format. A block equivalency file shows which census blocks (a small geographic area that contains up to around 100 people) fit in which congressional districts. Because the political and demographic data is often by census block, a block equivalency file is very useful for analysis.

If we do not have a block equivalency file, we can create one with official shapefiles. Block equivalency files created from shapefiles are approximations, but we estimate they are accurate to within 1%. If the state has provided neither block equivalency files nor shapefiles (some states provide their data in outdated or inaccessible formats like metes-and-bounds or images), we did one of three things: used Dave's Redistricting App (<a href="http://gardow.com/davebradlee/redistricting/">http://gardow.com/davebradlee/redistricting/</a>), used maps published on the Daily Kos website that are approximations of the official maps or manually created our own map from official redistricting documents. We estimate these methods to be accurate to within 1%.

**Partisan data**: Our partisanship scale measures how strongly a congressional district leans toward one political party compared to the rest of the country. We look at results in 2008 presidential election. To calculate partisanship, we find the difference between a congressional district's percentage of the vote for the Democratic and Republican presidential candidates in 2008 and the nationwide percentages for those candidates. For instance, if a congressional district has a 54% Republican partisanship, then John McCain likely won about 49.65% of the vote in the district (four percentage points ahead of his 45. 65% national average) and Barack

Obama likely won about 48.93% (four percentage points less than his 52.93% national average). The Democratic partisanship is simply the "mirror" percentage – a 54% Republican partisanship is the same as a 46% Democratic partisanship.

Based on partisanship percentages, we often can project the likelihood that a district would elect a representative of a particular party – irrespective of candidate-based factors, such as incumbency and campaign spending. We classify a district as "balanced" if neither party has a partisanship greater than 54%. We term districts with a 54-58% advantage as "leaning" for that party. We term districts with a partisanship greater than 58% for one party as "strong" for that party (and "lopsided" as far as the potential of being competitive).

Although we are generally quite confident in our percentages, this partisanship data for presidential election results will almost always be a close approximation rather than exact. Due to the value of protecting voter privacy, voter data is not collected on the same census block level used to draw districts. We have four primary sources for partisanship data: plan partisanship analysis conducted by other organizations (including governments and journalists), the Public Mapping Project, Dave's Redistricting App, and the Daily Kos.

The Public Mapping Project provides election data conveniently disaggregated to the block level, and has released a District Builder application that can be used to determine partisanship numbers for new congressional districts. Dave's Redistricting App is free online redistricting software used by online opinion outlets like Daily Kos and Redstate that accepts block equivalency files and displays political statistics for districts. In addition to using Dave's Redistricting App, Daily Kos also uses manually calculated partisanship statistics which we use when other sources of partisanship data are not available. Pre-redistricting partisanship is from election results compiled by Daily Kos.

**Demographic data**: To evaluate the racial dynamics of each congressional district, we use voting age population (VAP) by race/ethnicity. We determine this information using U.S. Census data. We assign demographic data to districts using an official or approximate (in the latter case, estimated to be accurate to within 1%) block equivalency file and PL 94-171 data from the census, which lists demographic information by census block.

In two cases – California and Texas – we used Citizen Voting Age Population numbers instead of Voting Age Population numbers, relying on official approximations of these numbers provided by the state governments. Pre-redistricting demographic data is determined using Dave's Redistricting App, and we estimate it to be accurate to within 1%.

To evaluate opportunities for racial minorities to elect candidates of their choice – which is a key standard of Section 2 of the Voting Right Act—a breakdown is also used to examine districts. Ethnic or racial VAP above the threshold means that voters of that group are in a

position to elect a candidate of choice. In a one-seat election, the threshold is 50% plus one. In a fair voting plan, the threshold decreases as the number of seats increases, opening doors for racial or ethnic minority voters to have a more significant impact on elections. In a three-seat district, that threshold is 25% plus one – which is also the fewest number of votes that only three candidates can obtain when every voter casts one vote.

Once we have determined the demographic percentages for each congressional district, we can further analyze each racial group's ability to elect a candidate of choice. A racial or ethnic group's voting strength is the percentage of that group's statewide VAP (or Citizen VAP in the case of California and Texas) living in a district with the ability to elect a candidate of choice. For instance, if a state has 20% Latino Voting Strength, this means that 20% of that state's Latino VAP lives in a district where Latinos meet the threshold to win a seat.

## Fair voting plans

In nearly every state, our fair voting plans were created by combining newly drawn U.S. House districts from maps governing this year's elections. We sought to make districts of three seats or five seats unless the number of seats in the state made that division impossible. We also, where possible, tried to make districts geographically compact.

Those realities greatly limited our flexibility for making districts to achieve our general objectives of: 1) backers of both major parties having enough votes to elect a candidate of choice; 2) districts being near competitive points where a shift of a few percentage points between the parties might well change the number of seats each party won; and 3) providing fair opportunities for racial minorities to elect candidates of choice.

Even so, we were in general very successful in meeting those objectives; for example, in our plans, every voter in every state with at least three House seats would live in a district where representatives from both major parties are likely to win seats.