The Threat to Representation for Children and Non-Citizens: An Analysis of the Potential Impact of ***Evenwel v. Abbott on Redistricting***

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A legal challenge could have altered how people are counted and how districts are drawn. On April 5, the Supreme Court ruled in the case of *Evenwel v. Abbott*, whose plaintiffs argued that legislative districts should be based upon the number of voters or potential voters in each district instead of all residents. In a unanimous verdict, the Court found that states could use all residents, as all had been doing for 50 years, and they did not need consider eligible voter numbers.

But, the opinion leaves the door open for future legal challenges if and when a state employs an alternative method for redistricting, such as counting eligible voters (citizens 18 years and older). When this case first went to trial an analysis was performed of the effects of such a change which are outlined below.

BACKGROUND

The Supreme Court agreed to hear a case that could alter the way virtually all legislative districts in the United States are drawn. Set for hearing on December 8, 2015, the case of Evenwel vs. Abbott questions the use of the population equality standard to draw state legislative districts in Texas. The plaintiffs argued for the use of registered voters or potential voters (defined as voting age citizens) instead of the total population in a given district.[1] On November 5, 2014, the three judge court upheld the population equality standard for use in Texas, but the Supreme Court set the case for argument instead of simply affirming the appellate court opinion. This means that they plan to review the use of the population equality standard to draw districts, and could rule that the appropriate standard counts voters or potential voters instead of total population. Presented here is an analysis of the impact the case could have on how districts are drawn and constituents are represented.

The population equality standard has been used by most jurisdictions since at least the 1970 redistricting round, so shifting to a standard of voters or potential voters would be a radical change. It would force substantial shifts in many redistricting plans because while the case concerns state legislatures, it could impact how districts from congressional down to city and county are drawn. The change would also have the effect of diminishing the representation of children (those under 18) and non-citizens.

This report assesses the impact of using an eligible voter equality standard on the current congressional and state legislative districts using the same materials that would have been available at the time redistricting was done. Social Explorer developed a companion interactive tool at www.socialexplorer.com/evenwel that presents district by district results for Congress and both the upper and lower houses of state legislatures nationwide.

The population equality standard is calculated by using the decennial census count for the United States. It requires either absolutely equal population (in the case of Congress) or population within a defined percentage of the average district size (for most state legislatures),

[1] A large number of Amicus briefs have been filed by a variety of parties. The briefs and other materials related to the case are available on Scotusblog (http://www.scotusblog.com/case-files/cases/evenwel-v-abbott/).

which is usually a total difference in population between the largest and smallest districts of less than 10 percent. The Census Bureau produces detailed population data, including race and Hispanic status, for the total population down to the census block (some 11.1 million areas in the United States).

Switching to a standard that uses a count of voters would be technically quite difficult because not only is it well known that voter lists and those who present themselves to vote in a given election vary greatly, but the handling of such lists is conducted by each local jurisdiction throughout the United States (most often counties). It is also well known that most voting lists contain a large number of so-called "dead wood" names of people who are deceased or no longer live in the district.

Another potential standard suggested by the plaintiffs is the use of a count of those potentially eligible to vote. Such a standard would closely mirror using the Citizens of Voting Age Population (CVAP), recorded by the Census Bureau for the American Community Survey. Though such individuals may or may not currently be registered or active voters, they would generally be eligible to vote.[2] Since the CVAP data are collected and compiled by the Census Bureau as part of the American Community Survey, using these data makes it possible to gauge the impact that Evenwel might have should the court rule for the plaintiffs. It should be noted that the American Community Survey is a survey of a sample of the population and not a full enumeration like the decennial census survey. Therefore further processing and estimates are required for this kind of analysis.[3]

A ruling for the plaintiffs could redefine population equality as an equal count of the number of potential voters (instead of all residents). The new method would increase the representation of potentially eligible voters and dilute the power of other groups, specifically children and non-citizens. For instance, two districts with 100,000 people each would need to be redrawn under the eligible voter standard of equality. If District A had 40,000 eligible voters and 60,000 children and non-citizens, while District B contained 80,000 eligible voters and 20,000 children and non-citizens, both would need to be redrawn. The new District A could end up containing 60,000 eligible voters and 60,000 children and non-citizens (120,000 people total) and the new District B could end up with 60,000 eligible voters and 20,000 children and non-citizens (80,000 people total). The two districts would be equal under the new standard (60,000 eligible voters each), but the number of people each elected official in new District A represented would be much larger than in new District B (1.5 versus 1), even though the number of voters would be the same. So the representation of non-citizens and children would have declined.

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[2] A small number of these individuals may be disenfranchised because they are incarcerated or convicted of a felony, or they may not meet residency requirements. However, the voting age citizen population is still a reasonable proxy for who would be eligible to vote.

[3] Not only is the American Community Survey subject to typical survey error, but it also does not report data below the block group level. Furthermore, it is reported for a five-year period (here 2006-2010) so it does not exactly match the census time frame. To get estimates of CVAP by block requires allocating the data to the block level. If the potential voters standard were adopted it is likely the citizenship data would need to be incorporated into the decennial census itself. Here we are using the sample data to estimate the CVAP by block so we can calculate the CVAP in each district.

To create a real world comparison, this analysis used the same data that would have been available for redistricting in 2011 (the 2010 Census and 2006-10 American Community Survey, from which the Census Bureau tabulates CVAP for various ethnic and racial communities down to the block group level). If the court should rule for the plaintiffs, the Census Bureau would be forced to adjust their methods to accommodate the ruling, which could include adding a question about citizenship to the decennial censuses. (This report does not take into account any other problems with such a change, but several of the briefs filed in Evenwel do discuss such issues, including whether adding such a question would jeopardize the response rate and accuracy of the census.)

This analysis reveals that the effects of ruling for the plaintiffs in Evenwel would be extensive. Not only would most statewide districting plans in the United States need to be redrawn, but more than half of all districts would be substantially changed based upon the change from the population to the potential voter criterion. The newly drawn districts would shift power to those districts with lower proportions of non-citizens and children under 18. The demographic shift in voting power would also substantially favor increasing the number of Republican-dominated districts.

RESULTS

Using typical standards for the division of legislative districts (that they should be within five percent of the new eligible voter-based average district size), the following results were found:

Nearly half of upper house legislative districts would not meet the current standards for equality with the new average district size (974 of 1951 districts, or 49.9 percent). All 50 states would need to redraw some districts. (State by state results are presented in Table 1.)

Over half of the lower house legislative districts would also need to be redrawn (2,739 of 4,792 districts, or 57.2 percent). Again, all states would need to redraw some districts. (State by state results are presented in Table 2.)

For Congress, where the standard is absolute population equality, more than two thirds of the districts are beyond two percent of the new average district size (69.7 percent). Only states with one congressional representative (Alaska, Delaware, Montana, North Dakota, South Dakota, Vermont, and Wyoming), as well as Hawaii (2 seats), Maine (2), New Hampshire (2) and WV (3) would be spared substantial redistricting. (State by state results are presented in Table 3.)

In addition, the equivalent of almost five congressional seats (4.89) would switch from Democratic Party to Republican Party control. This computation is done by summing up the district surpluses and deficits based upon the new eligible-voter based average district size and sorting them by party control. This finding does not imply which districts would have representatives from which party after redistricting using CVAP, but rather gives a general gauge of the impact that such a change would have on the party division in a given state.

Furthermore, the districts that have more citizens of voting age than the new eligible-voter based average district size would lose areas and population, and have that area and population added to other districts with fewer children and non-citizen adults. The districts with fewer or substantially fewer citizens of voting age than average would gain area and population from other districts. (See Tables 4, 5, and 6 for specific results for Congress and each state legislature.) The tables also present a series of demographic results for those districts that are above or below average by at least 10 percent. This should give a general indication of the impact that the change in population standard could have if the Court were to rule for the plaintiffs.

The other demographic factors examined include the following: race and Hispanic composition (including non-Hispanic white, black, Asian and Hispanic), the percent under 18 years of age, the percent 65 and older, the percent high school graduate, the percent college graduate, the percent in the labor force, the percent unemployed, median household income, the percent in poverty, and the percent non-citizens. It should be noted that the districts with fewer potential eligible voters than average generally have somewhat lower incomes, less-educated populations, a lower proportion of the population in the labor force, and a higher proportion of unemployed residents than the populations in all districts (especially compared with the those districts with higher numbers of those potentially eligible to vote.)

Drawing plans based on the count of those potentially eligible to vote would also create shifts in both the upper and lower state houses in terms of party control based upon the degree of under- or overrepresentation using CVAP. Specific analyses were conducted for California, Florida, New York, and Texas. In every instance, redrawing districts using the eligible voter standard would most likely result in a shift from Democratic to Republican elected officials. (This was calculated in the same manner as it was for the congressional plans.) The magnitudes of the potential shifts are shown in Table 7. In Texas and Florida, where the Republicans have a strong majority, the new redistricting standard would further strengthen Republican control. In California, it could prevent Democrats from attaining super majorities. In New York, while the Democrats have a super majority in the Assembly, the shift in power could mean that Democratic Party control of the almost evenly divided Senate would be much less likely.[4]

In short, if the Supreme Court determined a new redistricting standard under Evenwel that counted eligible voters instead of all residents, there would be a substantial power shift away from areas with school age children, Hispanics, Asians, and non-citizens, and towards areas with older residents, who were more likely citizens and non-Hispanic white. There would be a general shift from Democrat to Republican, and there might be even more impact in terms of the concerns of each party, as fewer Hispanics and parents with children would have a voice while the influence of the childless and non-Hispanic communities would grow.

[4] This analysis could be conducted for any state, where the party affiliations of representatives are known. More states will be added as time permits. Unlike congressional representatives, there is no easily available file of the party affiliations of **all** state legislators in the United States.

NOTE ON METHODOLOGY

The Census Bureau has a collection of all the plans for congressional and state legislative districts, including both upper and lower houses. Generally speaking, congressional districts are divided up within states based upon the total population in accordance with an equal population standard, as required by the Constitution and the 14th Amendment. This analysis used the special tabulation of the American Community Survey Citizens of Voting Age Population (CVAP) 2006-10 data that was performed by the Census Bureau and is available at the Census Redistricting Data Program website (www.census.gov/rdo).

For this analysis, those data were disaggregated and allocated to blocks. The Census Bureau requested redistricting plans that did not split blocks, so each state decided which district to put each of the blocks that were split. (The blocks that were split are available on the Census redistricting office site, but their inclusion would not affect the computations presented here in any substantial way.) The plans were documented using a so-called "block correspondence file," which linked to the block data including the disaggregated CVAP. Once linked, it was possible to compute an estimate of the CVAP population for each district. The difference between the average district size and the size of a given district was calculated using the potentially eligible voter count to calculate the new average district size, and the differences were tabulated and presented in Tables 1 to 3.

Using the Census Bureau's tabulation of the three types of districts in the 2009-13 American Community Survey data, average demographic composition was computed for each state. These results are presented in Tables 4 to 6 as an indication of the demographic effects of the potential change in the redistricting standard.

The elected officials' party affiliations were compiled from publicly available sources. The estimate of change in seats by party was computed based upon the difference for each district from the average district size given the potentially eligible-voter standard. The total difference for each party was summed and divided by the new average district size, and that figure is presented as the likely shift towards or away from a particular party based upon the changes implemented if the plaintiffs in Evenwel win. So the results do not indicate which specific districts would likely change party control, but rather they give a general gauge of what a plan dividing the districts by citizen of voting age population would be like compared to the current plan.

The Census Redistricting Data Program (www.census.gov/rdo) has information available regarding some issues with some of the plans, including unicameral legislatures, floteral districts, and the movement of prisoner and student populations. Such complications would not alter the results in a significant way and were omitted for the purposes of this report.

All computations and analyses were conducted by Andrew Beveridge.

AUTHOR

Andrew A. Beveridge, Ph.D., is Professor of Sociology at Queens College and the Graduate School and University Center of the City University of New York. Since 1993, Dr. Beveridge has been a consultant to the *New York Times*, which has published numerous news reports and maps based upon his analysis of census data. A volume he edited with David Halle of UCLA titled *New York and Los Angeles: The Uncertain Future* was published in 2013 by Oxford University Press. He received his Ph.D. and M.Phil. in sociology from Yale University and his B.A with honors in economics from Yale College. He has received grant and fellowship support from the American Council of Learned Societies, the National Science Foundation, the National Endowment for the Humanities, and many other agencies. He has also been involved with numerous consulting engagements, including many related to Civil Rights litigation. He was awarded the Public Understanding of Sociology Award by the American Sociological Association in 2007. He is the president and co-founder of *Social Explorer* (www.socialexplorer.com), an online research tool designed that allows users to visualize and explore current and historical demographic data. Funded by the National Science Foundation, a professional edition is now distributed by Oxford University Press, and a student edition by Pearson Publishing. The site has won several awards, including a 2014 Webby Honoree. The Social Explorer team also developed Census Explorer, available at www.census.gov/census explorer, which won a 2015 Webby Honoree.

The views expressed in this report are Beveridge's alone and do not necessarily represent the views of any organization with which he is associated.

Table 1. Analysis of State Upper House Legislative District Over and Under Representation Using Citizens of Voting Age Population (based upon current district lines from 2010 Census)

Estimated Under or Over Representation Based on Citizen of Voting Age Population from American Community Survey 2006-2010 Allocated to Blocks														
State	Over Represented 50% or more	Over Represented 25% to 50%	Over Represented 10% to 25%	Over Represented 5% to 10%	Over Represented 2% to 5%	Over Represented 2% to Under Represented 2%	Under Represented 2% to 5%	Under Represented 5% to 10%	Under Represented 10% to 25%	Under Represented 25% to 50%	Under Represented 50% or more	Total	Within 5% Under or Over Represented	More than 5% Under or Over Represented
AK	0	0	1	4	2	4	4	4	1	0	0	20	10	5
AL	0	0	0	2	6	20	7	0	0	0	0	35	33	2
AR	0	0	3	3	5	7	8	8	1	0	0	35	20	6
AZ	0	4	2	5	1	2	1	4	11	0	0	30	4	11
CA	0	0	10	2	5	4	4	4	11	0	0	40	13	12
CO	0	0	6	5	1	7	4	7	5	0	0	35	12	11
CT	1	0	3	4	3	3	6	10	7	0	0	37	12	8
DC	0	0	2	2	0	1	0	0	3	0	0	8	1	4
DE	0	0	1	5	1	6	4	2	2	0	0	21	11	6
FL	0	1	9	3	1	3	6	8	9	0	0	40	10	13
GA	0	1	6	7	6	7	11	15	3	0	0	56	24	14
HI	0	1	5	3	3	3	1	3	5	1	0	25	7	9
IA	0	0	1	9	4	16	15	4	1	0	0	50	35	10
ID	0	0	6	9	2	3	4	3	8	0	0	35	9	15
IL	1	3	6	5	2	8	11	6	17	1	0	60	21	15
IN	0	0	3	6	6	15	12	7	1	0	0	50	33	9
KS	0	1	6	5	2	9	5	8	2	2	0	40	16	12
KY	0	0	0	7	6	13	5	6	1	0	0	38	24	7
LA	1	0	2	2	1	8	11	14	1	0	0	40	20	5
MA	0	0	5	5	5	10	5	8	2	0	0	40	20	10
MD	1	1	7	2	3	8	6	9	11	0	0	48	17	11
ME	0	0	0	4	5	15	9	2	0	0	0	35	29	4
MI	0	0	0	2	5	9	8	14	0	0	0	38	22	2
MN	0	0	8	7	8	14	13	13	4	0	0	67	35	15
MO	0	0	0	4	6	12	9	3	0	0	0	34	27	4
MS	0	0	0	7	9	20	8	8	0	0	0	52	37	7
MT	0	0	3	8	4	11	16	8	0	0	0	50	31	11
NC	0	0	5	11	3	5	9	11	6	0	0	50	17	16
ND	0	0	4	4	5	18	8	6	2	0	0	47	31	8
NE	0	1	3	7	5	6	12	11	4	0	0	49	23	11
NH	0	0	0	3	6	6	6	3	0	0	0	24	18	3
NJ	0	0	6	6	6	5	4	9	4	0	0	40	15	12
NM	0	2	3	9	5	3	6	6	8	0	0	42	14	14
NV	0	2	2	3	0	3	2	4	5	0	0	21	5	7
NY	0	2	10	4	6	5	11	19	6	0	0	63	22	16
OH	1	0	0	1	3	9	9	10	1	0	0	34	21	2
OK	0	1	3	2	8	9	16	9	0	0	0	48	33	6
OR	0	0	4	4	2	5	6	6	3	0	0	30	13	8
PA	0	0	3	3	7	23	6	7	1	0	0	50	36	6
RI	0	5	3	0	2	5	6	9	8	0	0	38	13	8
SC	0	0	1	6	10	12	9	7	1	0	0	46	31	7
SD	0	0	5	4	2	10	8	1	5	0	0	35	20	9
TN	0	0	1	5	4	12	5	6	0	0	0	33	21	6
TX	0	1	5	5	1	4	5	4	6	0	0	31	10	11
UT	0	0	4	5	2	3	8	2	5	0	0	29	13	9
VA	0	2	4	5	2	3	7	14	3	0	0	40	12	11
VT	3	0	5	1	0	0	0	0	1	2	1	13	0	9
WA	0	1	4	9	8	6	6	12	3	0	0	49	20	14
WI	0	1	0	2	5	13	8	4	0	0	0	33	26	3
WV	0	0	1	1	5	2	5	3	0	0	0	17	12	2
WY	0	0	1	5	4	11	3	5	1	0	0	30	18	6
Total	8	30	172	232	203	416	358	346	179	6	1	1951	977	442

Analysis based upon Census 2010 and American Community Survey 2009-2013 special tabulation of CVAP allocated to blocks based upon population by author.

Table 2. Analysis of State Lower House Legislative District Over and Under Representation Using Citizens of Voting Age Population (based upon current district lines from 2010 Census)

Estimated Under or Over Representation Based on Citizen of Voting Age Population from American Community Survey 2006-2010 Allocated to Blocks													
State	Over Represented 50% or more	Over Represented 25% to 50%	Over Represented 10% to 25%	Over Represented 5% to 10%	Over Represented 2% to 5%	Over Represented 2% to Under Represented 2%	Under Represented 2% to 5%	Under Represented 5% to 10%	Under Represented 10% to 25%	Under Represented 25% to 50%	Under Represented 50% or more	Total	Within 5% Under or Over Represented	More than 5% Under or Over Represented
AK	0	0	3	5	6	10	5	9	2	0	0	40	21	8
AL	0	0	3	10	19	33	26	14	0	0	0	105	78	13
AR	0	1	9	10	14	20	17	22	7	0	0	100	51	20
AZ	0	4	2	5	1	2	1	4	11	0	0	30	4	11
CA	0	3	15	8	5	8	7	12	20	2	0	80	20	26
CO	0	3	7	12	6	9	3	10	15	0	0	65	18	22
CT	1	6	17	11	12	17	27	41	20	0	0	152	56	35
DE	0	0	5	7	4	9	5	4	7	0	0	41	18	12
FL	0	7	20	10	6	12	15	20	30	0	0	120	33	37
GA	1	4	22	19	18	25	25	40	26	0	0	180	68	46
HI	0	0	11	7	5	8	6	4	9	1	0	51	19	18
IA	0	0	7	12	13	23	30	13	2	0	0	100	66	19
ID	0	0	6	9	2	3	4	3	8	0	0	35	9	15
IL	1	8	11	9	7	20	11	23	28	1	0	119	38	29
IN	0	0	10	6	14	26	26	16	2	0	0	100	66	16
KS	0	3	21	13	12	16	16	30	12	0	2	125	44	37
KY	0	0	5	16	15	28	13	16	7	0	0	100	56	21
LA	1	2	4	11	14	30	14	22	8	0	0	106	58	18
MA	1	3	14	16	19	33	21	34	20	0	0	161	73	34
MD	8	17	1	2	2	0	3	2	7	16	10	68	5	28
ME	0	0	10	24	17	38	35	18	9	0	0	151	90	34
MI	1	0	5	12	21	20	19	26	7	0	0	111	60	18
MN	0	0	16	17	13	28	23	27	10	0	0	134	64	33
MO	0	0	7	22	28	43	33	24	6	0	0	163	104	29
MS	0	0	8	14	24	35	14	21	6	0	0	122	73	22
MT	0	0	12	13	11	20	21	16	7	0	0	100	52	25
NC	0	0	17	16	10	21	18	20	18	0	0	120	49	33
ND	0	0	4	4	5	18	8	6	2	0	0	47	31	8
NH	14	57	17	4	2	4	3	11	19	7	23	161	9	92
NJ	0	0	6	6	6	5	4	9	4	0	0	40	15	12
NM	0	4	12	4	5	11	6	9	19	0	0	70	22	20
NV	0	3	6	3	3	6	2	7	12	0	0	42	11	12
NY	1	11	32	4	10	13	7	19	52	1	0	150	30	48
OH	1	0	3	10	16	27	19	18	6	0	0	100	62	14
OK	0	1	7	9	7	30	30	12	5	0	0	101	67	17
OR	0	1	9	6	4	13	7	15	5	0	0	60	24	16
PA	0	0	15	25	21	62	39	32	9	0	0	203	122	40
RI	0	7	7	1	3	13	11	20	12	1	0	75	27	15
SC	0	0	12	13	17	34	16	23	9	0	0	124	67	25
SD	2	2	1	3	2	3	2	13	9	0	0	37	7	8
TN	0	0	7	13	11	27	14	25	2	0	0	99	52	20
TX	0	11	25	13	9	12	15	20	45	0	0	150	36	49
UT	0	3	14	6	10	15	3	9	14	0	1	75	28	23
VA	0	4	14	8	8	15	11	24	16	0	0	100	34	26
VT	0	50	8	0	0	0	0	0	3	34	9	104	0	58
WA	0	1	4	9	8	6	6	12	3	0	0	49	20	14
WI	0	2	2	9	16	35	16	15	4	0	0	99	67	13
WV	0	46	1	0	0	0	0	0	1	10	9	67	0	47
WY	0	0	6	10	8	12	9	8	7	0	0	60	29	16
Total	32	264	480	476	489	898	666	798	562	73	54	4792	2053	1252

Analysis based upon Census 2010 and American Community Survey 2009-2013 special tabulation of CVAP allocated to blocks based upon population by author.

Table 3. Analysis of Congressional District Over and Under Representation Using Citizen of Voting Age Population (based upon current district lines from 2010 Census)

Estimated Under or Over Representation Based on Citizen of Voting Age Population from American Community Survey 2006-2010 Allocated to Blocks

State	Over Represented 25% to 50%	Over Represented 10% to 25%	Over Represented 5% to 10%	Over Represented 2% to 5%	Over Represented 2% to Under Represented 2%	Under Represented 2% to 5%	Under Represented 5% to 10%	Under Represented 10% to 25%	Total	Within 2% Under or Over Represented	Over Represented 2% or More	Under Represented 2% or More	Number and Percent of Districts Substantially Too Large or Small		Estimated Sum of Total Seat Gain or Loss for GOP	Current Number of Democrat Reps	Current Number of GOP Reps
AK	0	0	0	0	1	0	0	0	1	1	0	0	0	0.0%	0.00	0	1
AL	0	0	0	1	5	1	0	0	7	5	1	1	2	28.6%	-0.03	1	6
AR	0	0	1	0	1	2	0	0	4	1	1	2	3	75.0%	0.00	0	4
AZ	1	1	0	0	0	4	1	2	9	0	2	7	9	100.0%	0.38	4	5
CA	4	6	5	3	9	5	11	10	53	9	18	26	44	83.0%	0.58	39	14
CO	0	0	1	1	2	2	1	0	7	2	2	3	5	71.4%	-0.06	3	4
CT	0	0	1	0	2	1	1	0	5	2	1	2	3	60.0%	0.00	5	0
DE	0	0	0	0	1	0	0	0	1	1	0	0	0	0.0%	0.00	1	0
FL	2	3	2	2	3	6	3	6	27	3	9	15	24	88.9%	0.42	10	17
GA	0	1	3	1	2	1	6	0	14	2	5	7	12	85.7%	-0.03	4	10
HI	0	0	0	0	2	0	0	0	2	2	0	0	0	0.0%	0.00	2	0
IA	0	0	0	1	3	0	0	0	4	3	1	0	1	25.0%	-0.01	1	3
ID	0	0	0	0	2	0	0	0	2	2	0	0	0	0.0%	0.00	0	2
IL	1	2	3	0	3	1	4	4	18	3	6	9	15	83.3%	0.36	10	8
IN	0	0	1	1	4	3	0	0	9	4	2	3	5	55.6%	0.05	2	7
KS	0	0	1	0	2	0	1	0	4	2	1	1	2	50.0%	0.00	0	4
KY	0	0	0	1	3	2	0	0	6	3	1	2	3	50.0%	0.02	1	5
LA	0	0	1	0	4	1	0	0	6	4	1	1	2	33.3%	0.05	1	5
MA	0	0	1	2	3	2	1	0	9	3	3	3	6	66.7%	0.00	9	0
MD	0	0	2	1	2	1	2	0	8	2	3	3	6	75.0%	0.08	7	1
ME	0	0	0	0	2	0	0	0	2	2	0	0	0	0.0%	0.00	1	1
MI	0	0	0	4	5	4	1	0	14	5	4	5	9	64.3%	-0.01	5	9
MN	0	0	0	4	1	2	1	0	8	1	4	3	7	87.5%	-0.10	5	3
MO	0	0	0	0	7	1	0	0	8	7	0	1	1	12.5%	0.01	2	6
MS	0	0	0	0	4	0	0	0	4	4	0	0	0	0.0%	0.00	1	3
MT	0	0	0	0	1	0	0	0	1	1	0	0	0	0.0%	0.00	0	1
NC	0	1	3	1	3	1	4	0	13	3	5	5	10	76.9%	0.14	3	10
ND	0	0	0	0	1	0	0	0	1	1	0	0	0	0.0%	0.00	0	1
NE	0	0	0	1	1	1	0	0	3	1	1	1	2	66.7%	0.05	1	2
NH	0	0	0	0	2	0	0	0	2	2	0	0	0	0.0%	0.00	1	1
NJ	0	1	2	2	1	2	3	1	12	1	5	6	11	91.7%	0.34	6	6
NM	0	0	0	1	2	0	0	0	3	2	1	0	1	33.3%	-0.02	2	1
NV	0	1	0	1	0	0	2	0	4	0	2	2	4	100.0%	0.11	1	3
NY	1	5	3	2	4	2	2	8	27	4	11	12	23	85.2%	0.81	18	9
OH	0	0	1	2	10	2	1	0	16	10	3	3	6	37.5%	0.02	4	12
OK	0	0	0	2	2	1	0	0	5	2	2	1	3	60.0%	0.00	0	5
OR	0	0	1	1	1	1	1	0	5	1	2	2	4	80.0%	0.02	4	1
PA	0	0	3	2	5	6	2	0	18	5	5	8	13	72.2%	0.08	5	13
RI	0	0	0	0	2	0	0	0	2	2	0	0	0	0.0%	0.00	2	0
SC	0	0	0	2	2	3	0	0	7	2	2	3	5	71.4%	-0.03	1	6
SD	0	0	0	0	1	0	0	0	1	1	0	0	0	0.0%	0.00	0	1
TN	0	0	0	4	2	2	1	0	9	2	4	3	7	77.8%	0.07	2	7
TX	2	4	6	2	6	4	1	11	36	6	14	16	30	83.3%	1.45	11	25
UT	0	0	0	1	2	1	0	0	4	2	1	1	2	50.0%	0.00	0	4
VA	0	3	0	0	2	2	3	1	11	2	3	6	9	81.8%	0.20	3	8
VT	0	0	0	0	1	0	0	0	1	1	0	0	0	0.0%	0.00	1	0
WA	0	1	1	2	1	2	2	1	10	1	4	5	9	90.0%	-0.14	6	4
WI	0	0	1	1	3	3	0	0	8	3	2	3	5	62.5%	0.05	3	5
WV	0	0	0	0	3	0	0	0	3	3	0	0	0	0.0%	0.00	0	3
WY	0	0	0	0	1	0	0	0	1	1	0	0	0	0.0%	0.00	0	1
Total	11	29	43	49	132	72	55	44	435	132	132	171	303	69.7%	4.86	188	247

Analysis based upon Census 2010 and American Community Survey 2009-2013 special tabulation of CVAP allocated to blocks based upon population by author.

Table 4. Demographic Composition of Congressional Districts for All Districts and Under and Over Populated Districts Using Citizens of Voting Age Population

Status of Districts	Number of Districts	% 0-17 Years Old	% 65 Years or Older	% Non-Hispanic White	% Non-Hispanic Black	% Non-Hispanic Asian	% Hispanic
All Districts	436	23.70	13.44	63.26	12.20	4.83	16.65
Over Represented 10% or More	40	26.75	9.96	25.02	13.38	7.35	51.99
Under Reprsented 10% or More	44	21.48	15.73	71.47	6.99	4.60	14.18
Status of Districts	**% High School Grad or more (25 years or older)**	**% College Grad or more (25 years or older)**	**% In labor force (16 years or older)**	**% Unemployed (16 years or older)**	**Median household Income**	**% In poverty**	**% Non-Citizen**
All Districts	85.82	28.59	64.26	6.21	$55,106	15.39	7.11
Over Represented 10% or More	72.89	22.60	64.82	7.66	$49,591	21.71	19.91
Under Reprsented 10% or More	87.89	29.74	61.79	5.53	$54,917	14.50	5.15

Source: Average of district based upon 2009-2013 American Community Survey (computed by author)

Table 5. Demographic Composition of State Upper House Legislative Districts for All Districts and Under and Over Populated Districts Using Citizens of Voting Age Population (CVAP)

Status of Districts	Number of Districts	% 0-17 Years Old	% 65 Years or Older	% Non-Hispanic White	% Non-Hispanic Black	% Non-Hispanic Asian	% Hispanic
All Districts	1,952	23.58	13.71	70.46	11.14	3.55	10.78
Over Represented 10% or More	211	27.06	10.00	43.47	14.13	6.13	30.05
Under Reprsented 10% or More	186	19.97	16.12	76.66	5.78	4.42	9.37
Status of Districts	**% High School Grad or more (25 years or older)**	**% College Grad or more (25 years or older)**	**% In labor force (16 years or older)**	**% Unemployed (16 years or older)**	**Median household Income**	**% In poverty**	**% Non-Citizen**
All Districts	87.38	28.19	64.95	5.71	$54,573	14.95	4.96
Over Represented 10% or More	80.45	26.16	67.34	7.14	$52,546	19.30	13.45
Under Reprsented 10% or More	90.17	33.42	63.20	5.28	$56,449	13.83	3.92

Source: Average of District Based Upon 2009-2013 American Community Survey (computed by author)

Table 6. Demographic Composition of State Lower House Legislative Districts for All Districts and Under and Over Populated Districts Using Citizen of Voting Age Population (CVAP)							
Status of Districts	Number of Districts	% 0-17 Years Old	% 65 Years or Older	% Non-Hispanic White	% Non-Hispanic Black	% Non-Hispanic Asian	% Hispanic
All Districts	4,792	23.34	13.89	71.61	11.46	3.30	10.07
Over Represented 10% or More	776	25.56	11.59	57.85	11.39	4.77	21.85
Under Reprsented 10% or More	689	20.28	15.73	77.66	7.96	3.29	7.96
Status of Districts	% High School Grad or more (25 years or older)	% College Grad or more (25 years or older)	% In labor force (16 years or older)	% Unemployed (16 years or older)	Median household Income	% In poverty	% Non-Citizen
All Districts	87.18	28.10	64.61	5.78	$54,793	15.04	4.74
Over Represented 10% or More	82.97	27.17	66.35	6.37	$54,655	17.06	10.10
Under Reprsented 10% or More	89.28	32.05	62.96	5.26	$55,277	14.44	3.59
Source: Average of district based upon 2009-2013 American Community Survey (computed by author)							

Table 7. Estimated Shift in Party Control of Seats Several State Legislative Houses Using Citizen of Voting Age Population (CVAP) to Divide Districts				
California	**Total**	**Democrats**	**Republicans**	**Shift to GOP**
Assembly	80	52	28	1.75
Senate	40	27	13	0.06
Florida				
Legislature	120	39	81	2.76
Senate	40	14	26	0.94
New York				
Assembly	150	103	42	4.99
Senate	63	30	31	1.75
Texas				
Legislature	150	52	98	6.99
Senate	31	11	20	1.06
New York State Senate and Assembly Have Vacant Seats and a Few are Not Major Party				
Analysis based upon Census 2010 and American Community Survey 2009-2013 special tabulation of CVAP allocated to blocks based upon population by author. Party affiliation from legislative websites.				