

# House Apportionment 2012: States Gaining, Losing, and on the Margin

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## Summary

On December 21, 2010, the Commerce Department released 2010 Census population figures and the resulting reapportionment of seats in the House of Representatives. The apportionment population of the 50 states in 2010 was 309,183,463, a figure 9.9% greater than in 2000. Just as in the 108<sup>th</sup> Congress, 12 seats shifted among 18 states in the 113<sup>th</sup> Congress as a result of the reapportionment. The next census data release was February 2011, when the Census Bureau provided states the small-area data necessary to re-draw congressional and state legislative districts in time for the 2012 elections.

This report examines the distribution of seats based on the most recent estimates of the population of the states (as of July 1, 2012). It explores the question of, what, if any, would be the impact on the distribution of seats in the U.S. House of Representatives if the apportionment were conducted today, using the most recent official U.S. Census population figures available.

The report will be updated as is deemed necessary.

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### Background

The Census Bureau's release of the first figures from the 2010 Census on December 21, 2010, shifted 12 seats among 18 states for the 113<sup>th</sup> Congress (beginning in January 2013). Illinois, Iowa, Louisiana, Massachusetts, Michigan, Missouri, New Jersey, and Pennsylvania each lost one seat; New York and Ohio each lost two seats. Arizona, Georgia, Nevada, South Carolina, Utah, and Washington each gained one seat; Florida gained two seats, and Texas gained four seats.<sup>1</sup>

The reapportionment of House seats in 2010 was based on an apportionment population that is different from the actual resident population of each state. For apportionment purposes since 1970 (with the exception of 1980), the Census Bureau has added to each state's resident population the foreign-based, overseas military and federal employees and their dependents, who are from the state but not residing therein at the time of the census. In 2010, these additional persons increased the census count for the 50 states by 1,042,523, a little less than twice the number in 2000. If the foreign-based military and federal employees had not been included in the counts, there would have been no change in the 2010 apportionment of seats, although the order of seat assignment would have changed.

## Tables

**Table 1** sets out the apportionment population as of April 1, 2010, and July 1, 2012; it also provides the resulting seat assignments for each of the 50 states. The table also illustrates the population change from 2010 to 2012 (shown by total and percent), the current House seat allocation, and what it would be at the beginning of the 114<sup>th</sup> Congress if the 2012 population estimates were used to apportion the House, and the average sized congressional district for each state in the 114<sup>th</sup> Congress. For the 114<sup>th</sup> Congress, the national average size congressional district would be 720,188, and districts would range in size from 525,146 (for Rhode Island's two congressional districts) to a maximum of 1,005,141 (for Montana's single district) if the 2012 estimated state populations were used in the apportionment. Bolded state abbreviations indicate the states losing or gaining a seat, if the 2012 population estimates were used rather than the 2010 apportionment population figures. Change values, either "total" counts or "percentage" change, with a minus sign indicate that the population within the state declined between 2010 and 2012.

<sup>&</sup>lt;sup>1</sup> See **Table 1** for each state's data. These allocations are based on a 435-seat House of Representatives. The 435-seat House was established in 1929 by the Permanent Apportionment Act (46 Stat. 21, 26-27), which ended the 19<sup>th</sup> century practice of increasing the House size after every census but one. There were no permanent increases in the House size for most of the 20<sup>th</sup> century.

State	2010 Apportionment Populationª	2010 Overseas/ Federal⁵	2012 State Population Estimates <sup>c</sup>	Change from 2010 Total	Percentage Change from 2010	Seats in 113 <sup>th</sup> Congress	Seats in 114 <sup>th</sup> Congress	Seat Change from 2010	2012 Average CD Population <sup>d</sup>
AL	4,802,982	23,246	4,822,023	19,041	0.396%	7	7		688,860
AK	721,523	11,292	731,449	9,926	1.376%	I	I		731,449
AZ	6,412,700	20,683	6,553,255	140,555	2.192%	9	9		728,139
AR	2,926,229	10,311	2,949,131	22,902	0.783%	4	4		728,980
CA	37,341,989	88,033	38,041,430	699,441	1.873%	53	53		717,763
со	5,044,930	15,734	5,187,582	142,652	2.828%	7	7		741,083
СТ	3,581,628	7,531	3,590,347	8,719	0.243%	5	5		718,069
DE	900,877	2,943	917,092	16,215	1.800%	L	I		917,092
FL	18,900,773	99,463	19,317,568	416,795	2.205%	27	27		715,465
GA	9,727,566	39,913	9,919,945	192,379	1.978%	14	14		708,568
н	1,366,862	6,561	1,392,313	25,45 I	1.862%	2	2		696,157
ID	1,573,499	5,917	1,595,728	22,229	1.413%	2	2		797,864
IL	12,864,380	33,748	12,875,255	10,875	0.085%	18	18		715,292
IN	6,501,582	17,780	6,537,334	35,752	0.550%	9	9		726,370
IA	3,053,787	7,432	3,074,186	20,399	0.668%	4	4		768,547
KS	2,863,813	10,695	2,885,905	22,092	0.771%	4	4		721,476
KY	4,350,606	11,239	4,380,415	29,809	0.685%	6	6		730,069
LA	4,553,962	20,590	4,601,893	47,931	1.053%	6	6		766,982
ME	1,333,074	4,713	1,329,192	-3,882	-0.291%	2	2		664,596
MD	5,789,929	16,377	5,884,563	94,634	1.634%	8	8		735,570
MA	6,559,644	12,015	6,646,144	86,500	1.319%	9	9		738,460
MI	9,911,626	27,986	9,883,360	-28,266	-0.285%	14	14		705,954

Table 1.Apportionment of Seats in the House of Representatives Based on the 2012 Census State Population Estimates (July 1, 2012)

State	2010 Apportionment Populationª	2010 Overseas/ Federal <sup>b</sup>	2012 State Population Estimates <sup>c</sup>	Change from 2010 Total	Percentage Change from 2010	Seats in 113 <sup>th</sup> Congress	Seats in 114 <sup>th</sup> Congress	Seat Change from 2010	2012 Averag CD Population <sup>d</sup>
MN	5,314,879	10,954	5,379,139	64,260	1.209%	8	7	-1	768,448
MS	2,978,240	10,943	2,984,926	6,686	0.224%	4	4		746,232
MO	6,011,478	22,551	6,021,988	10,510	0.175%	8	8		752,749
MT	994,416	5,001	1,005,141	10,725	I.079%	I	I		1,005,141
NB	1,831,825	5,484	1,855,525	23,700	I.294%	3	3		618,508
NV	2,709,432	8,881	2,758,931	49,499	1.827%	4	4		689,733
NH	1,321,445	4,975	1,320,718	-727	-0.055%	2	2		660,359
NJ	8,807,501	15,607	8,864,590	57,089	0.648%	12	12		738,716
NM	2,067,273	8,094	2,085,538	18,265	0.884%	3	3		695,179
NY	19,421,055	42,953	19,570,261	149,206	0.768%	27	27		724,824
NC	9,565,781	30,298	9,752,073	186,292	1.947%	13	14	I	696,577
ND	675,905	3,314	699,628	23,723	3.510%	I	I		699,628
ОН	11,568,495	31,991	11,544,225	-24,270	-0.210%	16	16		721,514
ОК	3,764,882	13,531	3,814,820	49,938	1.326%	5	5		762,964
OR	3,848,606	17,532	3,899,353	50,747	1.319%	5	5		779,871
PA	12,734,905	32,526	12,763,536	28,63 I	0.225%	18	18		709,085
RI	1,055,247	2,680	1,050,292	-4,955	-0.53%	2	2		525,146
SC	4,645,975	20,611	4,723,723	77,748	1.673%	7	7		674,818
SD	819,761	5,581	833,354	13,593	1.658%	I	I		833,354
ΤN	6,375,431	29,326	6,456,243	80,812	1.268%	9	9		717,360
ТΧ	25,268,418	122,857	26,059,203	790,785	3.130%	36	36		723,867
UT	2,770,765	6,880	2,855,287	84,522	3.050%	4	4		713,822
VT	630,337	4,596	626,011	-4,326	-0.686%	I	I		626,011
VA	8,037,736	36,712	8,185,867	148,131	1.843%	П	11		744,170
WA	6,753,369	28,829	6,897,012	143,643	2.127%	10	10		689,701

State	2010 Apportionment Populationª	2010 Overseas/ Federal <sup>b</sup>	2012 State Population Estimates <sup>c</sup>	Change from 2010 Total	Percentage Change from 2010	Seats in 113 <sup>th</sup> Congress	Seats in 114 <sup>th</sup> Congress	Seat Change from 2010	2012 Average CD Population <sup>d</sup>
WV	1,859,815	6,821	1,855,413	-4,402	-0.237%	3	3		618,471
WI	5,698,230	11,244	5,726,398	28,168	0.494%	8	8		715,800
WY	568,300	4,674	576,412	8,112	1.427%	I	I		576,412
Total	309,183,463	1,039,648	313,281,717	4,098,254	1.326%	435	435	Nat. mean:	720,188
								Minimum:	525,146
House si	ize: Constitution Minir	num <sup>e</sup> :		50				Median:	719,129
House s	ize: Constitution Maxi	mum <sup>e</sup> :		10,443				Maximum:	1,005,141

#### Notes:

a. See, "A New Portrait of America, First 2010 Census Results," table 1 at http://2010.census.gov/news/press-kits/apportionment/apport.html.

b. See, "A New Portrait of America, First 2010 Census Results," table 3 at http://2010.census.gov/news/press-kits/apportionment/apport.html.

- c. Table 1. Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2012 (NST-EST2012-01), U.S. Census Bureau, Population Division, December 2012. These are estimates of the resident populations for the states and do **not** include the overseas military and federal employees and their families.
- d. The average size congressional district for each state is calculated on the resident population for each state, which is the apportionment population minus the overseas military (and other federal) employees.
- e. Article I, Section 2 of the Constitution establishes the minimum size of the House (one Representative per state), and a maximum (one for every 30,000 persons).

## **Priority Lists and Seat Assignments**

The reapportionment process for the House relies on rounding principles, but the actual procedure involves computing a "priority list" of seat assignments for the states. The Constitution allocates the first 50 seats because each state must have at least one Representative. A priority list assigns the remaining 385 seats for a total of 435. **Table 2** displays the end of the "priority list" that would be used to allocate Representatives based on the 2012 Census estimates of the state populations as of July 1. The law only provides for 435 seats in the House, but the table illustrates not only the last seats assigned by the apportionment formula (ending at 435), but the states that would just miss getting additional representation.<sup>2</sup>

Seat	Last Seat Allocated	State	2012 State Population Estimates	Priority Valueª	Pop. Needed to Gain or Lose Seat
420	51	California	38,041,430	753,332.6	-2,235,511
421	16	Ohio	11,544,225	745,176.5	-559,470
422	7	Alabama	4,822,023	744,054.3	-226,770
423	2	Rhode Island	1,050,292	742,668.6	-47,526
424	52	California	38,041,430	738,703.4	-1,526,414
425	27	New York	19,570,261	738,631.9	-783,440
426	18	Illinois	12,875,255	736,029.3	-471,721
427	14	Georgia	9,919,945	735,315.2	-354,164
428	36	Texas	26,059,203	734,134.9	-889,968
429	14	Michigan	9,883,360	732,603.4	-317,579
430	18	Pennsylvania	12,763,536	729,642.8	-360,002
431	27	Florida	19,317,568	729,094.6	-530,747
432	7	South Carolina	4,723,723	728,886.3	-128,470
433	10	Washington	6,897,012	727,008.9	-170,251
434	53	California	38,041,430	724,631.5	-817,318
435	14	North Carolina	9,752,073	722,871.7	-186,292
		Last se	at assignment by law		
436	8	Minnesota	5,379,139	709,062.9	104,758
437	37	Texas	26,059,203	708,459.5	530,125

# Table 2. Population Needed to Gain or Lose a Seat Using the 2012 Census Estimates of the State Populations

<sup>&</sup>lt;sup>2</sup> The figures in **Table 2** for the "population needed to gain or lose a seat" are somewhat misleading because it is unlikely that one state's population total would be adjusted without others changing as well. Since the method of equal proportions used to allocate seats in the House uses all state populations simultaneously, changes in several state populations may also result in changes to the "populations needed to gain or lose a seat."

Seat	Last Seat Allocated	State	2012 State Population Estimates	Priority Valueª	Pop. Needed to Gain or Lose Seat <sup>i</sup>
438	12	Virginia	8,185,867	706,336.9	191,625
439	6	Oregon	3,899,353	705,164.4	97,916
440	28	New York	19,570,261	703,158.3	548,664
441	54	California	38,041,430	702,691.6	1,092,488
442	2	Montana	1,005,141	702,656.1	28,918
443	7	Louisiana	4,601,893	701,443.0	140,585
444	13	New Jersey	8,864,590	699,595.I	294,939
445	9	Missouri	6,021,988	698,011.6	214,477
446	28	Florida	19,317,568	695,626.0	756,616
447	10	Massachusetts	6,646,144	692,350.4	292,987
448	17	Ohio	11,544,225	691,447.2	524,656
449	55	California	38,041,430	688,624.8	1,891,891
450	6	Oklahoma	3,814,820	687,414.5	196,771

**Source:** Computations of priority values and populations needed to gain or lose a seat by CRS. See CRS Report R41357, *The U.S. House of Representatives Apportionment Formula in Theory and Practice*, by (name redacted), for an explanation of formula for allocating House seats. For the state populations, see Table 1. Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2012 (NST-EST2012-01), U.S. Census Bureau, Population Division, December 2012.

#### Notes:

a. Each state's claim to representation in the House is based on a "priority value" determined by the following formula:

 $PV = P / [n(n - 1)]^{\frac{1}{2}}$ ; where PV = the state's priority value, P = the state's population, and n = the state's n<sup>th</sup> seat in the House. For example, the priority value of Oregon's 6<sup>th</sup> seat is:

 $PV_{OR6} = 3,899,353/[6(6-1)]^{\frac{1}{2}}$ 

= 3,899,353/ [30]<sup>1/2</sup>

= 3,899,353/ 5.477225575

= 705,164.4

The actual seat assignments are made by ranking all of the states' priority values from highest to lowest until 435 seats are allocated.

b. These figures represent the population a state would either need to lose in order to drop below the 435<sup>th</sup> seat cutoff, or to gain to rise above the cutoff. If, in the case of Oregon, 97,916 more persons had been counted in the Census, the state's priority value would have been increased to 710,230.56 which would have resulted in a new sequence number of 435 because North Carolina's 14<sup>th</sup> seat would have occupied the 436<sup>th</sup> position in the priority list.

#### **Options for States Losing Seats**

The apportionment counts transmitted by the Census Bureau to the President (who then sends them to Congress) are considered final. Thus, most states that lost seats in the 113<sup>th</sup> Congress had only one possible option for retaining them: urge Congress to increase the size of the House. Any other option such as changing the formula used in the computations, or changing the components

of the apportionment population (such as omitting the foreign-based military and federal civilian employees) might only affect a small number of states if the House stays at 435 seats.<sup>3</sup>

As noted above, the 435-seat limit was imposed in 1929 by 46 *Stat.* 21, 26-27. Altering the size of the House would require a new law setting a different limit. Article I, Section 2 of the Constitution establishes a minimum House size (one Representative for each state), and a maximum House size (one Representative for every 30,000, or 10,306 based on the 2010 Census). In 2013, a House size of 468 would be necessary to prevent states from losing seats they held from the 108<sup>th</sup> to the 112<sup>th</sup> Congresses, but, by retaining seats through an increase in the House size, other states would also have their delegations become larger. At a House size of 468, California's delegation size, for example, would be 56 instead of 53 seats.

## **The Redistricting Process**

The apportionment figures released on December 21, 2010, are made up of three components: total resident population figures for the 50 states and the District of Columbia, the foreign-based military and overseas federal employees allocated to each state and DC, and the sum of these numbers (excluding DC), which becomes the apportionment population.

These numbers (minus DC) are all that is needed to reapportion the House, but most states need figures for very small geographic areas in order to draw new legislative and congressional districts.<sup>4</sup> The Census Bureau must provide small-area population totals to the legislatures and governors of each state by one year after the census (e.g., April 1, 2011).

The Census Bureau data delivered by April 1, 2011 (some states started receiving the information in February 2011), are often referred to as the P.L. 94-171 program data (89 Stat. 1023). This program provides, to each state, information from the 2010 Census. As such, the information is very limited—including age, race, and Hispanic origin. No other demographic information that might be useful to the persons constructing political jurisdictions, such as income or employment status, is available in the P.L. 94-171 data. Such data, however, are available from the results of the American Community Survey for geographic areas with populations as small as 20,000 persons.<sup>5</sup>

Census data are usually reported by political jurisdictions (states, cities, counties, and towns), and within political jurisdictions by special Census geography (such as Census designated places, tracts, block numbering areas, and blocks). The P.L. 94-171 program allows states, which chose to participate in it (49 in 2010), to request Census data by certain nontraditional Census

<sup>&</sup>lt;sup>3</sup> After the 1990 Census, Montana and Massachusetts challenged the apportionment formula, and the inclusion of the foreign-based military and civilians in the apportionment population. The Supreme Court affirmed the constitutionality of the equal proportions formula and the inclusion of the foreign-based military and civilians in the counts in two separate cases: *U.S. Dept. of Commerce v. Montana*, 112 S. Ct. 1415 (1992) and *Franklin v. Massachusetts*, 112 S. Ct. 2767 (1992).

<sup>&</sup>lt;sup>4</sup> With respect to single-member states, this information would be used to draw state legislative and local political jurisdictions.

<sup>&</sup>lt;sup>5</sup> For information about the 2005-2009 American Community Survey data, see http://www.census.gov/acs/ www/data\_documentation/2009\_release/. For information about the American Community Survey, see CRS Report R41532, *The American Community Survey: Development, Implementation, and Issues for Congress*, by (name redact ed).

geography such as voting districts (precincts) and state legislative districts.<sup>6</sup> These special political jurisdiction counts enable the persons drawing the district lines to assess past voting behavior when redrawing congressional and state legislative districts.

In most states, redrawing congressional districts is the responsibility of the state legislature with the concurrence of the governor. In seven states, Arizona, California, Hawaii, Idaho, Montana, New Jersey, and Washington, a non-partisan or bi-partisan commission is responsible for drawing and approving the plans.<sup>7</sup> Some states have explicit deadlines in law to complete their congressional districting. Most do not, so the effective deadline for the legislatures or commissions to complete their work would have been whatever deadlines were established in the states for filing for primaries for the 2012 elections.

Although many states have standards mandating equal populations, compactness, contiguousness, and other goals to not split counties, towns, and cities, federal law controls the redistricting process. Other than a requirement that multi-member states cannot elect Representatives at-large (2 U.S.C. 2c) however, no federal statutory law establishes explicit standards for redistricting. The principal laws that apply are the Supreme Court decisions mandating *one person, one vote* and the Voting Rights Act.<sup>8</sup>

The fundamental federal rule governing redistricting congressional districts, *one person, one vote*, was promulgated by the Supreme Court in *Wesberry* v. *Sanders* (376 U.S. 7, 1964). The Court has refined that ruling in a series of cases culminating in *Karcher* v. *Daggett* (462 U.S. 725, 1983) that one person, one vote means that *any* population deviation among districts in a state must be justified, but the deviations from absolute equality may be permitted if the states strive to make districts more compact, respect municipal boundaries, preserve the cores of prior districts, or avoid contests between incumbents.<sup>9</sup>

Section 2 of the Voting Rights Act (VRA) applies nationwide. It prohibits states or localities from imposing a "voting qualification or prerequisite to voting or standard, practice or procedure ... in a manner which results in the denial or abridgement of the right to vote on account of race or color."<sup>10</sup> The Supreme Court interpreted the VRA's application to redistricting in a series of cases responding, in part, to the extraordinarily complicated districts created by many states in the 1990s to maximize minority representation (beginning with *Shaw* v. *Reno*, 509 U.S. 630, 1993). The Court ended the decade by establishing new principles concerning such practices: (1) race may be considered in districting to remedy past discrimination; (2) but, states must have a

<sup>&</sup>lt;sup>6</sup> For a fuller discussion of this topic see the U.S. Census Bureau publication, *Strength in Numbers: Your Guide to Census 2010 Redistricting Data From the U.S. Census Bureau*, http://www.census.gov/rdo/.

<sup>&</sup>lt;sup>7</sup> National Conference of State Legislatures, *Redistricting Law 2010*, pp. 143-145. California adopted a redistricting commission initiative in 2008 for state legislative districts, and extended it to U.S. congressional districts in a 2010 initiative vote.

<sup>&</sup>lt;sup>8</sup> For an overview of the redistricting process, see CRS Report R42831, *Congressional Redistricting: An Overview*, by (name redacted).

<sup>&</sup>lt;sup>9</sup> For a more thorough discussion of the legal issues, see CRS Report RS22479, *Congressional Redistricting: A Legal Analysis of the Supreme Court Ruling in League of United Latin American Citizens (LULAC) v. Perry*, by (name red acted); CRS Report RS22628, *Congressional Redistricting: The Constitutionality of Creating an At-Large District*, by (name redacted); CRS Report RL30870, *Census 2000: Legal Issues re: Data for Reapportionment and Redistricting*, by (name redacted) and; CRS Report RS21593, *Redistricting and the Voting Rights Act: A Legal Analysis of Georgia v. Ashcroft*, by (name redacted).

<sup>&</sup>lt;sup>10</sup> Section 2: 42 U.S.C. Section 1973(a) (1996).

compelling state interest to ignore traditional redistricting principles and "gerrymander" to establish majority-minority districts; (3) courts will apply "strict scrutiny" to such assertions that racial "gerrymanders" are necessary to determine whether such plans are narrowly tailored to achieve the compelling state interest.

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