CRS Report for Congress

District of Columbia Representation: Effect on House Apportionment

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Summary

Two proposals (H.R. 328 and H.R. 492) have been introduced in the 110th Congress. Both provide for voting representation in the U.S. House of Representatives for the residents of the District of Columbia, but in, fundamentally, different ways. H.R. 328, for purposes of voting representation, treats the District of Columbia as if it were a state; H.R. 492 adds the District's resident population to the state of Maryland for purposes of representation. Both proposals increase the size of the House to 437 members from 435. Both provide for a representative for D.C. residents (one via representation in a new Maryland seat). And both proposals would, essentially, provide an additional seat to the state of Utah over what it received in the 2002 apportionment. This report will be updated as conditions warrant.

Background

H.R. 328, the District of Columbia Fair and Equal House Voting Rights Act of 2007, provides for a permanent increase in the size of the U.S. House of Representatives, from 435 seats to 437 seats. It specifies that one of the seats is to be allocated to the District of Columbia while the other seat is to be assigned using the normal apportionment formula allocation procedure, which presently would result in Utah adding a fourth seat. In essence, H.R. 328 treats the District of Columbia as if it were a state for the purposes of the allocation of House seats.

H.R. 492, the District of Columbia Voting Rights Restoration Act of 2007, also would permanently increase the size of the House to 437 seats. However, rather than treating the District of Columbia as a separate entity, H.R. 492 provides that, for the purposes of apportioning seats among the states, the District's population would be allocated to the state of Maryland and one of the Maryland seats would contain the District of Columbia. Under this proposal, District residents would receive representation in the U.S. House of Representatives via a new Maryland representative. The other seat would also go to Utah.

Reapportionment Impact

Table 1 lists the actual apportionment allocations of Representatives for 2000, with footnotes for the changes that would have occurred if DC had been treated as a state, plus two 437-seat alternatives described in options one and two below.

If DC had been treated as a state in the reapportionment of congressional seats following the 2000 census, and the House size had remained at 435, North Carolina would have not gained an additional seat in comparison with the 1990s. The state's delegation would have remained at 12 Representatives.

Option 1: 437-seat House including DC. If DC were to receive representation as if it were a state, and the House size were to be increased to 437, DC would be entitled to one Representative, and Utah would be entitled to four Representatives, one more than the state received in the reapportionment following the 2000 census.

Option 2: 437-seat House, DC's population added to Maryland. If DC's population were to be added to Maryland and the size of the House increased to 437, Maryland would be entitled to nine Representatives, one more than the state received in the reapportionment following the 2000 census. As in option 1, Utah would be entitled to four Representatives, one more than the state received in the reapportionment following the 2000 census.

Table 1. Apportionment Impact of Alternative Plans for DC Voting Representation in the House

			437 Representatives						
Actual 2000 allocation: 435 Representatives			DC treated as a state				DC's population added to MD		
ST	Apportion-ment pop.	Seats	ST	Apportion-ment pop.[b]	Seats	Seat change from 2000	ST	Apportion-ment pop.[b]	Seats	Seat change from 2000
AL	4,461,130	7	AL	4,461,130	7		AL	4,461,130	7	
AK	628,933	1	AK	628,933	1		AK	628,933	1	
AZ	5,140,683	8	AZ	5,140,683	8		AZ	5,140,683	8	
AR	2,679,733	4	AR	2,679,733	4		AR	2,679,733	4	
CA	33,930,798	53	CA	33,930,798	53		CA	33,930,798	53	
CO	4,311,882	7	CO	4,311,882	7		CO	4,311,882	7	
CT	3,409,535	5	CT	3,409,535	5		CT	3,409,535	5	
DC[a]	574,096	0	DC	574,096	1	+1	DC	0	0	
DE	785,068	1	DE	785,068	1		DE	785,068	1	
FL	16,028,890	25	FL	16,028,890	25		FL	16,028,890	25	
GA	8,206,975	13	GA	8,206,975	13		GA	8,206,975	13	
HI	1,216,642	2	HI	1,216,642	2		HI	1,216,642	2	
ID	1,297,274	2	ID	1,297,274	2		ID	1,297,274	2	
IL	12,439,042	19	IL	12,439,042	19		IL	12,439,042	19	
IN	6,090,782	9	IN	6,090,782	9		IN	6,090,782	9	
IA	2,931,923	5	IA	2,931,923	5		IA	2,931,923	5	
KS	2,693,824	4	KS	2,693,824	4		KS	2,693,824	4	
KY	4,049,431	6	KY	4,049,431	6		KY	4,049,431	6	
LA	4,480,271	7	LA	4,480,271	7		LA	4,480,271	7	
ME	1,277,731	2	ME	1,277,731	2		ME	1,277,731	2	
MD	5,307,886	8	MD	5,307,886	8		MD	5,879,945	9	+1
MA	6,355,568	10	MA	6,355,568	10		MA	6,355,568	10	

Actual 2000 allocation: 435 Representatives			437 Representatives							
			DC treated as a state				DC's population added to MD			
ST	Apportion-ment pop.	Seats	ST	Apportion-ment pop.[b]	Seats	Seat change from 2000	ST	Apportion-ment pop.[b]	Seats	Seat change from 2000
MI	9,955,829	15	MI	9,955,829	15		MI	9,955,829	15	
MN	4,925,670	8	MN	4,925,670	8		MN	4,925,670	8	
MS	2,852,927	4	MS	2,852,927	4		MS	2,852,927	4	
MO	5,606,260	9	MO	5,606,260	9		MO	5,606,260	9	
MT	905,316	1	MT	905,316	1		MT	905,316	1	
NE	1,715,369	3	NE	1,715,369	3		NE	1,715,369	3	
NV	2,002,032	3	NV	2,002,032	3		NV	2,002,032	3	
NH	1,238,415	2	NH	1,238,415	2		NH	1,238,415	2	
NJ	8,424,354	13	NJ	8,424,354	13		NJ	8,424,354	13	
NM	1,823,821	3	NM	1,823,821	3		NM	1,823,821	3	
NY	19,004,973	29	NY	19,004,973	29		NY	19,004,973	29	
NC[a]	8,067,673	13	NC	8,067,673	13		NC	8,067,673	13	
ND	643,756	1	ND	643,756	1		ND	643,756	1	
OH	11,374,540	18	OH	11,374,540	18		OH	11,374,540	18	
OK	3,458,819	5	OK	3,458,819	5		OK	3,458,819	5	
OR	3,428,543	5	OR	3,428,543	5		OR	3,428,543	5	
PA	12,300,670	19	PA	12,300,670	19		PA	12,300,670	19	
RI	1,049,662	2	RI	1,049,662	2		RI	1,049,662	2	
SC	4,025,061	6	SC	4,025,061	6		SC	4,025,061	6	
SD	756,874	1	SD	756,874	1		SD	756,874	1	
TN	5,700,037	9	TN	5,700,037	9		TN	5,700,037	9	
TX	20,903,994	32	TX	20,903,994	32		TX	20,903,994	32	
UT	2,236,714	3	UT	2,236,714	4	+1	UT	2,236,714	4	+1
VT	609,890	1	VT	609,890	1		VT	609,890	1	
VA	7,100,702	11	VA	7,100,702	11		VA	7,100,702	11	
WA	5,908,684	9	WA	5,908,684	9		WA	5,908,684	9	
WV	1,813,077	3	WV	1,813,077	3		WV	1,813,077	3	
WI	5,371,210	8	WI	5,371,210	8		WI	5,371,210	8	
WY	495,304	1	WY	495,304	1		WY	495,304	1	
		435			437				437	

All apportionment calculations by CRS using the "method of equal proportions" formula mandated by 2. U.S.C. 2a.(a).
[a]If DC had been allocated Representatives as if it were a state after the 2000 Census it would have been entitled to one Representative, and North Carolina would have received 12 instead of 13.
[b]The apportionment population is different from the actual resident population of each state because the Census Bureau adds to each state's resident population the foreign-based military and other federal employees and their dependents who are from the state but not residing therein at the time of the census.

The actual apportionment is done through a "priority list" calculated based on the equal proportions formula provided in 2. U.S.C. 2a.(a). Table 2 displays the end of the priority list that was used to allocate Representatives based on the 2000 Census. The law only provides for 435 seats in the House, but the tables illustrate not only the last seats assigned by the apportionment formula (ending at 435), but the states that would just miss getting additional representation.[1]

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[1] The figures in Table 2 for the "population needed to gain or lose a seat" are 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,

Table 2. Population Needed to Gain or Lose a Seat Using the 2000 Census Apportionment Population and a 435 Seat House

Priority	State	Seat	2000 apportionment population	Priority value	Pop. needed to gain or lose seat
425	PA	19	12,300,670	665,144.05	-359,885
426	TX	32	20,903,994	663,702.45	-567,519
427	MO	9	5,606,260	660,703.78	-127,450
428	CA	52	33,930,798	658,881.42	-679,651
429	MN	8	4,925,670	658,220.10	-93,814
430	GA	13	8,206,975	657,083.72	-142,386
431	IA	5	2,931,923	655,597.81	-44,337
432	FL	25	16,028,890	654,376.65	-212,933
433	OH	18	11,374,540	650,239.14	-79,688
434	CA	53	33,930,798	646,330.20	-33,940
435	NC	13	8,067,673	645,930.64	-3,084
Last seat assigned by law					
436	UT	4	2,236,714	645,683.70	+855
437	NY	30	19,004,973	644,328.90	+47,245
438	TX	33	20,903,994	643,275.93	+86,268
439	MI	16	9,955,829	642,645.62	+50,891
440	IN	10	6,090,782	642,024.48	+37,057
441	MT	2	905,316	640,155.07	+8,168
442	IL	20	12,439,042	638,109.37	+152,465
443	MS	5	2,852,927	637,933.77	+35,763
444	CA	54	33,930,798	634,248.18	+624,984
445	WI	9	5,371,210	633,002.89	+109,696
446	OK	6	3,458,819	631,490.94	+79,090
447	PA	20	12,300,670	631,011.04	+290,837
448	FL	26	16,028,890	628,704.74	+439,176
449	OR	6	3,428,543	625,963.33	+109,365
450	MD	9	5,307,886	625,540.08	+173,020

[a] Each state's claim to representation in the House is based on a "priority value" determined by the following formula: $PV = P / [n(n - 1)]^{1/2}$; where PV = the state's priority value, P = the state's population, and n = the state's n^{th} seat in the House. For example, the priority value of Wisconsin's 9th seat is:

$$PV_{WI9} = 5,371,210 / [9(9 - 1)]^{1/2}$$
$$= 5,371,210 / [72]^{1/2}$$
$$= 5,371,210 / 8.485281374238570$$
$$= 633,002.89$$

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 435th seat cutoff, or to gain to rise above the cutoff. If, in the case of Wisconsin, 109,696 more persons had been counted in the Census, the state's priority value would have been increased to 645,930.77 which would have resulted in a new sequence number of 435 because North Carolina's 13th seat would have occupied the 436th position in the priority list.

Source: Computations of priority values and populations needed to gain or lose a seat by CRS. See CRS Report RL30711, *The House Apportionment Formula in Theory and Practice*, by Royce Crocker, for an explanation of formula for allocating House seats.

Table 3 is similar to table 2, in that it displays the end of the priority list, but the last seat is 437 instead of 435. The priority values and the population need to gain or lose a seat do not change if DC is treated like state, or if DC's population is added to that of

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[1] (...continued)

changes in several state populations may also result in changes to the "populations needed to gain or lose a seat."

Maryland, because in either case, either DC is entitled the constitutional minimum of one Representative, or Maryland's 9th seat moves up from priority value 450 (see table 2) to priority value 408.

Table 3. Population Needed to Gain or Lose a Seat Using the 2000 Census Apportionment Population and a 437 Seat House

Priority	State	Seat	2000 apportionment population	Priority value	Pop. needed to gain or lose seat
425	CO	7	4,311,882	665,337.67	-136,152
426	PA	19	12,300,670	665,144.05	-384,940
427	TX	32	20,903,994	663,702.45	-610,190
428	MO	9	5,606,260	660,703.78	-138,946
429	CA	52	33,930,798	658,881.42	-749,420
430	MN	8	4,925,670	658,220.10	-103,952
431	GA	13	8,206,975	657,083.72	-159,308
432	IA	5	2,931,923	655,597.81	-50,396
433	FL	25	16,028,890	654,376.65	-246,119
434	OH	18	11,374,540	650,239.14	-103,387
435	CA	53	33,930,798	646,330.20	-105,063
436	NC	13	8,067,673	645,930.64	-20,006
437	UT	4	2,236,714	645,683.70	-4,693
Last seat assigned					
438	NY	30	19,004,973	644,328.90	+39,961
439	TX	33	20,903,994	643,275.93	+78,243
440	MI	16	9,955,829	642,645.62	+47,066
441	IN	10	6,090,782	642,024.48	+34,714
442	MT	2	905,316	640,155.07	+7,819
443	IL	20	12,439,042	638,109.37	+147,651
444	MS	5	2,852,927	637,933.77	+34,659
445	CA	54	33,930,798	634,248.18	+611,774
446	WI	9	5,371,210	633,002.89	+107,600
447	OK	6	3,458,819	631,490.94	+77,737
448	PA	20	12,300,670	631,011.04	+286,023
449	FL	26	16,028,890	628,704.74	+432,880
450	OR	6	3,428,543	625,963.33	+108,013

See notes end of table 2.

Adding New States and Seats to the House

The 435 seat limit for the size of the House 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, §2 of the Constitution establishes a minimum House size (one Representative for each state), and a maximum House size (one for every 30,000, or 9,380 based on the 2000 Census). In 2003, a House size of 473 would in result in no states losing seats they held from the 103rd to the 107th 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 473, California's delegation size, for example, would be 57 instead of 53 seats.[2]

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[2] For a fuller discussion of this topic see: CRS Report 95-791, *House of Representatives: Setting the Size*

Congressional precedent. General congressional practice when admitting new states to the union has been to increase the size of the House, either permanently or temporarily, to accommodate the new states. New states usually resulted in *additions* to the size of the House in the 19th and early 20th centuries. The exceptions to this general rule occurred when states were formed from other states (Maine, Kentucky, and West Virginia). These states' Representatives came from the allocations of Representatives of the states from which the new ones had been formed.[3]

When Alaska and Hawaii were admitted in 1959 and 1960 the House size was *temporarily* increased to 437. This modern precedent, differed from the state admission acts passed following the censuses in the 19th and early 20th centuries which provided that new states' representation would be added to the apportionment totals.

The apportionment act of 1911 anticipated the admission of Arizona and New Mexico by providing for an increase in the House size from 433 to 435 if the states were admitted.

As noted above, the House size was temporarily increased to 437 to accommodate Alaska and Hawaii in 1960. In 1961, when the President reported the 1960 census results and the resulting reapportionment of seats in the reestablished 435-seat House, Alaska was entitled to one seat, and Hawaii two seats. Massachusetts, Pennsylvania and Missouri each received one less seat than they would have if the House size had been increased to 438 (as was proposed by H.R. 10264, in 1962).

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[2] (...continued)
at 435, by David C. Huckabee.

[3] For a general discussion of the history of admitting states to the union, please see:CRS Report 98-702GOV, *Statehood Process of the Fifty States,* by Garrine P. Laney.