

ALTERNATIVE 2020 CONGRESSIONAL APPORTIONMENTS VIA DIVISORS
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Number of States	50		435		Minimum Divisor and Apportionments for Each Divisor Method						
	Population	Quota	Minimum Seats	Adams	Dean	Hill	Logarithmic	Identric	Webster	Jefferson	
Alabama	5,030,053	6,608	1	7	7	7	7	7	7	6	
Alaska	736,081	0,967	1	1	1	1	1	1	1	1	
Arizona	7,158,923	9,405	1	9	9	9	9	9	9	9	
Arkansas	3,013,756	3,959	1	4	4	4	4	4	4	4	
California	39,576,757	51,995	1	50	52	52	52	52	52	54	
Colorado	5,792,171	7,596	1	8	8	8	8	8	8	8	
Connecticut	3,608,298	4,740	1	5	5	5	5	5	5	5	
Delaware	990,837	1,302	1	2	1	1	1	1	1	1	
Florida	21,570,527	28,339	1	27	28	28	28	28	28	29	
Georgia	10,725,274	14,091	1	14	14	14	14	14	14	14	
Hawaii	1,460,137	1,916	1	2	2	2	2	2	2	2	
Idaho	1,841,377	2,419	1	3	3	2	2	2	2	2	
Illinois	12,822,739	16,846	1	16	17	17	17	17	17	17	
Indiana	6,790,280	8,921	1	9	9	9	9	9	9	9	
Iowa	3,192,406	4,194	1	4	4	4	4	4	4	4	
Kansas	2,940,865	3,864	1	4	4	4	4	4	4	4	
Kentucky	4,509,342	5,924	1	6	6	6	6	6	6	6	
Louisiana	4,661,468	6,124	1	6	6	6	6	6	6	6	
Maine	1,363,582	1,791	1	2	2	2	2	2	2	2	
Marvland	6,185,278	8,126	1	8	8	8	8	8	8	8	
Massachusetts	7,033,469	9,240	1	9	9	9	9	9	9	9	
Michigan	10,084,442	13,249	1	13	13	13	13	13	13	13	
Minnesota	5,709,752	7,501	1	8	7	8	8	8	8	7	
Mississippi	2,963,914	3,894	1	4	4	4	4	4	4	4	
Missouri	6,160,281	8,093	1	8	8	8	8	8	8	8	
Montana	1,085,407	1,426	1	2	2	2	2	1	1	1	
Nebraska	1,963,333	2,579	1	3	3	3	3	3	3	2	
Nevada	3,108,462	4,084	1	4	4	4	4	4	4	4	
New Hampshire	1,379,089	1,812	1	2	2	2	2	2	2	1	
New Jersey	9,294,493	12,211	1	12	12	12	12	12	12	12	
New Mexico	2,120,220	2,785	1	3	3	3	3	3	3	2	
New York	20,215,751	26,559	1	26	26	26	27	27	27	28	
North Carolina	10,453,948	13,734	1	14	14	14	14	14	14	14	
North Dakota	779,702	1,024	1	1	1	1	1	1	1	1	
Ohio	11,968,848	15,514	1	15	15	15	16	16	16	16	
Oklahoma	3,963,516	5,207	1	5	5	5	5	5	5	5	
Oregon	4,241,500	5,572	1	6	6	6	6	6	6	5	
Pennsylvania	13,011,844	17,095	1	17	17	17	17	17	17	18	
Rhode Island	1,098,183	1,443	1	2	2	2	1	1	1	1	
South Carolina	5,124,712	6,733	1	7	7	7	7	7	7	7	
South Dakota	887,770	1,166	1	2	1	1	1	1	1	1	
Tennessee	6,916,897	9,087	1	9	9	9	9	9	9	9	
Texas	29,183,290	38,340	1	37	38	38	38	38	38	40	
Utah	3,275,252	4,303	1	5	4	4	4	4	4	4	
Vermont	643,503	0,845	1	1	1	1	1	1	1	1	
Virginia	8,654,542	11,370	1	11	11	11	11	11	11	11	
Washington	7,715,946	10,137	1	10	10	10	10	10	10	10	
West Virginia	1,795,045	2,358	1	3	2	2	2	2	2	2	
Wisconsin	5,897,473	7,748	1	8	8	8	8	8	8	8	
Wyoming	577,719	0,759	1	1	1	1	1	1	1	1	
Total	331,108,434	435	50	435	435	435	435	435	435	435	

The Hill apportionment method, currently in use, is inferior to its main competitors, particularly to Identric and Webster. Logarithmic, Identric, and Webster agree across the board.
 According to them:
 > Montana should only get one seat
 > Rhode Island should only get one seat
 > New York should remain at 27 seats
 > Ohio should remain at 16 seats

Hill method rounds MT and RI up, NY and OH down, despite NY and OH quotas with larger fractional parts. You can't just go by fractional parts, but this does seem to illustrate Balinski & Young's argument that Hill unduly favors small states.

NOTES
 Solutions via Excel Solver (Data/Solver), starting with an initial divisor of 900,000 in each case.
 Hill (geometric mean, aka "equal proportions") is the official method run by the Census Bureau.
 Three main contenders disagree, those based on the logarithmic, Identric, and arithmetic means.
 The situation appears clear-cut, unlike 2010 where Webster was a slight outlier.
 I favor Identric theoretically but could support Webster as a simple, straightforward alternative to Hill.
 Hill apportionment in 2020 appears to be out of kilter.
 For mathematical reference, see my article "Optimal Congressional Apportionment."