

Appendix

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Projection Sources & Methods

- 1) **2020 projections based on linear extrapolation of population change between the 1980 Census and the 2010 Census.** The total population for each of the 50 states was projected to 2020 using linear extrapolation based on the past 30 years of population change:

$$Pop_{2020} = Pop_{2010} + \left(\frac{(Pop_{2010} - Pop_{1980})}{30} \times 10 \right)$$

- 2) **2020 projections based on linear extrapolation of population change between the 2000 Census and the 2010 Census.** The total population for each of the 50 states was projected to 2020 using linear extrapolation based on the past 10 years of population change:

$$Pop_{2020} = Pop_{2010} + (Pop_{2010} - Pop_{2000})$$

- 3) **2020 projections produced by demographic agencies within each state.** We used the [list of state agencies](#) provided by the U.S. Census Bureau's Federal-State Cooperative for Population Projections as our starting point. We used the most recent projections as of late August 2014. If an organization produced multiple projections scenarios, we used the middle or recommended set. Population projections for 2020 were unavailable for Alaska, Idaho, and Illinois. We used linear interpolation between Alaska's population projections for 2017 and 2022 to calculate a value for the 2020 population. We substituted the 2020 linear extrapolation of 2000-2010 population change for Idaho and Illinois.
- 4) **2020 projections based on linear extrapolation of population change between April 1, 2010 and the U.S. Census Bureau's recently released [July 1, 2014 population estimates](#).** The total population for each of the 50 states was projected to 2020 using linear extrapolation based on the average annual change that occurred between 2010 and 2014:

$$Pop_{2020} = Pop_{2010} + ((Est_{2014} - EstBase_{2010})/4.25) * 10$$

Apportionment Method

The method used to apportion seats is the [Huntington-Hill/Equal Proportions Method](#). This has been the official method used by the U.S. Census Bureau for apportionment since 1940.

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