Funding vs. Inaccuracy in the 2020 Census

OVERVIEW

For the first time, the U.S. Census Bureau will use the internet and mobile devices to collect census data. 2020 Census funding, however, is lower than it has ever been, and the lower funding could affect its accuracy. Statisticians **Bruce Spencer** of IPR and **Zachary Seeskin** (PhD 2016) of NORC find a higher error rate could shift seats in the U.S. House of Representatives and misallocate billions in funds.

FINDINGS

Accuracy and census costs are closely related. While census accuracy is expensive, sufficient and timely census funding is crucial to take the most accurate count. The census determines how many representatives each state gets and how federal dollars are distributed. Census error, aggravated by past funding shortfalls, could well shift as many as six seats or more in the U.S. House of Representatives. In one set of projections, findings show that census inaccuracy of up to 2% would cause Florida to lose one seat and Texas to lose two seats, while Minnesota, Ohio, and Rhode Island would each gain one. As many as 12 seats could change between individual states if the inaccuracy increases to 4%.

If the census error rises to as much as 2%, up to $40 billion in federal funding could be misallocated. Even moderate levels of census error would shift billions of dollars among states. For each half a percent increase in

IPR statistician **Bruce Spencer** worked with NORC statistician **Zachary Seeskin** (PhD 2016), a former IPR graduate research assistant, on a cost-benefit analysis of the 2020 Census.

average error, distortions in fund allocations are expected to rise by $9–$13 billion.

Census inaccuracy exacerbates unequal representation. Past censuses reveal that minority groups, in particular African Americans and Hispanics, have been under-counted. Since census population counts are used to draw district boundaries, such undercounts tend to exacerbate effects of gerrymandering and of voter suppression.
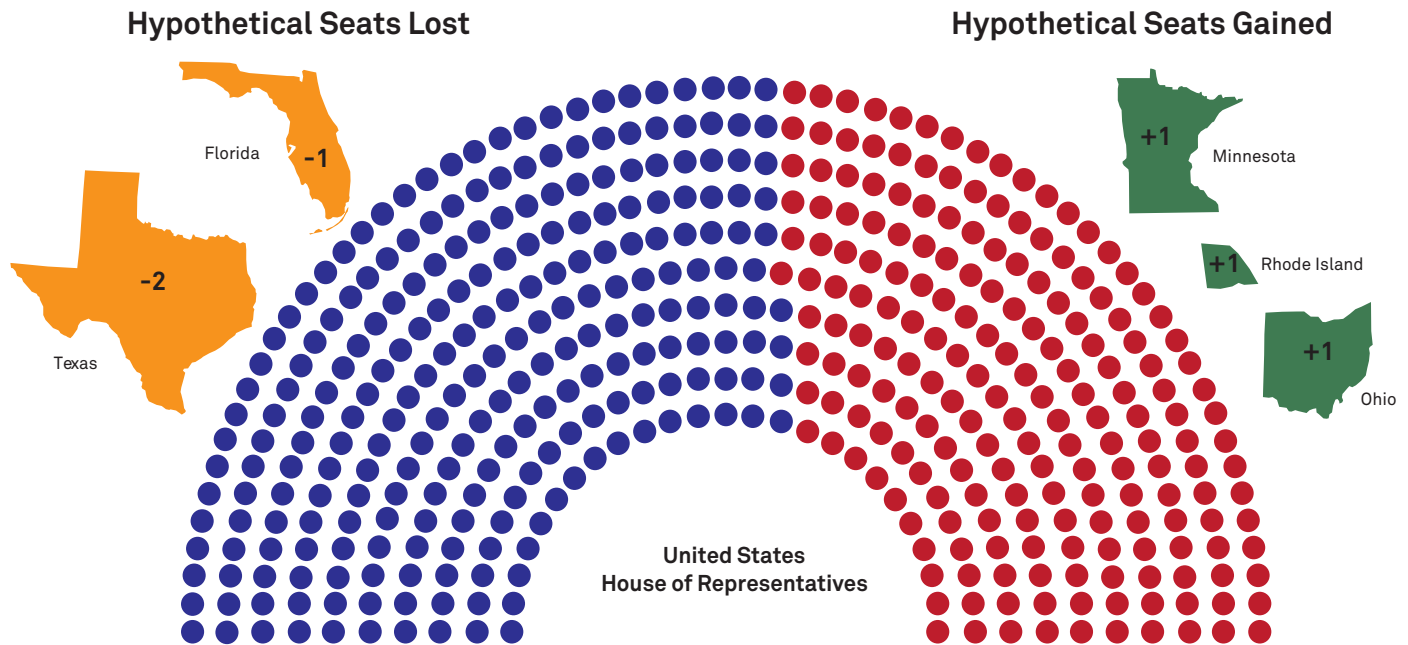
Congress has squeezed the 2020 Census with too little funding, too late. Over the last five U.S. censuses, Congress placed a high value on accuracy and provided the funds requested to improve it. For 2020, Congress decided to pursue a target for cost, instead of accuracy. It sought to spend $12.5 billion on the 2020 Census, or the same amount spent per household in 2010 after inflation. Though this inadequate amount has since been increased, it is still not enough and comes too late to fully improve accuracy.

New, lower-cost methods of collecting census data will not be fully tested due to lower funding levels, thereby increasing census inaccuracy. For the first time, the U.S. Census Bureau plans to use the internet and mobile devices to gather data and bring down costs. But budget cuts and delays have led to canceled and postponed testing of 2020 Census methods and technology. Census accuracy depends on whether such technologies can be successful at gathering the data.

POLICY TAKEAWAYS

- For the five past censuses, policymakers chose to allocate enough funding to ensure lower error rates. The current focus on a cost target will likely increase error rates in the 2020 Census.

- The focus on a cost target and higher rates of error in the 2020 Census would lead to House seats shifting and misallocation of federal funding.

- At a time when confidence in fair representation is being eroded, an accurate population census is critical. Census Bureau requests for resources for the 2020 Census need to be fulfilled and not deferred or delayed.

Funding Implications of the 2020 Census

Hypothetical Seats Lost

Florida **-1**

Texas **-2**

Hypothetical Seats Gained

+1 Minnesota

+1 Rhode Island

+1 Ohio

**United States
House of Representatives**

As many as six seats in the U.S. House of Representatives could shift and billions of dollars in federal funds could be misallocated depending on the amount of error in the 2020 Census.

METHODOLOGY

Seeskin and Spencer used a variety of statistical methods and data to estimate the potential rootmean-square error in the 2020 Census and the ensuing possible effects. To project errors in apportionment of House seats for individual states, they used short-term linear extrapolation of postcensal estimates from 2017, and modeled 2020 Census errors by scaling the measured errors in the 2010 Census. They also developed a variety of alternative parametric models for 2020 Census errors based on the true 2020 population. For errors in the allocation of federal funds, they obtained the latest values available from the 2010 Census for the statistics used to calculate allocations for the 18 programs studied.

REFERENCES

Seeskin, Z., and B. Spencer. 2018. Balancing 2020 Census cost and accuracy: Consequences for congressional apportionment and fund allocations. *IPR Working Paper Series, WP-18-10.*

FACTS AND FIGURES

- With a census error rate of around 2%, which is higher than those of the past five censuses from 1970–2010:

  - As many as six seats in the U.S. House of Representatives could shift, affecting both large and small states.

  - Up to an estimated $40 billion in federal funds could be misallocated.

- Current spending on the 2020 Census has been too low and too slow to permit full testing of new data collection technology, raising the likelihood of error.