TEXAS CENSUS INSTITUTE

The 2020 Census Undercount in Texas Counties

By: Dr. Francisco Castellanos-Sosa

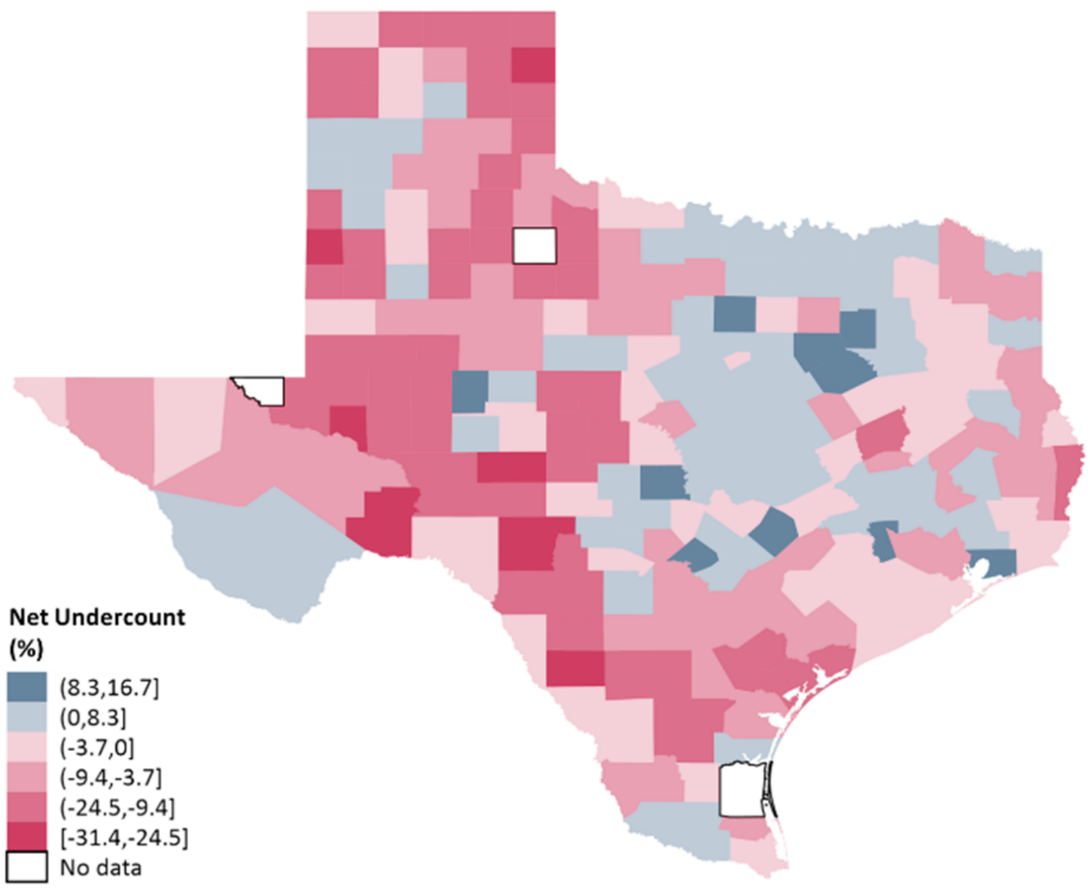
RESEARCH OVERVIEW

U.S. Census Bureau estimates suggest the 2020 Census undercounted 547,968 Texans. While these state-level numbers are informative, little is known of how this undercount is distributed across its counties. To inform this issue, we estimate the 2020 county-level net undercount in Texas counties and study its spatial distribution using data from the 2020 Census and the Texas Demographic Center 2020 Population Projections. This study aims to build on the work of Eric Jensen and Sandra Johnson and their use of demographic benchmarks to assess the 2020 Census by developing a projections benchmark to assess the 2020 Census at the county level.

MAIN FINDINGS

- 177 out of 254 counties (69.7%) in Texas experienced a net undercount of their population.
- Harris County, in the Gulf Coast region, experienced the largest numerical net undercount (255,057).
- Edwards County, in the South Texas region, experienced the largest net undercount rate (29.4%).
- Counties with a high numerical and rate net undercount predominate in the South and West Texas regions.
- Most counties with a high numerical and rate net overcount are located in the well-known Texas Triangle.
- 91.8% of Texas' net undercount appears in four of twelve Texas regions (Gulf Coast, Alamo, South Texas, and West Texas).
- Net undercount is correlated to counties' self-response rate in the 2020 census.
- A 1% increase in the Self-Response Rate is related to a 0.34% lower undercounting.
- The relationship between net undercount and the self-response rate is higher in counties with 30k people or less.

Figure 1.b
Net undercount rate in Texas counties



Note: A darker red color indicates a higher negative net undercount. A darker blue color indicates a higher positive net undercount (or net overcount). Loving, Kenedy, and King are excluded from the analysis due to the differential privacy approach used to estimate their populations.

AUTHOR'S MESSAGE

This research is a simple step toward understanding how the undercount at the state level is spread across Texas' counties. These estimates are constructed using official data sources, ensuring the differences presented here can be further studied concerning their source limitations through the Bureau and TDC methodologies.
The projections benchmark methodology used to distribute net undercounts across counties based on the differences between census counts and TDC Population Projections represents our effort to find innovative ways that allow us to find a more nuanced understanding of population dynamics and census accuracy. This approach not only provides valuable insights but also lays the groundwork for informed decision-making in policy and service planning.