

FUNDING IMPLICATIONS OF THE 2020 CENSUS UNDERCOUNT OF CHILDREN AND YOUNG CHILDREN IN TEXAS

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The Children's Census Initiative

The Texas Census Institute created the Children's Census Initiative to improve the accuracy with which the 2030 Census counts Texas children. The initiative comprises five related parts, each tackling a specific aspect of this phenomenon to enable a thorough analysis and informed decision-making. The first product of this initiative is a descriptive overview of net child undercounts in Texas counties and regions.¹ The second product of the initiative is a detailed overview of the counties with the highest numbers and rates of net child undercount.² The third product describes the net undercount of young children in Texas counties and regions. The fourth product studies the determinants of Texas child undercount. This is the fifth product of this initiative. It studies the funding implications of the 2020 Census undercount of children and young children. The Children's Census Initiative offers valuable insights and recommendations for addressing the U.S. Census child undercount and empowers stakeholders with the knowledge for effective decision-making and action.

Our Contribution

About \$2.5 billion in federal funding are projected to not be distributed to Texas annually due to the census undercount in 2020 and Texas is expected to experience a \$25.1 billion loss in federal funds during the decade.¹ Children and young children in the state were

undercounted at a 2.1% and 7.9% rate, respectively,^{2,3} however, little is known about the funding implications that the undercount had on federal programs from which children and young children could benefit. To close this gap, we identify the federal programs related to children and young children and estimate the potential losses by subtopics relevant to specific children and young children.

Main Findings

- 50 federal programs related to children and young children received \$11.5 billion for their implementation in Texas in FY 2020.
- Children and young children in Texas will not benefit from \$341 million annually, which translates to almost \$1 million every day, due to the 2020 Census undercount.
- In the long term, children and young children will not benefit from \$3.4 billion during a decade.
- Nutrition and Education for children are the subtopics most affected by the 2020 Census undercount (with a loss of \$157M+ annually).
- Education and Childcare for young children are the subtopics most affected by the 2020 Census undercount (with a loss of \$133M+ annually).

Introduction

The Demographic Analysis (DA) was performed to assess the quality of the 2020 Decennial Census.⁴ For the entire population, according to the DA, the 2020 Census did an accurate job. However, it is possible to observe a different story when exploring demographic groups by age. For instance, children (age 0-17) and young children (age 0-4) were undercounted in the 2020 Census at a 2.1% and 5.4%.⁴ Young children are a historically undercounted group whose net undercount rate has increased constantly during the last five censuses, since 1980.⁵ Making the 2020 Census' 5.4% net undercount rate for young children the largest to date.

In Texas, 153,633 children were undercounted at a 2.1% rate (the national rate).² Additionally, 155,855 Texas young children went undercounted at a 7.9% rate (1.5x the national rate).³ Given the relatively high nationwide net undercount rate for these population groups, it would be useful to understand better how they were

affected in terms of the distribution of federal funds, at least for the states with a significant undercount like Texas.⁶

It is well known that census data are used in federal and state funding formulas that distribute billions of dollars to communities in Texas every year.⁷⁻⁹ The Project on Government Oversight (POGO) recently found that census-derived data were instrumental in geographically distributing \$2.1 trillion in federal funding in Fiscal Year 2020, and in distributing \$150.3 billion to Texas in the same year.

From an exhaustive study on the 338 programs from POGO's list, Castellanos-Sosa and Moulton estimated Texas did not receive around \$2.8 billion in annual funding due to the 2020 Census undercount (including COVID-related and traditional programs).¹ They also estimate that, during the decade, Texas would approximate lose \$24.1 billion in federal funds, as a result of its net undercount.

This analysis of the 2020 Undercount in Texas for children and young children will help inform analysts and researchers, particularly those with local knowledge, and child advocates, to better understand the effects of the census undercount on the funding of federal programs for children and young children. Moreover, in the absence of more updated information, these estimates can be used as a benchmark on cost analyses during the planning stage of the census to reach these particular population groups in the 2030 Census.

Data and Methodology

This brief uses POGO's list of federal programs that relied on census data to allocate resources to Texas geographically and estimates from the 2020 Census.^{9,10}

Relating Federal Programs to Children and Young Children

There was no publicly available mapping of federal programs from which children and young children might benefit. We classified federal programs for children and young children in a two-step process. First, we researched the 338 programs from POGO's list to understand their objective and plausible relationships with children. In this first step, we preserved programs

whose main beneficiary or target population would be any people in the age range of 0 to 17. General programs, or those with a broad population focus are not part of our list. The second step consisted of examining what programs from our short list are related mostly to young children (age 0-4). In this way, we identified programs related to children overall and to young children.

Measuring Funding Implications for Children and Young Children

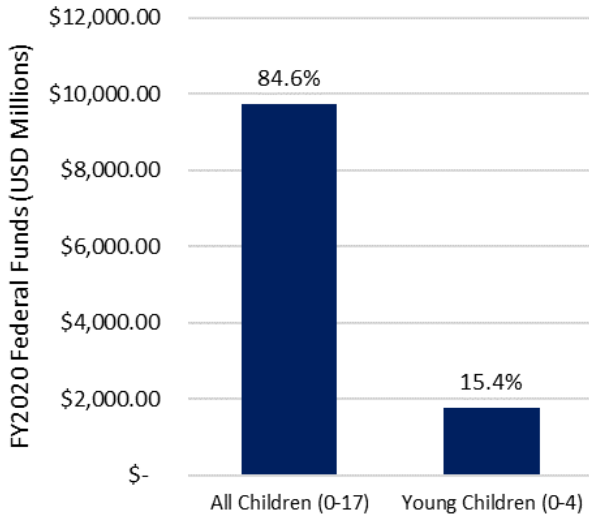
Given the range and complexity of the federal assistance programs that rely on census data, it is extremely difficult to project any funding implications due to undercounts exactly. The implications would depend on who exactly was miscounted, even within programs focused on either children or young children. The funding implications would also vary greatly from program to program. Given the difficulties of accurately projecting each program's funding impact, we use the undercount rates experienced in Texas for children and young children as a placeholder to estimate the funding shortfall that corresponds to the percentage of the target community (either children or young children). This approach provides a useful window to assess the funding implications for these programs.

These undercount figures for children in Texas, in combination with the program estimates of Castellanos-Sosa and O'Hare allow us to estimate overall annual funding implications for children and young children.^{2,3} Moreover, the granularity of our data allows us to explore the funding implications on specific topics by grouping federal programs, such as Childcare, Education, Health, Nutrition, and Safety, among others.

Results

In the first step of the analysis of the programs, we identified 50 programs whose main beneficiary or target population would be children (0-17). Altogether, these programs received \$11.5 billion for their implementation in Texas, of which 84.6% was targeted for all children, and 15.4% was destined exclusively for young children (see Figure 1).

Figure 1
FY2020 Federal Funds for Texas' Children and Young Children.



Note: The categories consider programs with a target population very close to the age range of interest (either 0-17 or 0-4).

From the second step of the analysis we ended up with 37 programs related to children and 13 to young children. Using the Texas funding levels estimated for these programs in FY 2020 as the baseline, we can project the annual budget loss due to the undercount of children in the state. Therefore, according to the state-level undercount numbers, Texas children did not receive \$201.1 million in annual funding after the 2020 census. Similarly, Texas young children did not benefit from \$139.9 million in annual federal funding.

In sum, children and young children will not benefit from an estimated \$341 million in annual funding, which translates to almost \$1 million every day. In the long term, this adds up to a loss of \$3.4 billion for 10 years.

The exhaustive analysis of the 338 programs, and the granularity of the information, allows us to identify how much money was left on the table for specific needs of children and young children. We can also assess how the child undercount affected children through programs related to Education, Foster/Adoption, Health, Nutrition, and Public Safety (see Table 1).

Nutrition and Education are the child-related subtopics most affected by the 2020 Census undercount. With 78.1% of the losses, more than \$157 million were lost in 19 federal programs under these two subtopics.

Table 1
Annual Funding Loss by Children Subtopic.

Children Subtopic	Annual Funding Loss
Nutrition (6)	\$80,056,331
Education (13)	\$77,001,448
Health (6)	\$34,103,826
Foster/Adoption (5)	\$9,207,875
Safety (7)	\$712,663
Total (37)	\$201,082,144

Note: Annual Funding losses are estimated using the 2020 Census undercount for children (0-17) and FY 2020 funding levels. Numbers in parentheses are the total of federal programs within each category.

Regarding young children, it is possible to group the federal programs into Education, Childcare, and Health (see Table 2).

Table 2
Annual Funding Loss by Young Children Subtopic.

Young Children Subtopic	Annual Funding Loss
Education (4)	\$67,280,718
Childcare (3)	\$65,807,465
Health (6)	\$6,835,990
Total (13)	\$139,924,173

Note: Annual Funding losses are estimated using the 2020 Census undercount for young children (0-4) and FY 2020 funding levels. Numbers in parentheses are the total of federal programs within each category.

Education and Childcare are the young child-related subtopics containing almost all the losses derived from the 2020 Census undercount. With 95.1% of the losses, more than \$133 million were lost in 7 federal programs under these two subtopics.

Implications on Children and Young Children Lives

Programs for children and young children can have a range of long-term effects on children's development and well-being. Research suggests that high-quality programs can positively impact various domains of a child's life.¹¹⁻²⁰ Here are some potential long-term effects associated with children's and young children's cognitive and educational development, social and emotional development, health and well-being, and socioeconomic benefits:

Cognitive and Educational Development:

Improved academic achievement: Children who participate in related programs exhibit better cognitive and academic skills, including language development, early literacy, and numeracy.

Increased likelihood of completing higher education: Children who receive the benefits of high-quality children's programs are more likely to graduate from high school and pursue higher education.

Positive impact on parental involvement: Some childhood programs involve parents in their children's education and development, fostering a positive home learning environment and future academic success.

Social and Emotional Development:

Enhanced social skills: Early childhood programs often provide opportunities for children to cope with trauma, interact with peers and develop social skills, including cooperation, sharing, and communication.

Emotional regulation: Exposure to a supportive and nurturing environment can contribute to the development of emotional regulation skills, which are crucial for managing stress and building resilience and contribute to academic success.

Health and Well-being:

Improved health outcomes: Access to early childhood healthcare services and nutrition can contribute to better physical health and well-being throughout a child's lifespan.

Reduced behavioral problems: Quality early childhood programs have been associated with lower rates of behavioral problems in later childhood and adolescence. This includes a lower likelihood of engaging in delinquent behaviors.

Socioeconomic Benefits:

Long-term economic benefits: Individuals who have participated in quality early childhood programs may also have higher earning potential as adults and better opportunities for making their own contributions to society. Society in turn can benefit

from investments in early childhood programs through reduced costs associated with remedial education, juvenile justice, and healthcare.

Socioeconomic and racial achievements: Access to quality early childhood education can help prepare a child with the skills and tools necessary for learning, helping to provide a more level playing field for children from under-resourced backgrounds.

How well early childhood programs work depends on different aspects: the quality of the program design, the level of fidelity during implementation, the program's term and dosage, and whether or not it meets the needs of the child and family. Whether or not schools and communities continue to support children over time can affect long-term program outcomes. High-impact, evidence-based programs that address multiple layers and stages of development in a child can have life-long effects and can be the difference between self-sufficiency and realized dreams and a life of dependency.

Concluding Remarks

Our research sheds light on the significant immediate and long-term financial implications stemming from the undercount of children and young children in the 2020 Census, particularly in the state of Texas. In the near-term, the failure to accurately account for these populations resulted in a substantial loss of federal funds—over \$341 million annually and an estimated \$3.4 billion over the decade. These financial losses, equivalent to nearly \$1 million daily, open up a critical gap in much needed support that could have been directed toward crucial programs related to the well-being and development of children and young children and their communities.

Our analysis identifies 50 federal programs dedicated to children and young children and underscores the severity of the issue, highlighting crucial sectors such as nutrition, education, and childcare which experienced notable funding gaps for children and young children. The combined losses in these subtopics surpassed \$290 million annually. The implications extend beyond mere numbers; they directly impact the cognitive, educational, social, and emotional development of children and young children, with potential long-term effects on their well-being.

As we delve into the nuanced data and funding implications, it becomes evident that targeted and comprehensive programs play a pivotal role in shaping positive outcomes for all children. Moreover, the findings emphasize the necessity of accurate census data for equitable resource distribution, especially in states like Texas with significant undercounts.

Moving forward, this research serves as a call to action for policymakers, advocacy groups, and communities to recognize the urgency of addressing undercounts and ensuring robust, inclusive programs for children and young children. The identified funding gaps are not just financial losses; they represent missed opportunities to invest in the future of our society. By leveraging these insights, we aim to inform strategies, policies, and advocacy efforts that safeguard the well-being and developmental potential of our youngest population in the years to come.

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References

1. Castellanos-Sosa, F. A. & Moulton, S. *Funding Implications of the 2020 Census Undercount in Texas by Federal Program Categories*. (2024).
2. Castellanos-Sosa, F. A. & O'Hare, W. P. *The 2020 Census Undercount of Children in Texas Counties*. (2023).
3. Castellanos-Sosa, F. A. & O'Hare, W. P. *The 2020 Census Undercount of Young Children in Texas Counties*. (2023).
4. Jensen, E. B. & Johnson, S. L. Using Demographic Benchmarks to Help Evaluate 2020 Census Results. *United States Census Bureau. Random Samplings* <https://www.census.gov/newsroom/blogs/random-samplings/2021/11/demographic-benchmarks-2020-census.html> (2021).
5. Jensen, E. B. Census Bureau Expands Focus on Improving Data for Young Children. *United States Census Bureau. America Counts: Series* <https://www.census.gov/library/stories/2022/03/despite-efforts-census-undercount-of-young-children-persists.html> (2022).
6. U.S. Census Bureau. *2020 Census Post-Enumeration Survey Results Available for 50 States and DC in May*. (2022).
7. Reamer, A. *Counting for Dollars 2020: The Role of the Decennial Census in the Geographic Distribution of Federal Funds*. <https://gwipp.gwu.edu/counting-dollars-2020-role-decennial-census-geographic-distribution-federal-funds> (2020).
8. Villa Ross, C. *Uses of Decennial Census Programs Data in Federal Funds Distribution: Fiscal Year 2021*. (2023).
9. Project on Government Oversight. *Dollars and Demographics: How Census Data Shapes Federal Funding Distribution*. (2023).
10. U.S. Census Bureau. 2020 Census: Redistricting File (Public Law 94-171) Dataset. <https://www.census.gov/data/datasets/2020/dec/2020-census-redistricting-summary-file-dataset.html> (2021).
11. Boudreaux, M. H., Golberstein, E. & McAlpine, D. D. The long-term impacts of Medicaid exposure in early childhood: Evidence from the program's origin. *J. Health Econ.* **45**, 161–175 (2016).
12. Barnett, W. S. Long-Term Effects of Early Childhood Programs on Cognitive and School Outcomes. *Futur. Child.* **5**, 25–50 (1995).
13. Barnett, W. S. Long-term cognitive and academic effects of early childhood education on children in poverty. *Prev. Med. (Baltim)*. **27**, 204–207 (1998).
14. Currie, J. Early childhood education programs. *J. Econ. Perspect.* **15**, 213–238 (2001).
15. Goelman, H., Zdaniuk, B., Boyce, W. T., Armstrong, J. M. & Essex, M. J. Maternal mental health, child care quality, and children's behavior. *J. Appl. Dev. Psychol.* **35**, 347–356 (2014).
16. Haskins, R. Beyond metaphor: The efficacy of early childhood education. *Am. Psychol.* **44**, 274–282 (1989).
17. Hill, J., Waldfogel, J. & Brooks-Gunn, J. Differential Effects of High-Quality Child Care. *J. Policy Anal. Manag.* **21**, 601–627 (2002).
18. Li, W., Farkas, G., Duncan, G. J., Burchinal, M. R. & Vandell, D. L. Timing of high-quality child care and cognitive, language, and preacademic development. *Dev. Psychol.* **49**, 1440–1451 (2013).
19. McCartney, K., Dearing, E., Taylor, B. A. & Bub, K. L. Quality child care supports the achievement of low-income children: Direct and indirect pathways through caregiving and the home environment. *J. Appl. Dev. Psychol.* **28**, 411–426 (2007).
20. Yoshikawa, H. Long-Term Effects of Early Childhood Programs on Social Outcomes and Delinquency. *Futur. Child.* **5**, 51–75 (1995).