EXECUTIVE SUMMARY

Introduction
Following the 2010 U.S. Census, attention to the high net undercount of young children (children ages 0 to 4) increased inside and outside of the Census Bureau. This paper provides an overview of the research and new activities related to the net undercount of young children that occurred as planning for the 2020 Census began. This includes a review of new activity within the Census Bureau, mobilization of researchers and advocates on this issue outside the Census Bureau, and how the Census Bureau and the child advocacy community worked together on this problem. The goal is to provide those interested in this issue with a comprehensive picture of young children and the 2020 Census and to supply a point of departure for those working on this issue in the future.

The focus here is on the net undercount of young children in recent U.S. Censuses, but it is worth noting that this issue is bigger than the 2010 U.S. Census. Over the past 70 years, the U.S. Census has seen a consistently high net undercount of young children and there is an under-reporting of young children in major Census Bureau surveys (U.S. Census Bureau 2019a). Young children have high net undercounts in many other countries around the world (O’Hare 2017b). In other words, this problem exists in many different cultures with different census-taking traditions. Despite changes in the U.S. Census Bureau methods over the past 70 years, as well as fundamental changes in U.S. society, the undercount of young children has remained high.

Background
Prior to 2011, the Census Bureau had given limited attention to the issue of counting young children in the decennial census. Despite the availability of data showing young children as having a relatively high net undercount since the 1990 Census, the 2010 Census included no specific efforts to improve the coverage of young children, gather data about the children most at risk, or to research reasons for this problem. The statement of one staff member from the Census Bureau’s Center for Survey Measurement captured the situation,

“...no one had highlighted this issue of undercounted young children as something worth studying so researchers did not optimize previous work to answer these questions” (U.S. Census Bureau 2014c, page 16).

As planning for the 2020 Census began, managers designing 2020 Census operations, including coverage improvement programs, were unaware of the fact that in the 2010 Census not only were young children...
the most undercounted age group but that errors in counting young children had increased since 2000. The Census Bureau was poorly positioned to develop the methods and tools needed to reverse the deteriorating coverage for the nation’s youngest population group.

2020 Census Planning and Research

Following the 2010 Census, which showed once again that young children had a very high net undercount in the census, activities on this issue increased within the Census Bureau. In 2011, the American Statistical Association/National Science Foundation/Census Bureau awarded William P. O’Hare a two-year Research Fellowship to focus on the undercount of young children in the census. In 2013, Deborah Griffin, a senior advisor at the Census Bureau, created a working group to investigate counting young children in the decennial census which resulted in a critical publication in 2014. This work triggered a Census Bureau blog by Frank Vitrano, Associate Director for the Decennial Census, which set the tone for this next several years. By 2015, a combination of efforts resulted in the Census Bureau acknowledging this coverage problem and committing resources to try to improve the count of young children in the 2020 Census.

As we moved closer to the 2020 Census, external groups, advocating for better data for young children, began asking the Census Bureau how they planned to address this problem in the 2020 Census design and many members of the Census Bureau’s Advisory Committees echoed these concerns. In 2015, the Census Bureau set up a research team within the Census Bureau to focus on this issue and within a year of the creation of this research team, early results were helping to frame operational and communication initiatives.

Between 2015 and 2020, activities within and external to the Census Bureau led to key findings about both characteristics of, and potential reasons for, this undercount. Staff at the Census Bureau conducted research using 2010 Census data. They concluded that, “No one factor was responsible for the high net undercount of young children” and “No group of young children was immune from the risk of being missed in the census, but some groups were at higher risk than others.” (U.S. Census Bureau 2019d). The team’s summary report (U.S. Census Bureau 2019d) noted that young children with the greatest risk of census omission included:

- Children who were not a biological or adopted child of the householder (i.e., grandchildren, other relatives, and children who were not related to the householder).
- Children who were Hispanic or racial minorities.
- Children living in complex households, defined as all households other than nuclear families, stem families (i.e., single-parent families), and single-person households.
- Children living in renter-occupied housing and multiunit structures.
- Very young children (those born in the few months prior to the census reference day).
- Children living in the largest and the smallest households.
- Children not enumerated by self-response.

Their research found evidence that the census missed some young children because the entire household they lived with was missed, including situations where the address was not included on the Census Bureau’s address file. The research also found evidence that sometimes the child was the only omission. U.S. Census Bureau (2019d) concluded that multiple contributing factors caused the undercount of young children in the 2010 Census including:

- Young children were missed because they lived in hard-to-count households with enumeration challenges.
- Self-respondents made errors when they created household rosters.
Researchers contracted by groups, such as the Partnership for America’s Children, also conducted and shared their survey and focus groups results. Their findings provided some explanations for why young children were left off census questionnaires at such a high rate.

- A high percentage of parents of young children reported that they did not intend to include their child on their census form; some did not think the census included young children since they were too young for school.
- For some respondents the term, “young children” did not always include babies or newborns.

**Changing the 2020 Census**

The information gleaned from analysis of 2010 Census data sets and derived from new survey and focus group results became a knowledge foundation upon which Census Bureau staff and partners across the country created educational, outreach, and promotional activities. Census Bureau staff also used this information to revise data collection methods and materials. Some of the methodological changes included:

- The 2020 Census questionnaire, help text on the internet instrument and enumerator data collection instruments included changes to try to improve coverage of young children. The Census Bureau revised the wording of the undercount probe questions on the census questionnaire to better identify potential rostering errors.
- New training materials for census enumerators clarified the importance of counting young children during nonresponse follow up or when taking questionnaire assistance calls.

Communication initiatives were especially important to highlight the message about counting young children in the 2020 Census. The list below includes some of the specific communication and partnership efforts in 2020.

- A specific communications campaign, “to improve the count of young children” created educational materials, talking points, fact sheets, infographics, kid-focused social media, and new messaging. Public Service Announcements and advertising campaigns focused on young children.
- The mail strategy included a direct mailing to households in areas with expected coverage problems involving young children, reminding them who to include on their census forms.
- The Census Bureau produced promotional materials with messaging about including young children, babies, and newborns.
- Partnership activities involving Sesame Street, Nickelodeon, and other celebrities stressed the importance of counting kids.
- The Statistics in Schools program added Pre-K materials for children ages 2 to 5.

Unlike all prior censuses, the 2020 Census included many specific efforts to improve the count of young children. This heightened focus on young children was the direct consequence of Increased awareness within the Census Bureau about the problem of correctly counting young children in the census and continued pressure from external advocates for young children.

**External Support**

Efforts of child advocates and researchers outside the Census Bureau matched the work inside the Census Bureau. The emergence of the Count All Kids campaign (CAK) in 2018, reflected the efforts of those outside the Census Bureau. CAK supplied an organizational infrastructure for individuals and groups outside the Census Bureau interested in getting an accurate count of young children in the 2020 Census. The Partnership for America’s Children served as the headquarters for the CAK and the CAK...
campaign included some of the largest organizations working to improve the lives of children such as the Coalition for Human Needs, Zero-to-Three, the Annie E. Casey Foundation, and First Focus. The outreach involved major child-serving groups such as the American Academy of Pediatricians and Childcare centers (Child Care Aware).

The CAK campaign facilitated communication between the Census Bureau and child advocates. The campaign undertook research related to counting young children in the census and supplied key feedback to the Census Bureau. The CAK website included a steady stream of information for child advocates working on the 2020 Census. The website offered blogs and reports on various aspects of counting children in the 2020 Census. The CAK also offered several webinars on this topic. As the Census Bureau created promotional materials, the CAK website flagged them for their network.

Other stakeholders including the Census Counts campaign, the Leadership Conference Education Fund, the National Association of Latino Elected Officials (NALEO), and the Urban League, contributed to both the research and the development of tools and materials to improve the count of young children in the 2020 Census.

Summary
Given the huge challenges that the Census Bureau faced in conducting the 2020 Census, it is not surprising that the net undercount of young children was higher in 2020 than it was in 2010 (U.S. Census Bureau 2022c). But it is unclear how effective any of the individual 2020 Census efforts were in improving the count of young children in the 2020 Census. Nonetheless, the changes in attention to this issue and the honest commitment on the part of the Census Bureau to address this problem is an important change in 2020 compared with 2010. There are many lessons learned from the experience between 2010 and 2020 that the Census Bureau and external advocates can use to improve their approach to the 2030 Census.

In summary, research this decade added significantly to our knowledge about which groups of young children have the greatest risk of being missed in the census. This research also identified several likely explanations for why the census undercounts young children. However, one important line of research that hasn’t as yet occurred is research to determine how to fix this problem.

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2 https://countallkids.org/
1. INTRODUCTION
The main purpose of this report is to bring together information from several sources about improving the count of young children in the 2020 Census. The report begins with a summary of the limited information that was available at the time of the 2010 Census about the net undercount of young children. The report’s focus is on the information developed after 2010 related to counting young children that came from Census Bureau activities and research as well as activities and research conducted outside the Census Bureau this past decade.

Those research efforts supplied important information about the characteristics of undercounted young children and explanations for why they are missed. The Census Bureau and child advocacy groups used this research to develop unprecedented operational, educational, and communication initiatives which this report also summarizes.

In addition to summarizing research and operational/communication changes in 2020, this report discusses the changes and developments in organizational infrastructure inside and outside the Census Bureau that led to these modifications. The Census Bureau established several groups, charged with different tasks, in efforts to improve the count of young children in the 2020 Census. Child advocacy groups (e.g., the Children’s Leadership Council and the Partnership for America’s Children) and groups that use census data about children (e.g., the Annie E. Casey Foundation) encouraged the Census Bureau to address the decline in coverage for this important population group. The Census Bureau worked closely with these groups, the Census Bureau advisory committees, and Census Bureau partners to share and discuss research and develop programs focusing on counting young children in the 2020 Census. The tangible changes found in the 2020 Census were only possible because of the efforts of all of these groups.

2. BACKGROUND
2.1 Early Research
In one of the earliest reports on this topic, West and Robinson (1999) raised the issue of the undercount of young children before Census 2000. Other research prior to 2015 clearly identified the undercount of young children as a serious statistical issue in the decennial census. Researchers focused on measuring the undercount highlighted the following four important findings:

1. Demographic analysis estimated a small net overcount of the total population in the 2010 Census, but this finding masked major differences by age with adults (ages 18 and older) having an overcount of 0.7 percent and children (ages 0 to 17) having an undercount of 1.7 percent (Velkoff 2011). Research also found that the youngest children (ages 0 to 4) had higher net undercounts than older children (ages 5 to 17) (O’Hare 2015).
2. At 4.6 percent, young children had the highest net undercount rate of any age group in the 2010 Census (O’Hare 2015).
3. While coverage rates for older children and adults improved after the 1980 Census, the net undercount of young children grew between 1980 and 1990 with continued increases in undercoverage in 2000 and 2010 (O’Hare 2015).
4. Black and Hispanic young children had higher net undercounts in the 2010 Census than White, Non-Hispanic young children (O’Hare 2015).

Table 1 displays the 2010 net undercount rates for the total population, the adult population, and for children. Table 1 uses data from Demographic Analysis, or DA, rather than from the Post-Enumeration Survey (PES) methodology. It is well established that DA provides a more accurate assessment of census coverage than the PES for young children (O’Hare et al. 2017). As noted above, the overall net overcount
of 0.1 percent in the 2010 Census masked important differences between adults (ages 18 and over) and children (ages 0 to 17). Likewise, the net undercount of 1.7 percent for all children masked the high net undercount of young children (ages 0 to 4).

Some Census Bureau reports show net undercounts as a negative number and other reports display undercounts as a positive number. In this report, a negative figure implies a net undercount. Having an undercount reflected by a negative number is more intuitive and is consistent with the presentation of 2010 DA analysis by Velkoff (2011). This is also the way that the Census Bureau says they plan to report net undercounts and net overcounts in the 2020 Census (U.S. Census Bureau 2022b).

Table 1. Demographic Analysis Estimates of 2010 Census Net Undercounts by Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percent Net Undercount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>0.1</td>
</tr>
<tr>
<td>Adult (ages 18 and older)</td>
<td>0.7</td>
</tr>
<tr>
<td>Children (ages 0 to 17)</td>
<td>-1.7</td>
</tr>
<tr>
<td>Young children (ages 0 to 4)</td>
<td>-4.6</td>
</tr>
</tbody>
</table>

Source: 2010 Demographic Analysis
Note: A negative value denotes a net undercount

A closer look at net undercounts in the 2010 Census by age group clearly found young children to be the population age group with the highest net undercount. Figure 1 shows that many age groups had estimated overcounts with only children ages 0 to 4 and children ages 5 to 9 having net undercounts exceeding 1 percent.

Figure 1. 2010 Census Estimated Net Undercount by Age Group
Source: May 2012 U. S. Census Bureau Release of 2010 Demographic Analysis
Note: A negative value denotes a net undercount

Figure 2 shows net census coverage for young children (ages 0 to 4), school-age children (ages 5 to 17) and adults (ages 18 and older) from 1950 to 2010 based on Demographic Analysis. From 1950 to 1980, the net undercount rates of young children were very similar to those of the two other age groups, and all were improving over time. However, after the 1980 Census, the net undercount rates for these three
ages groups diverged. The net undercount rate for young children increased dramatically, while the net undercount rate for children ages 5 to 17 was stable and the net undercount rates for adults declined steadily. In the 2000 and 2010 Censuses the coverage for adults and school-age children improved while the undercount rates for the youngest children continued to increase.

![Estimated Net Undercount of Young Children, Older Children and Adults: 1950 to 2010](image)

**Figure 2. Net Undercount Estimates of Young Children, Older Children and Adults: 1950 to 2010**

Source: U.S. Census Bureau (2014a)

Note: A negative value denotes a net undercount

Just as the total net undercount in 2010 masked the variability across age groups, the overall net undercount for all young children in 2010 masked large differences by race and Hispanic origin. Table 2 displays the estimated net undercount rates for young children for selected race and Hispanic origin groups. In the 2010 Census the net undercount rates for Black and Hispanic young children were higher than those for Non-Hispanic White young children.³

<table>
<thead>
<tr>
<th>Race or Hispanic Origin</th>
<th>Percent Net Undercount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Young Children</td>
<td>-4.6</td>
</tr>
<tr>
<td>Proxy for White Non-Hispanic Young Children</td>
<td>-2.7</td>
</tr>
<tr>
<td>Black Alone Young Children</td>
<td>-4.4</td>
</tr>
<tr>
<td>Black Alone or in Combination Young Children</td>
<td>-6.3</td>
</tr>
<tr>
<td>Hispanic Young Children</td>
<td>-7.5</td>
</tr>
</tbody>
</table>

Source: O’Hare (2015)

Note: A negative value denotes a net undercount

Studies published after the 2010 Census found considerable geographic variation in the net undercount of young children among states and counties (O’Hare 2014 and 2017a). Among states, the net coverage

³ The rates shown here are the official net undercount rates from the 2010 Census. However, Jensen et al. (2018) conducted further research which shows the rates for Hispanic young children may be lower than the official rates shown here.
of young children ranged from a 10.2 percent net undercount in Arizona to a 2.1 percent net overcount in North Dakota (O’Hare 2014). Among counties with less than 5,000 total population, the mean net overcount was 5.0 percent compared to a mean net undercount of 7.8 percent among counties with 500,000 or more total population (O’Hare 2017). King et al. (2018) found that county-level coverage errors were associated with differences in race and ethnicity.

2.2 Research to Support 2020 Census Planning
Despite these demographic analyses identifying young children as having a high and increasing level of net undercoverage, early planning for the 2020 Census lacked any specific initiatives to reduce coverage error for this population group. The 2010 Census research and evaluation program did not include any studies to identify the characteristics of undercounted children or explanations for their high rate of omission, leaving staff with no clear direction of what changes the 2020 Census might need. Designing solutions was premature without answering some basic questions such as which children were most at risk and why did young children have such high net undercount rates. Listed below are six key questions that the Census Bureau needed to answer and their implications for 2020 Census planning.

1. **Are young children omitted along with all other household members or are they the only omission in a household?** If the Census Bureau missed entire households that included young children, this points to the need to develop better methods to ensure that the Census Bureau’s address file is complete and that the Census Bureau makes it easy for households with young children to respond. If young children are the only omission in a household, the solution might involve clearer guidance about the importance of including young children.

2. **Do most of the errors involving young children occur during the self-response phase of the census or during follow up activities?** If respondents are supplying incomplete information about young children when they complete and submit their census forms, changes in forms design and messaging might reduce young child omissions. If research finds that the majority of omitted young children are on forms completed during nonresponse follow up, enumerator training and efforts to improve cooperation might reduce errors of omission involving young children.

3. **Is the census more likely to omit young children with certain living arrangements or characteristics?** If omissions are related to living arrangements or relationships to householders, the Census Bureau could use this information to develop education and outreach plans to stress the importance of including young children. This could also reveal situations where respondents might not realize that they should be including some young children (e.g., grandchildren, foster children, child in joint custody), suggesting the need for changes to the census data collection instruments and educational materials.

4. **Are young children under-reported in the census because respondents supply an incorrect (older) age for a young child?** Net undercoverage of young children is possible if the census enumerates young children but records their ages incorrectly. If evidence pointed to age reporting errors, addressing this problem would require revising the age question.

5. **Are coverage errors of young children higher in certain geographic areas?** If certain parts of the country or certain types of areas (e.g., urban centers) include a greater concentration of errors involving young children, the Census Bureau could focus resources, including partnership efforts, in those areas.

6. **Are coverage errors for young children related to any data processing methods such as imputation?** If the methodologies used to deal with missing data under impute young children, adjusting those methods could, in turn, reduce net undercoverage of young children.
3. TIMELINE FOR INNOVATIVE CENSUS BUREAU ORGANIZATIONAL CHANGES

3.1 Early Efforts
After the 2010 Census, there was an increase in research and attention related to the undercount of young children within the Census Bureau. The major activities and events noted below provides a timeline of key activities following the 2010 Census. To be clear, this is not a complete accounting of all activities related to improving the count of young children in the 2020 Census, but we believe the summary provides a good representation of the post-2010 efforts.

From the Fall of 2011 until the Fall of 2013, Dr. William P. O’Hare was an American Statistical Association/National Science Foundation/Census Bureau Research Fellow at the Census Bureau focused on the net undercount of young children in the census. Among other things, his research generated two Census Bureau working papers (U.S. Census Bureau 2014a and 2014b) and eventually a book (O’Hare 2015).

During 2013, an informal Census Bureau task force under the leadership of Deborah Griffin held regular meetings to explore the collective knowledge of the Census Bureau about the net undercount of young children. This task force included staff from across the Census Bureau with the goal of summarizing what the Census Bureau knew, and did not know, about the extent of the undercount of young children in the decennial census. The product from this group was a detailed task force report (U.S. Census Bureau 2014c). The report recommended education and outreach within the Census Bureau, a broad set of evaluations using existing data, and research requiring new data collection.

On the heels of this report, and in recognition of the high and growing net undercount of young children in the census, Frank Vitrano, Associate Director for the Decennial Census at the time, authored a census blog on the topic (Vitrano 2014). In it he announced:

“Along with my decennial managers, I stand committed to reversing this decline in coverage for young children in the 2020 Census. In fiscal year 2015, we will establish a team of experts from across the Bureau to focus on coverage improvement activities for the 2020 Census. Their first responsibility will be to identify and prioritize key evaluation and research projects. I can promise you that improving the coverage of children under the age of five will be high among their priorities. This team will report to Census Bureau leadership and will be responsible for making sure that this problem continues to receive the attention that it deserves.

In addition, I plan to identify a point person for this specific issue – improving the coverage of young children in official statistics. This individual will serve as an advocate for high quality data for young children and work with both decennial and demographic survey managers to understand and address the causes for this undercount.”

In many ways the Vitrano blog set the tone for much of the activity at the Census Bureau in the years leading up to the 2020 Census and provided a much stronger focus on the undercount of young children from 2015 to 2020 compared with the efforts that took place between 2005 to 2010. In January 2015, the Census Bureau named senior Census Bureau researcher Patrick Cantwell to head up the initiative on the undercount of young children.

3.2 The Undercount of Young Children Research Team (2015 – 2018)
In early 2015, the Census Bureau begin to assemble a small group of analysts (under the leadership of Scott Konicki reporting to Patrick Cantwell). The team began a dual track effort to (1) educate Census Bureau staff on the issue of the undercount of young children and (2) research the characteristics of missed children and possible causes for their omission. This team included staff from across the Census
Bureau and two external researchers (Dr. William O’Hare and Deborah Griffin). In April and May of 2015 members of the Undercount of Young Children Research Team briefed the Census Bureau director, deputy director, associate directors, and other decennial leaders on the issue of the undercount of young children in the census. Senior management agreed that it was critical that staff within the Census Bureau understand the scope of the problem in order to influence design decisions that might result in reductions in coverage error for young children in 2020.

By mid-decade, the Census Bureau began a series of efforts focused on raising awareness within the Census Bureau about the challenges of successfully counting young children in the decennial census. Between August 2015 and April 2017, staff conducted 32 briefings with managers and staff across the Census Bureau, advisory committees, and partners. See Appendix A for details. These briefings clearly increased awareness on this issue and alerted staff to the need to consider the impact of operational changes on the quality of data for young children. Decennial census staff, especially those in the communication directorate began to develop plans for 2020 initiatives to address the high net undercount of young children.

The research team’s priority was to use existing data from the 2010 Census to learn more about the types of errors resulting in young child omissions, the characteristics of undercounted young children, and possible causes for this undercount. The team accessed data from the following sources:

- 2010 Census Coverage Measurement Survey (CCM).  
- 2010 Demographic Analysis (DA).
- 2010 Census Coverage Probes and Coverage Follow up Operational Data.
- American Community Survey (ACS).
- Edited 2010 Census data files.
- Esri Tapestry Segmentation and the Census Bureau Planning Database.

Appendix B includes brief descriptions of each of these sources.

Between 2016 and 2019 the team released 13 detailed research reports and a summary report. Appendix C supplies a brief overview of each of these research reports. U.S. Census Bureau (2022a) is the Census Bureau’s Undercount of Young Children webpage with links to the final results. Unfortunately, the Census Bureau’s release of many of these reports were too late to have much impact on planning for the 2020 Census. One lesson learned here is to make sure to undertake this kind of research early in the decade to ensure that operational and communication efforts can build off research findings and help shape census planning. In addition to producing this series of research reports and supplying regular updates to senior census management, the Undercount of Young Children Research Team briefed the Census advisory committees and external groups on their findings (e.g., U.S. Census Bureau 2016c).

From the beginning there was the assumption that there was no single factor responsible for the high net undercount of young children. Findings from the research undertaken by the research team supported that assessment.

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4 Some reports refer to the CCM as the Post-Enumeration Survey (PES) because the PES is a critical part of the methodology.

5 Esri is an international supplier of geographic information system software. Esri created the Tapestry demographic and lifestyle segmentation for use in analyzing markets and consumers.
3.3 The Undercount of Young Children Implementation Team (2017 – 2018)
In 2017, the Census Bureau added a sub team to an existing project implementation team. The Census Bureau set up this sub team to develop, coordinate, and manage activities aimed at improving the coverage of young children. The scope of work included partnerships, communications, outreach, enumerator training, and general coordination with the coverage improvement teams. Using the research team’s findings, this team implemented changes to the wording of questions on the census form, improved training for enumerators and questionnaire assistance staff, and influenced communication and partnership initiatives. Census staff briefed the National Advisory Committee (NAC) on these changes (U.S. Census Bureau 2017h and 2018b).

3.4 The Undercount of Young Children Task Force (2019 – 2020)
The Department of Commerce and external stakeholders encouraged the Census Bureau to review 2020 operational and communication plans to confirm that they included all possible efforts to improve the count of young children. Following a presentation on communications at the November 2018 NAC meeting, child advocates expressed concern that the presentation did not include any information on young children. In early 2019, the Census Bureau established the Undercount of Young Children Task Force to improve communication and coordination on initiatives within the Census Bureau to reduce the undercount of young children and to ensure that all efforts to improve the count of young children in the 2020 Census were operationalized. Appendix D includes the mission statement and scope of this task force. The Census Bureau contracted with two outside experts on the undercount of young children, Dr. William O’Hare, and Deborah Griffin, to aid this task force. In addition to working to ensure 2020 Census methods were in place, the task force proposed 2020 Census research and evaluation projects.

The task force became an important communication vehicle within the Census Bureau but also for the advisory committees, the child advocacy community, and external stakeholders to learn about census activities and for the Census Bureau to learn about CAK-funded research results and CAK activities. While the research team that was formed in 2015 analyzed and summarized important aspects of the 2010 Census undercount of young children, the task force was successful in moving a final set of their research reports through required reviews for public release.

Of critical importance was the identification of a single point of contact within the Census Bureau on this issue. The Census Bureau named Karen Deaver as the task force chair, and she was responsible for updating the NAC on the work underway to improve the count of children in 2020 and to provide regular conference calls with the CAK. In early 2019, CAK began regular meetings with the Census Bureau liaison to receive updates on the progress of specific initiatives and to obtain answers to their questions about research and other activities. Establishing an ongoing mechanism to support communication between the Census Bureau and the child advocacy community was extremely successful and is something that the Census Bureau should extend.

3.5 The Young Children Communications Team (2019 - 2020)
The Census Bureau assembled a team which included communications experts, 2020 Census operations and project leaders, members of the Undercount of Young Children Task Force, and subject-matter experts on households with young children to create a Young Children Communications Team. This team developed plans for materials and partnerships specific to households with young children in the 2020 Census. The 2020 Census Partnership and Communications Program included “children under five” as a program element in their Community Partnership and Engagement Program (U.S. Census Bureau 2018c).

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6 Project implementation teams were responsible for overseeing operational implementation of specific projects (e.g., coverage improvement methods).
The 2020 Census Integrated Partnership Program’s strategic frameworks included “young children” as a hard-to-count population (U.S. Census Bureau 2019f). The contractor responsible for the advertising and communications campaign for the 2020 Census was Young & Rubicam (often referred to as team Y&R). One of the elements of this contract was a focused campaign to improve the count of young children.

3.6 Other Census Bureau Research
Awareness of this issue within the Census Bureau led staff in the Center for Administrative Records Research and Applications to examine linked data sets from the 2010 Census. Fernandez, Shattuck & Noon (2018) used administrative records, linked to 2010 Census and ACS data, to explore the characteristics of children under age five who the 2010 Census likely undercounted.

The main vehicle the Census Bureau used to hone 2020 Census messaging was the Census Barriers, Attitudes and Motivators Study (CBAMS) conducted in 2018. This involved a survey and a set of focus groups. The Census Bureau’s original analysis of CBAMS did not include any information on families with young children, but in early 2019, the Census Bureau completed a special analysis of the 2020 CBAMS data focusing on households with young children (U.S. Census Bureau 2019e) which found parents of young children differed from others in a few important ways.

As the Census Bureau began preparations to produce the DA estimates for 2020, they established a subject matter expert advisory group to help them grapple with technical questions. As a sign of the increased attention to the count of young children, they included an expert on the undercount of young children in the advisory group.

Census Bureau staff analyzed population estimates and county-level DA results to create new information about the young child undercount (King et al. 2018). These data were critical for later research to identify census tracts with the highest risks of undercounting young children.

4. CENSUS ADVISORY COMMITTEES
4.1 Census Bureau National Advisory Committee
The Census Bureau’s National Advisory Committee (NAC) consists of 32 members appointed by the Census Bureau director. The Census Bureau established this advisory group to make recommendations to the Census Bureau on a broad set of topics, including race and ethnicity, hard to reach populations, language, American Indian and Alaska Native tribal considerations, data privacy and confidentiality. The NAC established in 2012 replaced advisory committees for the 2010 and earlier censuses. The NAC meets twice a year where Census Bureau staff make presentations and request feedback from members. The NAC makes formal recommendations to the Census Bureau and for certain topics creates working groups.

In 2016, the NAC set up an Undercount of Young Children Working Group which worked with Census Bureau staff to stay abreast of their research and to recommend operational and communication plans for the 2020 Census that held promise to reduce the undercount of young children. This working group produced an interim report and a set of recommendations (U.S. Census Bureau 2017i and 2018d).

At the time of the 2010 Census, there were no members on the Census Bureau advisory committees to provide a voice for the interests of young children. In 2012, the Census Bureau named Dr. Jerlean Daniel (former director of the National Association for the Education of Young Children) to the NAC. Since her appointment, the Census Bureau named other experts with a focus on children to the NAC and they have supplied continuous reminders about the problem of undercounted young children. The current child-focused members of NAC are Gina Adams (Urban Institute), Florencia Gutierrez (Annie E. Casey Foundation), and Iheoma Iruke (Duke University).
4.2 Census Scientific Advisory Committee
The Census Scientific Advisory Committee’s (CSAC) 21 members advise the Census Bureau director on the uses of scientific developments in statistical data collection, survey methodology, geospatial and statistical analysis, econometrics, and computer science. Census Bureau staff present issues relating to Census Bureau programs and activities to the CSAC for their advice. CSAC members reflect diverse backgrounds and points of view that are critical to the Census Bureau’s decennial and nondecennial programs. The CSAC meets once or twice a year.

Census staff briefed the CSAC on many 2020 Census programs and issues, including the undercount of young children. The Census Bureau recently added Kristen Moore, of Child Trends, to the CSAC to make sure the committee doesn’t overlook the issue of counting young children.

5. ORGANIZATIONS OUTSIDE OF THE CENSUS BUREAU

5.1 Census Counts, Census Task Force, and Leadership Conference Education Fund
The Census Counts campaign and the Leadership Conference Education Fund organized much of the stakeholder activity in the 2020 Census involving young children. The Leadership Conference Education Fund (LCEF) houses the Census Counts campaign and brings together civil rights organizations across a wide spectrum of U.S. society. Many of these organizations have grass-roots affiliates that include people who live and work in the communities most at risk of census undercoverage. The Census Counts campaign and the Census Task Force worked to communicate with community members about the importance of the census and supplied resources to facilitate participation. The website includes greater detail about the Census Counts campaign and the resources they developed for the 2020 Census. Some of the first statistical data to help the get-out-the-count effort for young children came from the Census Counts website in 2017.

5.2 The Children’s Leadership Council
In 2016, the Leadership Conference Education Fund begin funding the Children’s Leadership Council (CLC) to mobilize the child advocacy community to pay attention to the high net undercount of young children in the census. The CLC was a coalition of fifty-seven of the nation’s major organizations dedicated to improving the lives and opportunities of American babies, children, and youth. The CLC expressed interest in working with the Census Bureau to reduce the undercount of children in the 2020 Census.

During 2017 and 2018, the CLC focused much of its work on the issue of the undercount of young children and the importance of preventing this undercounting in the 2020 Census. The CLC engaged with the Census Bureau and the Census Advisory committees, giving testimony at NAC meetings from multiple CLC members on the importance of census data to the children’s community. The CLC helped in educating members of Congress, the Administration and other policymakers about the census and elevating the importance of reducing the undercount of young children. Using webinars, meetings, conference calls, and other activities, the CLC raised awareness of this issue with CLC members and allies. In addition, CLC developed some products such as talking points and Frequently Asked Questions (FAQs).

5.3 Count All Kids
The CLC along with the Partnership for America’s Children (PAC) created the Count All Kids (CAK) campaign in July of 2018 based on the strong interest in this issue among CLC members, state-based

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7 https://censuscounts.org/
child advocates and allies. The CLC ended its operations on December 31, 2018, and the leadership of CAK transferred entirely to PAC.

The CAK campaign includes national, state, and local children’s organizations and allies. Between 2018 and 2021 the CAK focus was on trying to get a correct count of young children in the 2020 Census. According to their website⁸,

*The Count All Kids Campaign is a public outreach effort to work with advocates, state and local policy makers, service providers and others to persuade families with young children to fill out the census questionnaire and include their children.*

The CAK campaign had three main functions:

- Serving as a conduit for getting information from the Census Bureau to child advocates across the country.
- Engaging in primary research on topics related to getting an accurate count of young children in the census.
- Providing feedback and advice to the Census Bureau based on their research and the experiences of the national, state, and local network of advocacy groups.

The CAK’s role was to continue advocacy with the Census Bureau and raise awareness among the public, advocates, allies, and policymakers about the quality of census data on children in general and the undercount of young children in the census in particular. The CAK interacted directly with the Census Bureau in meetings and conferences and indirectly through the NAC and CSAC to influence the design of the 2020 Census operations and communications plan. The CAK mobilized individuals and groups interested in getting a more accurate count of young children. They also linked with the broader census stakeholder community.

As we approached the 2020 Census, major stakeholders and the philanthropic community established several organizations to function as “hubs” for given populations. The Count All Kids campaign became the hub for people and groups interested in the undercount of young children.

To address the lack of CBAMS focus groups with parents of young children, CAK commissioned several focus groups with parents of young children to gather more information on messaging (Count All Kids 2019a). This external research complemented the Census Bureau work, supplying insights into reasons why young children are missed in the census.

5.4 Population Reference Bureau

The Population Reference Bureau (PRB) is a private, non-profit organization specializing in supplying information on population, health, and the environment.⁹

In the fall of 2018, PRB started research to develop tract-level data about the risk of the 2020 Census undercounting young children. Such data would help the Census Bureau, child advocates, Census Complete Count Committees, and other stakeholders pinpoint where to focus their efforts in the get-out-the-count work. To support this research the Census Bureau gave PRB access to 2010 Census county-level net undercount rates for children under age 5 for a set of 689 large counties. Census

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⁸ https://countallkids.org/about-cak/

⁹ https://www.prb.org/
coverage of young children varied widely across these counties, ranging from a 19.3 percent net undercount to a net overcount of 12.0 percent.

PRB developed a set of 40 potential explanatory variables based on past Census Bureau research, conversations with Census Bureau staff, consultation with outside experts, and a review of the literature on census accuracy. Based on the model and updated data from the 2013-2017 American Community Survey, PRB predicted the 2020 Census net undercount rate for children under age 5 for each census tract in the 689 counties with at least 25 children under age 5. PRB assigned census tracts into one of three categories of risk of young child undercount:

- Low Risk of a net undercount in the 2020 Census (predicted net overcount),
- High Risk of a net undercount in the 2020 Census (predicted net undercount rate of 0 to 8.29 percent), and
- Very High Risk of a net undercount in the 2020 Census (predicted net undercount rate of 8.3 percent or higher).

PRB issued a report with the detailed methodology used for the tract level predictions (O’Hare et al. 2020) and made a large data file available to the public. PRB also developed a series of databases and interactive maps that included tract-level census self-response rates along with the undercount risk measure and the number of children under age 5. They updated these databases and maps weekly from the end of May 2020 through mid-October 2020 (Mather 2020).

6. CENSUS BUREAU AND STAKEHOLDER COLLABORATION

6.1 Early Meetings

Several groups outside the Census Bureau with a strong interest in high quality data about children reached out to the Census Bureau, raising this issue, and asking what specifically, the Census Bureau planned to do in 2020 to reduce the historic and problematic undercount of young children.

A series of meetings between 2016 and 2018 set the tone for engagement involving the Census Bureau and child advocates related to the undercount of young children in the 2020 Census. Three early meetings with Census Bureau staff (April 2016, March 2017, and June 2017) signaled a greater commitment on the part of the Census Bureau to address this issue in the design of the 2020 Census.

- Under the auspices of the Annie E. Casey Foundation, with assistance from the CLC and the LCEF, there was a meeting held on April 28, 2016, involving Census Bureau senior staff and prominent child advocates interested in the 2020 Census. We believe this was the first meeting between a Census Bureau director and child advocates.
- The CLC hosted a meeting in March of 2017 for CLC members and representatives of the Census Bureau on the issue of the undercount of young children and the Census Bureau plans to address it. Census Bureau staff shared some of their early research findings and operational and communication plans to address this undercount. This meeting provided an opportunity for the Census Bureau to connect with, and learn from, key stakeholders in the children’s community about their concerns.
- On June 8, 2017, CLC hosted a meeting of child advocates and key Census Bureau personnel. In the morning session of this meeting, attendees heard from Census Bureau staff about operational and communication plans. In the afternoon session, representatives from stakeholder organizations had an opportunity to share their plans and their concerns with the Census Bureau. The Census Bureau’s Associate Director for Decennial Census (Al Fontenot) attended this meeting, another reflection of the Census Bureau’s commitment to this issue.
These meetings set a positive tone for advocates and other stakeholders to work with the Census Bureau to share future research and discuss partnership and communication projects to address the undercount of young children in the 2020 Census. Building this foundation was key to successful communication and collaboration.

6.2 Sharing Research and Plans for 2020
The sharing of research findings, outreach materials, and plans between the Census Bureau and the child advocacy community in the 2020 Census was unprecedented. The information sharing involved multiple mechanisms and sometime relied on informal relationships between researchers and advocates. This section reviews several of the key facets of this activity.

Census Bureau staff hosted brainstorming sessions with existing and potential national partners to exchange ideas, learn from external advocates, and discuss methods of reaching respective audiences. The Census Bureau designed this collaborative session to share tactics and find future opportunities for collaboration. CAK members took part in this event sharing their ideas and research-based recommendations for messaging.

The communications team at the Census Bureau and Lake Research conducted focus groups to evaluate the effectiveness of alternative messaging. Team Y&R’s specific campaign to improve the count of young children developed messaging themes involving young children that they evaluated in focus groups of participants with children. Census Bureau staff and CAK staff shared their results and their draft materials in conference calls and meetings.

As Census Day approached, the CAK conducted a full day workshop in Washington, DC to educate advocates leading state young child census outreach campaigns about the resources and strategies available to support their work to count all young children in the 2020 Census. Senior Census Bureau staff attended this December 2019 workshop to supply an overview of the operational and communication changes in place for the 2020 Census to improve the count of young children. Census Bureau staff also shared specific resources (toolkits, infographics, posters, and Public Service Announcements) available for use by CAK members and the public in general. During this meeting, staff from the Census Bureau heard about CAK-sponsored research results, took part in brainstorming sessions, and answered questions from CAK members and other attendees. At this conference PRB staff unveiled the data file showing census tract-level data on the risk of undercounting young children.

On February 22, 2020, the Census Bureau hosted a national kickoff event in Cleveland, Ohio, to further elevate the importance of counting all young children in the 2020 Census. The event was attended by a CAK representative and local child advocates from Ohio.

The Census Bureau developed a webpage devoted to the undercount of young children. This webpage included links to research reports, the infographic about, “Counting Young Children in the 2020 Census,” the Director’s blog, and presentations made by Census Bureau staff on research findings and 2020 plans (Konicki 2018).

The CAK’s website included blogs, links to webinars and reports, and links to other resources.

7. RESULTS – ANSWERING KEY 2020 PLANNING RESEARCH QUESTIONS
Section 3.2 of this report includes information about the data sources used by the Census Bureau research team. Many of these sources are mentioned below. This section summarizes how research on the undercount of young children this decade provided answers to six key 2020 planning questions.
7.1 Are young children omitted along with all other household members or are they the only omission in a household?

Research using 2010 Census data found evidence that some young child omissions were the only omission in a household but some young children were omitted along with other household members or sometimes all household members. These situations may be explained by rostering errors with a response excluding a child in error or excluding a child along with a possible subfamily (U.S. Census Bureau 2017d and 2019c).

There are multiple situations when the 2010 Census omitted young children along with all household members. The CCM data showed that the 2010 Census missed some young children because the address they lived at on April 1st was not on the final list of census addresses. Those housing units may have never been on the original address list, or one of the 2010 Census operations may have removed them in error (U.S. Census Bureau 2017d and 2019c). Other errors occurred when the address list included the household’s address, but the entire household was either missed, enumerated in the wrong location, or enumerated without complete name and demographic information (U.S. Census Bureau 2017d and 2019c).

Fernandez, L., Shattuck, R. and Noon, J. (2018) found evidence that some of the children in the administrative records population who could not be found in the 2010 Census records were from households that the census counted (suggesting the children were the only omission in that household). The research also found that the census omitted other young children along with their whole household.

7.2. Do most of the errors involving young children occur during the self-response phase of the census or during follow up activities?

CCM data allowed researchers to analyze the method of data collection associated with young child omissions. U.S. Census Bureau (2017d) found more evidence of young child coverage errors in households that required nonresponse follow up compared with households that self-responded. The CCM data found notable omissions in households from nonresponse follow up operations, including households that required the use of proxy data from a neighbor or landlord. The reasons for these errors might be attributed to the respondents, to the enumerators, or to nonresponse issues. The households enumerated in nonresponse follow up are generally considered to be hard-to-count. As discussed in section 7.3, the research team found that young children were more likely than older children to live in hard-to-count households.

CCM provided evidence that some young children were missed when the housing unit in the PES matched a housing unit in the census and some household members matched, but the child was not found. This suggests that some respondents excluded young children when they responded. The person completing the census might have been confused or chose to conceal information resulting in the omission of these young children. There is some anecdotal evidence that young children are omitted from the census questionnaire when the household has more people that the lease allows. Respondents fear the data from the census will be made available to the landlord.

Analysis of data on 2010 Census self-response questionnaires that failed a coverage edit\(^\text{10}\) shows that when some respondents completed their census forms, they may have had some confusion about including young children (U.S. Census Bureau 2017b and 2017c). Further analysis found that the coverage probes specifically asking about “newborns or babies,” “foster children,” and “other relatives”

\(^{10}\) Coverage edit is a census procedure designed to identify possible respondent errors, specifically persons omitted or included in error.
prompted respondents to add young children they had initially omitted (U.S. Census Bureau 2017c). These results suggest that some respondents were unsure about including newborns, babies, foster children, and other relatives until they reached these reminder probes on the 2010 Census questionnaire. U.S. Census Bureau (2019d) concluded that respondents who were willing to complete a census questionnaire sometimes made rostering errors and that the high net undercount of young children is due in part to this misunderstanding.

Several additional studies support the conclusions that a large share of respondents do not think they are supposed to include young children when they complete the census. Evidence collected by the Census Bureau in 2014 identified potential respondent misbeliefs about children and the census. Census Bureau researchers (Nichols et al. 2014a, 2014b, 2014c, and 2016) found that respondents were consistently less likely to believe the Census Bureau wanted to collect names of children compared to names of adults.

In the summer of 2019, CAK engaged Lake Research Partners to survey households with children ages 5 and under, making less than $50,000 per year to find out more about why the census misses young children. Lake Research Partners designed and administered an online survey conducted from July 15 to July 28, 2019. The survey examined beliefs about the census and young children and explored the effectiveness of potential messages. These results supplied important information in planning messaging for 2020. That research resulted in a key finding – a sizable proportion of parents did not think the census included young children (Griffin and O’Hare 2020). Analysis found that 10 percent of respondents did not plan to include their young child in the census and another 8 percent were not sure if they would include their young child, suggesting they did not think young children were supposed to be included in the Census. For some groups, such as Hispanics, the numbers were higher.

The National Association of Latino Elected Officials (NALEO) Educational Fund is a non-profit, non-partisan organization facilitating full Latino participation in the American political process.11 NALEO efforts during the planning and conduct of the 2020 Census included educating policymakers about the need for sound and cost-effective planning for the 2020 Census and advocating for an accurate count of Latinos. In the summer of 2018, NALEO asked Hispanic respondents with young children if they thought those young children were supposed to be included in the census. The survey results identified a noteworthy problem about Hispanic households with respect to counting young children (Vargas 2018). NALEO’s survey of Hispanic respondents found that about 15 percent were not sure if the census included young children (Vargas 2018). The high rates at which Hispanic respondents do not believe the Census Bureau wants young children included in the census may help explain the high net undercount of Hispanic young children.

In the fall of 2019, Article 1, a national civic campaign to promote the 2020 Census, commissioned a survey of several hard-to-count groups, and asked a question about whether respondents thought young children were supposed to be included in the census. In the general population, about a third of the population were unsure if, “the census counts all children and/or babies.” For young adults (ages 18 to 34) which is the age group most likely to be parents of young children, 40 percent were unsure if the census included children or babies. Article 1 and Quadrant Strategies (2019) concluded, “Misinformation and a lack of knowledge are standing in the way of everyone being counted in the 2020 Census – especially when it comes to young children.”

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11 Additional information about NALEO and the 2020 Census is found at https://naleo.org/census/.
In combination, the Census Bureau research, CAK research, and research by NALEO and Article 1 pointed to the need to include messaging to parents clarifying that it was important to include young children when they answered the census. Educating respondents would be critical to reducing errors of omission.

7.3 Is the census more likely to omit young children with certain living arrangements or characteristics? DA found Black and Hispanic young children had higher net undercounts than White Non-Hispanic young children (O’Hare 2015). Prior to research conducted by the Census Bureau Undercount of Young Children Task Force there was no specific data about differences in undercoverage by characteristics other than race and Hispanic origin. Census Bureau research after 2010 added to our collective knowledge in this area.

A summary document (U.S. Census Bureau 2019d) captured this line of research and concluded that in the 2010 Census young children with the highest risks of coverage errors included:

- Children who were not a biological or adopted child of the householder (i.e., grandchildren, other relatives, and children who were not related to the householder).
- Children who were Hispanic or racial minorities.
- Children living in complex households, defined as all households other than nuclear families, stem families (i.e., single-parent families), and single-person households.
- Children living in renter-occupied housing and multiunit structures.
- Very young children (those born in the few months prior to the census reference day).
- Children living in the largest and the smallest households.
- Children not enumerated by self-response.

In addition, Fernandez, L., Shattuck, R. and Noon, J. (2018) found that the 2010 Census was less likely to include grandchildren, other relatives, or nonrelatives of the household reference person, those living in large households, households in poverty, and those living with a single parent than their counterparts. They also found that the 2010 Census was less likely to include children in households with unemployed individuals, adults with low levels of education, and adults with low English language ability. They noted that the Census Bureau acknowledges many of these factors as hard-to-count households.

Research found overwhelming evidence that complex households, especially families and nonfamilies with nonrelatives and multigenerational families had high risks of undercoverage involving young children. Tabulations of complex households by type revealed that more than half of all Black, American Indian and Alaska Native, Native Hawaiian and Pacific Islander, and Hispanic young children live in a complex household (U.S. Census Bureau 2018a).

Mobile populations are more difficult to count accurately. Researchers found that in the 2010 Census, young children who moved shortly after Census Day had high rates of coverage error (U.S. Census Bureau 2017d). A review of ACS data for young children found that 20 percent of young children moved in the previous year (U.S. Census Bureau 2017e).

This information on the characteristics of the living arrangements and characteristics of young children that the 2010 Census missed shaped the communication and outreach campaigns of the Census Bureau and child advocates (U.S. Census Bureau 2017a, 2017e, and 2018).

7.4 Are young children under-reported in the census because respondents supply an incorrect (older) age for a young child?

Research to investigate if some of the problem with the high net undercount of young children in 2010 was due to respondents providing incorrect information about their children’s ages relied on
administrative records data. Fernandez, Shattuck & Noon (2018) found that the 2010 Census recorded an older age for a non-trivial percent of children who were in both the 2010 Census and the administrative records dataset. This may explain some of the measured undercount. Tempering these results was the fact that they did not compare the full age distributions in the two universes and concluded that incorrect age assignments may cancel out by respondents or imputation reporting some older children with younger ages. Testing of the age question might be valuable but it is unlikely that these errors explain a large portion of the undercount of young children.

A review of questionnaire images revealed that despite the instructions, some respondents enter ages in months for young children (e.g., 9 months). Some of these reporting errors could result in the census recording an 18-month-old as 18 years old. There was no formal investigation about the potential scope of these reporting errors.

7.5 Are coverage errors of young children higher in certain geographic areas?
Answering this research question would help planners decide where best to allocate resources. Early research using DA-like data found considerable geographic variation in the net undercount of young children among states and counties (O'Hare 2014 and 2017).

To study geographic characteristics, the research team looked at the geographic distribution of households responding positively to one of the child-specific coverage probes. These results found that urban areas had the greatest number of added children based on coverage edits and the greatest number of positive responses to child-specific coverage probes, confirming earlier DA-based analysis that urban areas accounted for a large majority of the undercounted children (U.S. Census Bureau 2017g). But the concentration of the population in urban areas drives these high numbers. Research found that areas of all sizes had fairly similar proportions of their households and populations reflecting added children or positive-responses indicating that errors enumerating young children occur across the country.

The research team used the Esri Tapestry segmentation analysis and the Census Bureau’s Planning Database to identify the types of geographic areas with high rates of potential coverage error involving young children. Esri segments with the highest rates of positive responses to the coverage questions about children tended to be neighborhoods with recent immigrants, language barriers and complex households (U.S. Census Bureau 2017f). The Planning Database identified areas with low predicted mail response rates, language barriers, high poverty and unemployment rates, and low levels of educational attainment as having the greatest potential for coverage errors involving children (U.S. Census Bureau 2017f).

7.6 Are coverage errors for young children related to any data processing methods such as imputation?
The research team conducted limited work on imputation although they did find one imputation error that ironically masked the high undercount of very young children (U.S. Census Bureau 2019b). Detailed analysis found that the Census Bureau edited the date of birth of children born after April 1st (children out of scope for the census) to a birth date in January – March of 2010 (U.S. Census Bureau 2019b). Without these imputations, the 2010 Census would have severely undercounted this youngest age group.

8. KEY CONCLUSIONS FROM 2020 PLANNING RESEARCH
The research found a number of potential explanations for why the census undercounts young children.

- Surveys and focus groups found that some errors occur because respondents assume that the Census Bureau does not want young children included in the census.
• In addition, some respondents are confused about including a young child because of their living arrangement. The 2010 Census was more likely to omit children living in complex households and children with a relationship other than biological, step or adopted child (e.g., grandchildren, foster children, other relatives such as nephews and nieces). This is due, in part, to misunderstandings about who respondents need to include on their household census forms but could also be related to 2010 Census limitations in enumerating large households.

• The research found that young children were more likely than older children to live in the hardest-to-count households where the census risks missing them along with their entire household.

• Research also found that missing housing units accounted for some of the young child omissions when the census misses the child and their entire household.

• Age reporting errors and processing issues contributed to the undercount on the 2010 Census but were unlikely to be drivers.

These findings pointed to the following five areas of improvement that the Census Bureau needed to pursue in order to address the root causes behind the undercount of young children in the 2020 Census.

1. Reduce errors that respondents make when completing their census forms.
2. Increase the number of households that self-respond and gain cooperation from hard-to-count households.
3. Improve the quality of the address file.
4. Improve methods of data collection for large and complex households.
5. Improve the quality of nonresponse follow up.

9. CENSUS BUREAU OPERATIONAL AND COMMUNICATION EFFORTS IN 2020

9.1 Efforts to Reduce Respondent Errors
Research found respondents made mistakes when they completed their census forms contributing to many of the 2010 Census omissions of young children. Some respondents did not believe that the Census Bureau wanted information about young children, and other respondents were unsure about the need to include young children. Research showing grandchildren, foster children, nonrelatives, and children in joint custody as having some of the greatest risks of being missed led to specific wording changes referencing children in these relationships. Appendix E includes a summary of the specific operational changes designed to address respondents mistaken assumption that young children are not supposed to be included in the census. These changes also tried to clarify the importance of including all young children living at an address on census day regardless of their relationship to the person completing the form. Appendix F summarizes the specific communication initiatives included in the 2020 Census to address errors that respondents might make. U.S. Census Bureau (2021) provides details on the 2020 Census Integrated Communications Plan including a section on counting young children. Velkoff (2022) provides an excellent summary of many of the Census Bureau’s efforts to count young children in the 2020 Census.

9.2 Efforts to Increase Self-Response and Gain Cooperation from Hard-To-Count Households
Increasing self-response rates by gaining cooperation from the hardest-to-count households was a major goal of the communications campaign with expected benefits for counting young children. The Census Bureau developed several innovations in the 2020 Census that indirectly could improve the
count of young children. These changes may have helped in 2020 with some enumeration shortcomings related to young children in 2010 (Deaver 2021).

- The availability of an internet response option in the 2020 Census held promise to improve response, especially from younger respondents. This could help gain a more accurate count of young children because a large share of parents of young children are young adults who are more familiar with using the internet. Optimizing the internet instrument for use on mobile phones was an important step to making it easy for young parents to complete the census form using their phones.

- The increase in the number of languages available for response was another 2020 effort that should have helped non-English speaking households with young children. There were more than 250 flyers, pamphlets, and other materials about the 2020 Census available in English and in other languages. The focus of some of these materials was young children.

- The 2020 Census was the first census to allow individuals to respond without a Census identification (ID) number. Persons who believed that the census hadn’t counted them could respond to the census online without an ID and during data processing the Census Bureau unduplicated responses.

- Offering several ways to respond (internet, paper, and phone) might increase the overall response rate. Paper and telephone responses were still possible for individuals preferring one of these methods of response rather than the internet. CBAMS research found that some hard-to-count households, including those with limited English proficiency, preferred responding by paper or phone.

**9.3 Efforts to Improve the Quality of The Address File**

Research found that the 2010 Census missed some young children along with their entire household because their housing unit was missing from the Census Bureau’s Master Address File (MAF). In preparing for the 2020 Census, the Census Bureau used new methods to update and correct the MAF (Deaver 2021). These efforts should have indirectly helped the count of young children.

**9.4 Efforts to Improve Data Collection for Large and Complex Households**

Complex and large households face unique challenges to correct enumeration. The 2020 Census tried to address these challenges by focusing on internet responses which allowed room for each person in very large households and allowing multiple responses from the same address (Deaver 2021).

- Paper forms have space limitations meaning that space is not always available for complete reporting of all persons in large households. Given that most people list household members by age, this limitation has the greatest impact on the youngest children. The 2020 Census internet instrument had no space limitations, allowing respondents to easily list all of their household members.

- Many complex households include more than one family unit and respondents may choose to only report their family members. The 2020 Census accepted multiple responses from a specific

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12 The census ID is the unique number identifying a specific housing unit. The Census ID was provided to household in the initial census mailing.
address and from a specific computer. During data processing, the Census Bureau uses an algorithm to weed out duplication but ensure that multiple families are correctly enumerated.

The Census Bureau developed in-language communication materials and instruments. Indirectly these efforts were expected to benefit large and complex households with young children.

9.5 Efforts to Improve the Quality of Nonresponse Follow Up

Improvements in training related to young children reflected the following changes from 2010 (Deaver 2021) and Walejko & Konicki (2018):

- The Census Bureau developed updated training materials for Nonresponse Follow-Up (NRFU) enumerators that included specific mentions of counting children and a knowledge check question for on-line training.
- There was a case study for in-class NRFU training involving a respondent who is confused about whether to count a grandchild.
- The 2020 Census also included updated training for Census Questionnaire Assistance telephone enumerators and interviewers conducting coverage improvement calls.
- The Frequently Asked Questions (FAQs) created for NRFU and telephone enumerators included content related to the undercount of young children.

10. EXTERNAL PARTNERSHIP AND COMMUNICATION EFFORTS IN 2020

10.1 Census Counts and Leadership Conference Educational Fund

In 2017, the Census Counts campaign began posting statistical data and information to help stakeholders and advocates prepare for the upcoming 2020 Census. Over time they posted statistical data and information for several key stakeholder groups. The first population for which they supplied data was young children. The fact that young children was the first population addressed in this effort reflects the extent to which the undercount of young children in the Census had increased saliency since the 2010 Census.

The Census Counts website included multiple data sheets on children focusing in particular on the number and percent of young children living in Hard-to-Count Census tracts. In August of 2017, the Census Counts website made available a set of tables related to young children living in Hard-to-Count Census tracts. There were nine tables showing data for states, large cities, and congressional districts ranked based on the number and percent of young children in Hard-to-Count tracts (Leadership Conference on Civil and Human Rights 2022).

In addition to the statistical data, the Census Counts website included several other products related to the undercount of young children including a factsheet on counting young children in the 2020 Census (Leadership Conference Education Fund 2019). The Census Counts campaign also issued FAQs, a toolkit for counting kids, and a “Be Counted” flyer and hosted a webinar on “Census 101 and the Young Child Undercount: Issues, Resources, Next Steps.”
10.2. Counting for Dollars
“Counting for Dollars” was another very useful site.\textsuperscript{13} This site supplied information on 316 federal funding programs that use census-derived data. It was easy for users to break out the specific programs that serve children and obtain data for their states. For example, this website provided data on all of the programs within the U.S. Department of Education that use census-derived data to distribute funds to states and localities.

10.3 Population Reference Bureau (PRB) Data on Risk Level of Young Child Undercounts
PRB developed tract-level data regarding the risk of the 2020 Census undercounting young children. These data would help the Census Bureau, child advocates, Census Complete Count Committees, and other stakeholders pinpoint where to focus their efforts in the get-out-the-count work. The public data file included the risk level assigned to each census tract in 689 large counties along with the predictive data for each tract. Inclusion of the predictive data helped users understand which factors caused a given census tract to have a high risk. PRB supplied the tract level data to the widely-used CUNY mapping system so users could explore the tract-level risk of undercounting young children in the 689 large counties in an interactive mapping application—the HTC 2020 map. The PRB website linked directly to the City University of New York (CUNY) HTC Mapping system.\textsuperscript{14}

In December 2019, PRB staff described the project at a conference of child advocates organized by the PAC. In February 2020, the Count All Kids website and a webinar, organized and hosted by the PAC, highlighted the undercount risk measure and the PRB database. PRB staff also summarized the results of their research at the virtual 2021 Applied Demography Conference.

PRB also developed a series of databases and interactive maps that included tract-level census self-response rates along with the undercount risk measure and the number of children under age 5. They updated these databases and maps weekly from the end of May 2020 through mid-October 2020 (Mather 2020).

10.4 City University of New York Mapping Application
The City University of New York (CUNY) is the public university system of New York City. Steve Romalewski directs the CUNY Mapping Service, which is part of the Graduate Center’s Center for Urban Research. As he had done in the 2010 Census, Steve Romalewski developed a user-friendly mapping application stakeholders could use to show locations where there was likely to be a census undercount based on the Census Bureau’s provided self-response rates.

One part of this mapping system was the incorporation of the PRB risk of undercounting young children measure. This website supplied constantly updated information on 2020 Census self-response rates for census tracts and higher levels of geography based on daily updates from the Census Bureau. By incorporating the PRB data, the CUNY site allowed child advocates to track how the 2020 Census was unfolding tract by tract. This information was very helpful for advocates trying to improve the count of young children in the 2020 Census.

The CUNY mapping system added the PRB data in early February of 2020 when PRB initially released the data. From February 1, 2020, through October 31, 2020 (when the Census Bureau’s extended data collection phase had ended), users viewed the HTC map 350,000 times. The fact that it had data related

\textsuperscript{13} https://gwipp.gwu.edu/counting-dollars-2020-role-decennial-census-geographic-distribution-federal-funds

\textsuperscript{14} https://www.censushardtcountmaps2020.us/
to young children was a big plus. Users accessed the PRB map layer within the CUNY mapping service about 3,600 times, with a large share of those hits coming through the PRB website. The cooperation between PRB and the CUNY mapping service helped advocates gain access to important data.

10.5 The Urban Institute

The Urban Institute is a non-profit organization that conducts economic and social policy research. For decades, the Urban Institute has analyzed census data and supplied insights into census issues, notably the accuracy of the decennial census. In June 2019, the Urban Institute (2019) released a report titled, “Assessing Miscounts in the 2020 Census.” The report provided findings from a 2020 Census count assessment nationally and by state under low, medium, and high-risk scenarios. The report included data for several high-risk demographic groups including the population ages 0 to 4. For young children, the Urban Institute report predicted a net undercount of 4.61 percent in the low-risk scenario, 5.69 percent in the medium-risk scenario, and 6.31 in the high-risk scenario. In other words, they predicted a net undercount for young children in the 2020 Census at least as high as the 2010 net undercount and probably higher. The Urban Institute made available similar data on potential undercounts of young children for each state.

In November of 2021, the Urban Institute issued another report related to the accuracy of the 2020 Census (Urban Institute 2021). The 2021 study used a micro-simulation method and predicted a net undercount of 4.86 percent for the population ages 0 to 4 based on a predicted overcount of 4.13 percent and a predicted omissions rate of 8.99 percent. This study was particularly helpful because it estimated omissions in addition to net undercounts.

The inclusion of young children as a high-risk group in these two Urban Institute studies reflects the extent to which this issue has been elevated in recent years among groups outside of the Census Bureau.

10.6 Other Stakeholder Groups

Many census stakeholder groups incorporated messages about the high net undercount of young children and the importance of making sure they are counted in the 2020 Census. In part, this interest was due to the high net undercount of young children of color in the 2010 Census. For example:

- NALIEO efforts during the planning and conduct of the 2020 Census included educating policymakers about the need for sound and cost-effective planning for the 2020 Census and advocating for a correct count of Latinos. NALIEO sponsored a 2016 report on the Undercount of Young Hispanics (O’Hare et al. 2016b) and a congressional briefing on this topic.
- Asian Americans Advancing Justice posted a blog about large differences in hard-to-count characteristics among subgroups of Asian children (O’Hare 2020).
- The Federation of Pediatric Organizations was a key participant in the Census Bureau’s February 2020 event in Cleveland related to young children.
- The National Urban League conducted a webinar in March 2020 which had a segment on the high net undercount of Black young children.
- The Population Association of America sponsored a congressional briefing on the undercount of young children in the census featuring Dr. William O’Hare and key Census Bureau staff.

11. CONTINUED RESEARCH AND EVALUATION

From 2015 to 2018 the Census Bureau research team produced 13 reports. The Census Bureau should replicate many of those reports using 2020 Census data as quickly as possible so that information can
provide a foundation for the 2030 Census campaign. Also, Fernandez and colleagues produced a very useful report comparing 2010 Census records with administrative records. The Census Bureau should pursue a similar style of matching study using 2020 administrative records and 2020 Census responses.

Two recent Census Bureau announcements suggest they plan to build on the momentum achieved over the past decade. At the September meeting of the CSAC, the Census Bureau announced the formation of a cross-directorate team within the Census Bureau to work on the high net undercount of young children in Census Bureau data. Velkoff (2022) stated that this team would research ways to improve data on young children by improving data collection, improving population estimates, and modeling. The Census Bureau also announced the creation of the Office of Strategic Alliances to maintain many of the relationships developed in the build up to the 2020 Census, including the link to child advocates.

Of critical importance is measuring the accuracy of the 2020 Census count and assessing the demographic and geographic variation in net coverage for young children. Another sign that the Census Bureau is more focused on the net undercount of young children is the planned production of two new experimental series in the DA program. One series will provide estimates for the coverage of the population ages 0 to 4 for each state. A second series will provide data by race for the population ages 0 to 17. Velkoff (2022) noted that the cross-directorate team would research the coverage of children in the 2020 Census and help with planning for the 2030 Census.

As stated throughout this document, there were many new activities in the 2020 Census to improve the count of young children. Assessing the effectiveness of these changes is also important. Unlike the 2010 Census, the 2020 Census included several operational and communication efforts focused on reducing the undercount of young children. In planning for the 2030 Census, it would be useful to know if those efforts paid off. Did changes in roster and coverage questions help? Did communications efforts dispel misunderstandings about who to include? Did the use of administrative records help or hurt the count of kids? Do respondents understand that they should include young children? Was the mailer effective in getting respondents to include young children?

It is very important that the Census Bureau maintain the positive relationships they developed with external child advocate groups and other partners. Nourishing these relationships throughout the decade should create a better foundation in place prior to the 2030 Census.

Research has found that Census Bureau surveys, such as the ACS, also undercount young children (U.S. Census Bureau 2019a). Research should continue, using the ACS, to explore methods that might reduce these coverage errors and improve the quality of census data on young children. The Census Bureau’s plans to test some alternative rostering language in the 2022 ACS content test is a good example of this. The 2030 test censuses that the Census Bureau conducts in the next few years offer another possibility for testing new approaches.

Focus groups, surveys, and cognitive testing with parents of young children should take place early in the decade to feed into 2030 Census instrument and operations designs. The 2030 CBAMS should include direct questioning about respondent’s understanding of if they should include young children in the census. Early CBAMS focus groups should include a session with parents of young children or ensure that parents of young children are a part of all other focus groups.

12. LESSONS FOR THE 2030 CENSUS

The research and activities described in this report suggest several important lessons.
• Start early. The Census Bureau will make some of the most important decisions about the 2030 Census many years before 2030. Moreover, the 2030 Census will likely include several important tests early in the decade. These are opportunities for testing experimental methods related to getting a more accurate count of young children.

• Name a point person to communicate with outside groups and advocate within the Census Bureau for the interests of young children.

• Establish teams involving different parts of the Census Bureau. The proposed cross-directorate team to work on this problem should include demographers, statisticians, survey methodologists, communications staff, and staff with operational expertise.

• Use the ACS as a learning lab to expand testing options and reduce coverage errors involving young children in the ACS and the decennial census.

• Involve external researchers, advisory committees, stakeholders, and advocates for children.

As we finalized this report, the Census Bureau released the first data from the 2020 Post-Enumeration Survey and limited data for comparison with DA (U.S. Census Bureau 2022c). The middle series DA analysis indicate a net undercount rate of 5.4 percent for the population ages 0 to 4 in 2020, compared to 4.6 percent for the corresponding population in the 2010 Census. The increase in the net undercount of young children is disappointing but not entirely unexpected. Moreover, it is worth noting that the net undercount of young children did not increase as much as the net undercount for some other vulnerable groups such as African-Americans and Latinos. Perhaps some of the efforts outlined in this report helped limit the increase in coverage error over the decade.

There are also other reasons that one might not expect the activities outlined here to have as much impact as we had hoped for. Many of the efforts to improve the count of young children in the 2020 Census started relatively late in the census cycle. If they had started earlier in the cycle they may have been more effective. Also, it is important to recognize the 2020 Census was conducted under very difficult circumstances, including chronic underfunding of the Census Bureau, attempted political interferences, a pandemic, and many natural disasters.

On a more positive note, much of the work done over the past decade is likely to have a payoff in the 2030 Census. There are several reasons to expect more progress on this issue in the next decade. The high net undercount of young children has been elevated inside and outside the Census Bureau as an important issue. The organizational infrastructure that was developed over the past decade provides a chance to address this issue earlier and more forcefully in the 2030 Census planning cycle. Momentum has been established on this issue which is likely to have an impact over the next decades. We believe the activities over the past decade have established a critical foundation and an organizational infrastructure that will serve us well as we move toward the 2030 Census.

In summary we are disappointed that the work done on this issue over the past decades did not result in a more accurate count of young children in the 2020 Census, but we are optimistic that the work over the past decade will have an important impact on the count of young children in the 2030 Census.
13. REFERENCES


Undercount of Young Children Research Team Briefings and Presentations
Source: Griffin (2017)

August - December 2015
- Decennial Leadership Group (Decennial Division Chiefs and Assistant Division Chiefs, Associate Director and Assistant Director for Decennial Census)
- Research and Methodology Center Chiefs
- Pre-brief for Executive Steering Committee Presentation with Associate Director and Assistant Director for Decennial Census
- Executive Steering Committee (Director, Deputy Director, Associate and Assistant Directors)
- Census Bureau Director
- National Advisory Committee – 2015 Fall meeting
- Field Division Regional Managers
- Los Angeles Regional Office Managers
- American Community Survey Office Managers
- Census Managers
- Center for Survey Measurement Seminar
- Demographic Directorate managers and staff
- Decennial Statistical Studies Division Information Share
- Federal Committee on Statistical Methodology conference - Complex Households

January - June 2016
- Decennial Directorate Brown bag
- American Community Survey Office Research Team
- Federal State Cooperative for Population Estimates (FSCPE) annual meeting
- State Data Center meeting
- Decennial briefing to managers including Associate and Assistant Directors
- Census Bureau Director briefing prior to Casey-sponsored event
- External stakeholder meeting sponsored by Casey foundation
- Decennial Managers and 2020 Communications staff
- Federal Interagency Forum on Child and Family Statistics
- Deputy Director
- Center for Adaptive Design managers

July 2016 – April 2017
- Census Coverage Measurement Questionnaire Design team
- Census 101 event with staff involved in 2020 Communications Contract
- Census Information Center Steering Committee
- 2016 Southern Demographic Association conference presentations
- National Advisory Committee 2016 fall meeting
- Center for Survey Measurement seminar with Jon Krosnick
- Children’s Leadership Council meeting
Data Sources for 2010 Census Research

The team accessed data from the following sources:

- **2010 Census Coverage Measurement Survey (CCM)** – Record-level data from the CCM supplied important information about the characteristics of the young children missing from the 2010 Census. The CCM developed a roster of household members and matched those persons against the 2010 Census enumerations to find individuals, including young children, omitted from the 2010 Census. These nonmatching young children could be true omissions or represent incomplete enumerations. Despite some limitations, these data supply insights into instances where the enumeration of young children was problematic. U.S. Census Bureau (2017d) includes more detail on how the research team used the CCM data for their research. The Census Bureau acknowledges that the CCM’s estimated net undercount of young children is low. In the 2010 Census, DA estimated a net undercount of -4.6 percent for the population ages 0 to 4 compared to an estimate of -0.7 percent net undercount from the CCM. For this reason, researchers chose to use DA estimates of net undercoverage in lieu of the CCM estimates.

- **2010 Demographic Analysis (DA)** - The Census Bureau has used Demographic Analysis or (DA) since the 1950s to estimate net undercounts in the U.S. This method creates a separate independent estimate of the expected population based largely on births and deaths. DA is an example of the cohort-component method of population estimation meaning staff estimate each component of population change (births, deaths, and migration) for each birth cohort. Because of its heavy reliance on high quality birth certificate data, researchers recognize this method as the best way to gauge census coverage for young children. The Census Bureau Task Force on the Undercount of Young Children, (U.S. Census Bureau, 2014, page i) concluded, “The task force believes that Demographic Analysis (DA) provides the best measure of this undercount in the 2010 Census at 4.6 percent nationally.”

- **2010 Census Coverage Probes and Coverage Follow up Operational Data** – The 2010 Census self-response and NRFU questionnaires first asked respondents to determine the total number of people living in the unit. The next question was designed to identify possible census omissions. It included a probe about, “children, such as newborn babies or foster children.” Questionnaires responding positively to this probe were eligible for follow up to try to determine if the household may have omitted a child in error. The research team used operational data about the households that responded positively to this child-specific coverage probe and summarized data about the children added due to the follow up operation.

- **American Community Survey data** - Researchers summarized the social, demographic, and economic characteristics of enumerated young children using ACS data. Comparing summaries for young versus older children allowed researchers to decide if young children were more likely to live in households with hard-to-count characteristics.
• **Edited 2010 Census data files** – The research team analyzed 2010 Census data before and after edits and imputation to study the potential errors introduced due to missing data on age. Researchers also summarized 2010 Census data for children ages 0 to 4, 5 to 9, and 10 to 17 to determine if the household characteristics of the youngest children differed from those of older children. The research team developed a complex household typology using relationship data from the 2010 Census to examine the living situations of children (U.S. Census Bureau 2018a).

• **Esri and the Census Bureau Planning Database** – The team used the Esri Tapestry system and selected variables from the Census Bureau’s Planning Database to obtain additional local characteristics to summarize geographic distributions of coverage errors involving children.
Census Bureau Research Team Reports on the Undercount of Young Children
Source: U.S. Census Bureau (2019d)


This report used data from vital statistics and from the American Community Survey (ACS) to estimate survey coverage of new mothers by maternal age, marital status, and race. The results suggest that the ACS and likely the decennial census undercount young mothers, especially young, unmarried mothers. It is possible that the census misses young children along with their young mothers.


In this report, estimates from Demographic Analysis (DA) and Census Coverage Measurement (CCM) were combined to produce new estimates of census omissions by age. CCM estimates of erroneous enumerations and counts of whole-person imputations were also compared by age. The research found that a high omission rate, not a low erroneous enumeration rate or a low whole person imputation rate, is driving the high net undercount of young children.


These two reports compared the characteristics of the youngest children (ages 0 to 4) with those of older children in two age groups (ages 5 to 9 and ages 10 to 17). The first report used data from the 2010 Census, summarizing demographic, housing, and household characteristics. The second report used detailed demographic, social, and economic data from the 2010 - 2014 ACS five-year estimates. Both reports found that young children were more likely than older children to live in the kinds of households and housing units known to have greater enumeration challenges and coverage errors.

These reports used data from the 2010 Census Coverage Follow up (CFU) operation. The first report profiled the characteristics of the households that responded positively to one of the 2010 Census child-specific coverage probes. It showed certain household types as having a greater likelihood of marking one of the child-specific coverage probes, which may reflect confusion about including a child on their census form. The second report found the young children who were added to a 2010 Census questionnaire based on follow-up interviews in CFU. The report found several characteristics with high CFU add rates, showing that these types of households made errors when they initially completed their census forms. Results from the undercount probes and the CFU operation were also used to study the geographic distribution of errors involving young children.


In these reports, nonmatch rates derived from CCM results were used to examine the characteristics of young children who were counted in the 2010 CCM survey but could not be matched to a 2010 Census record. The results supplied a profile of the types of young children who were most at risk of undercoverage.


In this report, 2010 Census data on relationship to the householder were used to construct a detailed set of household types. Those household types were categorized as complex or noncomplex. This typology was used to study the distribution of young children across household type and to examine the relationship between household type and potential coverage error.


This report used population estimates to produce measures of coverage error for children in three age groups in three major Census Bureau surveys. The results showed a strong pattern of undercoverage for young children (age 0 to 4).

Vital statistics and detailed 2010 Census data on date of birth were used to estimate coverage for the youngest children (age 0). The research found that children born in 2010 may have been missed at higher rate than the DA estimates of net coverage error suggest.
Mission Statement and Scope of The Undercount of Young Children Task Force

Source: Count All Kids (2019b)

Task Force Mission

1. To assess the recommendations made to reduce the undercount of young children in the 2020 Census with priority on those affecting production operations, communications, and evaluations.
2. To ensure that agreed upon solutions are poised for implementation in the 2020 Census.
3. To understand 2020 shortcomings and effectiveness of 2020 coverage improvement efforts and plan the research agenda on this topic in preparation for 2030.

Task Force Scope:

1. Gather findings from research, suggestions from stakeholders including advisory groups and child advocate groups, and proposals from internal interested parties that are aimed at improving the count of young children.
2. Unduplicate and summarize these ideas into a single list.
3. Organize ideas into three major categories: production operations, communication/partnerships, and research/evaluation with appropriate subcategories such as ‘instrument-related’ or ‘training’ for operations ideas.
4. Meet with senior management and relevant internal program managers and/or Integrated Project Team (IPT) leads to determine the disposition of each idea: already complete, feasible for 2020 Census, possible for 2030 Census, and not feasible. This includes exploring variations or alternative to the ideas with the goal of increasing their feasibility and implementation for the 2020 Census.
5. Prioritize those ideas that can be implemented in the 2020 Census.
6. Work with senior management to empower program managers to implement agreed upon solutions. This includes advocating senior management to provide funding and personnel as well as to consider deprioritizing other initiatives if necessary.
Operational Changes to Address Respondent Errors

The Census Bureau made important changes to the data collection instruments (i.e., internet instrument, paper forms, help screens) and primary solicitation materials (invitation letter and questionnaire) to try to clarify the need to include young children. Deaver (2021) and Walejko & Konicki (2018) documented these changes, including:

- The first mail piece received in most households read, “We need your help to count all adults, children, and babies.” The earlier version simply read, “We need your help to count everyone.”
- The Census Bureau revised the language on the primary solicitation materials that most households received in 2020. In the 2010 Census, the question used to create a household roster asked about, “everyone living or staying at this address.” The 2020 Census question asked about, “all adults, children, and babies living or staying at this address.”
- The help text on the 2020 Census internet instrument provided additional guidance about counting children. If a respondent clicked on the help icon in the instrument, greater information appeared detailing who to count including, “be sure to include … babies and children of all ages (even newborns and infants), including biological, step and adopted children as well as grandchildren, foster children, and children in joint custody arrangements.”

Deaver (2021)
The 2010 Census included an undercount question to try to identify and correct any errors that respondents made when they created their household roster. In the 2020 Census, the Census Bureau revised this probe to specifically mention “grandchildren” and “children, related or unrelated” to hopefully prompt respondents to add in any young children they might have originally omitted.

Deaver (2021)

Another operational change in the 2020 Census was that the internet instrument allowed respondents to add missed young children in real time without the need for a follow up contact (Deaver 2021). Changing the online instrument to prompt respondents to enter the name of the person they are thinking of when they respond, “yes” to the undercount probe was an important change in 2020 (Walejko & Konicki 2018). In 2010 the only coverage adds were those made after an enumerator recontacted a household. Automating these corrections in real time holds promise to streamline and more fully account for young children initially omitted. Unlike the internet responses, positive responses to the undercount probe on paper forms in 2020 required a follow up call. The instrument used for this follow up included details to try to identify any potential omissions involving young children (Deaver 2021).
Communication Changes to Address Respondent Error

The communications campaign created numerous materials focused on getting a more accurate count of young children in the 2020 Census. The Census Bureau website dedicated to young children included these materials to allow partners to access and use them in 2020. These materials were based on results of research conducted within the Census Bureau and external to the Census Bureau. This included:

- A fact sheet on the undercount of young children and a fact sheet outlining unique living situations and who to include when responding to the census.¹⁵
- “Every Moment Counts” Public Service Announcement poster and half-pagers.
- A child-focused infographic, Counting Young Children in the 2020 Census
- “Kiss them then count them” materials

One of the most innovative efforts to reduce response error in the 2020 Census was the development of a direct mailer. The Census Bureau developed a metric to assess the risk of undercounting young children at the census tract level. The Census Bureau used this metric to identify specific census tracts (that staff converted to Zip Codes) that would receive a special EDDM (Every Door Direct Mail) postcard just prior to the data collection phase of the 2020 Census. Every address on a mail carrier’s route receives an EDDM rather than individual households. The U.S. Postal Service delivered about 14 million mailers to target areas in late February 2020 with clarifications about who respondents needed to count in the census. This postcard included instructions to, “include newborn babies and young children, even if they are not in your family.” The postcard also cited including, “any family members or friends who are living with you now, even if it’s only for a short time.” This later message was a suggestion that the CAK offered in their NAC public comment based on their focus group research.

¹⁵ Young Child fact sheet - https://www.census.gov/content/dam/Census/programs-surveys/sis/resources/2020/cyc-fact-sheet.pdf#:~:text=%E2%80%A2%20If%20a%20child%E2%80%99s%20family%20and%20guardian%29%20is,if%20they%20are%20only%20staying%20with%20you%20temporarily.
The Census Bureau hired partnership specialists focused on improving the count of young children and collaborated with partners to develop content and products for their networks.

Additional products included:

- A pre-K resource as part of the Statistics in Schools program.
- A song, “Everyone Counts.”
- Storybooks with activities.
- Promotional items such as re-sealable snack containers, burp cloths, insulated reusable zipper pouches, and baby beanies.

The Census Bureau held a national event to highlight the importance of counting young children in the 2020 Census at the Great Lakes Science Museum in Cleveland, Ohio on February 22, 2020.

Media activities included the following child-specific Census Counts stories and the use of social media including Facebook, Twitter, Instagram, and LinkedIn

- November 13, 2019 - “Big Push to Count Every Newborn and Young Child in 2020 Census.”
- February 19, 2020 - “Census Bureau Joins with National and Local Organizations to Help Count Young Children in 2020.”
- May 13, 2020 - “2020 Census is Critical for Your Community.”
- June 1, 2020 - “When Larry the Cucumber and Daniel Tiger Speak; Children Listen.”