Estimating the Net Undercount of Young Children in the 2010 U.S. Decennial Census at the County Level

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Abstract

Data from the Census Bureau's Demographic Analysis (DA) show there was a net undercount of 970,000 children age 0 to 4 in the 2010 Decennial Census. The net undercount rate for the population age 0 to 4 in 2010 was 4.6 percent which is more than twice as high as any other age group. Given the relatively high net undercount rate for young children, it would be useful to examine how this net undercount of 970,000 people is distributed geographically. Yearly population estimates from the Census Bureau provide estimates of young children which are independent of the previous census and are based on a methodology very similar to that used in DA. Like the DA method, the yearly population estimates are based on a simple demographic accounting equation that uses number of births, deaths, and net migration.

In this study, the 2010 Decennial Census country-level counts of children age 0 to 4 are compared to corresponding figures from the Census Bureau's Vintage 2010 population estimates, to ascertain net overcounts and net undercounts. In the largest quintile of counties based on total population size, there was a collective net undercount of 6.0 percent for those age 0 to 4 and in the smallest quintile of counties, there was a collective net overcount of 2.9 percent. National undercount rates for the population age 0 to 4 are driven largely by the results in large counties and do not reflect the experience in the "average" state or county. Other demographic and socio-economic correlates of net undercounts for children age 0 to 4 are also examined.