November 2004

CENSUS 2000

Design Choices Contributed to Inaccuracy of Coverage Evaluation Estimates

GAO Accountability · Integrity · Reliability

Highlights

Highlights of GAO-05-71, a report to congressional requesters

Why GAO Did This Study

Evaluations of past censuses show that certain groups were undercounted compared to other groups, a problem known as "coverage error." To address this, the Census Bureau included in its 2000 Census design the Accuracy and Coverage Evaluation Program (A.C.E.) to (1) measure coverage error and (2) use the results to adjust the census, if warranted. However, the Bureau found the A.C.E. results inaccurate and decided not to adjust or plan for adjustment in 2010.

Congress asked GAO to determine (1) factors contributing to A.C.E.'s reported failure to accurately estimate census coverage error, and (2) the reliability of the revised coverage error estimates the Bureau subsequently produced.

To do this, GAO examined three sets of Bureau research published in March 2001, October 2001, and March 2003 and interviewed Bureau officials.

What GAO Recommends

GAO is making recommendations related to how the Bureau handles design decisions and reports results to improve planning and reporting of 2010 census and coverage evaluation.

The Department of Commerce concurred with the recommendations but raised several concerns regarding our analyses, which we have discussed in the report and used to revise it.

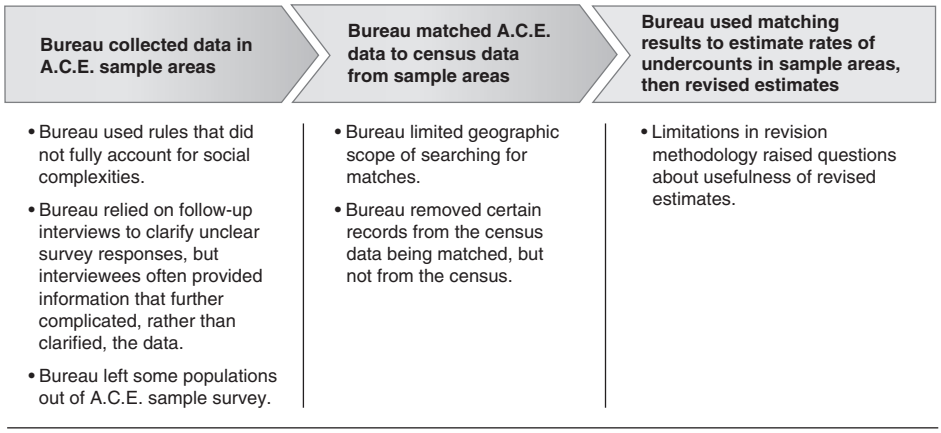
www.gao.gov/cgi-bin/getrpt?GAO-05-71.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Patricia A. Dalton at (202) 512-6806 or daltonp@gao.gov.

What GAO Found

According to senior Bureau officials, increasingly complicated social factors, such as extended families and population mobility, presented challenges for A.C.E., making it difficult to determine exactly where certain individuals should have been counted thus contributing to the inaccuracy of the coverage error estimates. For example, parents in custody disputes both may have an incentive to claim their child as a resident, but the Bureau used rules for determining where people should be counted–residence rules--that did not account for many of these kinds of circumstances. Other design decisions concerning both A.C.E. and the census also may have created "blind spots" that contributed to the inaccuracy of the estimates (see figure). The Bureau has not accounted for the effects of these or other key design decisions on the coverage error estimates, which could hamper the Bureau's efforts to craft a program that better measures coverage error for the next national census.

Factors Potentially Affecting Accuracy of Coverage Error Estimates at Different Points in the A.C.E. Program



Source: GAO.

Despite having twice revised A.C.E.'s original coverage error estimates, the Bureau has no reliable estimates of the extent of coverage error for the 2000 census. While both revisions suggested that the original estimates were inaccurate, in the course of thoroughly reviewing the revisions, the Bureau documented (1) extensive limitations in the revision methodology and (2) an unexpected pattern between the revised estimates and other A.C.E. data, both of which indicated that the revised coverage error estimates may be questionable themselves. Furthermore, when the Bureau published the revised estimates, it did not clearly quantify the impact of these limitations for readers, thus preventing readers from accurately judging the overall reliability of the estimates. It is therefore unclear how A.C.E. information will be useful to the public or policymakers, or how the Bureau can use it to make better decisions in the future.