

Two Sets of County Population Estimates: How and Why Do They Differ?

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The Population Estimates Program at the US Census Bureau annually develops and produces official estimates of the total population for states and counties. These official estimates are developed using an administrative records components of change approach. This approach assumes that administrative records data can provide symptomatic indicators of the basic components of population change – births, deaths, net internal and net international migration. This method is applied universally to every county in the United States.

The current procedure of using a single method universally applied to all counties to produce the official estimates of counties generated considerable discussion at a July 2006 Conference sponsored by the Census Bureau. The need to develop, consider and possibly use multiple methods in the production of the official sets of estimates emerged as an overwhelming outcome of this meeting.

Currently, the Census Bureau uses a variant of the housing unit methodology to produce estimates of subcounty areas. This method has a long historical track record in the estimates arena. This method relies upon current estimates of housing units along with assumptions about the vacancy rates and number of persons per household (PPH) in an area to generate population estimates. The commitment by the Census Bureau to develop an ongoing Master Address File (MAF) along data available from the American Community Survey (ACS) makes the development of a housing unit method an attractive addition to the administrative records methodology used to produce county population estimates.

The use of multiple methods to produce the official estimates presents new challenges and raises new questions. A priori, one would like the two approaches to yield similar results. However, since each method has its unique set of weaknesses and biases, large differences in results can and often exist.

This research will examine two sets of population estimates for states and counties developed for the post 2000 period; one set developed using the current administrative records method and an alternative set developed using a housing unit approach. The research will draw upon earlier research that examined the accuracy and differences in two sets of county population estimates prepared for 2000. The current research will examine the differences in the results for the post 2000 period. The difference in estimate results for the post 2000 period will be compared to the differences observed for the 2000 comparison. The research will also explore county typologies that may be related to the differences in estimate results.