An Evaluation of Small Area Population Estimates Produced by Housing Unit Method: A Multi-State Comparison.

> By Nazrul Hoque University of Texas at San Antonio Department of Demography and Organization Studies Institute for Demographic and Socioeconomic Research

Abstract

In this paper we examine the 2006 population estimates for small areas produced by the Census Bureau and individual states using Housing Unit Method. We examine the small area population estimates for Texas, Florida, Illinois and Georgia against the population estimates produced by the Census Bureau. Three error measures are used to assess the accuracy of estimates. These measures are the Mean Percent Error (MPE), the Mean Percent Absolute Error (MAPE), and the Mean Percent Absolute Difference (MPAD). Normally the error of an estimate is determined by subtracting the estimated population for an area from the census count and dividing the difference by census count. Since we are not comparing the census year, we are estimating the error measures by subtracting the individual states' estimated values from the Census Bureau's estimated values produced by the Housing Unit Method.

For this paper, the values of these three measures are presented by population size in 2000 and rate of population change from 1990 to 2000.