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Post-Census 2000 Population Estimates for the Municipios of Puerto Rico: Current Research at the Census Bureau

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During the 1990s, the Puerto Rico municipio estimates at the Census Bureau were produced using a ratio-correlation technique. An evaluation of these estimates in light of Census 2000 showed unacceptable results. For the post-Census 2000 period, an agreement was reached between the U.S. Census Bureau and the Puerto Rico Planning Board to explore alternative methods for producing the municipio estimates. In the interim, the post-Census 2000 population estimates for the municipios are produced by a simple method, which assumes that the average 1990-2000 annual growth rate of each municipio remains constant.

In this paper, we describe the methods that are under consideration at the Census Bureau for producing official estimates of the Puerto Rico Municipios. One suggested method is a hybrid component-regression method in which the base population, births and deaths are assumed given and the net migration component is estimated with an ordinary least square regression model. Another proposal is to develop detailed population estimates by age, sex, race and Hispanic origin using the traditional cohort component method. For the cohort component method, the net migration component will be developed using two different approaches. The first approach proposes that the Census Bureau obtain the individual tax return files from Puerto Rico and also the permission from the Internal Revenue Service to use the U. S. tax data in combination with the Puerto Rico tax data. In the second approach, the net migration estimates for the 1990-2000 period will be developed by applying the forward survival method to the 1990 census populations, and then comparing with the Census 2000 populations.

This paper discusses the net migration estimates as well as the post-Census 2000 population estimates produced for Puerto Rico Municipios under alternative methods of estimation. It also discusses limitations of each method.