

# **IMPROVING THE MEASUREMENT OF NET INTERNATIONAL MIGRATION FOR STATE AND COUNTY POPULATION ESTIMATES**

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## **ABSTRACT:**

An important component of population change in the postcensal state and county estimates produced by the U.S. Census Bureau is net international migration. Based on internal evaluations, the distribution of international migrants at the subnational level is a problematic area for annual population estimates and is being investigated for improvement. Most census literature concerned with the development of estimates of the net international migration component has primarily focused on one of three areas: overall national estimates of net international migration, the foreign-born population in a specific location or area of the United States, or national estimates of a specific country of origin population (Costanzo, et al., 2002; Deardorff and Blumerman, 2001; Mulder, et al., 2001). An article that did focus on the allocation of international migration to states and counties appeared in the early 1990s (Word, 1992). Other research demonstrates that foreign-born residents in state and county populations were not evenly distributed across the country (Lollock, 2001; Schmidley, 2001).<sup>1</sup>

This paper will be divided into three parts. The first part of this paper presents the methodology or approach used to distribute the national-level of net international migration to the states and counties for three vintages (vintage 2001, vintage 2002, and vintage 2003).<sup>2</sup> After Census 2000, there were substantial changes in the production of estimates of the international migration component due to availability of data and to growing doubts about the appropriateness of the existing approach. First, between the July 1, 2001 estimates (produced in late 2001) and those produced for 2002, there were several changes to the data used for the population estimates in general, and two major changes for the international migration component in particular. Some minor changes were incorporated for estimates produced in 2003. Using a comparison of the three production sets of estimates for the period July 1, 2000 to July 1, 2001, this paper will examine the effects of the changes made to the net international migration component – (a) vintage 2001 with vintage 2002; (b) vintage 2002 with vintage 2003; and (c) vintage

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<sup>1</sup> Six states in Census 2000 had over one million foreign-born residents that accounted for 70.4 percent of the total foreign-born population (Schmidley, 2001).

<sup>2</sup> The annual production of county-level population estimates at the Census Bureau involves the creation of an annual time series of estimates going back to the most recent decennial census. This means that for the 2001 round of estimates (vintage 2001) we obtain estimates for counties for July 1, 2001. When we made estimates for July 1, 2002 (vintage 2002), we also made a new set of estimates for July 1, 2001, as well as for estimates produced for vintage 2003.

2001 with vintage 2003. This will allow for an understanding of how sensitive net international migration estimates are to assumptions and data.

In the second part of this paper, there will be an examination of the relationship between the distribution of the change in the foreign-born population and the component of net international migration at the subnational level. In general, when creating estimates, the use of direct techniques are preferred over indirect techniques to create more reliable estimates. The limited availability of administrative data led the Census Bureau to estimate some of the sub-components of the net international migration component by indirect methods. In this section, theoretical and empirical data will be used to examine the differences between net international migration and change in the foreign-born population.

Finally, the third part of this paper assesses the other potential of sources of data for improving the distribution of international migration to subnational population estimates. Primarily the discussion will focus around how current sources of data can be extended. Particularly there will be an examination of the American Community Survey (ACS) and Social Security Administration's 100% Numident file linked to IRS data (IRS-SSA). Both are currently being used in the production of population estimates, but could potentially be extended to improve the distribution of the net international migration component to county population estimates.

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