THE AGE-SEX PATTERNS OF PERSON-BASED MIGRATION RATES FOR STATES: 2000-2004

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ABSTRACT: To estimate the domestic migration component needed to produce subnational population estimates the Census Bureau uses tax return information. The current method is called the "return-based" method. The purpose of this paper is to evaluate a new method called the "person-based" method, which we hypothesize, will improve migrant's characteristics data.

Under the current return-based methodology, only the filer's age/sex/race/Hispanic origin characteristics are obtained directly from information on the tax return. The characteristics of the spouse and dependents are assigned indirectly based on those of the filer.

In the person-based methodology, the age/sex/race/Hispanic origin characteristics of all persons with legitimate social security numbers are assigned directly. That is, the spouse and dependents characteristics information are obtained directly from matching to the Person Characteristics File (PCF). Thus, it is assumed that the resulting patterns of migration rates by age and sex will be an improvement over those developed using the return-based system.

This study addresses the following questions:

- Are person-based age/sex migration patterns demographically reasonable?
- Are these patterns consistent over time for individual states?

To address the first question we calculated state in- and out-migration rates for the population by five-year age groups (0-65+) and sex. These are compared to the interstate migration rates by age and sex for the United States. Then we looked at the rates by Census region and division to determine if the age/sex patterns are similar.

To address the second question, we looked at the rates over 4 periods: 7/1/2000 to 6/30/2001, 7/1/2001 to 6/30/2002, 7/1/2002 to 6/30/2003 and 7/1/2003 to 6/30/2004. We would expect, in general, to find no large deviations in the state patterns by age and sex across time.

The evaluation shows that the person-based methodology does provide demographically reasonable characteristics data. In general, the person-based migration rates by age and sex are consistent for states across the four periods. State migration rates were similar to the national interstate patterns by age and sex. A few states had unique migration patterns, particularly for ages 20-24 to 25-29 and 65+, these are highlighted. The patterns were similar in most states for males and females and remained consistent over time.