

OVERVIEW AND TECHNICAL NOTES

This report uses data from the 1999 and 2001 cycles of the National Survey of Recent College Graduates (NSRCG).³ These data were restricted to college graduates who earned an S&E bachelor's or master's degree at a U.S. institution of postsecondary education during the 4 academic years 1996–97 through 1999–2000, completed secondary education at a U.S. high school, were employed during the survey reference week, and reported the state of their principal employer. Graduates also had to be living and employed in the United States (i.e., the 50 states, District of Columbia, and Puerto Rico) during the survey reference week.

This report addresses the following questions:⁴

- To what extent do recent S&E bachelor's degree recipients change states between four life events from birth to postgraduate employment (i.e., between birth and high school graduation, between high school graduation and receipt of bachelor's degree, and between receipt of bachelor's degree and employment during the survey reference week)?
- To what extent do recent S&E master's degree recipients change states between five life events from birth to postgraduate employment (i.e., between birth and high school graduation, between high school graduation and receipt of bachelor's degree, between receipt of bachelor's and master's degree, and between receipt of master's degree and employment during the survey reference week)?
- How stable are the residential patterns from birth to postgraduate employment of recent S&E bachelor's and master's degree recipients? To what extent do these individuals return to prior areas of residence for postgraduate employment?
- How do migration and residential stability patterns vary by selected demographic, educational,

and occupational characteristics—sex, race/ethnicity, marital status, employment and student status, undergraduate grade point average (GPA), parents' education, academic field of degree, employment sector, and occupational category? How does residential stability differ by geographic region?

From the combined 1999 and 2001 sample of recent college graduates, 14,362 received their bachelor's degree in an S&E field at a U.S. institution of postsecondary education during the time period for which they were sampled. Of these respondents, 11,429 met the criteria for inclusion in this study; that is, they completed high school in the United States, were employed during the reference week of the surveys, and reported their employer's state. A total of 5,793 recent college graduates received their master's degree in an S&E field at a U.S. institution of postsecondary education during the time period for which they were sampled. Of these respondents, 3,702 met the criteria for inclusion in this study. The total unduplicated sample of recent bachelor's and master's degree recipients was 15,131.⁵

The findings in this report are estimates based on the samples selected for the 1999 and 2001 NSRCG and, consequently, are subject to sampling variability. The standard error is the measure of the variability of the estimates due to sampling. Estimates of standard errors for the results in this report were computed with a technique known as jackknife replication using WesVar.⁶ All comparisons cited in the report were tested for statistical significance using t-tests and found to be significant at the .05 level.

³ The primary reason for using data from two survey cycles instead of one cycle is to increase the sample size and thereby reduce the sampling error.

⁴ This report was modeled after an InfoBrief on interstate migration of the 1999 S&E doctorate population (Sanderson and Dugoni 2002).

⁵ To obtain unduplicated counts for the analyses of migration patterns among recent S&E bachelor's degree recipients, the number of bachelor's recipients who were eligible for selection in both surveys (15 cases) were excluded from the S&E bachelor's degree subpopulation. Nine cases were excluded from the subpopulation for S&E master's degree recipients because those respondents had earned master's degrees in both the 1999 and 2001 cycles.

⁶ The standard error tables appear in the appendix. The WesVar computer program was developed by Westat.