

Section 3

Reversing the Net Out-Migration of College-Educated Nebraskans

Priority 3. Reducing, eliminating, and then reversing the net out-migration of Nebraskans with high levels of educational attainment.

The third priority recommended by the 2003 LR 174 Task Force is to reduce, eliminate and then reverse the net out-migration of Nebraskans with high levels of educational attainment. This priority was advised because data from the 2000 U.S. Census showed that Nebraska lost more college-educated adults than the state attracted between 1995 and 2000. Furthermore, during the same period, Nebraska attracted a significant net in-migration of adults with less than a high school education.

Unfortunately, based on the current data from the U.S. Census Bureau, it is impossible to draw any conclusions about the migration patterns of the adults who have moved to or from Nebraska since 2000. Consequently, this section reviews currently available estimates and explains why these estimates do not clearly indicate whether Nebraska is gaining or losing more college-educated adults than it has in the past.

Previous and New Estimates of Adult Migration

An analysis of data collected through the 2000 U.S. Census revealed that, between 1995 and 2000, Nebraska experienced a net out-migration of college graduates that was more than offset by a net in-migration of adults with less than a high school education. The results of this analysis were reported in the *2004 Baseline Report for the LR 174 Higher Education Task Force* and repeated in the *2005 Nebraska Higher Education Progress Report for the LR 75 Legislative Evaluation Task Force* to underscore the importance of developing more employment opportunities for individuals who are educated at Nebraska's colleges and universities.

The migration analysis presented in the *2004 Baseline Report* was based on the U.S. Census Bureau's estimates of the numbers of adults aged 22 to 64, who left and entered the state during the five-year period preceding the 2000 census. These estimates and the resulting estimates of net migration were based on responses to questions asked on the long version of the 2000 census form that was completed by a one-in-six sample of U.S. households.

Migration estimates based on 2000 census data were included in the *2004 Baseline Report* with the intention that they would later be compared to data collected through the 2010 decennial census. However, the U.S. Census Bureau is no longer going to collect migration data that are comparable to the data collected in 2000. Instead, the Census Bureau is conducting the American Community Survey (ACS) to collect migration data—and other detailed information about the U.S. population—on an annual basis.¹

¹Two data collection forms were used in conducting the 2000 U.S. Census: (1) the short form, which was used to count the total population, and (2) the long form, which obtained detailed demographic, housing, social, and economic data from a sample of U.S. households. In the future, the decennial census will continue to provide a count of the total population, but the American Community Survey will replace the decennial long form.

The decennial long form asked each respondent whether household members had lived in their current home five years ago, and, if not, to report the location of their previous residence. In comparison, the ACS form asks if members of a household lived in a different residence one year ago. Since the resulting ACS data are based on a one-year, rather than a five-year time frame, they are not directly comparable to decennial census data.

Compared to the decennial census, the major advantage of the ACS is that it provides new estimates of interstate migration every year, rather than only once every ten years. For the purposes of this report, the major disadvantage of the ACS is that it provides estimates of the numbers of adults who migrated to and from Nebraska based on small samples of individuals who entered or left the state. As a result, the migration estimates developed from ACS data can vary dramatically from one year to another, not because any significant changes in migration patterns have occurred, but because estimates based on small samples commonly fluctuate as a result of sampling error and other types of statistical errors that reduce their accuracy. In contrast, the migration data collected through the decennial census in 2000 were from large samples of respondents, thus resulting in estimates with small margins of error.

First conducted in 2005, the annual nationwide ACS obtains detailed data from a sample of more than three million households. The ACS data files that are available for public use include the survey responses obtained from an annual sample of about 1% of Nebraska's total estimated population.¹ However, only a small fraction of these individuals have reported that they lived in Nebraska for less than a year, and even smaller samples of respondents from other states have said that they moved out of Nebraska within one year of the survey. When these groups of respondents are classified by level of education, sample sizes are further reduced, thereby decreasing the reliability of the migration estimates by education level and increasing their possible variability.

Even though migration estimates based on ACS data can be expected to vary quite dramatically from one year to another, they are the only available statistics for monitoring Nebraska migration patterns since the 2000 U.S. Census. Consequently, the Coordinating Commission has reported the estimates based on ACS data since they first became available for analysis in January 2007.

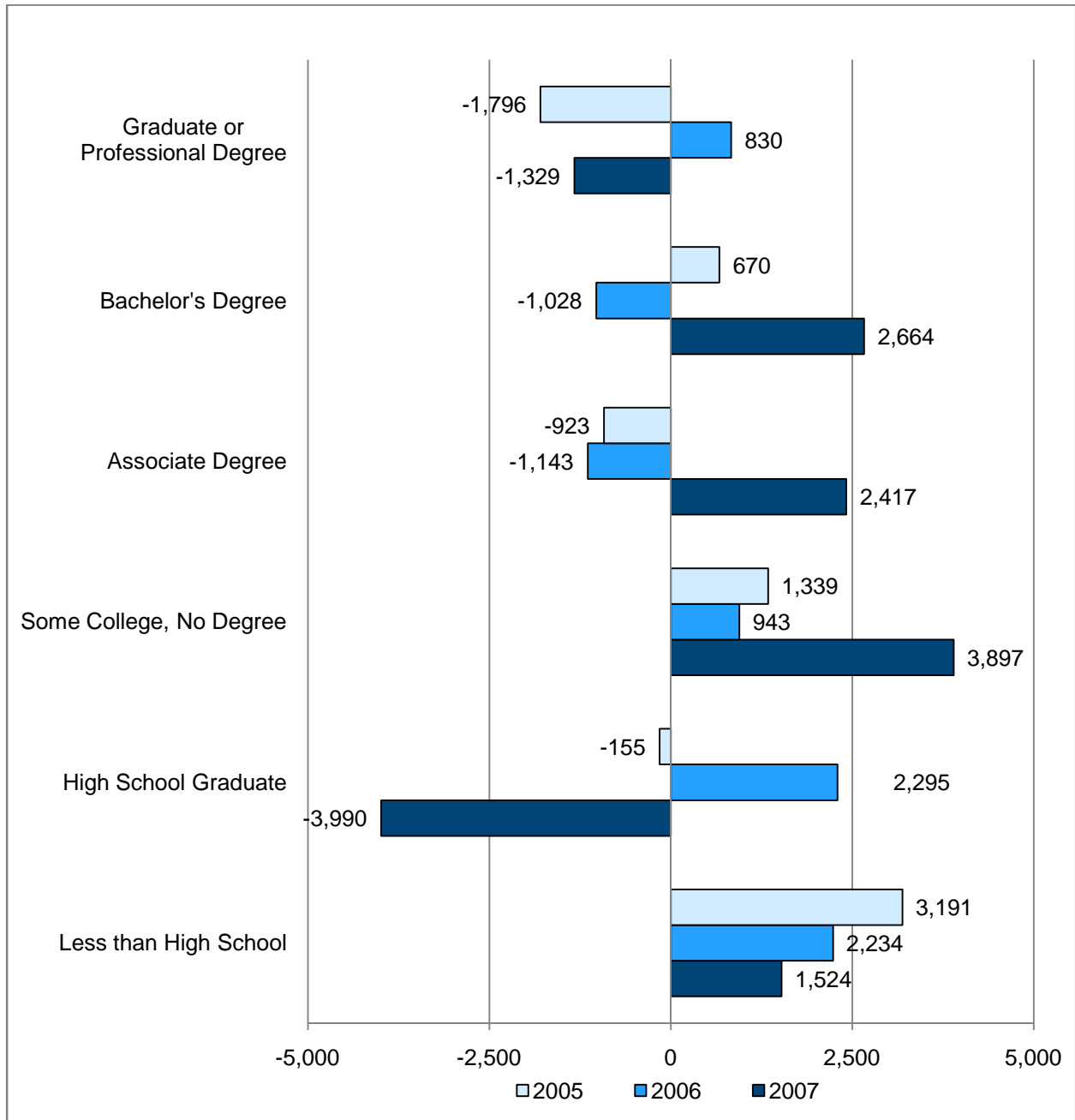
Section 3 of the *Nebraska Higher Education Progress Report for 2007 and 2008* summarized the migration estimates for Nebraska based on data collected through the ACS conducted in 2005 and 2006. These surveys obtained data from small samples of individuals who moved into or out of Nebraska in 2004 and 2005, respectively. This section of the 2008 report summarizes the migration estimates based on 2007 ACS data collected from a sample of individuals who migrated to and from the state in 2006. In addition, this section compares these estimates to those for the previous two years.

Estimates of Adult Migration Based on Results of the American Community Survey

Figure 3.1 on the next page summarizes the net-migration estimates for Nebraska by education level, based on the results of the ACS conducted in 2005, 2006 and 2007. As illustrated in this chart, the estimates based on the 2007 ACS data are significantly different than those based on ACS data collected in 2005 and 2006. Also, there are noticeable differences between the estimates derived from the 2005 and 2006 data.

¹The ACS data files used by the U.S. Census Bureau include a slightly larger sample of Nebraskans than the data files available for public use. As a result, the population statistics reported in the data tables published by the Census Bureau will be slightly different than the statistics derived from the data available for public use.

Figure 3.1
Estimated Nebraska Net-Migration of 22- to 64-Year-Olds in 2004, 2005 and 2006
by Education, Based on the 2005, 2006 and 2007 American Community Surveys
Conducted by the U.S. Census Bureau¹



¹Data Source: Estimates based on the 2005, 2006 and 2007 American Community Surveys, conducted by the U.S. Census Bureau, obtained from the National Center for Higher Education Management Systems (NCHEMS), January 2007, 2008 and 2009. See [Table A11.1](#), [Table 11.2](#) and [Table 11.3](#) in [Appendix 11](#) for supporting data.

Net migration is the difference between the estimated numbers of individuals who moved to or from Nebraska. If net migration is positive, the number of people who moved to the state is higher than the number who left Nebraska. If net-migration is negative, the number of people who left the state exceeded the number who moved to Nebraska.

Although the estimates of net migration based on 2005 and 2006 ACS data were significantly different, the general pattern of Nebraska's estimated net migration was the same for both years. In summary, the net in-migration of adults with less than a high school diploma or less was more than twice as high as the net in-migration of adults with some college but no degrees, and the state experienced a net out-migration of adults with college degrees.

When the estimates based on 2007 ACS data are compared to those based on the 2005 and 2006 surveys, as shown in Figure 3.1, a general migration pattern is no longer revealed. Based on the estimates reported in Figure 3.1, Nebraska continued to attract more working-age adults with less than a high school education or some college, but no degree, during the three-year period. However, even these trends are not solidly evidenced due to the inherent variability of estimates based on small samples of survey respondents.

All of the estimates shown in Figure 3.1 on the previous page are based on very small samples. For example, based on 2007 ACS data, Nebraska lost 1,329 more individuals with graduate or professional degrees than the state attracted in 2006. This estimate is based on survey responses from 21 individuals who moved to Nebraska in 2006 and 36 respondents who moved from Nebraska to other states the same year, or a total of 57 individuals in the sample of about 3 million Americans who were surveyed in 2007. Based on the statistical analysis of the data obtained from these individuals, the estimated negative migration of 1,329 individuals with graduate or professional degrees should be interpreted only as the mid-point in an estimated range of -3,524 to +866 at the 90% confidence level. In other words, given the small sample of survey respondents who moved to or from Nebraska in 2006, the only conclusion that can be firmly drawn is that the actual net-migration of people with graduate or professional degrees was probably somewhere between a negative 3,524 and a positive 866. This conclusion obviously provides no help in determining whether the goal of Priority 3 is being accomplished.

Figure 3.2 visually illustrates the margins of error for the net-migration estimates based on the 2007 ACS data. Similar ranges of variability have been calculated for all of the other estimates summarized in Figure 3.1.¹ Given that these ranges are relatively wide and the corresponding net-migration estimates at each education level are significantly different from one year to the next, it is impossible to draw even tentative conclusions about the migration of working-age adults to or from Nebraska between 2004 and 2006.

As shown in Figure 3.1, the estimated net-migration of adults with less than a high school education was more than twice as high in 2004 than in 2006, based on the 2005 and 2007 ACS data. However, these estimates may or may not be evidence of an actual trend.

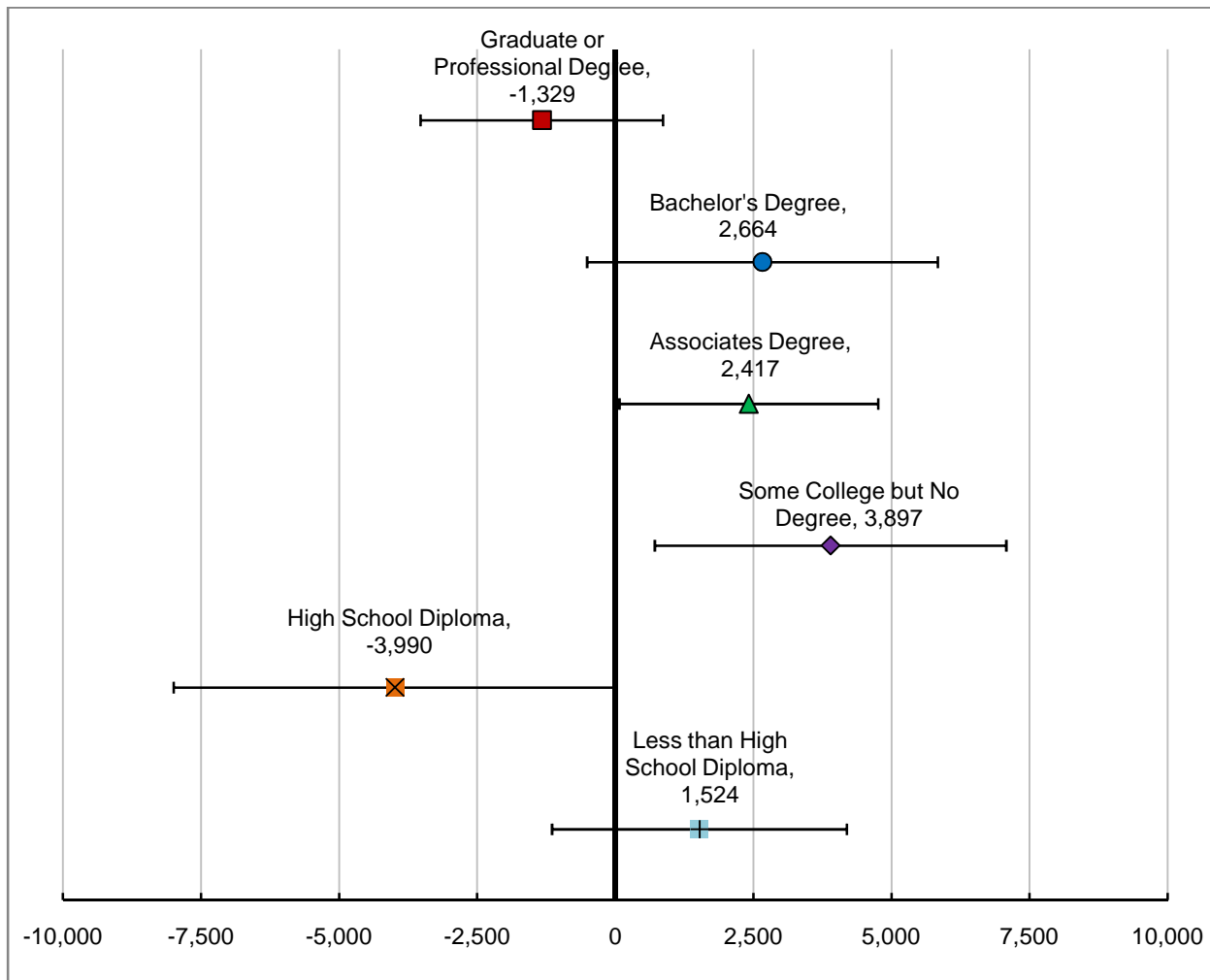
Similarly, the estimated net-migration of working-age adults with some college, but no degree, suggest that Nebraska attracted a higher number of individuals at this level of education than it lost to other states during all three years for which estimates are available. However, the estimated net-migration of 3,897 individuals in 2006 appears to be unexpectedly high, compared to the estimates of 1,339 for 2004 and 943 for 2005.

At the other education levels in Figure 3.1, there are no general patterns on which to base any conclusions about Nebraska migration patterns. Nevertheless, the estimates reported in Figure 3.1 provide a basis for comparison as the Coordinating Commission monitors future estimates of the numbers of working-age adults who migrate to and from Nebraska on annually.

¹The Excel spreadsheets with the sample sizes, calculated standard errors and the margin of error at the 90% confidence level for the American Community Survey (ACS) conducted in 2005, 2006 and 2007 are available from the National Center for Higher Education Management Systems (NCHEMS). For further information, call the NCHEMS research staff at (303) 497-0301.

Figure 3.2
Nebraska Net Migration Estimates by Education Level
Based on 2007 American Community Survey Data

This chart shows each net-migration estimate as the mid-point of the range of values based on the margin of error at the 90% confidence level.

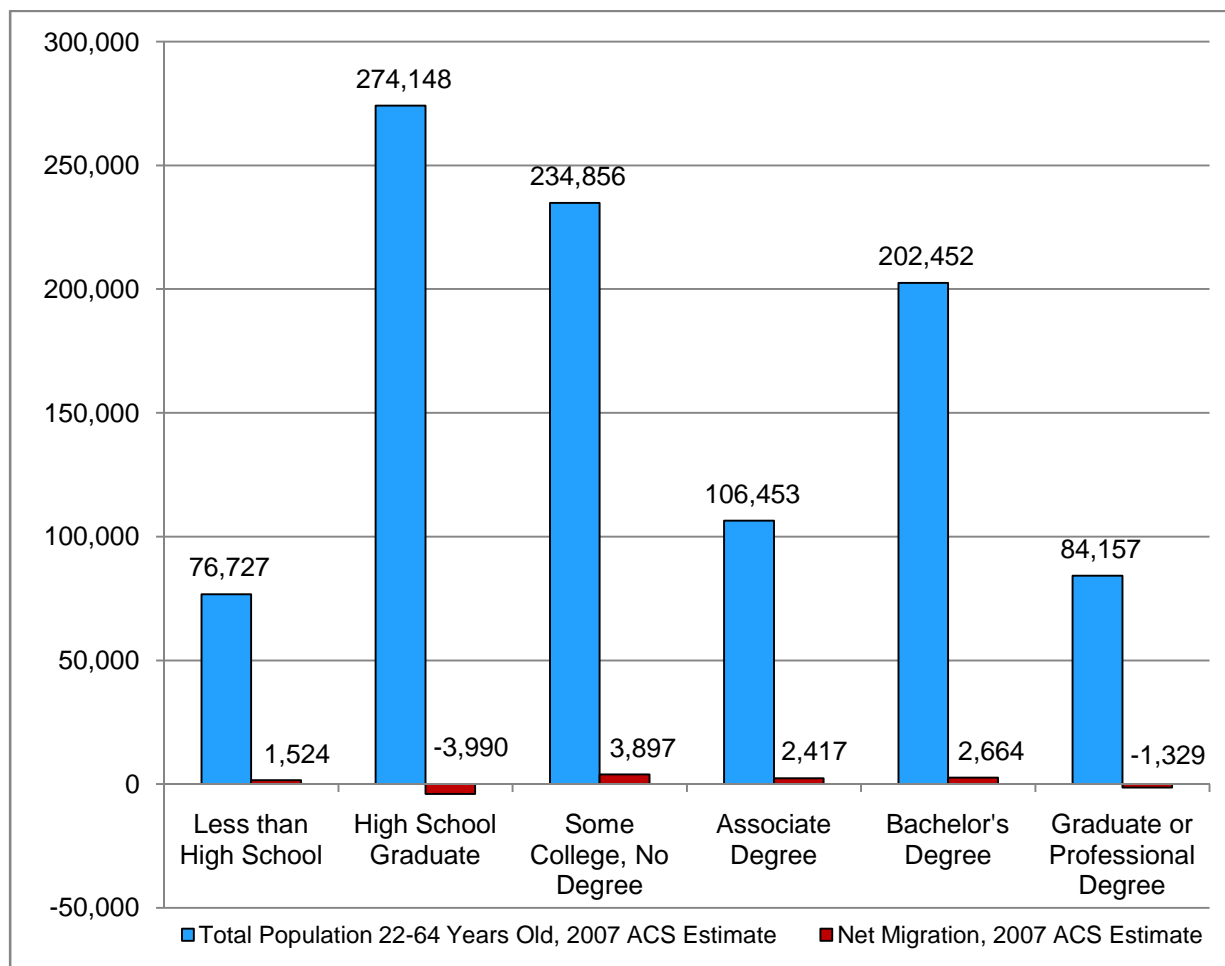


¹Data Source: Estimates based on the 2007 American Community Surveys, conducted by the U.S. Census Bureau, obtained from the National Center for Higher Education Management Systems (NCHEMS), January 2009.

Additional Information Related to Migration

Although currently available estimates from the U.S. Census Bureau do not reveal a clear picture of Nebraska migration patterns, there is still reason to be concerned about the net-migration of working-age adults. As illustrated in [Figure 3.3](#) below, the latest available net-migration estimate at each education level is small, relative to the corresponding total estimated working-age population of the state. Nevertheless, repeated positive or negative net-migration will have a corresponding positive or negative effect on the size and quality of the state's labor force over the long run.

Figure 3.3
Estimated Total Nebraska Population of 22- to 64-Year Olds in 2007 Compared to the
Estimated Nebraska Net-Migration of 22- to 64-Year-Olds in 2006 by Education,
Based on the 2007 American Community Survey
Conducted by the U.S. Census Bureau¹



¹Data Source: Estimates based on the 2007 American Community Surveys, conducted by the U.S. Census Bureau, obtained from the National Center for Higher Education Management Systems (NCHEMS), January 2009.

As an additional frame of reference, [Table 3.1](#) on the next page shows the number of degrees conferred by all postsecondary institutions between 2002–2003 and 2006–2007, the latest year for which data are available. These institutions include degree-granting and non-degree-granting, for-profit schools, as well as the University of Nebraska, the Nebraska State College System, Nebraska's six community colleges and the state's independent colleges and universities.

**Table 3.1
Total Number of Degrees Conferred
Nebraska Postsecondary Institutions
2002–2003 through 2005–2006¹**

Degree Level	2002–2003	2003–2004	2004–2005	2005-2006	2006-2007
Associate degrees and other less-than-four-year degrees	6,793	7,029	7,886	8,125	8,037
Bachelor's degrees	11,072	11,503	12,091	12,360	12,640
Master's degrees	3,614	3,704	3,999	4,026	4,121
Professional degrees ²	434	382	492	414	450
Doctorates	826	828	878	892	884
Total degrees conferred	22,739	23,446	25,346	25,817	26,132

¹Data Source: National Center for Education Statistics, fall 2003, 2004, 2005 and 2006 IPEDS surveys. Include the University of Nebraska, the Nebraska State College System, Nebraska community colleges, independent colleges and universities, degree-granting for-profit schools, non-degree-granting for-profit schools and schools of radiologic technology operated by non-profit medical organizations.

²In Nebraska, professional degrees are conferred in dentistry, medicine, pharmacy, and law.

