

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 overall 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.

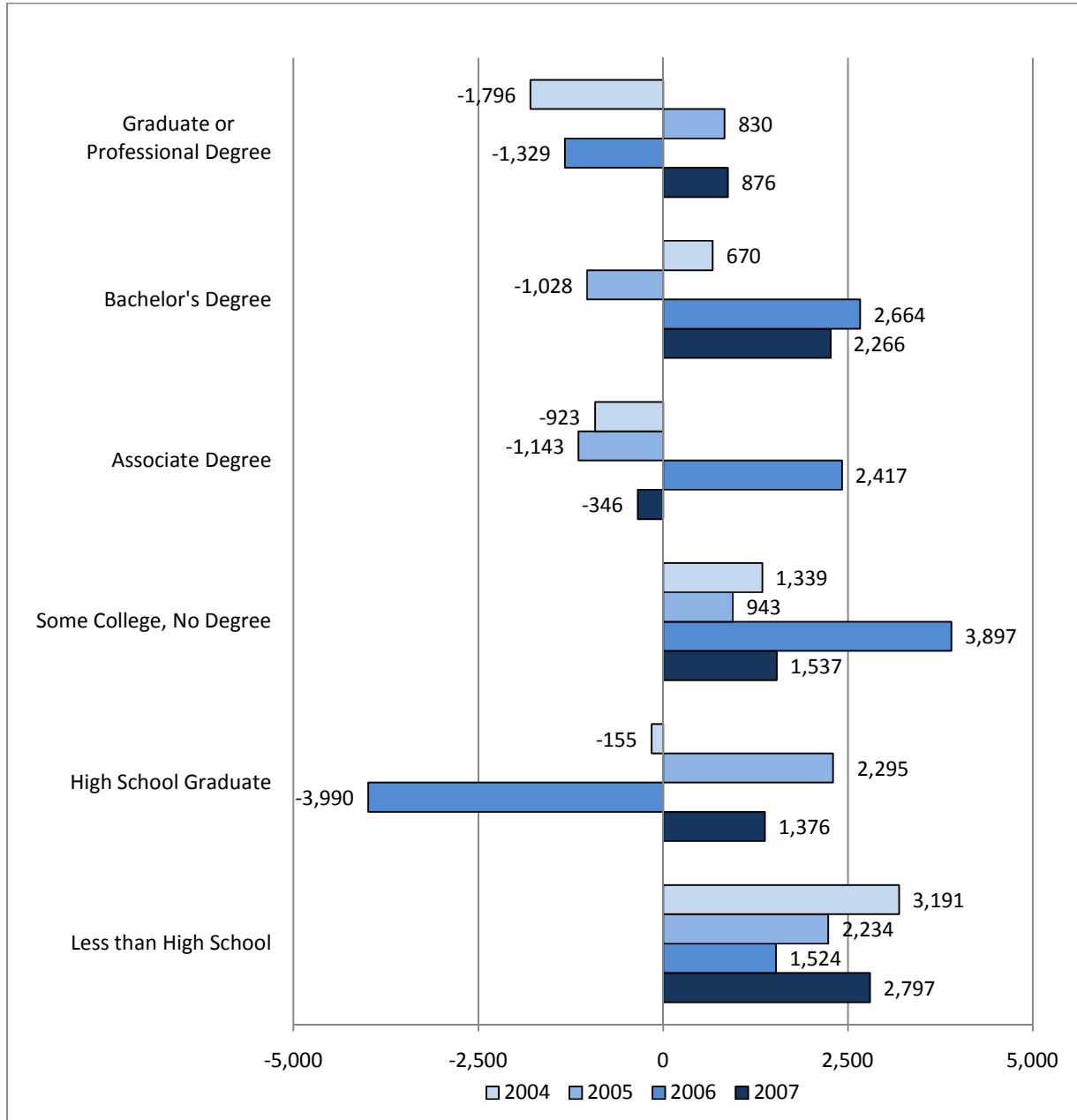
Section 3 of the *Nebraska Higher Education Progress Report* for 2007, 2008 and 2009 summarized the migration estimates for Nebraska based on data collected through the ACS conducted in 2005, 2006 and 2007. These surveys obtained data from small samples of individuals who moved into or out of Nebraska in 2004, 2005 and 2006, respectively. This section of the 2010 report summarizes the migration estimates based on 2008 ACS data collected from a sample of individuals who migrated to and from the state in 2007. In addition, this section compares these estimates to those for the previous three 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, 2007 and 2008. As illustrated in this chart, the estimates based on the 2008 ACS data are significantly different than those based on ACS data collected in 2005, 2006 and 2007. Also, there are noticeable differences among the estimates derived from the 2005, 2006 and 2007 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, 2006 and 2007
by Education, Based on the 2005, 2006, 2007 and 2008 American Community Surveys
Conducted by the U.S. Census Bureau¹



¹Data Source: Estimates based on the 2005, 2006, 2007 and 2008 American Community Surveys, conducted by the U.S. Census Bureau, obtained from the National Center for Higher Education Management Systems (NCHEMS), January 2007, 2008, 2009 and 2010. See [Table A11.1](#), [Table 11.2](#), [Table 11.3](#), and [Table 11.4](#) 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.

When the estimates based on the four years of ACS data are compared, as shown in [Figure 3.1](#), an overall migration pattern is not clearly revealed. Based on these estimates, Nebraska consistently attracted more working-age adults with less than a high school education than it exported over the four-year period. In addition, the estimates of net migration shown in [Figure 3.1](#) indicate that Nebraska consistently attracted working-age adults with some college, but no degrees, between 2004 and 2007. However, these trends are not as solidly evidenced as they appear in [Figure 3.1](#) due to the inherent variability of estimates based on small samples of survey respondents. Furthermore, there is no consistency in the direction of the estimates of net migration for the other four education levels shown in [Figure 3.1](#), namely, high school graduate, associate degree, bachelor's degree, and graduate or professional degree.

The primary reason for the inconsistent net-migration estimates shown in [Figure 3.1](#) on the previous page is that they are based on very small samples. For example, based on 2008 ACS data, Nebraska attracted 1,537 more individuals with some college, but no degrees than the state lost in 2007. This estimate is based on survey responses from 55 individuals who moved to Nebraska in 2007 and 59 respondents who moved from Nebraska to other states the same year, or a total of 114 individuals in the sample of about 3 million Americans who were surveyed in 2008. Based on the statistical analysis of the data obtained from these individuals, the estimated positive net migration of 1,537 individuals with some college, but no degrees, should be interpreted only as the mid-point in an estimated range of -1,579 to +4,653 at the 90% confidence level. In other words, given the small sample of survey respondents who moved to or from Nebraska in 2007, the only conclusion that can be firmly drawn is that the actual net migration of people with some college, but no degrees, was probably somewhere between a negative 1,579 and a positive 4,653. Such a conclusion obviously provides no help in determining whether the goal of Priority 3 is being accomplished.

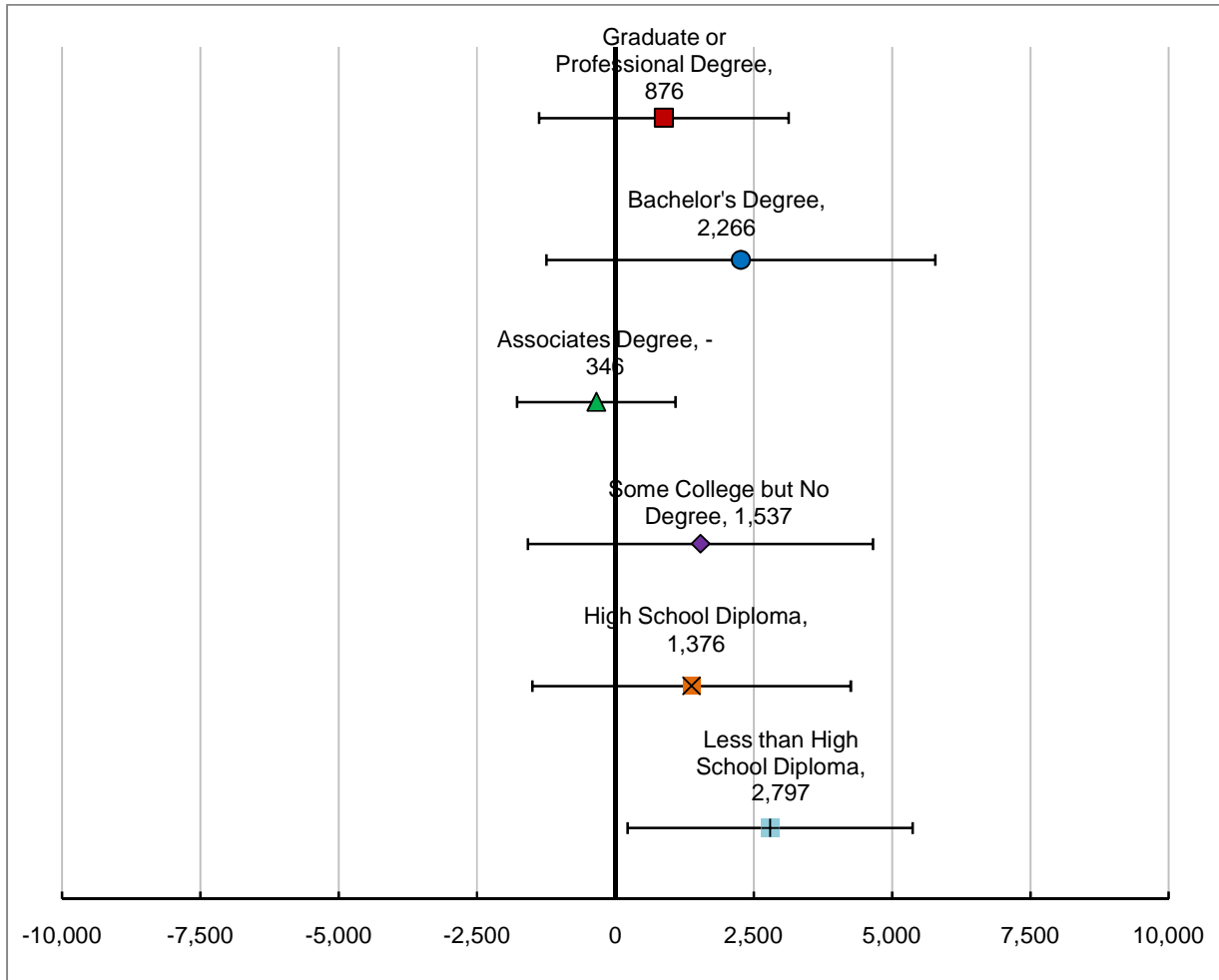
[Figure 3.2](#) visually illustrates the margins of error for the net-migration estimates for 2007, which are based on 2008 ACS data. Similar ranges of variability have been calculated for all of the other estimates for 2004, 2005 and 2006, which are summarized in [Figure 3.1](#). Given that these ranges 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 overall migration pattern of working-age adults who moved to or from Nebraska between 2004 and 2007.

The data summarized in [Figure 3.1](#) on the previous page indicate that Nebraska is an importer of working-age adults with less than a high school diploma. There is also evidence that the state is attracting more individuals with some college, but no degrees, than it is losing to other states. However, the estimates based on ACS surveys to date tend to vary quite dramatically from one year to the next, even for the adults with less than a high school education or only some college, and they do not provide evidence that the state is consistently losing or gaining high school or college graduates as a result of migration.

In summary, the ACS data analyzed to date suggest that Nebraska is continuing to attract working-age adults with lower levels of education, but the data do not clearly indicate whether Nebraska is gaining or losing more adults with undergraduate and graduate degrees than it has in the past. Consequently, the Coordinating Commission will continue to monitor annual estimates of the numbers of working-age adults who migrate to and from Nebraska to determine if a clearer, overall picture of Nebraska's net migration pattern eventually emerges from the analysis of additional ACS data.

Figure 3.2
2007 Nebraska Net Migration Estimates by Education Level
Based on 2008 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.



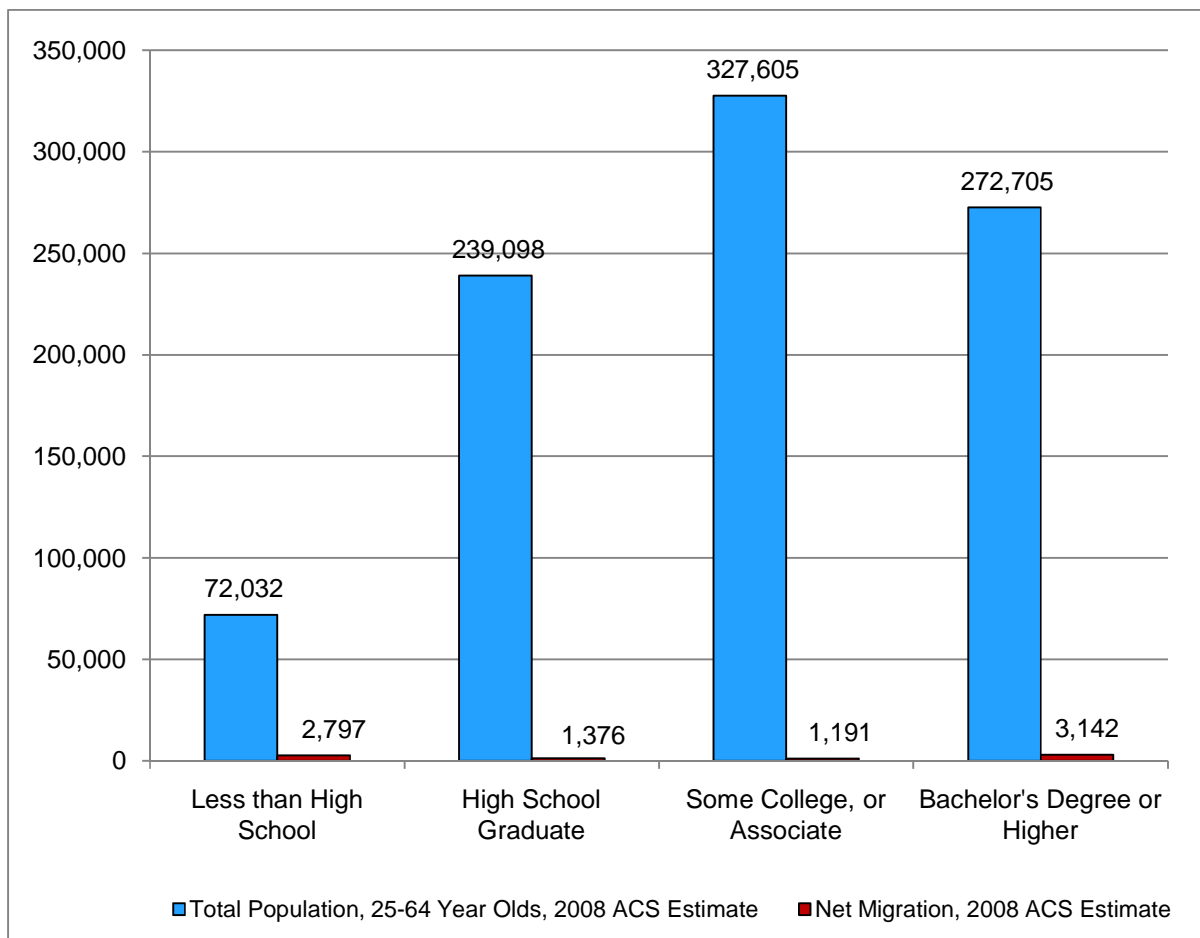
¹Data Source: Estimates based on the 2008 American Community Surveys, conducted by the U.S. Census Bureau, obtained from the National Center for Higher Education Management Systems (NCHEMS), January 2009.

Note: The 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, 2007 and 2008 are available from the National Center for Higher Education Management Systems (NCHEMS). For further information, call the NCHEMS research staff at (303) 497-0301.

Additional Information Related to Migration

Although currently available estimates from the U.S. Census Bureau do not reveal a clear picture of overall 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 25- to 64-Year Olds in 2008 Compared to the
Estimated Nebraska Net-Migration of 22- to 64-Year-Olds in 2007 by Education,
Based on the 2008 American Community Survey
Conducted by the U.S. Census Bureau¹



¹Data Source: Estimates based on the 2008 American Community Surveys, conducted by the U.S. Census Bureau, obtained from the National Center for Higher Education Management Systems (NCHEMS), January 2010.

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 2007–2008, 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 2007–2008¹

Degree Level	2002–2003	2003–2004	2004–2005	2005-2006	2006-2007	2007-2008
Associate degrees and other less than four year degrees	6,793	7,029	7,886	8,126	8,037	8,287
Bachelor's degrees and Post baccalaureate certificates	11,072	11,503	12,091	12,355	12,640	12,775
Masters degrees and Post-Masters certificates	3,631	3,719	4,013	4,040	4,135	4,696
Doctor's degrees ² (research/scholarship and professional practice)	1,243	1,195	1,356	1,292	1,320	1,330
Total degrees conferred	22,739	23,446	25,346	25,813	26,132	27,088

¹Data Source: National Center for Education Statistics, fall 2003, 2004, 2005, 2006, 2007 and 2008 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 practice doctor's degrees are conferred in dentistry, medicine, pharmacy, and law.

