Is there a New Mexico Brain Drain?

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A brain drain is said to occur when highly educated and highly skilled people leave their native region to pursue opportunities elsewhere. Discussion and analysis of a brain drain and its consequences usually occur in an international context, but in a large nation such as the United States it may be useful to examine the migration of the highly educated from one region to another. Data from the American Community Survey (U.S. Bureau of the Census) are used below to address the question of whether or not New Mexico is experiencing a brain drain. A brief discussion of the possible consequences of a brain drain precedes the data analysis.

Standard economic theory suggests that labor mobility, including the mobility of the highly skilled and highly educated, results in greater productivity and output. A short version of this story is that if there are no barriers to mobility, then labor will migrate to those areas where it will be more productive and more highly rewarded. This simple 'labor mobility scenario' suggests that everyone will be better off with migration –even if migrants are often among the most highly skilled and highly educated. Migration, of course, is much more complicated than this simple story suggests.

More than fifty years ago, economists observed that out-migration of highly talented people could result in much slower economic development in migrant sending areas (Myrdal 1957, Hirschman 1958). These economists argued that developing areas often suffered from a shortage of highly talented people with the ability to provide entrepreneurial, technological, and organizational talent. If the talented and skilled were leaving, who would remain to lead economic development efforts? Per capita income in the sending region also might decline as its most highly talented and highly paid residents moved elsewhere. And, if per capita income was falling, the area would not look attractive to potential investors. Further, the relatively poor sending region might be subsidizing the education and training of those who would live and work in wealthier areas. For these and other reasons, developing nations in Asia, Africa, and Latin America have been particularly concerned with the possible adverse consequences of a brain drain (Cervantes and Guellac 2002).

Despite numerous theoretical and empirical studies, there is no general agreement on the consequences of a brain drain. Some analysts (Beine, et al. 2001) suggest the possibility of what they call a 'beneficial brain drain' (BBD). Consider, for example, a highly educated person who migrates to a wealthier area, acquires valuable experience and knowledge, and then returns home. The benefits for the sending area may far out-weigh the costs of the initial out-migration. Out-migrants may also be an important source of investment funds in the sending region. Large flows of remittances (migrants sending money home) are well documented at the international level, but more difficult to track within a nation. If enough people leave a region to reduce local labor supply, wages for those who remain may increase.

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Many of the issues surrounding the brain drain phenomenon cannot be solved without intensive research efforts and years of study. Data limitations often limit the kind of analysis that can be performed. The consequences of a brain drain (gain) are both short term and long term. Data on the migration patterns of highly educated persons from state to state in the US are, however, available.

The American Community Survey (ACS), conducted annually by the U.S. Bureau of the Census, provides both migration and educational attainment data (http://www.census.gov/acs/www/). Although there are no direct tabulations of migration by educational status, the Census Bureau releases data files known as the Public Use Microdata Sample (PUMS). PUMS files contain data on individuals with all identifying information removed. The PUMS files allow data users to construct specialized tables that are not part of the published reports prepared by the Census Bureau.

The ACS is a relatively large sample. From 2006 to 2011 the ACS sample size was approximately three million persons or about one percent of the total population (Table 1). Before 2006 the ACS sample size was not large enough to provide reliable estimates of migration. Appropriate sampling weights are provided so that estimates of the entire population can be obtained.

Table 1: ACS Sample Size (Person Records)

Year	New Mexico	US
2006	18,637	2,969,741
2007	18,593	2,994,662
2008	18,583	3,000,657
2009	18,816	3,030,728
2010	19,209	3,061,692
2011	19,777	3,001,818

Figures 1 through 8 exhibit the number of people moving into New Mexico (in-migrants) and out of New Mexico (out-migrants) along with their educational attainment. Figures 1 through 6 display the data for 2006, 2007, 2008, 2009, 2010, and 2011. Figure 7 combines the data from 2006 to 2011. Figure 8 displays New Mexico's net gain or loss due to migration between 2006 and 2011. The figures report the number of migrants in four educational categories: (a) those with a bachelor's degree, (b) those with a master's degree, (c) those with a professional degree such as a law degree, (d) and those with a doctorate. Migrants refer to those who did not live in the same state one year earlier.

In all six years reported (Figures 1-6) New Mexico gained more people with a bachelor's degree or higher through in-migration than it lost through out-migration. The state's net gain of these highly educated people was 27,665 for the six years combined (Figures 7 and 8).

In all six years, there was net out-migration from New Mexico of those with a professional degree. During the 2006 to 2011 period, New Mexico's net loss of professionals due to migration was 2,306. The net loss of those with a professional degree was more than offset by net gains of those with a bachelor's degree (18,918), master's degree (9,643), and doctoral degree (1,410).

In brief, New Mexico has been experiencing a brain *gain* and not a brain drain in recent years.

Figure 1: New Mexico In and Out by Education 2006

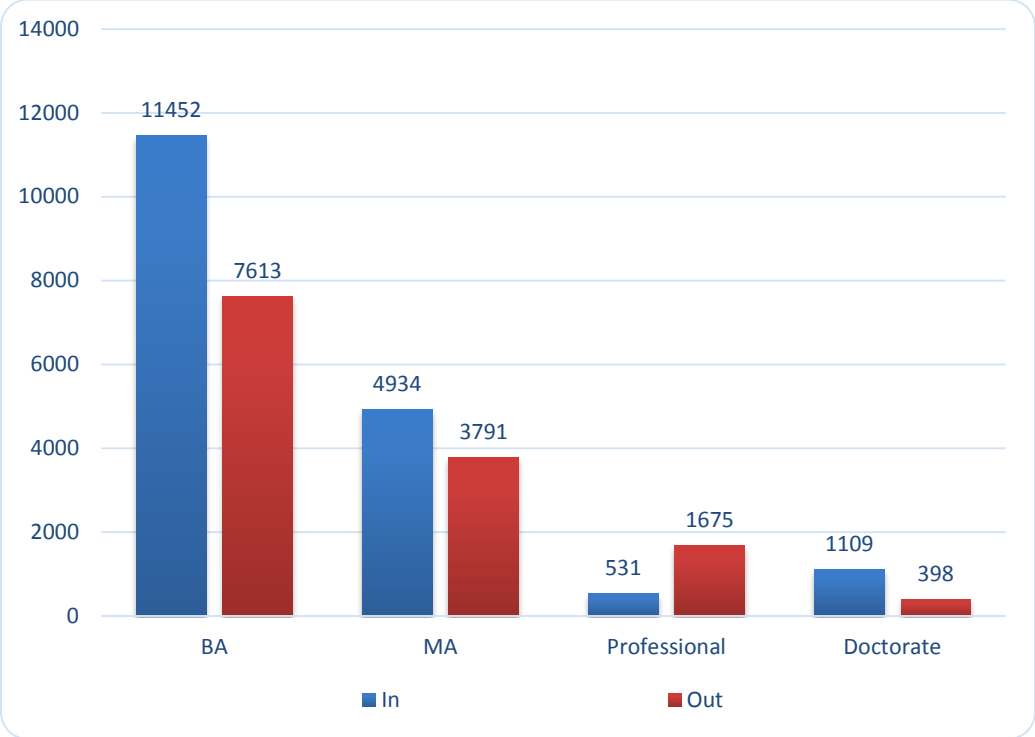


Figure 2: New Mexico In and Out by Education 2007

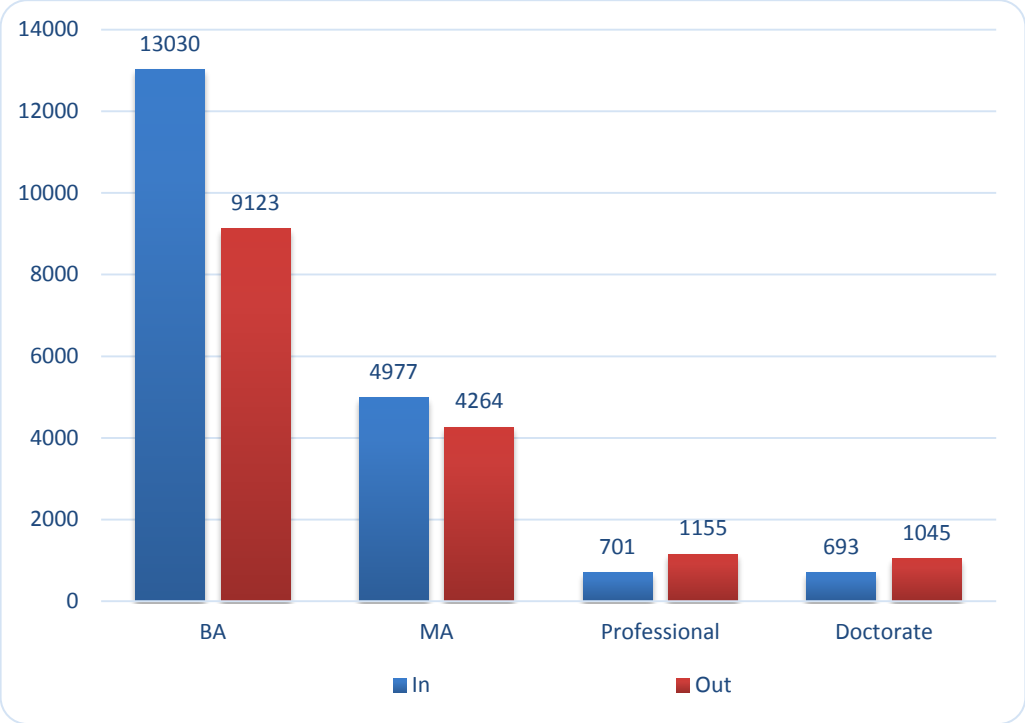


Figure 3: New Mexico In and Out by Education 2008

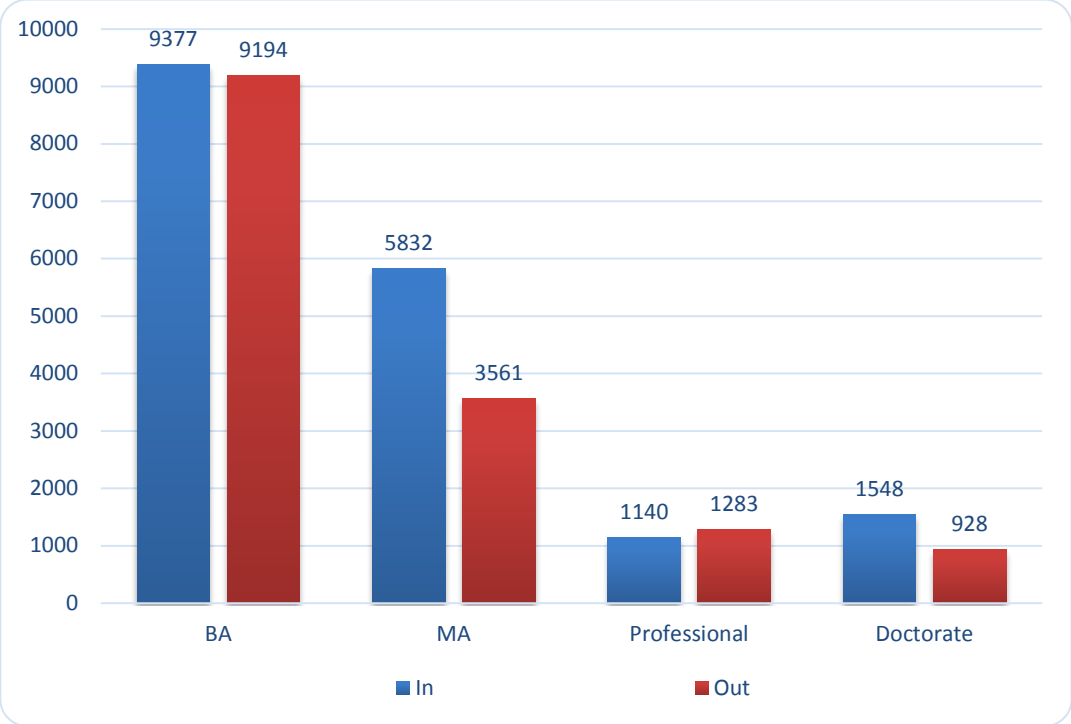


Figure 4: New Mexico In and Out by Education 2009

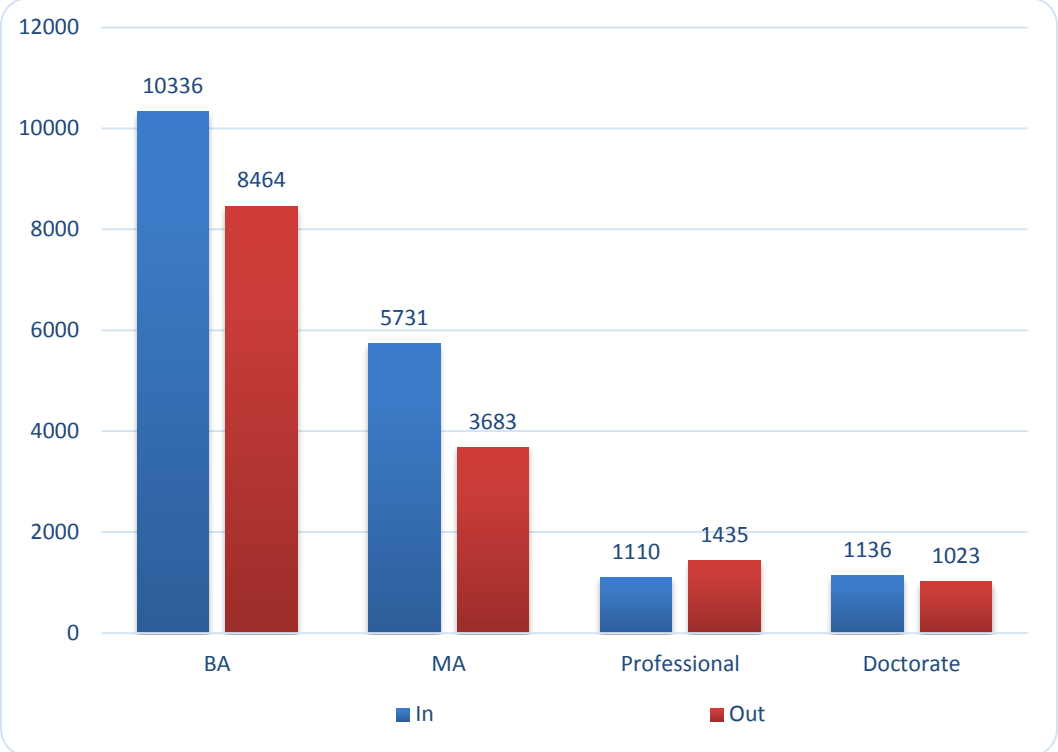


Figure 5: New Mexico In and Out by Education 2010

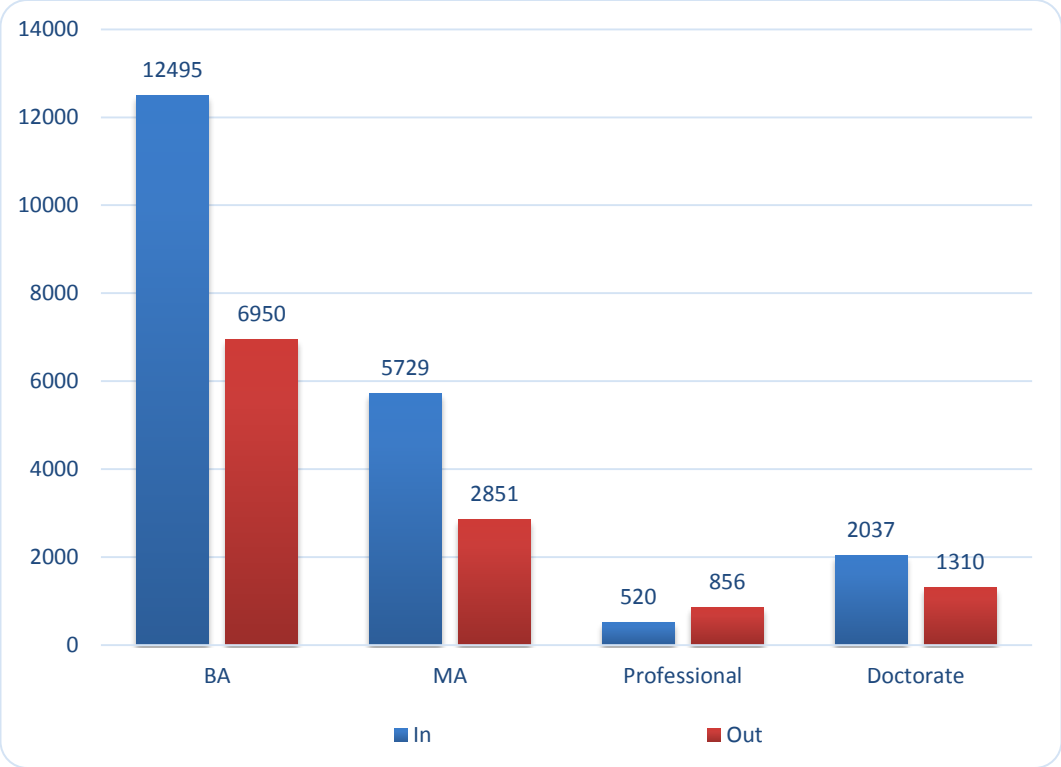


Figure 6: New Mexico In and Out by Education 2011

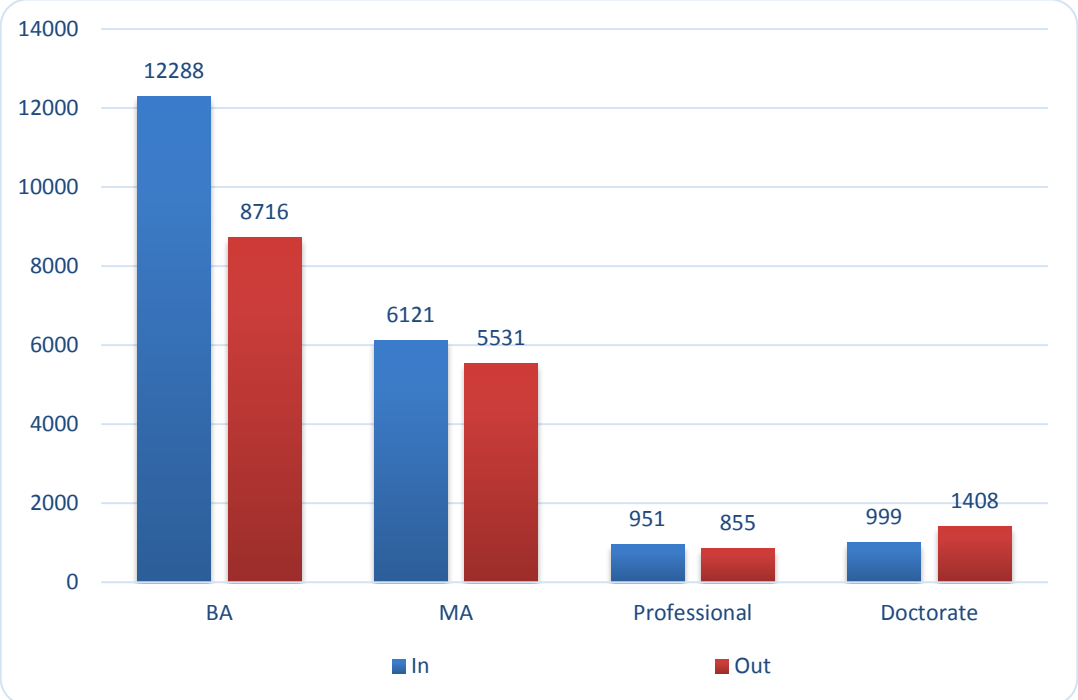


Figure 7: New Mexico In and Out by Education (2006-2011 combined)

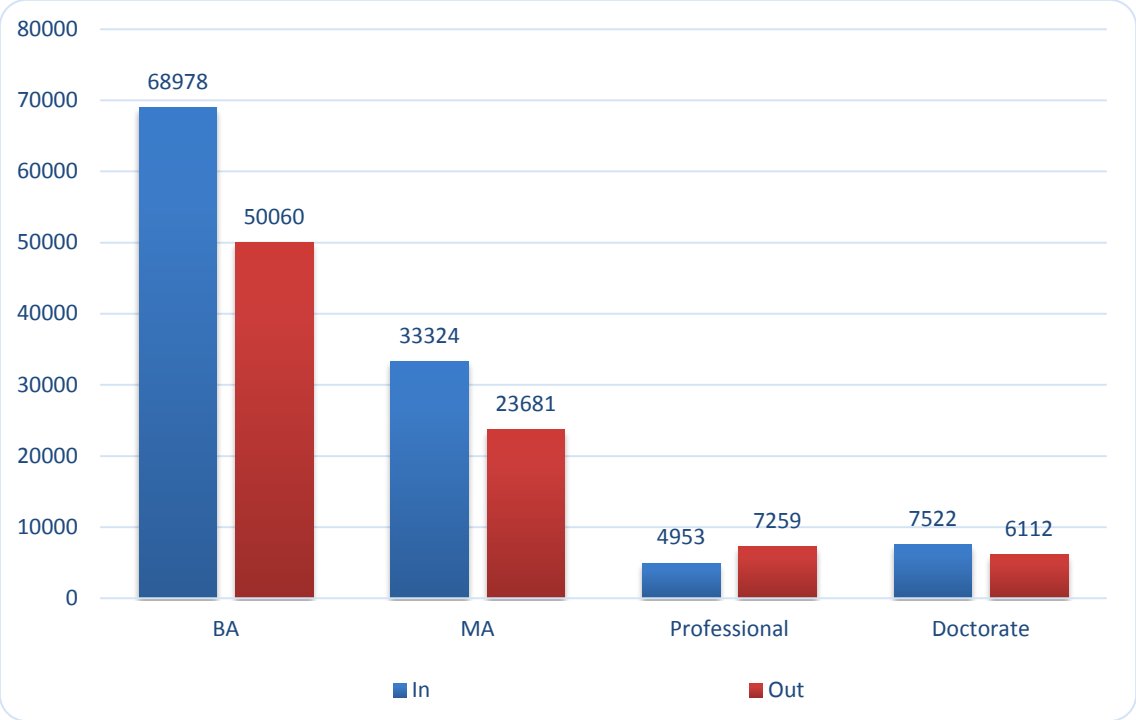
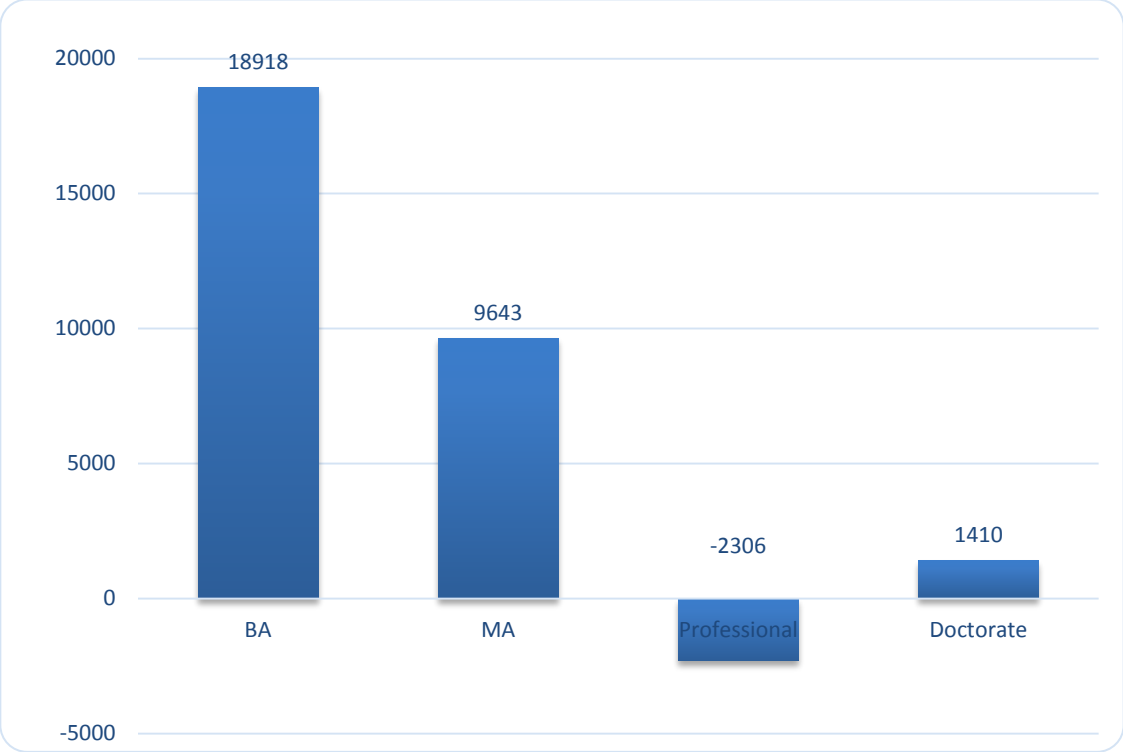


Figure 8: New Mexico's Net Gain (Loss) from Migration: 2006 to 2011



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