Rural Migration: The Brain Gain of the Newcomers

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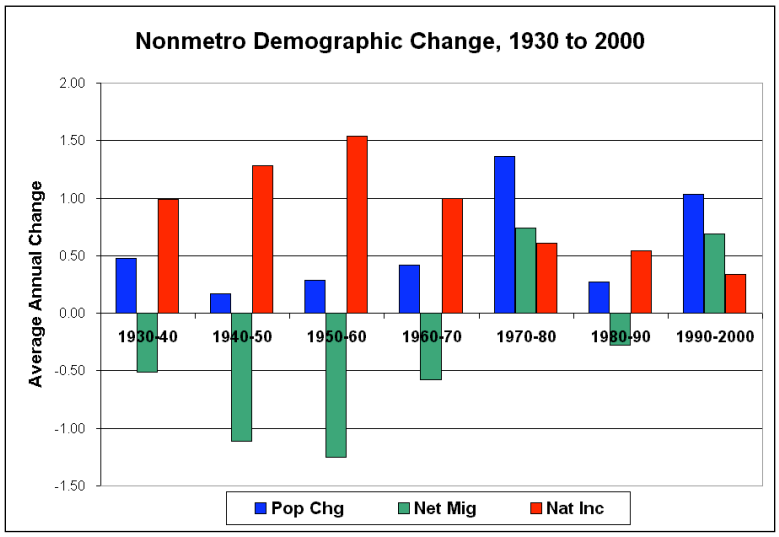
INTRODUCTION

The population in rural Minnesota has changed significantly over that past decade. Many of the most interesting changes have occurred in areas that we don't normally discuss. Commonly referred to as the rural rebound[1], the trend of population growth in rural areas was found in the 1970s and in the 1990s (Figure 1 illustrates this trend). Between 1990 and 1999, over 2.2 million more Americans moved from metropolitan counties to non-metropolitan counties.

Figure1: National Non-Metropolitan Demographic Change, 1930-2000.
Source: Kenneth Johnson and Calvin Beale, 1999.



Retirement and recreational counties accounted for the bulk of population growth in Minnesota between 1990 and 1999.[2] The changes in population and demographics of rural areas are enough to warrant further investigation. The story of Minnesota's rural population change is interesting and nuanced, especially when we consider that in Minnesota, people move with great frequency. While this varies by age, between 1995 and 2000, 43% of Minnesotans moved to a new residence.[3]

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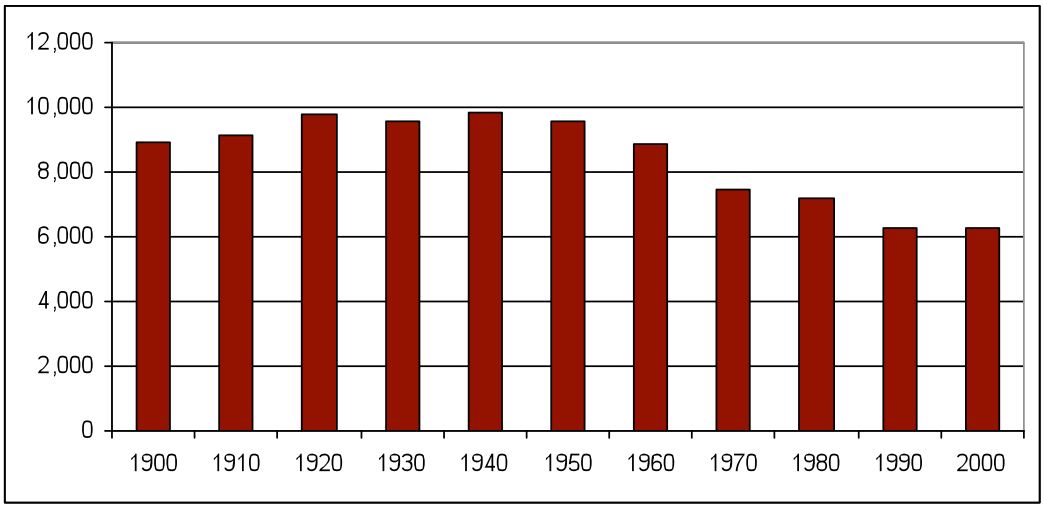
[1] Population Reference Bureau. August 1999. *Reports on America: The Rural Rebound.*
[2] McGranahan, David. 1999. *Natural Amenities Drive Rural Population change.* Economic Research Service: AER-781.
[3] Minnesota Planning. October 2004. *Minnesota Migrants: A 2000 Public Use Microdata Sample Portrait. Population Notes*.

HOW SOCIAL SCIENTISTS UNDERSTAND POPULATION CHANGE

United States Census. Government entities in the United States use population statistics as a proxy for funding, assistance, and political boundaries. Conducting a census of the population is a constitutional requirement of the U.S. Federal government and is done every ten years. The information gathered by the U.S. Census is often used by local units of government to analyze the trends in population changes and plan accordingly. Frequently, a conventional analysis to understand community change is done by comparing county population from one decade to the next, and seldom expands to a more detailed understanding of the underlying population dynamics.

This has implications for funding and, more importantly, the morale of a county. Grant county, for example, saw a generally steady and flat total population between 1990 and 2000 (see Chart 1). This may lead to the perception that nobody has moved to or from the county over the past decade.

Chart 1: Total Population, Grant County, Minnesota, 1900 – 2000.
Source: U.S. Census Bureau

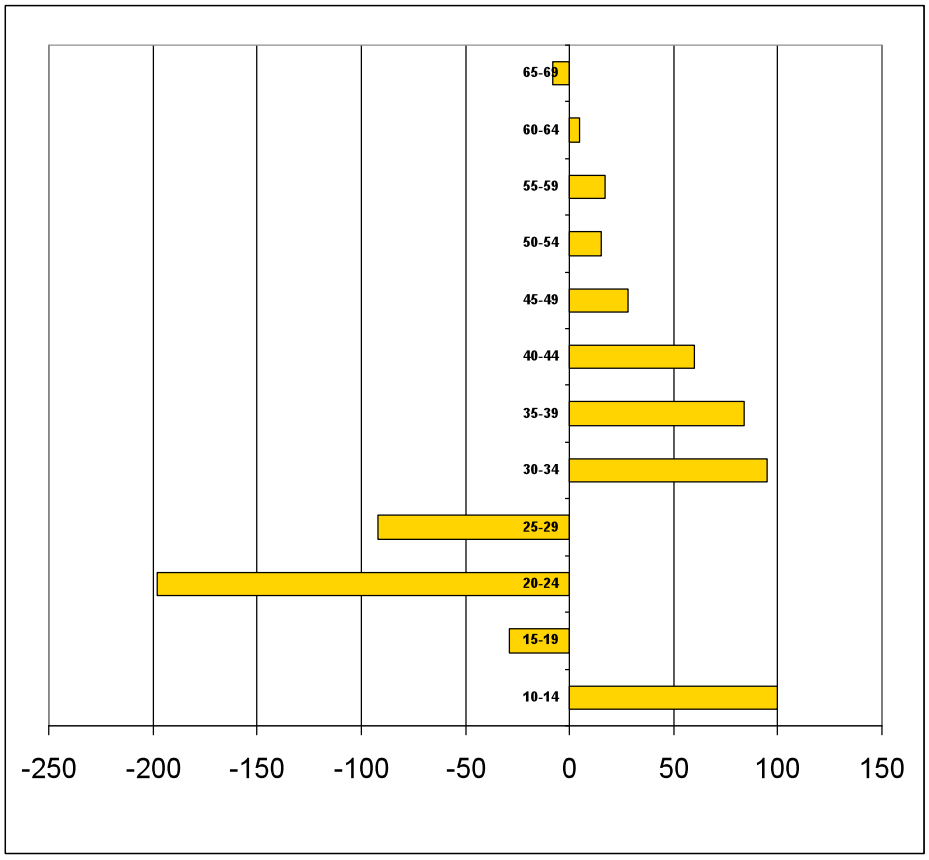


SIMPLE COHORT ANALYSIS

To dig a bit deeper into the data we will examine the changes in population, by age, in any given geography. Generating this type of analysis is straightforward. First, we identify the number of people for each age cohort in 1990. From that baseline we expect this same number of people to reside in the county in 2000 – in the age cohort that is 10 years older. For example, if there are 100 people in the 30-34 age range in 1990, we would expect 100 people in the 40-44 age range in 2000, as they have aged 10 years.

These difference between expected (from 1990) and observed (in 2000) population of age cohorts will be examined further for Grant county. Remember, we saw earlier that they had experienced a flat total population change between 1990 and 2000. Looking more closely at the data we discover both decline *and* growth within various age categories and uncover an interesting and complex portrait of the changes taking place.

Figure 3: Difference between observed and expected population, Grant County, 1990-2000.
Source: U.S. Census Bureau

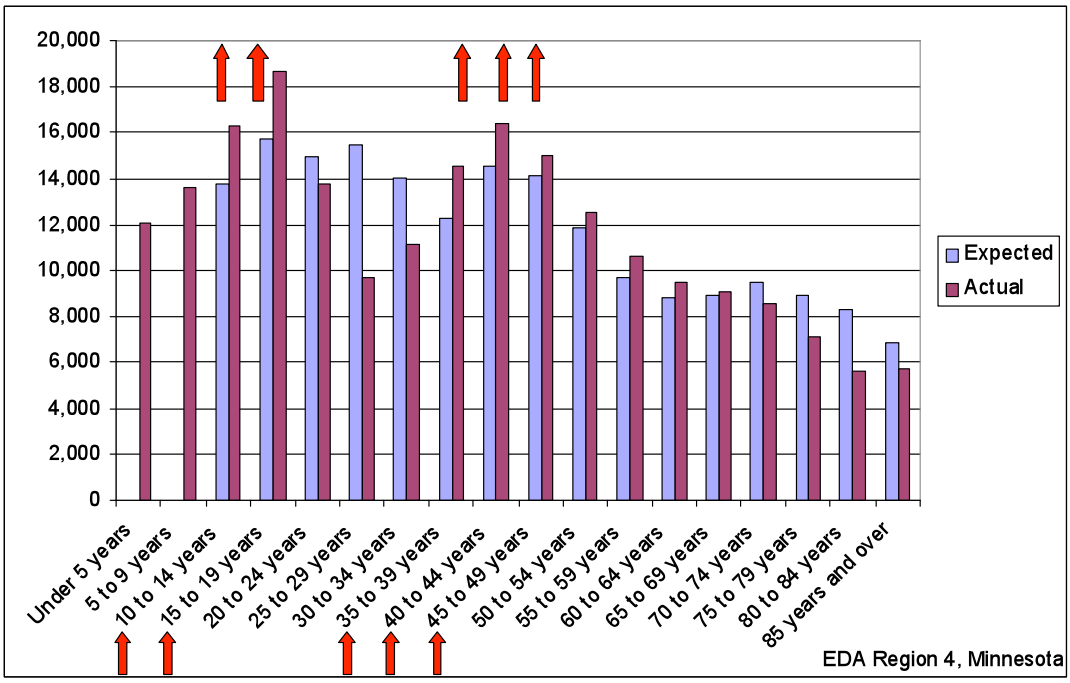


The net gain of 95 people in the 30-34 age cohort into Grant County makes up 33% of all people in this age group. The gain of 84 people age 35-39 make up 19% of that age cohort, and the gain of 100 people age 10-14 make up 20% of that age cohort. This demonstrates the significance of this in-migration. The total county population would be much lower had newcomers not arrived in the county, given the losses of the 16-29 year olds. This type of analysis can be used to look at population changes in every county in Minnesota and across the state a trend is beginning to emerge.

UNCOVERING A NEWCOMER TREND

Using this "simple cohort technique" described above we compared the actual 2000 population in age cohorts from the expected 1990 data for counties in the Economic Development Region 4 located in west central Minnesota. This includes the counties of Becker, Clay, Douglas, Grant, Otter Tail, Pope, Stevens, Traverse and Wilkin.

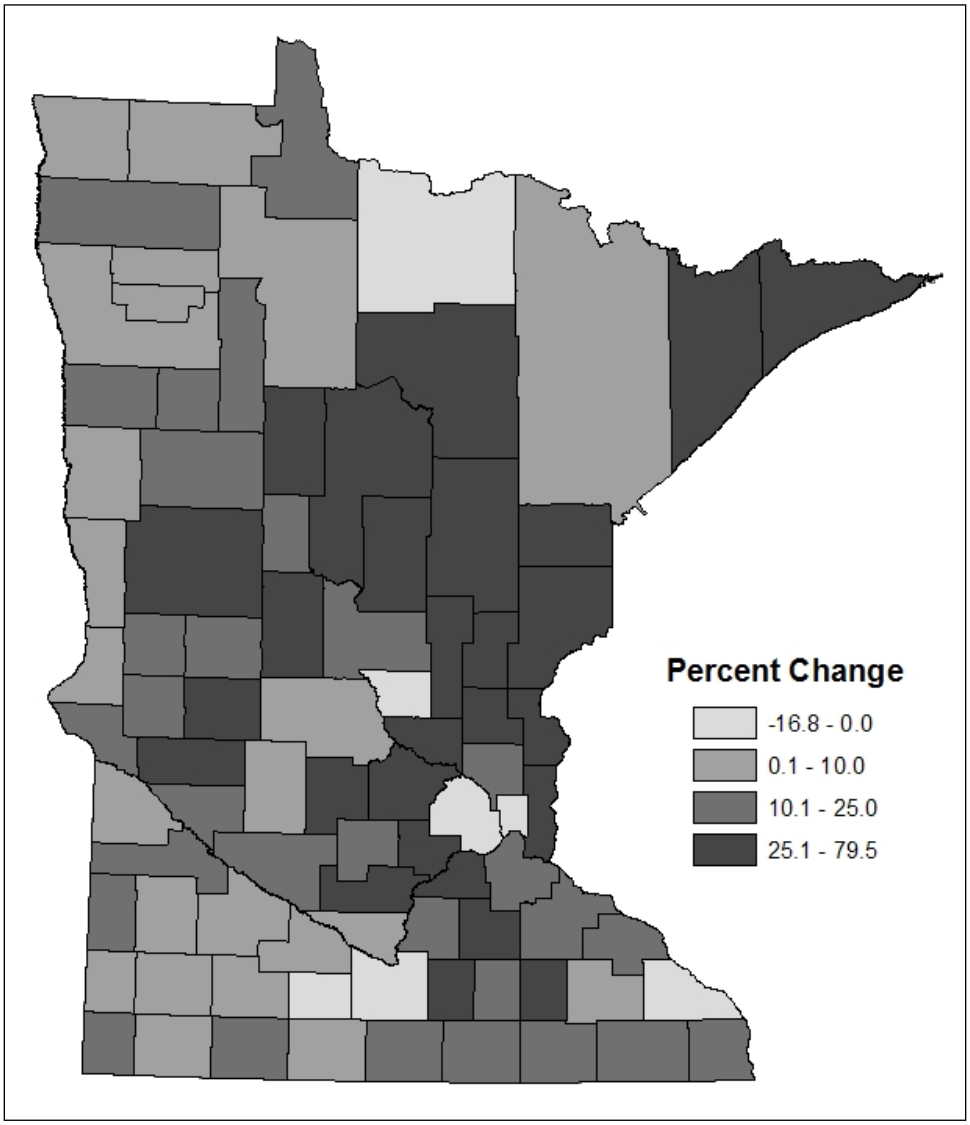
Figure 2: Expected vs. Actual Population in Age Cohorts, 1990-2000, EDA Region 4. Source: U.S. Census Bureau



The "brain drain" is a phrase often used to describe when young adults leave rural areas in search of new opportunities (schooling, jobs and experience). We see that in the age cohorts 20-24, 25-29, and 30-34 there were fewer people than we expected from the size of those age cohorts 10 years ago (Figure 2).

It can be easy for the reality of the "brain drain" to dominate how we think about population changes in rural areas. For many good reasons this trend is alarming. Plenty of time and energy is devoted to thinking about that trend. Outside of these brain drain age cohorts, we also see some positive news in age cohorts that are larger than expected. This includes those aged 10-14, 15-19, 35-39, 40-44 and 45-49. These are not small numbers. There are thousands of "newcomers" to the region that were not there 10 years before.

Map 1: Percent Change in 35-39 Age Cohort, 1990-2000.
Source: U.S. Census Bureau

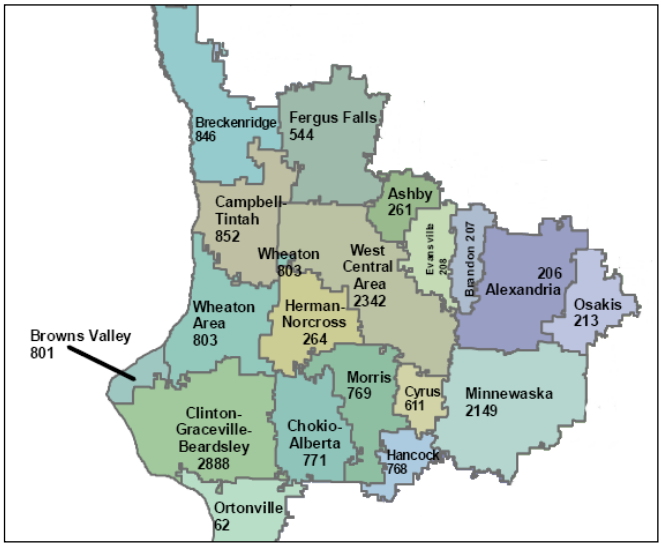


This map shows that nearly every rural county in Minnesota experienced a growth in the 35-44 year old cohort. This migration has occurred even in the southwestern portion of the state where, overall, total population has declined. However, we now see that even in the midst of total population decline, there is growth. The only counties that witnessed losses in this age cohort are Benton, Blue Earth, Hennepin, Koochiching, Ramsey, Watonwon, and Winona.

NEWCOMERS BRING CHILDREN

Could this all be some anomaly in the numbers? To better understand this phenomenon, we can analyze school enrollment data. If we have people aged 30-49 moving to rural counties, they may be bringing children. Do we see a corresponding increase in school enrollments?

Map 2: West Central Minnesota School Districts in Analysis Area



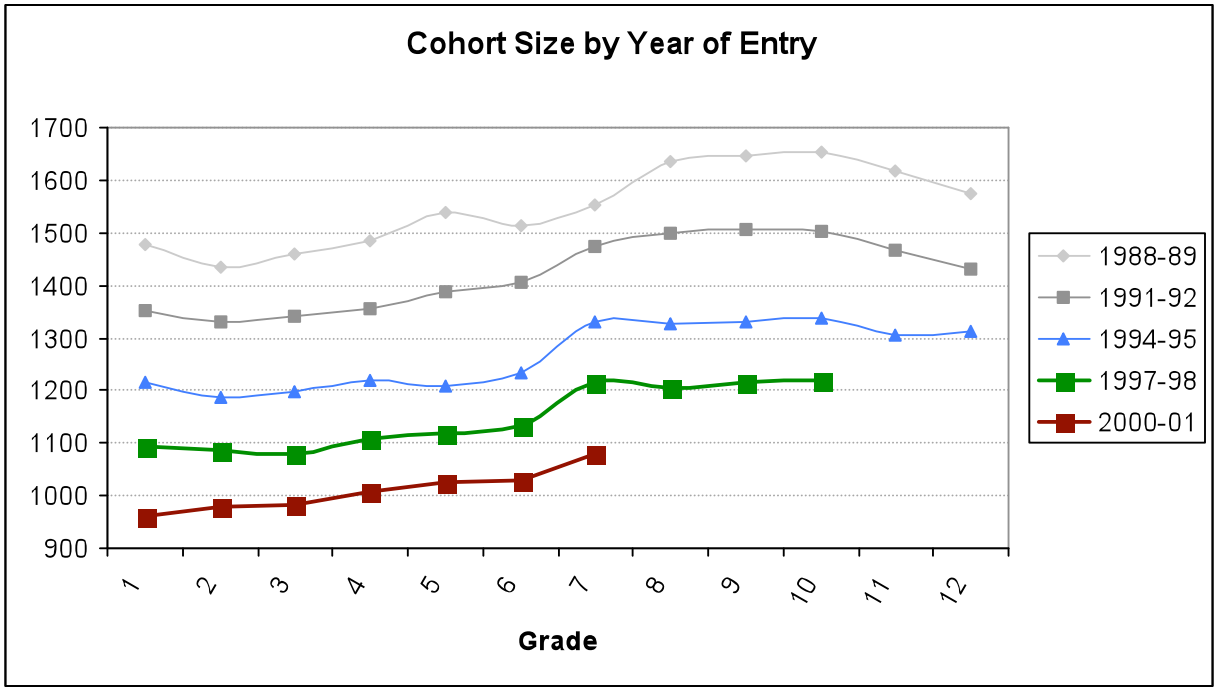
In 2007, nineteen school districts in west central Minnesota collaborated to complete an analysis of class cohorts using data obtained from the Minnesota Department of Education. School superintendents typically use class sizes of the previous year to estimate class sizes of the upcoming year. We examined individual class cohorts in much the same way we analyzed census data earlier. For example, if 100 children begin first grade this year, we expect 100 children to be in second grade next year.

Table 1: Class Size by Year in Collaborative Region, west central Minnesota
Source: Minnesota Department of Education

Grade	*1997-98*	*2000-01*	*2003-04*
PK	137	141	169
KG	1,043	958	980
01	**1,087**	962	924
02	**1,168**	1,070	937
03	**1,170**	1,072	989
04	1,207	**1,109**	1,006
05	1,241	**1,230**	1,123
06	1,319	**1,215**	1,121
07	1,475	1,330	**1,215**
08	1,477	1,335	**1,335**
09	1,555	1,407	**1,309**
10	1,654	1,503	1,338
11	1,509	1,453	1,344
12	1,504	1,496	1,355
Total	***17,409***	***16,140***	***14,976***

Conventional analysis of school enrollment data would look solely at totals. We see a dramatic decline in the total enrollment, from 17,409 to 14,976 (Table 1). This is due primarily to lower fertility rates of the resident population. However, in the midst of this overall decline there is also growth. The 2nd grade class in 1997-1998 (in red) enrolled 1,168 students. Three years later, when this class cohort was in 5th grade, their size grew to 1,230. Three years after that, when they were in 8th grade, it grew again to 1,335. This class cohort gained 168 students (14%) during this time period. So, yes, there is growth here as well. And so we see that the newcomer cohort has a positive effect on school enrollments.

Chart: School Cohort Size by Year of Entry in Collaborative Region
Source: Minnesota Department of Education



There are two trends at work here. First, we see the dramatic decreases in the *starting class sizes* in this region. What were once nearly 1,500 students beginning first grade in 1988 has declined to just over 950 in 2000. This is the product of people not having children with the same frequency as in the past. The second trend is that of newcomers who are bringing their children aged 10-14 to rural areas. This is apparent as we see upward trend in class sizes as cohorts move from third, to fourth, to fifth, and sixth grades. So, like population figures, utilizing totals to describe and understand change can mask the underlying dynamics.

WHY DO THEY COME?

The University of Nebraska has done additional research to explore the qualities of these newcomers to the western panhandle of Nebraska. This area of the state has witnessed overall population loss, but does have growth of newcomers in the 30-44 year age cohort – similar to that in Minnesota. Their findings were illuminating. Newcomers indicated that they moved to rural Nebraska because they wanted: 1) a simpler pace of life, 2) safety and security, and 3) low housing costs. A number moved from a metropolitan county. A large percentage of the newcomers are educated (40% have bachelors or higher) and had household incomes (48% over $50,000) higher than the existing rural population.

CONCLUSION

Given this refreshed view of changing demographics, rural America needs to rethink its description of gains and losses. If rural America is losing high-school educated youth (the brain drain) and replacing them with those that at least have a bachelors, isn't this a Brain Gain? Nebraska researchers summarized the opportunities this way:

> *New residents bring many assets to the Panhandle region. On average, they are younger and better educated than current Panhandle residents. They also are more likely than current residents to have children in their household. Thus, they are contributing to stabilize, and in some cases increase, the population of the area. In addition, the majority of the newcomers are in their prime earning years, so they are increasing the labor force in the region. Many new residents possess professional occupation skills and business, management and financial operations skills. Many were also involved in their previous community, thus bringing volunteer and leadership experience to their new location. Some new residents have entrepreneurial backgrounds and have an interest in starting a business in their current community. It is important that communities and the region as a whole tap into these assets that newcomers are bringing.*[4]

There is rural population growth in the 30-49 year age cohort. In many rural counties, this in-migration is just about equal to the out-migration of the 18-25 year age cohort. This in-migration is composed of adults in their prime earning years. These findings will

[4] Center for Applied Rural Innovation. September 2007. *Relocation to the Buffalo Commons Research Brief.* RB 07-001.

remind us that the changes we witness across rural Minnesota are complex and reflect not just challenges, but significant opportunities.

It appears the questions should not necessarily be "how do we get these newcomers?" but "how do we keep them?" The factors related to staying in these new communities include job opportunities and security, feeling of belongs, suitable housing, and opportunities to join local organizations. What can your community do to build on this trend?

In the coming years, the University of Minnesota Extension will continue to explore rural demographics and trends related to these newcomer populations. If you would like to find out more about this trend in your part of the state, or wish to build on this opportunity for your community, please contact your local Extension Educator. Visit www.extension.umn.edu for more information.

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