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An Examination of Brain Drain in Nebraska Counties and Communities: Retention of the Population Cohort Age 10-19 Years of Age in 1980 through 2000

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An Examination of Brain Drain in Nebraska Counties and Communities:
Retention of the Population Cohort Age 10-19 Years of Age in 1980 through 2000

The release of the U.S. Census as well as Agricultural Census has recently been a time of anxiety for many policy makers and rural residents. The continued decline in rural population and in farm and ranch operators poses some serious questions about the demographic future of rural Nebraska. One way to gain a deeper understanding of how changes in population structure may affect Nebraska is to examine census data using a cohort methodology. By tracking a cohort of population over time we begin to understand how the structure is changing at a county and place (community) level.

In this analysis we track the cohort within Nebraska that was born between 1960 and 1969. We track them by county type and by community size through the year 2000. Five county types were used in this analysis. They are: metro counties, large trade counties, small trade counties, small town counties and frontier counties.

As defined by the Federal Office of Management and Budget, metropolitan counties either contain a city of 50,000 or more persons, or meet specified labor market conditions related to such a city. By current definition, Nebraska is home to nine such counties: five in the Omaha area, two in the Lincoln area and two in the Sioux City area. The other four county classifications were developed specifically to describe Nebraska.

There are thirteen large trade center counties, each containing an incorporated place of 7,500 or more persons. Nineteen small trade center counties each contain a place of 2,500 or more persons. Small trade center counties, of which there are 24, include no place of 2,500 persons, and have a population density of fewer than six persons per square mile (the traditional definition of the frontier).

In 1980 Nebraska had 268,156 persons age 10 to 19 years. By 1990 that cohort (then age 20 to 29 years) had declined to 233,867. It then rebounded (for ages 30 to 39 years) to 241,251 in the year 2000 (See Table 1). From 1980 to 1990 the state had a 12.8 percent decline in numbers within this cohort, that was followed by a 3.2 percent increase between 1990 and 2000. This shift in population resulted in a net ten-percent decline of this cohort within the state. We hear a great deal about “brain drain,” and certainly any loss of...
young people from Nebraska is a matter of concern. However for this specific cohort, now in their prime earning years, we can see that the state has retained population numbers equal to nearly 90 percent of its native born population. These numbers can not tell us if these are the same people, but they do paint a picture of a state maintaining a large portion of its young population, at least through their late 30's.

When we examine these cohort numbers by county type, we see a slightly different and very mixed picture. Overall, large trade counties lost 14.3 percent of this cohort between 1980 and 1990, and then had an 11.7 percent increase in this age group from 1990 to 2000. This resulted in a 4.2 percent decline in the number within this cohort. Red Willow County had the greatest decline between 1980 and 2000. They lost 37.5 percent of the numbers within this age group. Scotts Bluff County saw the next greatest decline in this age group with a 30.6 percent decrease.

The Small Trade Counties had a 30.2 percent decline in this cohort from 1980 to 2000. These county types then saw a recovery of 7.1 percent within this age group from 1990 to 2000. Dawes County led the decline with a 53.3 percent decline in this age group of population.

Small Town Counties saw an overall 35.9 percent decline in the numbers of this cohort, although this number hides a potential shift in this exodus. While these counties lost 47 percent of this age cohort between 1980 and 1990 they saw an increase of 20.9 percent between 1990 and 2000. Nuckolls and Knox Counties saw the steepest overall decline with drops of 49.5 and 48 percent.

The Frontier counties, those with less than six people per square mile, saw similar patterns. Between 1980 and 1990 these counties lost 50.1 percent of the population in this cohort, and then during the 1990's saw an increase of 16.3 percent. This resulted in a net decrease of 42 percent. Wheeler and Goveley Counties had the greatest declines with 55.2 and 52.1 percent declines.

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The changes we see in this analysis provides two views of brain drain in Nebraska. The first is that Nebraska maintains almost 90 percent of the young people born in the 1960's. In addition, there is a concentration of younger populations in our metropolitan counties. Indeed, only five Nebraska counties saw an actual increase in the 1960 to 1969 birth cohort between 1990 and 2000, and all of these were Metro counties. Even very rapidly growing Dawson County saw a nearly 5 percent net decline in the cohort over the twenty years examined.

However, there is an alternative view that suggests some hope for our rural areas. While the 1980's saw a dramatic decline in this cohort, the 1990's reflected a growth within the cohort for all county types. That is, people do return to rural places, at least from this particular 10 year cohort. The same is true of Nebraska’s smaller (less then 10,000 population) communities. In fact, some individual communities, even in very rural areas, can boast net increases in the cohort.

What happened in such areas? In our view it seems likely that new entrepreneurial activities emerged as this population reached adulthood. However, if that is the case, such opportunities seem to have been concentrated in a select few counties and places, and may be tied to regional population and economic characteristics.

It will be instructive to examine other age cohorts in the context of local economic trends to determine what interactions exist. The future of our non-metropolitan counties will be reflected in whether youth cohorts remain in Nebraska’s rural places, migrate to our metropolitan areas or leave the state entirely. The 1990's can provide clues as we look to the future.

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Figure 1.

![Graph of size of 1960-1969 birth cohort by size of community](image)

Table 1. Retention of the Population Cohort Aged 10-19 Years of Age in 1980 by County Type

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<tbody>
<tr>
<td>Nebraska</td>
<td>268,156</td>
<td>233,867</td>
<td>241,251</td>
<td>-12.8</td>
<td>3.2</td>
<td>-10.0</td>
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<td>Metro Counties (N=9)</td>
<td>136,150</td>
<td>144,560</td>
<td>144,867</td>
<td>6.2</td>
<td>0.2</td>
<td>6.4</td>
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<td>Large Trade Counties (N=13)</td>
<td>62,213</td>
<td>48,835</td>
<td>50,527</td>
<td>-21.5</td>
<td>3.5</td>
<td>-18.8</td>
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<td>Small Trade Counties (N=19)</td>
<td>31,491</td>
<td>20,506</td>
<td>21,971</td>
<td>-34.9</td>
<td>7.1</td>
<td>-30.2</td>
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<td>Small Town Counties (N=24)</td>
<td>27,457</td>
<td>14,557</td>
<td>17,596</td>
<td>-47.0</td>
<td>20.9</td>
<td>-35.9</td>
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<tr>
<td>Frontier Counties (N=28)</td>
<td>10,845</td>
<td>5,409</td>
<td>6,290</td>
<td>-50.1</td>
<td>16.3</td>
<td>-42.0</td>
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