September 2016
Brief: 2016-3

## How Migration Impacts Rural America

Miranda N. Smith, Richelle L. Winkler, and Kenneth M. Johnson

## Migration Shapes Rural Communities in Different Ways

A keynote story of rural America since the 1950s has been the saga of young people leaving rural America for education, excitement, and careers in cities. But, relentless youth outmigration is only one dimension of the rural migration story. Some rural places attract migrants while others lose them; and whom they attract and whom they lose varies. Some rural places attract retirees, others attract families, and some even attract young adults. Rural migration patterns reflect the varying social, economic, and environmental conditions across rural America. And, these differential migration patterns have significant implications for population structure, service needs, and community and economic development potential of rural communities.
Understanding distinct migration patterns can help community leaders to develop strategies to improve the well-being of their communities. Here, we summarize migration patterns by age across rural (nonmetropolitan) America from 1950-2010. Focusing on the most recent decade, we identify five distinct types of counties according to their age-specific net migration patterns.

## Rural Migration over Time

## KEY FINDINGS

- We find five distinct migration patterns in rural counties. Each type has a different impact on the local age structure and unique implications for local service needs and community development strategies.
- Youth Migration and Rural Exodus counties tend to lose people due to out-migration, especially young people. Many are located in economically depressed areas, where migration exacerbates population aging and reduces the number of skilled workers in the economy.
- Retirement counties and Destination counties generally attract migrants, especially older adults and family age migrants. Many are adjacent to metropolitan areas or have natural amenities, which attract people. Destination counties tend to attract people at all ages and face development challenges due to rapid growth. Retirement counties experience considerable out-migration of young adults coupled with an influx of older adults, leading to rapid population aging.
- University Influence counties attract collegeage and young adults, but lose family-age and older migrants. The university population heavily influences service demands in these areas. across most age groups during the 1950s and 1960s. Then, in the 1970s, there was a brief "rural renaissance" during which rural America gained from migration at all ages except for
young adults. In the 1980s, out-migration again became widespread because of the farm crisis and the shift of rural manufacturing jobs offshore. Migration patterns shifted again during the 1990s and 2000s, with modest migration gains among families with children and a growing trend of retirement age in-migration to rural counties. Though the magnitude of the migration loss varied from decade to decade, rural America suffered a net loss of young adults (20-29) throughout the 60-year period.


Figure 1: Median Net Migration by Age Group in Nonmetro Counties, 1950-2010 Data Source: Age-Specific Net Migration Estimates for US Counties, 1950-2010 (Winkler et al. 2013)

## Variation in the Pattern: Distinct Migration Types

The migration trends above summarize overall rural migration patterns, but we discovered distinct sub-types of rural counties by analyzing migration for four age groups that represent discrete stages in the life course. The "family age" group includes children less than 15 years of age and adults 30 to 49. The "emerging adult" group includes 15 to 24-year-olds. The "young adult" group includes 25 to 29 -year-olds and the "retirement" group includes 50 to 74 year-olds. We used cluster analysis to group counties with similar agespecific net migration patterns between 2000 and 2010. We found five distinct migration patterns among 1,770 nonmetropolitan counties. Counties with more than $5.5 \%$ of their population living in institutions (like prisons or nursing homes) or with $1.5 \%$ of their population living in military barracks were excluded and are shown in the map below as "Group Quarters".

|  |  | Median Net Migration Rate |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County <br> Type | Number of <br> Counties | Metro <br> Adjacent | Family Ages | Emerging <br> Adults | Young <br> Adults | Retirement <br> Ages |
| Youth <br> Migration | 490 | $59 \%$ | 2 | -13 | -19 | 4 |
| Rural <br> Exodus | 504 | $35 \%$ | 5 | -31 | -37 | 2 |
| Retirement | 333 | $50 \%$ | 12 | -22 | -30 | 14 |
| Destination | 269 | $62 \%$ | 13 | -4 | -3 | 14 |
| University <br> Influence | 174 | $53 \%$ | -3 | 33 | -27 | 5 |

Table 1: Median Net Migration Rate (per 100) by Age Group and County Type, 2000-2010
Data Source: Age-Specific Net Migration Estimates for US Counties, 1950-2010 (Winkler et al. 2013)


Figure 2: Net Migration by Age Group for Five Nonmetro County Types, 2000-2010 Data Source: Age-Specific Net Migration Estimates for US Counties, 1950-2010 (Winkler et al. 2013)

## Youth Migration Counties

Youth Migration counties ( $\mathrm{n}=490$ ) are characterized by net out-migration of emerging adults and young adults coupled with minimal net in-migration of families and retirees. The typical county in this group experienced a net loss of 13\% of its emerging adults and 19\% of its young adults. In contrast, it had a modest migration gain of 2\% among family-age migrants and $4 \%$ among retirees.

Youth Migration counties are dispersed across the United States, but are common in agricultural areas and far from large cities. For example, Rush County, Indiana is a youth migration county located about an hour's drive southeast of Indianapolis. Its county seat is Rushville (population 6,341). This is farm country, $15 \%$ of high school students are in the Future Farmers of America, and manufacturing is also important to the local economy. The county has no interstate highways. Its population has steadily declined since reaching its peak in 1960.

Young people leave Rush County and others like it to seek broader education, employment, and social and economic opportunities elsewhere. Youth Migration counties generally have little race/ethnic diversity, and younger people often see them as dull. The mechanization of agriculture, timber, and mining, which were historically major employers in many of these counties, has steadily diminished opportunities in these fields over time. Recent declines in manufacturing further reduce job opportunities. Often, social or economic quality of life indicators suggest these are good places to live, but many young people find them less appealing because of limited economic and social opportunities. Often the most educationally successful young people with more extra-local experiences are the most likely to leave, contributing to a brain drain that has been a major policy concern in such rural areas for decades. Overall, Youth Migration patterns result in population aging as younger people leave, creating a situation where K-12 school enrollments decline and associated schools consolidate, and the number of skilled workers in the local economy drops.


Figure 3: Spatial Distribution of Rural Migration Types

## Rural Exodus Counties

Rural Exodus counties ( $\mathrm{n}=504$ ) experienced more out-migration of emerging adults (31\%) and young adults (37\%) than Youth Migration counties. There is a modest inflow of migrants at family ages (5\%) and retirement ages (2\%), but not nearly enough to offset the outflow of younger people. These counties tend to be remote from metropolitan centers $65 \%$ of them are not adjacent to metropolitan counties. Geographically, they are mostly
concentrated in the Great Plains and the Mississippi River Delta. Many have seen persistent population loss for decades and have limited economic opportunities.

Cherry County, Nebraska is typical of the Great Plains Exodus counties. It is a farm dependentii county located in the sandhill region of northwestern Nebraska, a three to four hour drive from the nearest metropolitan area in Rapid City, South Dakota. The largest city is Valentine, with a population of about 2,800 . The county's population declined steadily from almost 12,000 in 1920 to about 5,700 in 2010 (about one person per square mile). Desha County, Arkansas is typical of the Mississippi Delta Exodus counties. Desha County is a racially diverse cotton-producing county that has lost more than half its population since 1940 and is classified by the USDA as a persistent poverty, low education and low-income county. ${ }^{2}$

The relentless out-migration of young people from Exodus counties is causing them to age even faster than most of rural America. Between 2000 and 2010, migration increased the median age by 2.6 years to almost 41 (compared to the nonmetro average of 39 ). These counties face significant challenges providing services (particularly health care) to an aging and sparsely distributed population with relatively few working age people and few resources. They face many of the same challenges as the Youth Migration counties, but to a greater extent.

## Retirement Counties

Retirement counties $(\mathrm{n}=333$ ) experienced considerable in-migration of retiree and family ages between 2000 and 2010, but had significant net migration losses of emerging adults and young adults. On average, net migration increased the population of retirees by $14 \%$ and family ages by $12 \%$, but reduced the population of emerging adults and young adults by about $22 \%$ and $30 \%$, respectively. Retirement counties are scattered across mountainous areas of the West, in the northwoods of the Upper Midwest and New England, in the Ozarks and in the Texas hill country. They tend to be in areas of natural beauty with mountains, lakes and scenic vistas as well as outdoor recreation opportunities. Almost one in five housing units (19\%) in Retirement counties are for seasonal, recreational, or occasional use (i.e., second homes). ${ }^{1}$ Many of these second homes will become year-round residences as retirees, who have vacationed there, eventually become full time residents.

A prominent cluster of Retirement counties spans the inland lakes region from northwestern Wisconsin to central Minnesota. These areas attract older people to lakeside cottages, but they offer limited employment and service opportunities for young adults (see Winkler 2013). Another cluster in Idaho and Montana includes counties like Custer County, ID, which is a mountainous and heavily forested area where outdoor recreation, including fishing, hunting, whitewater rafting, and hiking are popular. Nearly $30 \%$ of all housing units in Custer County are second homes. ${ }^{1}$ This Retirement county lost $31 \%$ of its young adults to net migration between 2000 and 2010, but gained a significant number of retirees.

Retirement counties have older populations than any other county type, with a median age in 2010 of about 43 years, because of the combination of older people moving in and younger people moving out. Between 2000 and 2010, migration caused the median age to increase by 3 years (i.e., median age was 39 in 2000, would have increased to 40 from natural population aging, but increased to 43 due to migration). Some Retirement counties experience out-migration of their oldest seniors, who need easier access to specialized medical care and greater support from their family.

Social, community, and economic activities in these counties tend to focus on older adults,
which may further encourage young adult out-migration. In addition, second homes and retirement migration often drive up housing costs, pricing young people out of the local housing market. Some young people who wish to remain in Retirement counties, or migrate to them, may wonder how they will fit into community life. This is unfortunate because Retirement counties require skilled health services to meet the needs of an aging population, yet struggle to find trained labor to fill these positions.

## Destination Counties

Destination counties ( $\mathrm{n}=269$ ) are unique among nonmetropolitan counties in that they lose few young adults. The typical Destination county experienced minimal net migration loss of emerging adults and young adults, and attracted migrants at all other ages. Destination counties tend to be close to growing metropolitan areas (62\% are adjacent to metro areas) and/or are rich in natural amenities and outdoor recreation. They are widely dispersed, but more clustered in the Southeast, the Intermountain West, and in oil and gas boom areas. There are few Destination counties in New England or the Midwest.

Natural and scenic amenities and outdoor recreation are big attractions in Destinations like Pitkin County, Colorado - home of ski resorts like Aspen and Snowmass. Net migration more than doubled the population of young adults in Pitkin County between 2000 and 2010. Since 1960, its total population has grown from 2,381 to 17,148 in 2010. ${ }^{1}$ Destination counties are also evident in the southeast along coasts and in the Appalachian Mountains (such as Monroe County, FL home of the Florida Keys and Sevier County, TN in the Smokey Mountains). Coasts and mountains are attractive natural features that also draw investments in outdoor recreational infrastructure and related restaurants, shops, and activities that draw folks to rural places and create jobs. The southern Destination counties tend to attract more people of retirement age and fewer young adults than Destinations in the West.

Other Destination counties at the outer fringes of growing metropolitan areas often attract exurban migrants, especially in the South. Here, migration is partly the result of metropolitan spillover as commuters trade longer trips to work for lower housing prices and attractive rural settings. Such Destination counties are close enough to the metro area and related jobs and services. They often also offer lower housing costs, newer housing and attractive environmental features coupled with social and cultural resources. For example, Banks County, GA is located just outside the rapidly expanding Atlanta metropolitan area. It boasts celebrated historic buildings and is home to the Chattahoochee National Forest and the Broad River.

Destination counties tend to have growing economies. They often face planning challenges as they struggle to cope with a rapidly growing population, significant development and demands for expanded infrastructure and services, while trying to provide affordable housing and protect the quality of life attributes that make the areas attractive to migrants.

## University Influence Counties

The presence of a college or university produced a distinct migration pattern in 174 nonmetropolitan counties. The typical University Influence county had a migration gain of about 33\% among emerging adults, but a net out-migration of young adults as students graduated.

The migration impact of a university depends on both the size of the school and the size of the surrounding community. In counties with large universities but small populations such as Oktibbeha County, Mississippi (home to Mississippi State University), the in-migration
of emerging adults dominates the local age structure. Mississippi State's enrollment of 20,000 represents $40 \%$ of the county's 50,000 people. ${ }^{1}$ Migration triples the population of emerging adults, and has an extraordinary impact on the demographic structure and on service demands.

Among other counties in this group, the impact of the college or university is modest, because the institutions are smaller and/or the general population is larger. For example, in Union County, Oregon, the 3,500 students of Eastern Oregon University represent 11\% of the county's population of about 25,000 . Here, the in-migration of students influences both the age structure and community and economic life; but to a far lesser extent than in counties with larger universities and/or smaller total populations.

The impact of migration in University Influence counties differs from that elsewhere because the young migrants come, stay for a few years, and then most leave. The constant turnover of young people brings a continuous stream of energy, human capital, and outside funds to the community. However, these students tend to be less invested in local community life and have relatively little discretionary income. They also place service and infrastructure demands on the local community, but likely contribute less than permanent residents to local social, political and economic life.

## Conclusion

Rural migration is the result of the unique local and regional economic, environmental, and social conditions that influence individual rural counties, together with the larger social, economic and political forces that are redistributing the U.S. population. There is considerable variation in age-specific migration patterns across rural America. We identify five distinctly different migration profiles in nonmetropolitan counties. These differential migration patterns have a major impact on the local demographic structure and have important implications for the people, places and institutions of these counties. Because younger people tend to move away from rural America and older people are increasingly moving to selected rural counties, migration almost always accelerates the overall aging of the population. Migration also impacts local socioeconomic conditions, services, infrastructure demands, community development strategies, and social service needs. Recognizing the diversity of migration patterns across rural America and the implications of different types of migration informs planning and policy-making for health care delivery, the provision of social services, housing and community and economic development.

## Data and Methods

## What is New Migration and How is it

 Measured? Net migration is the difference between the numbers of individuals moving into and out of a geographic area over a specific time period. Here, the geographic area is the county. Net migration can be calculated for the entire population as well as for population sub-groups (such as by age, sex, race, or ethnicity). Our analysis is based on county net migration estimates by age groups that were created by teams of demographers in each decade from 19502010. The estimates use the "residual" method. The population is counted in the Census at the beginning of a decade (i.e.,2000). Then, the population for each 5 -year age group is aged forward by ten years. From this value, births for the ten-year period are added and deaths to each age group are subtracted. This generates an expected population at the end of each decade. The difference between this expected population and that counted in the census at the end of the decade (i.e., 2010) is the estimated net migration. Positive values indicate an increase in population due to net migration, and negative values indicate a decrease. A detailed summary of the methods is available in a report by Winkler et al. 2013. The data are publicly available online at www.netmigration.wisc.edu, along with
interactive mapping and chart-building tools.

## References

1. US Census Bureau 2010.
2. US Department of Agriculture. ERS

County Typology Codes, 2015 Edition. Economic Research Service. Available online: http://www.ers.usda.gov/data-products/county-typology-codes.aspx.
3. Johnson, K. M., R.L. Winkler, and L. T. Rogers. 2013. Age and Lifecycle Patterns Driving U.S. Migration Shifts. The Carsey Institute. Issue Brief 62. April 12, 2013.
4. Johnson, K.M. and R.L. Winkler. 2015. "Migration Signatures: Net Migration by Age and Race/Ethnicity in U.S. Counties, 1950-2010." Demographic Research 32(38): 1065-1080.
5. Parker, T. 2015. ERS County Typology

Codes Update. United States Department of Agriculture. Economic Research Service. Web. http://www.ers.usda.gov/data-products/county-typologycodes/documentation.aspx.
6. Winkler, R.L., K. M. Johnson, C.Cheng, J. Beaudoin, P. R. Voss, and K. J. Curtis. AgeSpecific Net Migration Estimates for US Counties, 1950-2010. Applied Population Laboratory, University of Wisconsin-

Madison, 2013. Web.
http://www.netmigration.wisc.edu/.
7. Winkler, R.L. 2013. Living on lakes: Segregated communities and social exclusion in a natural amenity destination. The Sociological Quarterly 54 (1): 105-129.

## Acknowledgments

This research was funded by a joint venture agreement with the USDA Forest Service Rocky Mountain Research Station. The content is solely the responsibility of the authors and does not necessarily represent the official views of the United States Department of Agriculture. Dr. Johnson's work was supported, in part, by the New Hampshire Agricultural Experiment Station.

## About the Authors

Miranda N. Smith is a graduate student in Environmental and Energy Policy at Michigan Technological University. Richelle L. Winkler is Associate Professor of Sociology and Demography in the Social Sciences Department at Michigan Technological University. Kenneth M. Johnson is Senior Demographer at the Carsey School of Public Policy and a Professor of Sociology at the University of New Hampshire.

Suggested Citation: Smith, Miranda N., Winkler, Richelle L., and Johnson, Kenneth M. 2016. "How Migration Impacts Rural America." Brief \#3. Rural Population Research Network.

The Rural Population Research Network is a USDA NIFA supported network of scholars who conduct research on the most pressing demographic, economic, social, and environmental challenges faced by rural communities in the United States. The project for 2012-2017 is titled 'W3001: The Great Recession, Its Aftermath, and Patterns of Rural and Small Town Demographic Change'. https://www.nimss.org/projects/14576.

