

The Outs and Ins



of Rural Migration

Introduction

The number of rural Pennsylvanians moving out of state has been a hot topic for many years. Data from the federal Internal Revenue Service (IRS) suggest that the out-migration of rural Pennsylvanians may not be as severe as some have perceived.

A detailed look at data from 2004 to 2005 shows that rural Pennsylvania had a net gain of about 9,000 people. And, an analysis of data from 2000 to 2005 shows an overall 11 percent increase in the number of out-of-state residents moving to rural Pennsylvania.

To better understand the pattern of out- and in-migration, the Center for Rural Pennsylvania analyzed county data to identify the number of people who moved out of and into rural Pennsylvania, and compared the characteristics of counties from and into which migrants moved.

One key finding from the analysis is that rural areas had a net gain of out-of-state migrants from 2004 to 2005, but the gain was regional. Other findings indicate that people leaving rural Pennsylvania generally move to an urban county with more economic opportunities and higher housing costs, and people moving into rural Pennsylvania from out of state generally move from an urban county with higher housing costs.

Methods

The Center for Rural Pennsylvania used two data sources to analyze migration patterns: the

Table 1: Indicators Analyzed

Demographic Category	Economic Category	Quality of Life Category
<u>Population Change, 2000-2005:</u> Percent change in estimated county population, 2000-2005. ¹ <u>Population Density:</u> Number of persons per square land mile, 2005. ¹ <u>Minorities:</u> Percent of population that is non-White and non-Hispanic, 2000. ¹ <u>Married with Children:</u> Percent of households that are married couples with children, 2000. ¹ <u>Senior Citizens:</u> Percent of population that is 65 years old and older, 2000. ¹	<u>Change in Business Establishments:</u> Percent change in the number of business establishments between 2000-2004. ¹ <u>Unemployment Rate:</u> Average unemployment rate between 2003-2005. ² <u>Change in Employment:</u> Percent change in full and part-time employment between 2003-2005. ² <u>Average Wage:</u> Average annual wage for salaried employees, 2005. ² <u>Change in Average Wage:</u> Percent change in inflation-adjusted average annual wage for salaried employees, 2003-2005. ²	<u>Homeownership:</u> Percent of occupied housing units that are owner-occupied, 2000. ¹ <u>Housing Values:</u> Median values of specified owner-occupied housing units, 2000. ¹ <u>Real Estate Taxes:</u> Median real estate taxes paid by homeowners, 2000. ¹ <u>Poverty Rate:</u> Percent of total population identified by the U.S. Census Bureau as being at or below the poverty threshold, 2000. ¹ <u>College Education:</u> Percent of persons 25 years old and older with a bachelor's degree or higher, 2000. ¹

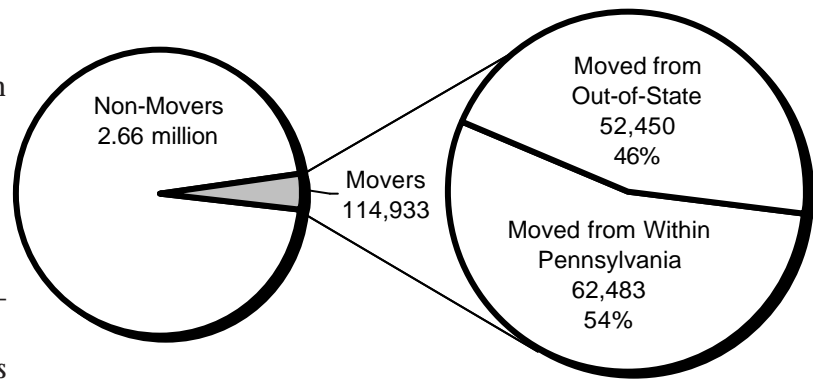
¹ U.S. Census Bureau, including Census 2000, County Business Patterns, and 2002 Economic Census. ² U.S. Bureau of Economic Analysis, wage data adjusted for inflation using the CPI-U with 2005=100.

U.S. Internal Revenue Service's (IRS) County to County Migration Inflow and Outflow, and selected demographic and economic indicators from the U.S. Census Bureau and U.S. Bureau of Economic Analysis.

The IRS data are computed from income tax filings. Taxpayers that report different county addresses in successive years are considered taxpayers that have migrated. This data set identifies both the counties and states where the taxpayers lived during the preceding tax year and the counties and states into which they moved.

The IRS data report both the number of tax returns and the number of personal exemptions. The number of returns approximates the number of households and the number of personal exemptions approximates the population. In this report the focus will be on personal exemption migrants. The analysis focused on the tax period 2004 to 2005; however, the years 2000 to 2005 were also examined for trend analysis.

Figure 1: In-Migration to Rural Pennsylvania, 2004 to 2005



Data source: IRS County-to-County Migration Flows

Data Limitations

Data suppression: For confidentiality reasons, the IRS does not report individual migration if less than 10 tax filers move from one specific county to another specific county. For rural Pennsylvania, data was not available for 82,293 persons, or approximately 52 percent of the total in- and out-migrant population. The absence of this county data limits the completeness of this analysis. However, from the data that is available, relevant insights can be gleaned on conditions in counties from and into which the majority of individuals moved.

Characteristics of Migrants Unknown: The IRS data do not include any demographic characteristics on migrants. It is unknown, for example, the age, employment status, or level of educational attainment of migrants. While this lack of information limits the completeness of the analysis, the focus here will be on the characteristics of counties into and out of which migrants moved.

Data Exclude Certain Groups: The IRS data do not include non-filers. They also do not completely capture senior citizens who have recently lost a spouse or others filers with very low income. The data do not adequately identify international migrants who are not residents and do not need to file an IRS tax return. Despite these limitations, the IRS estimates that its data capture 80 percent of the movement of the population domestically within the United States each year.

Definitions

Rural County: In this analysis, a county was defined as rural if its population density (number of persons per square land mile) was below the statewide population density of 274 persons per square mile. Counties that had a population density at or above the statewide population density were considered urban. In Pennsylvania, 48 counties are rural and 19 are urban.

In-Migration: The movement of persons into a county. The in-migration rate is determined by dividing the number of migrants by the population and then multiplying the product by 1,000.

Out-Migration: The movement of persons out of a county. The out-migration rate is determined by dividing the number of migrants by the population and then multiplying the product by 1,000.

Net-Migration: Subtraction of the number of persons who move into a county from the number of persons who moved out. If this number is negative, it means that more people moved out than moved in. If the number is positive, then more people moved in than moved out.

Map 1: Out-of-State In-Migration Rate to Pennsylvania by County, 2004 to 2005

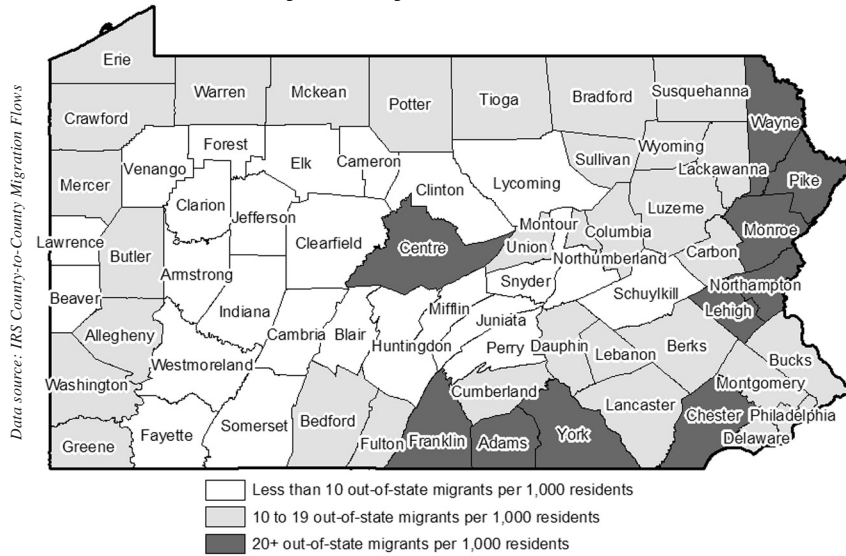


Table 1 on Page 1 lists the demographic, economic and quality of life indicators used in this analysis along with their sources. Two criteria were used to select these indicators: first, data on these indicators had to be available for each county in the United States; second, the indicators had to describe current conditions in counties where persons moved to and from. Each indicator was placed into one of three broad categories: demographic, economic, or quality of life.

To statistically analyze the differences between counties from and into which persons moved, the Center used a paired-samples t-test procedure. This statistical test compares the means of two variables for a single group. The procedure computes the differences between values of the two variables for each case and tests whether the average differs from zero.

Results

Overall In-Migration

From 2004 to 2005, 114,933 persons moved into rural Pennsylvania. That is slightly more than 4 percent of the total population. As Figure 1 shows, 55 percent of these individuals moved from within Pennsylvania. Among the 62,483 rural residents who moved within Pennsylvania, an estimated 51 percent moved from one rural county to another rural county and 49 percent moved from an urban county to a rural county.

Forty-five percent moved into rural Pennsylvania from out of state.

Among the 52,450 persons who moved into rural Pennsylvania from out of state, 44 percent went to five of the commonwealth's 48 rural counties: Monroe, Franklin, Pike, Centre and Adams. With the exception of Centre, each of these counties borders another state.

When examining urban county in-migration, the analysis found that 301,322 persons moved; 53 percent moved within Pennsylvania and 47 percent moved in from out of state.

Among the 158,313 who moved within Pennsylvania, an estimated 84 percent moved from one urban county to another and 16 percent moved in from a rural county.

Among the more than 143,000 persons who moved into urban counties from out of state, 45 percent moved into the five-county Philadelphia region.

Map 1 shows the out-of-state in-migration rates for Pennsylvania counties. Every county in Pennsylvania had out-of-state in-migration. The rate for rural counties was 15 persons for every 1,000 residents. The rate for urban counties was 16 persons for every 1,000 residents.

For a more long-term perspective, from 2000 to 2005, the number of persons from out of state moving into rural Pennsylvania increased 11 percent overall.

From 2000 to 2005, the number of out-of-state residents moving into urban counties increased 13 percent overall.

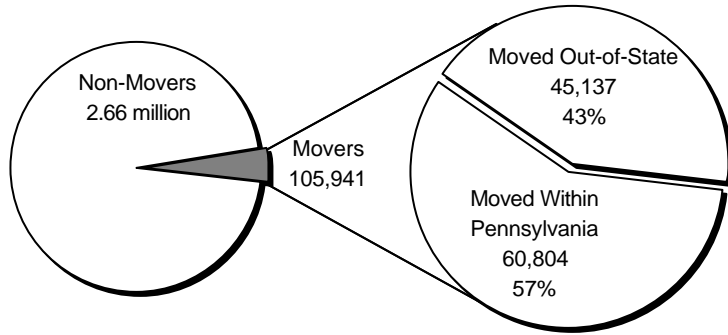
Overall Out-Migration

From 2004 to 2005, 105,941 rural Pennsylvanians, or just about 4 percent of the total rural population, moved. As Figure 2 on Page 4 shows, approximately 57 percent of these individuals moved within Pennsylvania. Among the more than 60,800 rural residents who moved within Pennsylvania, an estimated 52 percent moved to another rural county and 48 percent moved to an urban county.

Forty-three percent of rural Pennsylvanians moved out of state.

Among the 45,137 rural residents who moved out of state, 78 percent were from rural counties in central and western Pennsylvania.

Figure 2: Out-Migration from Rural Pennsylvania, 2004 to 2005



Data source: IRS County-to-County Migration Flows

The analysis of Pennsylvania's urban counties found that 306,791 persons, or about 4 percent of the urban population, moved from 2004 to 2005. Fifty-two percent of urban movers went to another Pennsylvania county. Among the nearly 160,000 urban residents who moved within Pennsylvania, an estimated 83 percent moved to another urban county and 17 percent moved to a rural county.

Forty-eight percent of urban Pennsylvanians moved out of state.

Among the nearly 147,000 urban residents who moved out of state, 31 percent were from Philadelphia and Allegheny counties.

Map 2 shows the Pennsylvania out-migration rate by county. The rural out-migration rate was 13 migrants per 1,000 residents and the urban rate was 16 per 1,000 residents.

For a more long-term perspective, from 2000 to 2005, there was a 2 percent decline in the number of

rural residents moving out of state. Among urban counties, there was a 2 percent increase.

Net Migration

From 2004 to 2005, rural Pennsylvania had a net gain of nearly 9,000 persons who migrated to rural areas, while urban areas had a net loss of nearly 5,500 persons. As Map 3 shows, out-of-state migrants generally moved to counties in eastern and south central Pennsylvania.

As Figure 3 shows, rural counties have been slowly gaining more out-of-state residents.

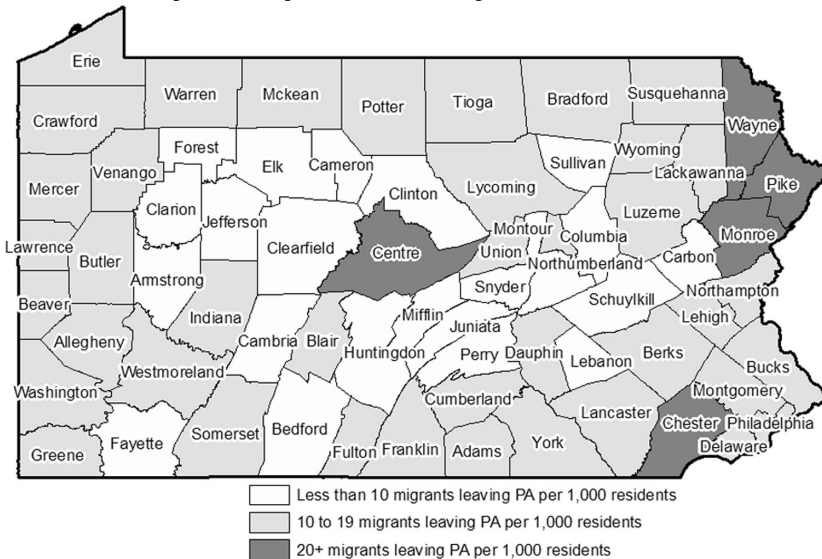
From 2000 to 2005, 265,660 persons move out of rural Pennsylvania and out of state. During this same period, more than 290,811 persons from out of state moved into rural Pennsylvania. The result was a net gain of 25,151 rural residents. In this same period, urban areas experienced a net loss of 56,179 persons.

In-Migration: County Comparison

According to IRS data, from 2004 to 2005, individuals from 90 counties across the United States moved into rural Pennsylvania. The analysis is based on 38 percent (19,912 people) of the total number of out-of-staters moving into rural Pennsylvania. The Center for Rural Pennsylvania compared the out-of-state counties these individuals left with the rural Pennsylvania county into which they moved. The analysis included a t-test to determine whether there was a statistically significant difference between the two counties.

Map 4 on Page 6 shows the states and counties from which out-of-state migrants came. Migrants coming to rural Pennsylvania came from 90 counties in 20 states. Ninety-four percent of these individuals came from states surrounding Pennsylvania. The largest percentage of these individuals came from New York (41 percent) and New Jersey (26 percent.)

Map 2: Out-of-State Out-Migration Rate by Pennsylvania County, 2004 to 2005



Data source: IRS County-to-County Migration Flows

Table 2 on Page 6 shows the comparisons. The key findings are:

Demographics: Out-of-state residents who move into rural Pennsylvania are generally coming from counties with higher population densities. This suggests that they are moving from urban to rural areas. These individuals moved from moderate population growth counties to counties with higher population growth. They also moved from counties with fewer minorities and senior citizens to rural Pennsylvania counties with more minorities and senior citizens.

Economics: Persons moving from another state to rural Pennsylvania would likely see little difference in the economy. In the counties from and into which they moved, the unemployment rate was nearly equal and the percent change in businesses and wages were not significantly different. There were, however, two key differences: average annual wages and the change in employment.

According to the data, the average wage in the out-of-state counties was \$12,800 higher than the rural Pennsylvania counties into which they moved.

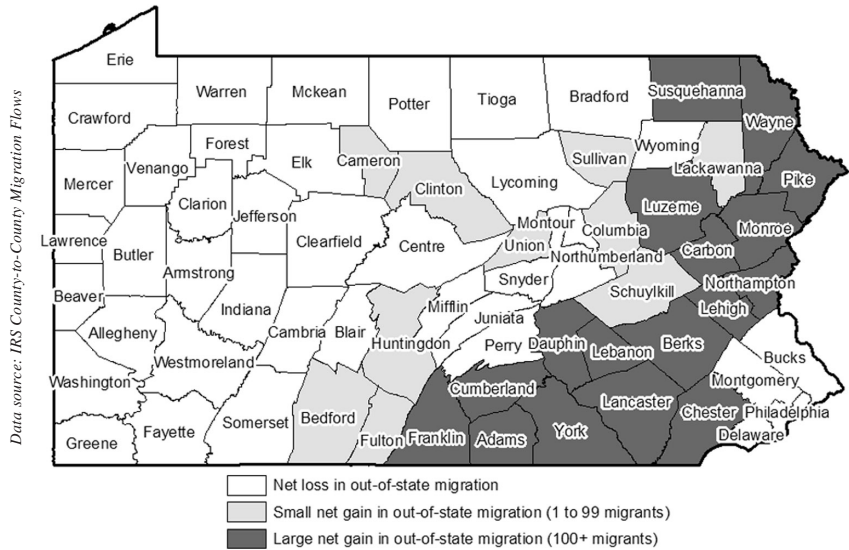
In terms of employment, the rural Pennsylvania counties into which these individuals moved had a 9 percent increase in employment from 2003 to 2005, while the out-of-state counties they moved from had less than a 3 percent average increase.

Quality of Life: From a housing perspective, the out-of-state counties where persons moved from had lower homeownership rates, higher housing values, and higher property taxes than the counties into which they moved. For example, housing values were, on average, nearly \$70,000 lower in rural Pennsylvania than their former county.

In addition, new rural residents found there were fewer rural adults with college degrees.

However, the poverty rate was nearly identical to the county from which they came.

MAP 3: Out-of-State Net Migration by County, 2004 to 2005

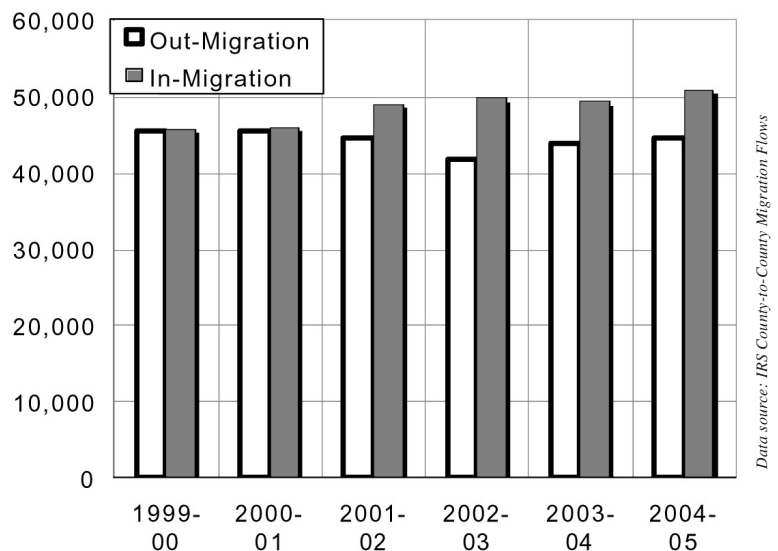


Out-Migration: County Comparison

According to the IRS data, from 2004 to 2005, individuals from rural Pennsylvania moved to 113 different counties in 21 states outside of Pennsylvania. The analysis is based on 23 percent (10,498 people) of the total number of rural Pennsylvanians who moved out of state. This section illustrates the differences between the rural Pennsylvania counties which these individuals left and the out-of-state counties into which they moved.

As Map 5 on Page 7 shows, persons who moved out of rural Pennsylvania went to one of 21 counties.

Figure 3: Rural Pennsylvanians Moving Out of State Vs. Out-of-State Residents Moving to Rural Pennsylvania, 2000 to 2005



other half moved to an urban county. A similar pattern is found among urban Pennsylvania county migrants.

• **Among Those Who Move Out of State, Most Do Not Move Far**

Ninety-four percent of rural residents who moved out of state went to an adjacent state, and among these, 59 percent went to a county directly bordering Pennsylvania. While residents leave rural Pennsylvania, it appears that many do not go very far.

• **When Rural Pennsylvanians Move Out of State, They Move to Urban Counties**

More than two-thirds of rural residents who moved out of state moved to an urban county, and less than one-third moved to another rural county. The opposite is true for persons moving into rural Pennsylvania, as the majority of these individuals left an urban county to live in a rural county.

• **Economic Factors May Be One Reason Why Rural Pennsylvanians Leave**

When rural Pennsylvanians leave the state, they generally go to a county with lower unemployment, higher job growth and higher wages. However, these migrants were likely to face higher housing costs and taxes in their new counties.

• **Migration in Rural Pennsylvania is Regional**

Within rural Pennsylvania, the eastern region had a net increase in migrants, while the central and western regions had a net loss. While the rural migration picture is, on average, positive, there are regions within the commonwealth that are experiencing more out-migration.

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The Center for Rural Pennsylvania
200 North Third Street, Suite 600
Harrisburg, PA 17101
Phone: (717) 787-9555
Fax: (717) 772-3587
www.ruralpa.org
1P0707 – 200