

The Northeast Regional Center for Rural Development

County Economic Development Index

CEDI 2000

February 2001



This report was prepared with grant funds provided under a cooperative agreement between The Pennsylvania State University and the USDA/CSREES (Cooperative State Research, Extension and Education System, grant no. 99-34104-7541). Opinions expressed are the authors', and not necessarily those of the cooperating institutions. We thank Emilio Pagoulatos, University of Connecticut, for stimulating our interest in developing the index underlying this report. We would also like to thank Barry Denk, Frank Higdon, Jon Johnson, and Stephen Smith for their helpful comments.

Suggested citation:

Goetz, Stephan J. and Brian Lego, *County Economic Development Index for the Rural Northeast US, 2000*, The Northeast Regional Center for Rural Development, University Park, PA, February 2001 (revised), p. 31.

Programs of The Northeast Regional Center for Rural Development are equally available to all people.

Permission is hereby granted for the use of all or parts of this report provided the above citation appears in the reproduced materials, and a copy of the publication containing the reproduced materials is transmitted to the Center: NERCRD, 7 Armsby Building, Penn State University, University Park, PA, 16802-5602.

County Economic Development Index for the Rural Northeast US, 2000

Introduction: Why a CEDI for Rural Areas?.....	1
The 148 Non-Metro Counties of the Northeast.....	1
The Overall CEDI for 2000	3
Maps and Discussion of Variables Included in the CEDI.....	4
A. Income-Related	6
Personal Income per Capita.....	6
Wage-and-Salary Earnings per Employee	6
Self-Employment Earnings per Proprietor	8
Per Capita Wealth Estimates.....	8
Food Stamps Dollars Received per Capita	10
B. Job-Related	10
Unemployment Rate	10
Employment Change, 1995-1998	12
Civilian Government Employment as a Percent of all Employed	12
C. Demographic	14
Net Migration.....	14
Youth Retention Ratio.....	14
Birth-Death Ratio.....	16
Death Rates (controlling for the effect of age)	16
D. Other Measures of Economic Vitality	18
Patents Granted.....	18
Housing Growth.....	18
Detailed County-Level Statistical Tables.....	20
Conclusion.....	27
References	27
Appendix.....	28
High school graduates	28
College graduates.....	28

Introduction: Why a CEDI for Rural Areas?

Economic and social statistics tend to be more detailed, timely and widely analyzed for metropolitan areas than for non-metro or rural areas of the United States. This reflects the larger population numbers living in metro areas and the proportionately higher cost of collecting data for smaller, dispersed populations in rural or non-metro areas. As a result, less information is available for rural areas, which also means that federal, state and local policy decisions are often made with less knowledge about their possible impacts over time on rural communities than is the case in urban areas.

To illustrate, the *Business Opportunity Index, 2000* by C. Zlatkovich and K. Putnam, contains “detailed economic information for all states and metropolitan areas” only. The recent Housing and Urban Development Report, *Now is the Time: Places Left Behind in the New Economy—America’s Northeast* also illustrates this point. Virtually all of the data, statistical analyses and findings relate to larger cities, which is not surprising given HUD’s geographic mandate. This also means that the nearly 7 million residents of non-metro areas in the Northeast are not covered by the insights listed in the HUD report. More specifically, we do not know whether non-metro places as a group are also being left behind in the New Economy and, if so, whether to a larger or to a lesser degree than is the case for metro areas. And, we do not know *which* non-metro counties are being left behind, and which are keeping pace with or even staying ahead of the New Economy.

This report compiles in one place a consistent set of economic indicators about the non-metro northeastern US, using the most currently available statistics. We are keenly aware of the limitations of any analysis that is based on average county-level data, including the fact that county-wide governments either do not exist or have limited responsibilities in New England, and we do not claim that the indicators chosen tell the entire story of what is happening in the non-metro Northeast. However, the indicators do provide a foundation for a conversation that may allow us to begin to develop such an understanding.

The index for 2000 will serve as a benchmark against which future progress—or a lack thereof—can be gauged in individual counties. The report is also designed to stimulate discussion about economic conditions in the non-metropolitan Northeast, by allowing local leaders to determine how their county compares with neighboring counties.

The 148 Non-metro Counties of the Northeast

The Northeastern US is usually thought of as being largely urbanized, with a heavy concentration of people in Boston, New York City and Washington (the “BosNyWash” Mega city), as well as population centers such as Pittsburgh and Philadelphia. New Jersey officially contains only metropolitan counties, even though some of these counties also contain rural areas. Furthermore, much of the land area of these metropolitan counties is used for agricultural purposes. A recent report shows that there are now more farmers in metro than in non-metro areas of the Northeast (this analysis excludes West Virginia; see Altobelli and Pfeffer, 2000, p. 22).

Three of only five states in the nation that have a demographic and a political majority of residents living in rural areas are found in the Northeast: Maine, Vermont and West Virginia (see Beeson and Strange, 2000). Many of these rural states, and the rural areas of states such as NY and PA, are increasingly affected by the desires of those living in cities to move into low-density suburban and rural housing areas. Other rural areas of the Northeast face the problem of continued economic decline and population loss.

The following map shows the metropolitan and non-metropolitan counties of the Northeast. Out of a total of 299 counties, 148 are non-metropolitan. Of these non-metro counties, 83 (56%) have populations between 2,500 and 19,999; these counties are more likely to be adjacent to a metro area (32%) than not adjacent (24%)—see Table 1. Note that the last two categories in Table 1 (codes 8 and 9) are commonly referred to as *rural*. All other counties are *urban* or “urbanized.”

Table 1: Beale Code Designations of Northeast Non-Metro Counties

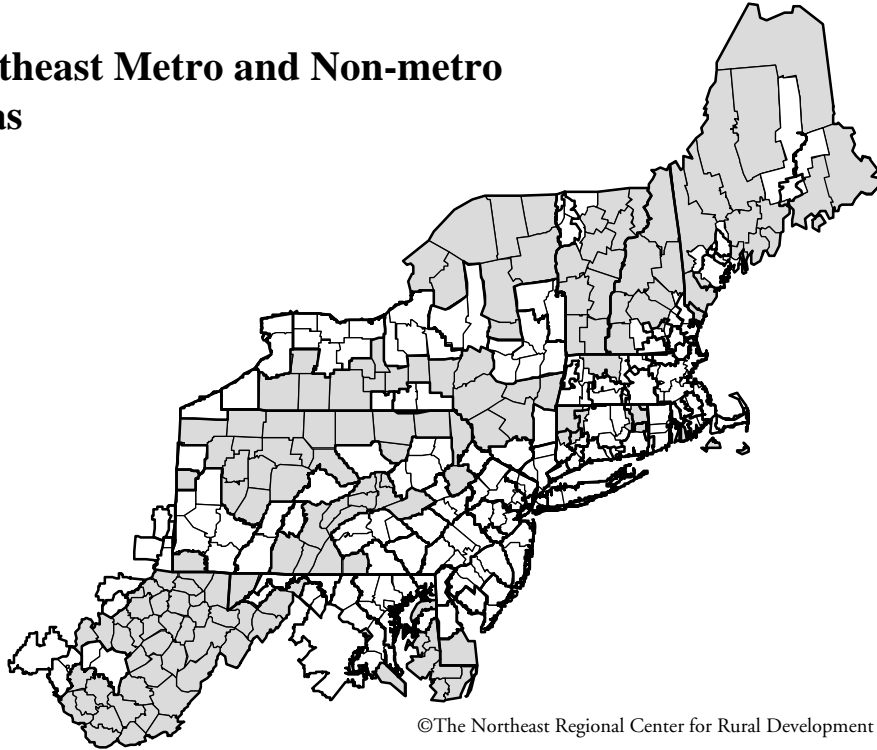
Beale Code	Description	Percent of Non-metro counties
4	Population of 20,000 or more, adjacent to a metro area	13.5%
5	Population of 20,000 or more, not adjacent to a metro area	7.4%
6	Population of 2,500 to 19,999, adjacent to a metro area	31.8%
7	Population of 2,500 to 19,999, not adjacent to a metro area	24.3%
8	Less than 2,500 residents, adjacent to a metro area	11.5%
9	Less than 2,500 residents, not adjacent to a metro area	11.5%

The Federal Office of Management and Budget (OMB) keeps track of metropolitan and non-metropolitan areas. Metropolitan statistical areas (MSAs) are generally defined as places with a large core population, and adjacent areas that are economically and socially integrated into the core area. More specifically (US Statistical Abstract, 1999, Appendix II, p. 914),

...current standards provide that each MSA must include at least: (a) One city with 50,000 or more inhabitants, or (b) A Census Bureau-defined urbanized area (of at least 50,000 inhabitants) and a total metropolitan population of at least 100,000 (75,000 in New England). Under the standards the county (or counties) that contains the largest city becomes the central county (counties), along with any adjacent counties that have at least 50 percent of their population in the urbanized area surrounding the largest city. Additional “outlying counties” are included in the MSA if they meet specified requirements of commuting to the central counties and other selected requirements of metropolitan character (such as population density and percent urban). In New England, the MSA’s are defined in terms of cities and towns rather than counties.

Considerably more detail about the definition of MSAs, including those in New England, are available in the U.S. Statistical Abstract on the Department of Commerce’s web-site: <http://www.census.gov/prod/99pubs/99statab/app2.pdf>. A map showing New England's metropolitan areas at the sub-county-level is accessible through the following web site: www.census.gov/geo/www/mapGallery/ma_1999.pdf.

Northeast Metro and Non-metro areas



©The Northeast Regional Center for Rural Development

Note: Unshaded areas of maps represent metropolitan counties.

The Overall CEDI for 2000

The overall County Economic Development Index (CEDI) contains four components: A. income-related, B. job-related, C. demographic and D. other measures of economic vitality. Each of these components in turn consists of at least two variables, which are described in greater detail in this report. A total of 14 individual variables is used to compute the overall index.

To arrive at the overall index, we added together the 14 individual variables after using a statistical adjustment that make the variables with their different units of measure more comparable.¹ The overall index ranges from 100 to 4,722 for the most-developed or economically vital county. By construction, the average for all counties is 1,590, while the median is 1,561.

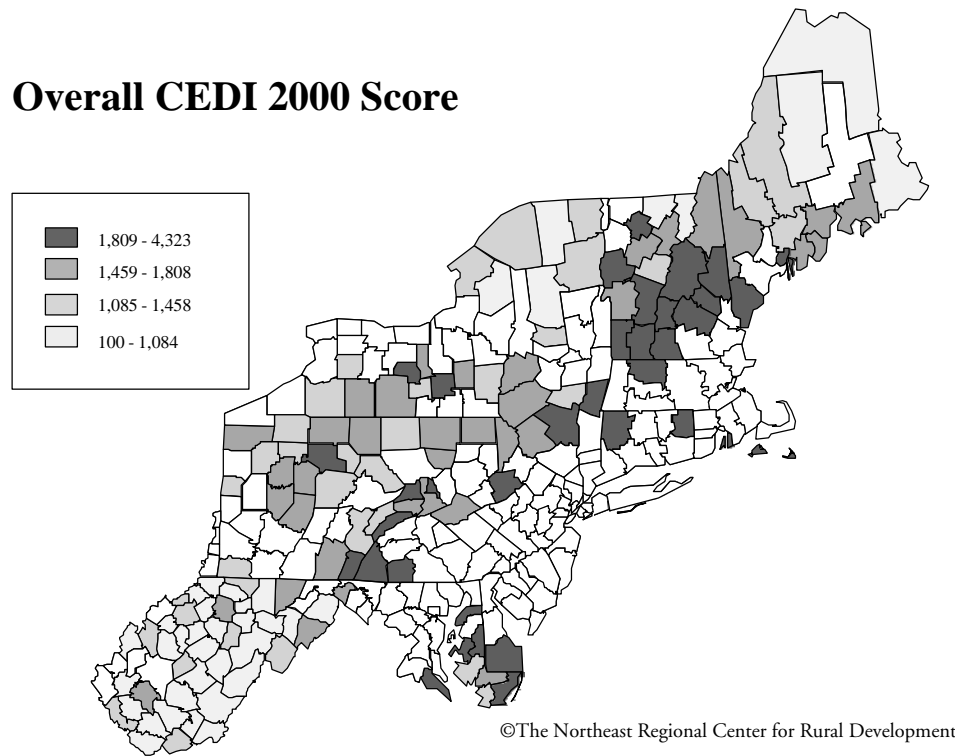
Table 2 contains the overall CEDI score by quartile for individual counties. Counties in the first quartile are ranked from the highest- to the lowest-scoring county, while the counties in the three other quartiles are listed alphabetically.

Two important facts stand out in the map showing the total CEDI. First, with the exception of Maine and northern Vermont, the New England non-metro counties all rank highly

¹ We calculate z-scores for each variable by subtracting the mean and dividing by the standard deviation of the variable. This creates a new variable with a mean of zero and a standard deviation of one. The z-scores are then added together for each county. The lowest score we obtain is -14.89. We then add 15.89 to the score of each county, and multiply the result by 100 to arrive at the overall CEDI.

on this index. In particular, the concentration of highly-ranked counties in Vermont and New Hampshire is noteworthy. Second, nearly all of the top-ranked counties border on (or are adjacent to) a metropolitan area, suggesting there are important spillover effects from the metro to these non-metro areas. The lower-ranked counties tend to be located at the geographic extremes of the Northeast, in ME, WV and northern NY and VT.

Overall CEDI 2000 Score



Maps and Discussion of Variables Included in the Overall CEDI

The following pages contain county-level maps showing where individual counties rank relative to others in terms of these indicators. Also included is a discussion of the rationale for choosing the different variables.

Table 2: Overall CEDI Scores by Quartile

First Quartile		Second Quartile		Third Quartile		Fourth Quartile	
County	Index	County	Index	County	Index	County	Index
Adams, PA	2,411	Allegany, NY	1,571	Cameron, PA	1,309	Aroostook, ME	1,009
Addison, VT	2,101	Armstrong, PA	1,623	Cattaraugus, NY	1,235	Barbour, WV	593
Belknap, NH	2,925	Bedford, PA	1,752	Chenango, NY	1,188	Braxton, WV	997
Bennington, VT	2,221	Boone, WV	1,880	Clay, WV	1,428	Calhoun, WV	542
Caroline, MD	2,111	Bradford, PA	1,589	Clearfield, PA	1,534	Doddridge, WV	569
Carroll, NH	2,604	Caledonia, VT	1,623	Clinton, NY	1,390	Essex, VT	1,011
Cheshire, NH	2,362	Clarion, PA	1,680	Clinton, PA	1,500	Fayette, WV	752
Columbia, NY	2,117	Coos, NH	1,848	Dorchester, MD	1,362	Franklin, NY	858
Dukes, MA	3,537	Cortland, NY	1,973	Essex, NY	1,415	Gilmer, WV	937
Elk, PA	2,147	Crawford, PA	1,731	Forest, PA	1,198	Grant, WV	1,055
Franklin, MA	2,046	Delaware, NY	1,581	Franklin, ME	1,209	Greenbrier, WV	997
Franklin, PA	1,993	Garrett, MD	1,644	Fulton, NY	1,458	Hamilton, NY	1,128
Fulton, PA	2,221	Hancock, ME	1,791	Greene, NY	1,382	Hampshire, WV	992
Grafton, NH	2,932	Hardy, WV	1,762	Greene, PA	1,266	Lewis, NY	1,165
Juniata, PA	2,093	Harrison, WV	1,614	Huntingdon, PA	1,362	Lewis, WV	513
Kent, MD	2,192	Indiana, PA	1,853	Jackson, WV	1,196	Lincoln, WV	865
Lamoille, VT	2,079	Jefferson, PA	1,681	Jefferson, NY	1,379	Logan, WV	703
Litchfield, CT	3,203	Knox, ME	1,935	Kennebec, ME	1,316	Marion, WV	887
Merrimack, NH	2,758	Lincoln, ME	1,656	Lawrence, PA	1,530	Mason, WV	723
Monroe, PA	2,187	McKean, PA	1,586	Mercer, WV	1,178	McDowell, WV	100
Montour, PA	2,825	Morgan, WV	1,867	Mifflin, PA	1,460	Monroe, WV	699
Nantucket, MA	4,722	Northumberland, PA	1,640	Mingo, WV	1,248	Nicholas, WV	1,002
Newport, RI	2,530	Otsego, NY	1,738	Monongalia, WV	1,455	Orleans, VT	1,164
Sagadahoc, ME	2,155	Oxford, ME	1,647	Orange, VT	1,551	Piscataquis, ME	1,010
St. Mary's, MD	3,049	Potter, PA	1,841	Pendleton, WV	1,195	Pocahontas, WV	999
Sullivan, NH	2,235	Rutland, VT	1,797	Pleasants, WV	1,355	Preston, WV	786
Sussex, DE	2,421	Schuylkill, PA	1,572	Ritchie, WV	1,217	Raleigh, WV	1,149
Talbot, MD	2,792	Seneca, NY	1,829	Schuyler, NY	1,490	Randolph, WV	1,066
Tompkins, NY	2,539	Snyder, PA	1,770	Somerset, MD	1,400	Roane, WV	1,081
Ulster, NY	2,300	Steuben, NY	1,869	Somerset, ME	1,315	Summers, WV	483
Union, PA	2,120	Sullivan, NY	1,788	St. Lawrence, NY	1,255	Taylor, WV	543
Windham, CT	2,126	Sullivan, PA	1,709	Tioga, PA	1,533	Tucker, WV	675
Windham, VT	2,028	Susquehanna, PA	1,693	Tyler, WV	1,176	Washington, ME	1,113
Windsor, VT	2,116	Waldo, ME	1,709	Upshur, WV	1,225	Webster, WV	326
Worcester, MD	2,104	Washington, VT	1,600	Venango, PA	1,507	Wetzel, WV	1,015
Yates, NY	2,061	Wayne, PA	1,992	Warren, PA	1,539	Wirt, WV	333
York, ME	2,020	Wicomico, MD	1,836	Wyoming, NY	1,291	Wyoming, WV	706

A. Income-Related

Personal Income per Capita

Per capita income is perhaps the single statistic that is most commonly used to measure economic progress or vitality of an area. The statistic is calculated by dividing total income in a county by total county population. Income can be derived from dividends, interest and rent payments; transfer payments such as welfare benefits; and self-employment (proprietors'), wage and salary, and farm earnings. Counties with large shares of non-working populations (e.g., with relatively more children or seniors), tend to have lower per capita incomes. Conversely, areas with large numbers of wealthy retirees may have high per capita incomes even though the retirees are not working. Income per capita translates into purchasing power, standard of living and ability to provide public services and infrastructure needed to support private sector activity. One factor to keep in mind is that costs of living can vary significantly across counties, so that the same level of income in two different counties may not translate into the same amount of purchasing power or standard of well being.

Nantucket County, MA had the highest per capita income in 1998, with \$44,300. Here a family of four had an average total family income of \$177,200. At the bottom of the list is Webster County, WV, where average income per person was \$12,700. Non-metro counties with high average per capita incomes are concentrated in Vermont, New Hampshire and parts of coastal Maine.

Variable: Total income from all sources divided by total population, 1998

Source: U.S. Department of Commerce, Bureau of Economic Analysis

Wage and Salary Earnings per Employee

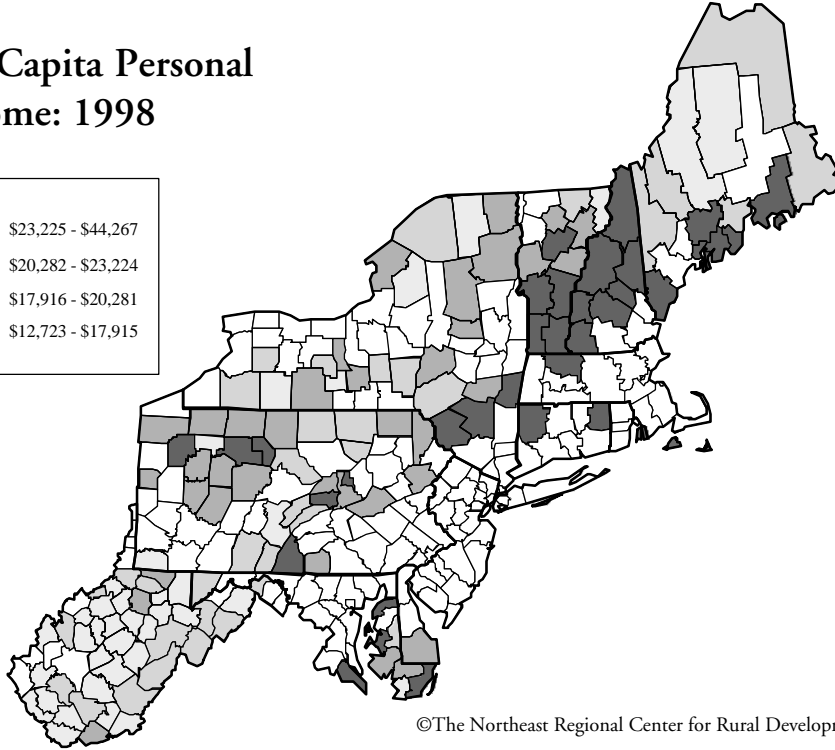
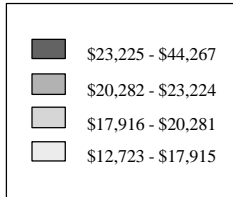
These earnings measure the returns to individuals for providing their labor services. A high wage and salary income implies a high level of labor productivity or relative scarcity of workers and, usually, a high standard of living, purchasing power and economic vitality.

Per worker earnings from wage and salary employment ranged from \$36,381 in Montour, PA to less than half that amount, \$16,583 in Wirt, WV. Other counties with high wage and salary earnings per worker include St. Mary's, MD (\$33,992), Boone, WV (\$33,252) and Steuben, NY (\$31,691).

Variable: Total wage and salary earnings divided by wage and salary employment, 1998

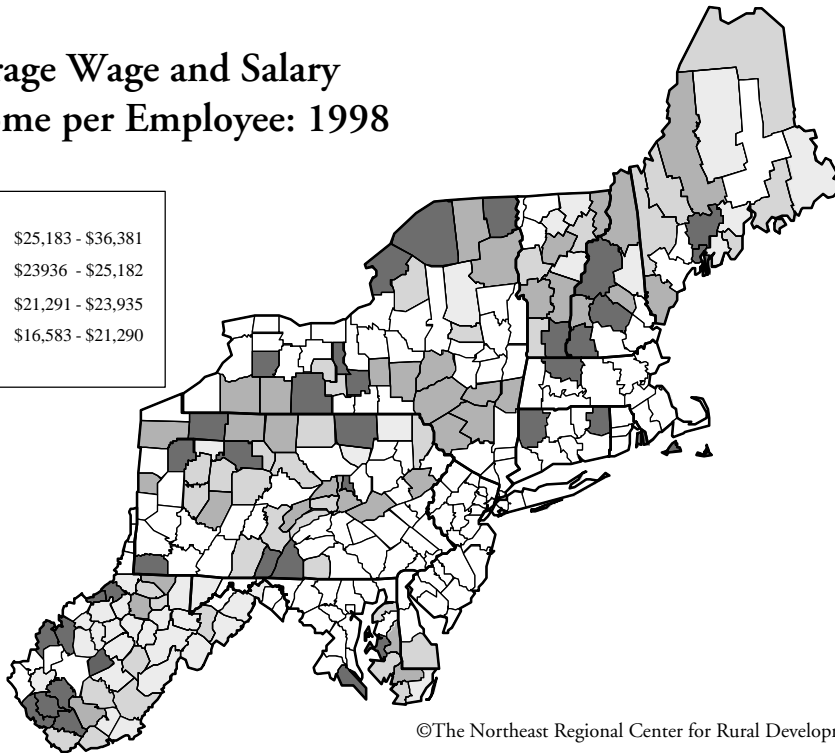
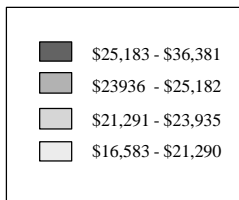
Source: U.S. Department of Commerce, Bureau of Economic Analysis

Per Capita Personal Income: 1998



©The Northeast Regional Center for Rural Development

Average Wage and Salary Income per Employee: 1998



©The Northeast Regional Center for Rural Development

Self Employment Income per proprietor

An important trend both nationwide and in non-metro areas of the Northeast is growth in the number of self-employed workers, as reported through Schedule C tax filings. To the extent that entrepreneurship and self-employment are hallmarks of the “New Economy,” counties with higher rates of self-employment have more economic vitality than those with lower rates, even though low earnings per self-employed proprietor remain a potential concern. In some cases self-employment reflects entrepreneurial energy in a county, while in others it may be a response to widespread layoffs and unemployment.

A higher level of income per non-farm proprietor is indicative of economic vitality and more prosperous or successful entrepreneurs. There is a remarkable concentration of counties with high incomes per self-employed worker in Pennsylvania and, to a lesser extent, in New Hampshire. The highest income per worker from self-employment is found in Boone County, WV (\$45,951), followed by Mingo, WV and Indiana County, PA. The lowest is found in Taylor, WV (\$7,635). The range in self-employed income per workers (\$7,635-\$45,951) is considerably wider than is the case for wage-and-salary earnings (\$16,583-\$36,381).

Variable: Total non-farm proprietorship earnings divided by total non-farm proprietor employment, 1998

Source: U.S. Department of Commerce, Bureau of Economic Analysis

Per Capita Wealth Estimates

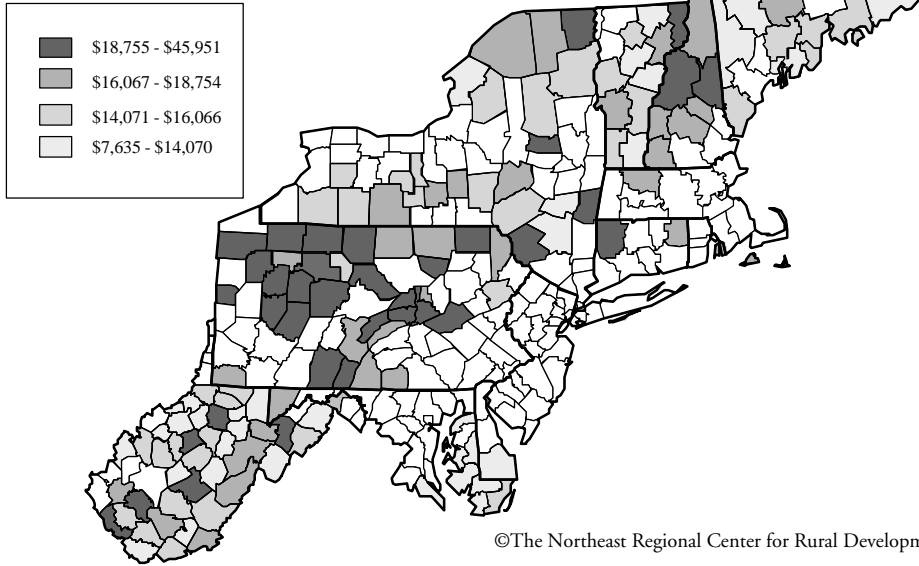
Data on the wealth status of individuals are notoriously difficult to collect at the county- or state-levels. Zlatkovich and Putnam recently proposed that dividends, interest, and rent payments can serve as a proxy for wealth. These annual payment flows are the returns to the owners of capital assets on their investments. For example, at a 10% interest rate, an interest payment of \$10,000 implies that the value of the underlying capital asset is \$100,000. Not surprisingly, there is a strong and statistically significant correlation between this measure and per capita income (0.866); no two other variables studied here are more highly correlated.

Consequently, it is not surprising that high-wealth counties tend to be concentrated in Vermont and New Hampshire, as was true for per capita incomes. High-income individuals tend to derive proportionally more of their income from investment income (i.e., unearned income) than is true for individuals with lower incomes. The top three counties, based on this measure of wealth, are Nantucket, MA, Dukes, MA and Talbot, MD. In each of these counties, annual income per capita from investments exceeds \$10,000.

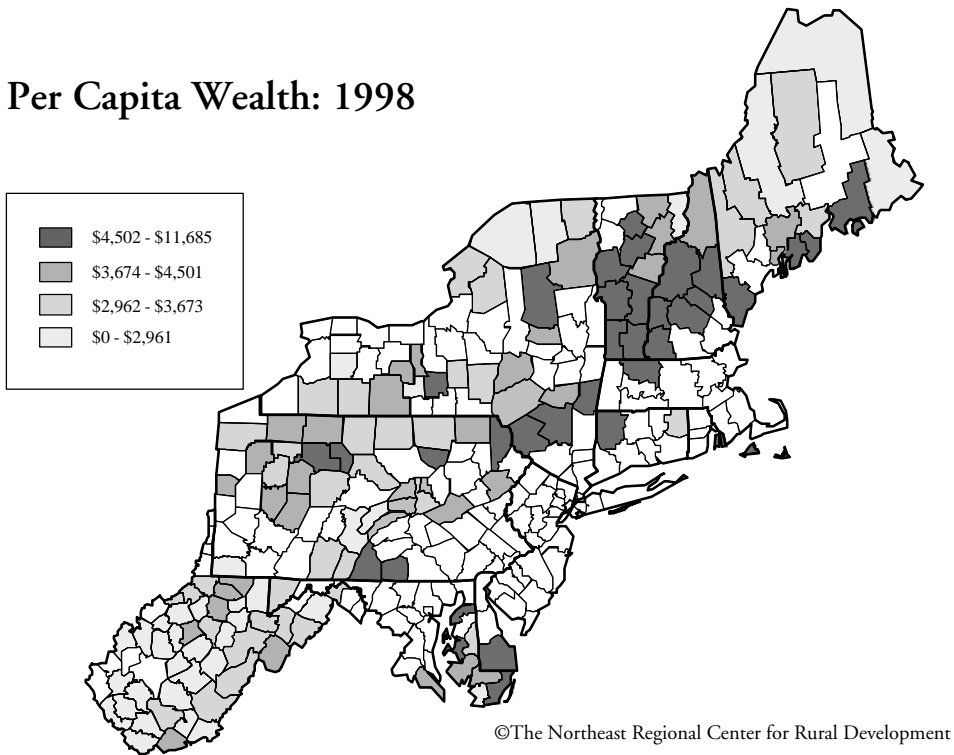
Variable: Total dividends, interest and rent payments divided by total population, 1998.

Source: U.S. Department of Commerce, Bureau of Economic Analysis

Average Self Employment Income per Proprietor: 1998



Per Capita Wealth: 1998



Food Stamp Dollars Received per Capita

An important indicator of poverty in a county is the amount of food stamp dollars that are disbursed per person. The larger the population eligible to receive food stamps, i.e., the greater this number usually is, the higher the degree of poverty and the lower the economic vitality or level of development of the county.

Dukes County, MA had the lowest receipts (\$13), while Webster County, WV had the highest receipts (\$237 per capita). In general, counties with higher levels of poverty are located at the geographic extremes of the Northeast, that is, in parts of West Virginia and Maine.

Variable: Total food stamp receipts in the county divided by the total county population, 1998

Source: U.S. Department of Commerce, Bureau of Economic Analysis

B. Job-Related

Unemployment Rate

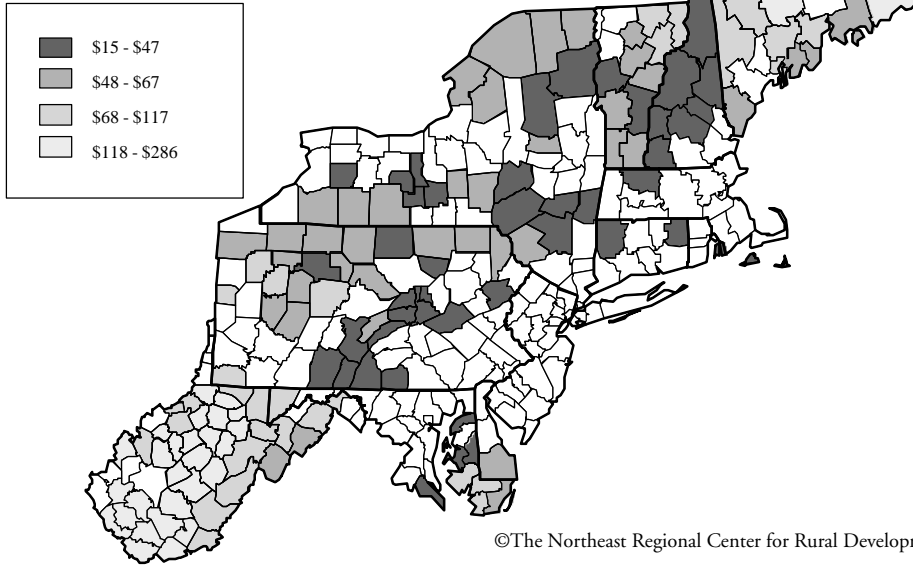
Although an imperfect measure, the unemployment rate is widely used to capture distress in local labor markets. One reason why it is an imperfect measure is that the unemployment rate does not include discouraged workers—those who have given up the search for work. This often means that the reported unemployment rate is lower than the true unemployment rate in counties that have experienced long-term economic distress. It remains to be seen how the unemployment rate is affected by policy changes such as the Welfare Reform Act of 1996, because the Act has an effect on the size of a county's labor force. The HUD Report mentioned in the introduction refers to areas with high unemployment rates and high welfare dependency as being in "double trouble," because former welfare recipients in these counties will have greater difficulty finding work to comply with the Welfare Reform Act.

In the current economic climate, low unemployment rates are often an impediment to further economic growth. In the non-metro Northeast, unemployment rates range from 1.7% in Nantucket, MA (rank 1) and 1.9% in Grafton, NH (rank 2) to 17.8% in Calhoun, WV (rank 148). The HUD report refers to cities with 6.8% jobless rates in 1998 as having "high unemployment rates." In the non-metro Northeast, about 60 non-metro counties (2 out of every 5) had unemployment rates equal to or above 6.8%.

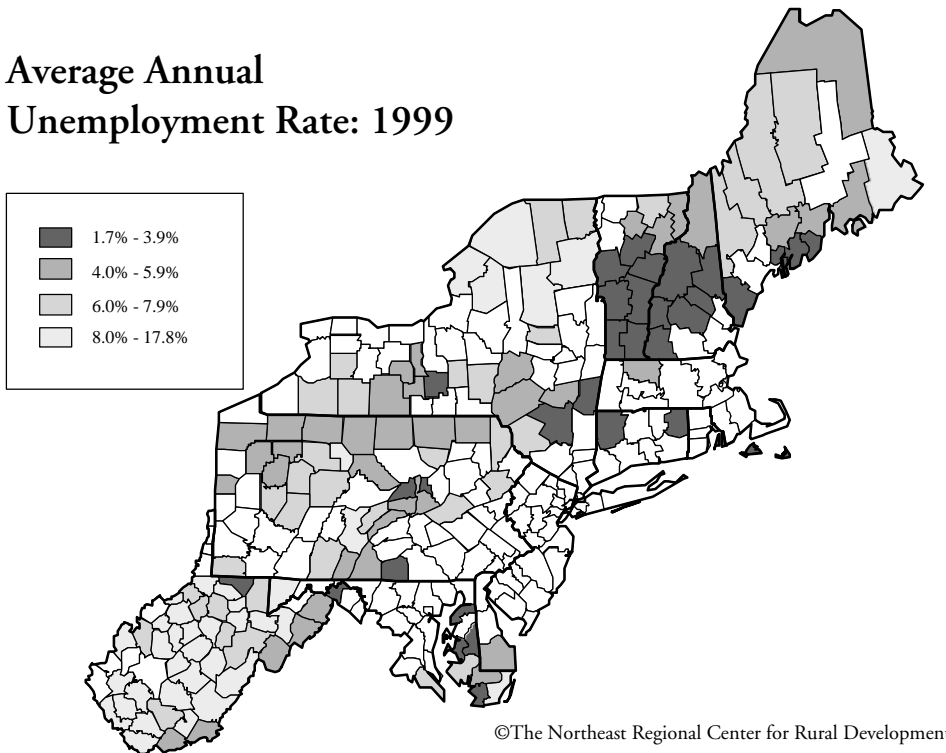
Variable: Unemployment Rate (unemployed as a percent of the labor force), 1999

Source: U.S. Dept. of Labor, Bureau of Labor Statistics

Food Stamp Receipts Per Capita: 1998



Average Annual Unemployment Rate: 1999



Employment Change, 1995-1998

An obvious and direct measure of the economic vitality of an area is growth in the number of jobs over time. Here we report the rate of growth of full- and part-time jobs between 1995 and 1998. In the non-metro Northeast, counties with faster job growth had higher incomes in 1998, faster income growth between 1995 and 1998, and they also exhibited a lower rate of unemployment, fewer food stamp dollars per capita and higher rates of net in-migration.

Counties with rapid rates of job growth (above 6.0 percent) are found throughout the Northeast. St Marys, MD had the fastest rate of job growth (24.2 percent), followed by Clay, WV (16.5 percent) and Nantucket, MA (15.9 percent). A number of counties in Maine experienced relatively rapid employment growth between 1995 and 1998. The counties with the largest relative number of jobs lost were all located in WV. Mingo, McDowell and Mason counties each lost more than 5 percent of all jobs that existed in 1995. Overall, 18 (12%) of all non-metro counties in the Northeast lost more jobs than were created over this period. In comparison, job growth nationally was 7.1%.

Variable: Total full- and part-time jobs, percent change between 1995 and 1998

Source: U.S. Department of Commerce, Bureau of Economic Analysis

Civilian Government Employment as a Percent of all Employed

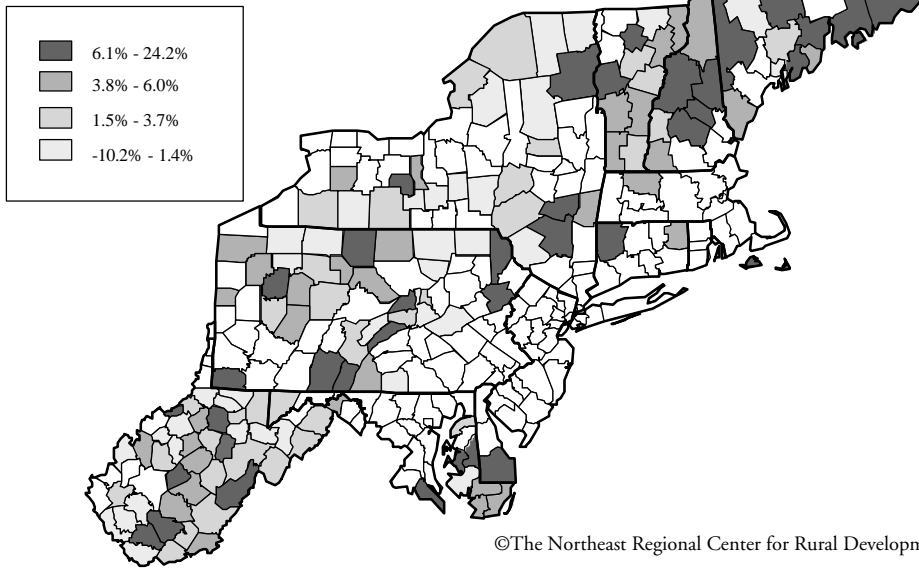
Previous studies have suggested, and the data used here confirm, that counties in which the number of civilian (non-military) government jobs as a share of all jobs is greater exhibit less economic vitality. In the non-metro Northeast, a higher share of government employment is associated with lower per capita income levels, a higher unemployment rate, greater levels of food stamps received per capita, less employment and population growth and more out-migration (all are statistically significant correlations). One way to think of this is that communities in decline first see their private sector jobs disappear, while the number of public sector jobs at least initially remains more or less unchanged (for example, in schools). Another way in which to think of this is that communities requiring more public sector jobs to support a given number of private sector jobs have less economic vitality.

Elk County, PA has the smallest share of public sector employment (6.9%) of all non-metro counties in the northeast, while Monongalia County in WV has the highest share (32.5%): here nearly one in three workers is employed in the public sector (which is largely explained by the presence of West Virginia University). Rates are also high in a number of counties in northern and southern NY.

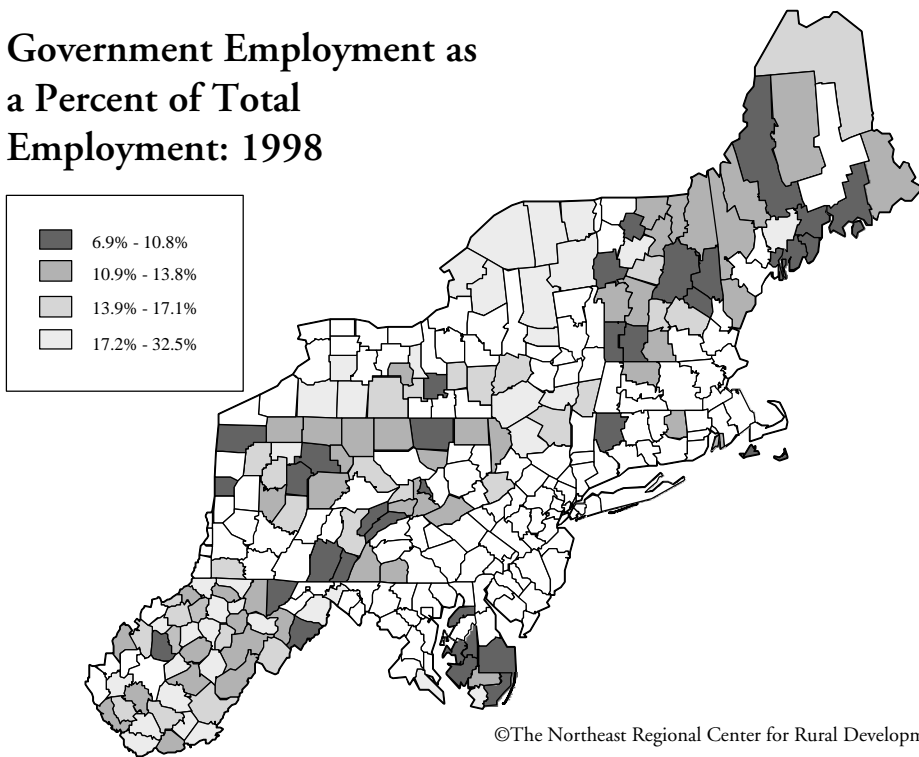
Variable: Federal, State, and local civilian government jobs as a percent of all jobs in the county, 1998

Source: U.S. Department of Commerce, Bureau of Economic Analysis

Total Employment Change: 1995-1998



Government Employment as a Percent of Total Employment: 1998



C. Demographic

Net Migration

When people migrate, they are voting with their feet to express which communities they find to be desirable places to live. Communities or counties may be “desirable” by virtue of the job opportunities or the level of amenities they offer, or both. Clearly, Nantucket County, MA attracts many well-to-do residents. Much of the rapid growth in the US West during the 1990s has been attributed to pleasant environmental conditions and natural amenities (in addition to gaming in Clark County, Nevada). In this case, jobs appear to have followed people to the West, and vice versa. In the non-metro Northeast, much of the net in-migration represents urban residents moving into suburbs or urban fringe areas. The net migration rate is one potential method of classifying non-metro counties according to whether or not they are distressed. While counties losing people might be glad to switch places with counties gaining population, rapid in-migration can be just as problematic as out-migration in terms of providing appropriate levels of public services, and increased pressures on the local housing market.

Nantucket, MA (3.3 percent), Monroe, PA (2.1 percent) and Carroll, NH (2.1 percent) gained the proportionally largest number of new residents on balance between 1998 and 1999. The top losing counties are located in West Virginia (which also contains a number of the top-ranked counties on this measure), but Jefferson, NY also lost 1.8 percent of its 1998 residents, giving it a ranking of 147. With the exception of West Virginia, every single state in the Northeast gained more residents in non-metro than in metro counties, or lost fewer residents in non-metro than in metro counties, between 1990 and 1998 (Goetz 1999).

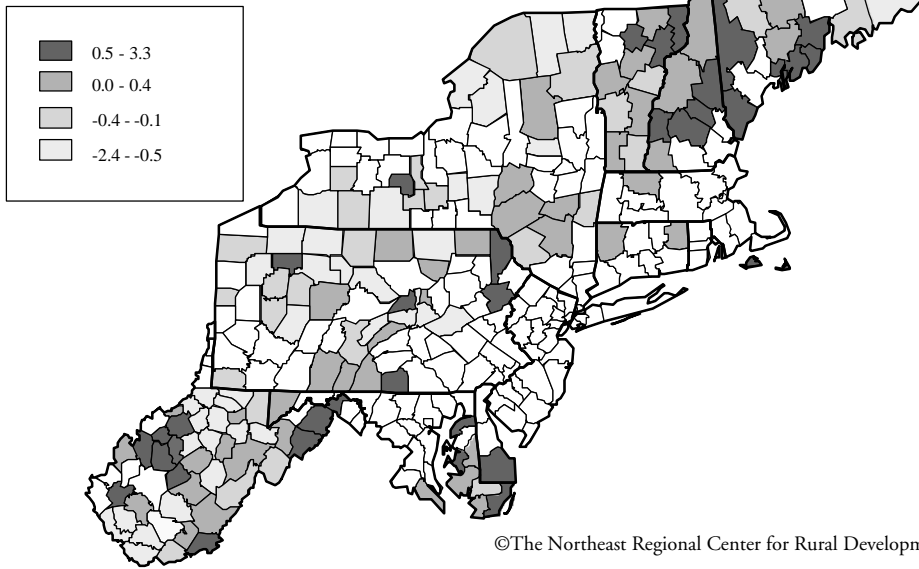
Variable: Number of net in-migrants into a community, 1998-1999, divided by the 1998 resident population

Source: U.S. Department of Commerce, Bureau of Census.

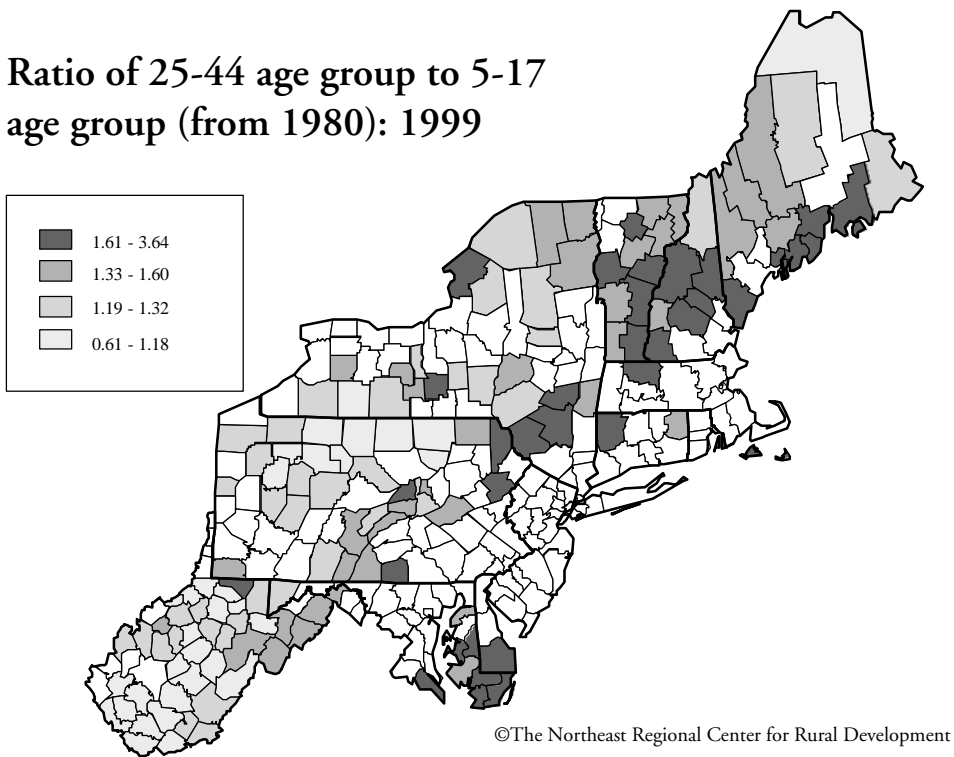
Youth-Retention Ratio

Leaders of rural communities often point out that they are losing “the best and the brightest” of their young residents, who fail to find local employment opportunities that are commensurate with their skills. Often this means that the local community fails to receive a return on the tax dollars that it has invested in its youth through the local public school system. It also means an entire generation of potential business and community leaders can be lost to a community. While we are unable to measure the individual characteristics of the youth who leave, we can get a rough idea of how many young residents leave the community (perhaps to attend college) but fail to return to their home county. To estimate this, we divide the number of 25 to 44 year-olds in 1999 by the number of 5 to 17 year-olds in the county in 1980 (the choice of this year is dictated by the Census year). If this number is high, the implication is that many of those who lived in the county when they were young chose to remain in the county or to return after obtaining a college or university degree elsewhere. Conversely, if the number is low, this suggests that the community is unable to retain its youth (regardless of the youth’s level of education).

Rate of Net Migration: 1998-1999



Ratio of 25-44 age group to 5-17 age group (from 1980): 1999



Counties with the three highest scores in terms of this indicator are all located in New York: Cortland (2.54), Ulster (2.12) and Columbia (2.07). The number 2.54 implies that for every 100 5-17 year-old in 1980, there were 254 25-44 year-olds in 1999. The smallest numbers, indicating an inability to retain the county's youth, are found in Lincoln, ME (1.09), Greenbrier, WV (1.22), and Essex, VT and Chenango, NY (tied at 1.23). Counties with more rapid per capita income growth also tended to retain more of their youth (and vice versa).

Variable: Total number of 25-44 year-olds in 1980 divided by the total number of 5-17 years olds, 1999

Source: U.S. Department of Commerce, Bureau of Census.

Birth-Death Ratio

Couples are less likely to have children if they live in economically depressed communities, and see few economic prospects on the horizon for themselves and let alone their unborn offspring. Further, people of childbearing age may leave such depressed communities altogether to find employment elsewhere. In this context, the ratio of the total number of births to the total number of deaths is one indicator of the degree of economic vitality of a community.

Counties with the highest ratio of births to deaths are St. Mary's, MD (2.25 births for every death), Jefferson, NY (1.95) and Lamoille, VT (1.91). A higher birth-death ratio in a county was associated with higher per capita income (both levels and growth), a lower unemployment rate and food stamp dollars received per capita, and higher wage-and-salary earnings per worker. Counties with the lowest ratio are Sullivan, PA (0.45), Forest, PA (0.55) and Hamilton, NY (0.62).

Variable: Total number of births divided by total number of deaths, 1999

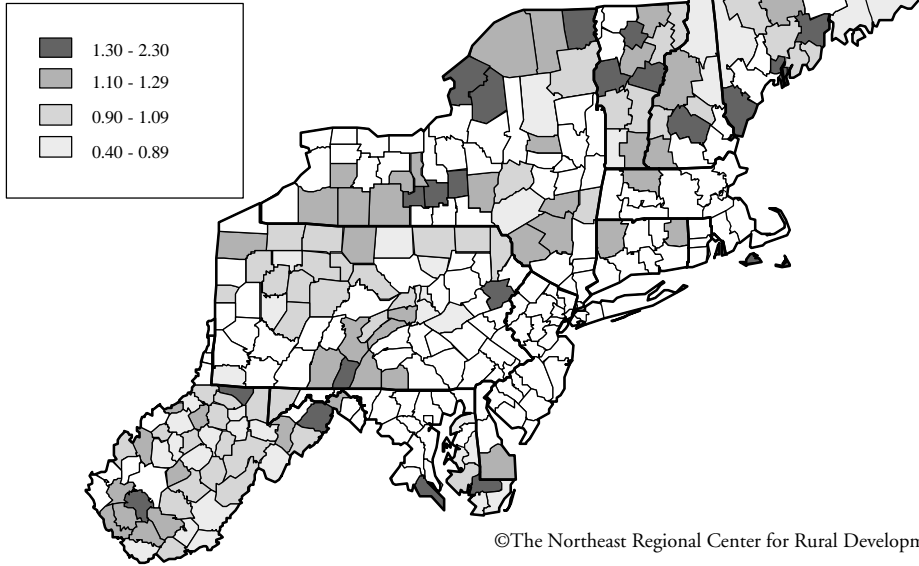
Source: U.S. Department of Commerce, Bureau of Census.

Death Rates (controlling for the effect of age)

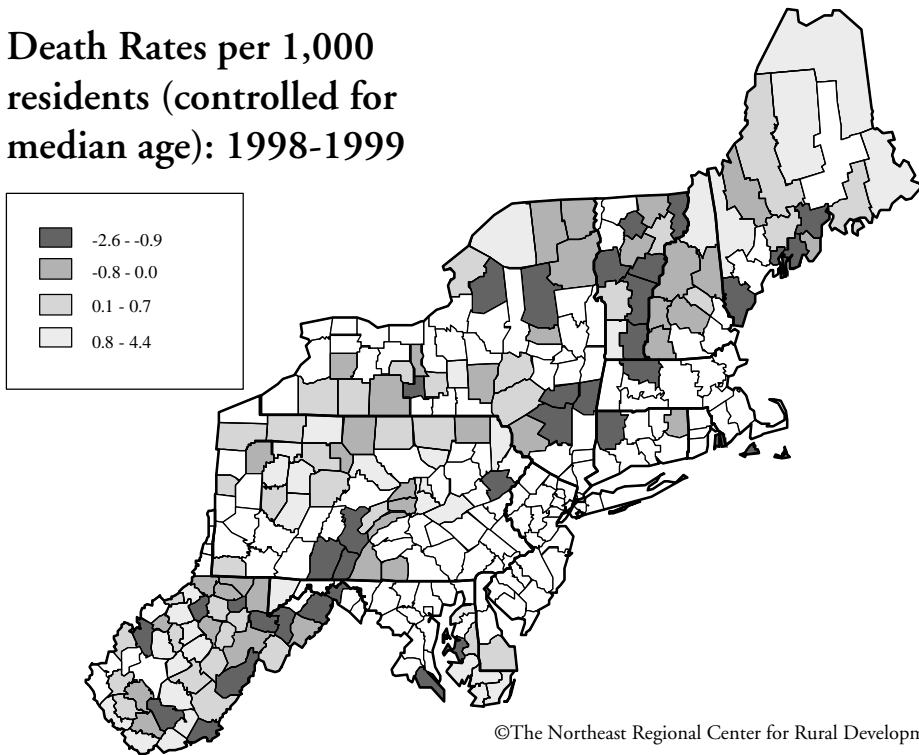
World-wide, higher death rates tend to be associated with lower levels of economic development. To control for the effect of age on death rates we statistically adjusted the raw death rates by the median population age—the rate reported here is that component of the death rate that is not accounted for by age. In other words, some counties have a higher death rate than would be predicted based on the median age, while others have a lower rate. Clearly, causes other than age are influencing death rates in these counties, either raising or depressing the rates. As expected, higher age-adjusted death rates are associated with lower per capita incomes, higher unemployment rates and food stamp dependency, less wealth and less rapid job growth over time.

High age-adjusted death rates occur in northern Maine, parts of Pennsylvania and West Virginia, as well as the Maryland's Eastern Shore. The highest rate is found in Sullivan, PA (4.37), followed by Somerset, MD (4.01) and Montour, PA (3.91). The lowest rate occurs in Dukes, MD (-2.46), Fulton, PA (-2.46) and Lincoln, ME (-2.26).

Birth-to-Death Ratio: 1998-1999



Death Rates per 1,000 residents (controlled for median age): 1998-1999



Variable: Actual deaths per 1,000 residents minus predicted deaths per 1,000 residents, 1999. The prediction is based on the regression: death rate = $a + b \cdot \text{AGE}$, where AGE is the median age of the population from the 1990 US Census.

Source: U.S. Department of Commerce, Bureau of Census, plus authors' own calculations.

D. Other Measures of Economic Vitality

Patents Granted

The generation of new ideas and ability to innovate are hallmarks of the “New Economy” and potentially strong measures of economic vitality. While innovation and new product development are often thought to occur primarily in larger cities, or the campuses of research universities, our map suggests that significant patent-generating activity is taking place in non-metro counties of the Northeast that do not contain universities.

In 1999, patents were registered in all but 30 of the 148 non-metro counties in the Northeast. The two leading counties in terms of patents registered in 1999 per 100,000 workers were in the state of New York: Tompkins (home to Cornell University) with 154 and Schuyler with 136 patents per 100,000 workers. Morgan, WV was ranked third, with 131.

Variable: Utility patents registered in 1999 per 100,000 employees in 1998.

Source: US Patent and Trademark Office

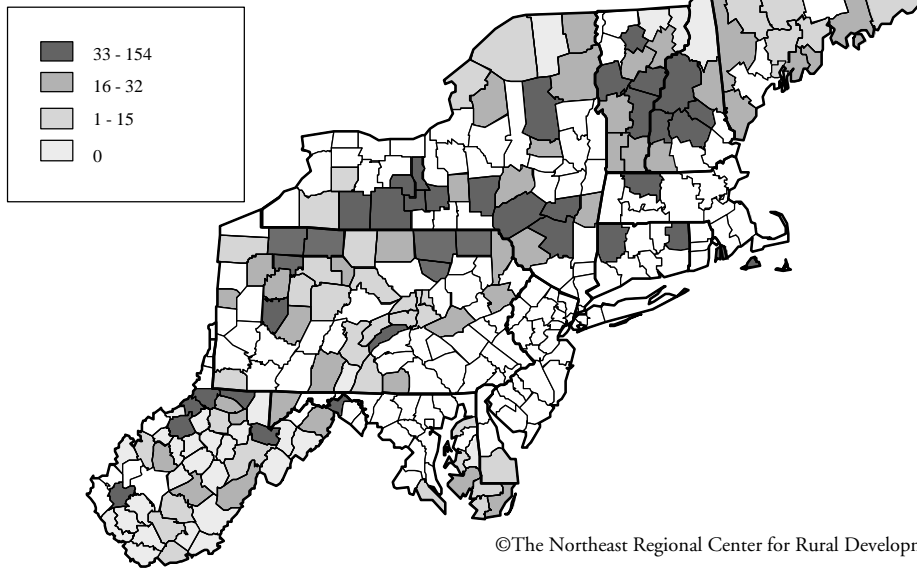
Growth of the Housing Stock

Our last measure of economic growth is also self-explanatory. Areas that are booming experience more applications for new building permits (assuming sufficient land is available). One drawback of using this measure is that in certain areas building permits are not required. In these cases, our indicator will slightly undercount the actual rate of economic development.

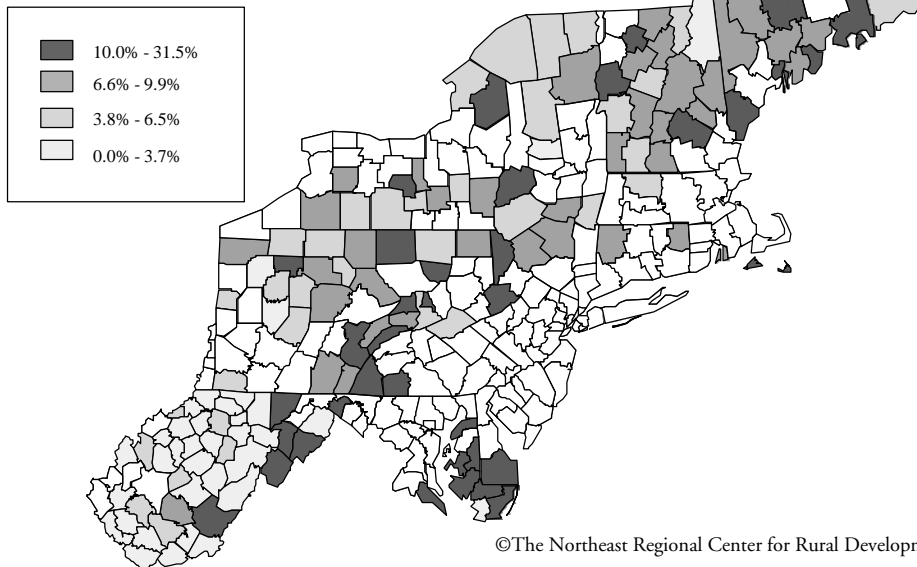
Variable: Building permits authorized (total residential units), 1990-1999, as a percent of the 1990 housing stock. Note: the value for 1998 is estimated using the average of 1997 and 1999.

Source: US Department of Commerce, Bureau of Census.

Patents granted per 100,000 employees: 1998



Housing Stock Growth: 1990-1999



Detailed County-Level Statistical Tables

Note: A rank of 1 indicates the highest (best) rank and the largest value of the variable across all counties, 148 the lowest. In the case of a negative indicator (such as food stamps per capita), a small value implies a high rank.

County, State	Income								Employment					
	Per Capita Income		Wage and Salary		Self Employment		Per Capita Wealth		Food Stamps per		Unemployment		Employment	
	(\$)		Earnings (\$)		Earnings (\$)		(\$)		capita (\$)		Rate (%)		Change (%)	
Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	
Adams, PA	23,083	39	23,848	76	16,329	70	4,585	36	20	4	3.7	28	0.4	125
Addison, VT	22,081	48	23,757	77	14,664	96	4,729	28	43	38	3.2	23	7.4	25
Allegany, NY	17,444	117	24,508	52	16,057	75	3,009	109	67	86	7.7	107	-0.3	131
Armstrong, PA	21,728	54	23,729	80	22,418	12	3,971	57	66	84	6.3	83	3.3	80
Aroostook, ME	18,557	101	21,295	111	16,364	67	2,754	124	97	110	5.6	66	2.1	100
Barbour, WV	14,789	141	18,101	145	11,675	135	2,826	121	138	126	11.2	139	0.9	121
Bedford, PA	18,657	99	22,450	98	18,764	37	3,193	98	45	42	6.0	74	7.7	21
Belknap, NH	27,824	9	24,723	49	18,373	40	6,743	13	29	14	2.4	4	10.8	7
Bennington, VT	25,599	15	23,354	86	14,478	99	7,000	10	58	67	3.7	28	4.6	57
Boone, WV	19,193	88	33,252	3	45,951	1	2,409	134	174	141	11.2	139	-1.2	140
Bradford, PA	19,746	81	25,913	27	17,483	48	3,652	76	59	69	4.2	42	0.6	124
Braxton, WV	15,880	128	19,730	131	15,638	82	2,486	131	160	136	10.8	136	4.1	67
Caledonia, VT	20,394	72	21,503	108	16,476	66	4,053	53	80	96	4.1	39	5.8	41
Calhoun, WV	13,454	147	18,819	142	14,071	111	2,011	143	177	142	17.8	148	0.0	130
Cameron, PA	23,672	32	23,752	78	14,071	112	4,650	33	61	75	8.2	113	5.1	50
Caroline, MD	18,375	103	24,373	59	11,100	139	3,174	101	47	45	3.2	23	9.0	12
Carroll, NH	27,664	10	21,151	114	19,399	33	8,438	5	36	21	2.5	6	8.3	16
Cattaraugus, NY	18,845	95	24,328	60	15,826	81	3,107	105	55	59	7.2	96	2.7	90
Chenango, NY	19,668	82	24,960	44	14,513	97	3,553	81	57	62	6.0	74	1.5	112
Cheshire, NH	25,442	16	26,731	19	17,007	52	5,469	20	23	5	2.7	11	4.6	58
Clarion, PA	20,435	70	22,742	97	27,589	6	3,480	86	69	87	4.9	53	7.4	27
Clay, WV	13,561	146	24,855	48	13,256	124	1,584	148	226	146	11.0	138	16.5	2
Clearfield, PA	20,390	73	23,265	89	22,321	14	3,605	77	73	91	7.7	107	2.7	92
Clinton, NY	20,664	67	26,184	24	19,566	31	3,203	96	60	74	6.6	86	-0.8	137
Clinton, PA	19,810	80	23,697	81	19,561	32	3,418	88	65	82	5.7	67	3.9	72
Columbia, NY	25,425	17	24,939	46	19,036	35	5,570	19	39	28	3.1	21	4.5	60
Coos, NH	23,370	35	24,198	65	18,360	41	4,052	54	42	37	4.1	39	5.5	44
Cortland, NY	19,570	83	24,161	68	17,912	44	3,321	91	52	53	7.0	93	-0.9	138
Crawford, PA	20,576	68	25,027	41	21,833	16	3,476	87	58	66	5.4	62	5.6	42
Delaware, NY	19,470	84	24,985	42	14,203	107	4,477	38	37	22	5.3	58	2.9	86
Doddridge, WV	15,764	130	16,792	147	13,718	118	2,801	122	150	135	6.0	74	3.9	73
Dorchester, MD	20,766	63	22,937	93	11,118	138	4,386	41	82	99	7.3	97	-0.6	135
Dukes, MA	33,599	2	26,129	25	16,931	53	11,216	2	13	1	3.8	33	11.2	5
Elk, PA	24,385	27	26,567	20	21,789	17	4,729	29	34	20	6.1	78	1.6	109
Essex, NY	20,697	66	24,029	71	15,870	79	4,121	48	45	40	8.6	120	7.6	22
Essex, VT	15,805	129	24,174	67	19,804	27	2,415	133	94	107	5.9	70	4.0	70
Fayette, WV	17,318	119	21,388	109	15,177	88	2,436	132	164	138	9.9	133	4.0	70
Forest, PA	17,947	111	21,280	112	18,081	43	3,575	79	56	60	7.7	107	1.4	115
Franklin, MA	25,642	14	25,348	33	17,729	46	4,614	35	30	15	4.0	35	4.9	53
Franklin, ME	19,940	78	23,377	85	13,228	125	3,673	75	93	106	6.9	91	0.4	126
Franklin, NY	17,956	110	24,027	72	17,030	51	2,765	123	62	77	7.9	110	1.3	117
Franklin, PA	23,282	36	25,362	32	17,891	45	4,702	30	28	13	4.6	49	4.9	54
Fulton, NY	21,906	51	23,647	82	21,241	20	4,107	49	60	72	6.1	78	1.9	105
Fulton, PA	19,830	79	26,870	18	31,044	4	3,265	94	42	35	4.2	42	8.7	13
Garrett, MD	18,293	104	20,438	119	17,422	49	3,186	99	79	95	8.5	117	2.0	102
Gilmer, WV	16,898	122	18,657	144	19,680	29	3,675	74	168	139	9.4	129	4.5	61
Grafton, NH	28,826	8	27,461	17	21,147	21	7,147	8	27	12	1.9	2	9.4	9
Grant, WV	17,823	112	22,159	102	19,792	28	3,278	93	71	89	8.4	116	-2.9	143
Greenbrier, WV	18,731	98	21,551	107	14,126	109	3,555	80	97	109	8.2	113	3.7	76
Greene, NY	21,726	55	24,191	66	12,775	129	4,143	46	45	43	5.4	62	6.2	37
Greene, PA	17,385	118	30,662	8	16,331	69	2,676	126	108	114	7.3	97	7.6	22
Hamilton, NY	22,051	49	20,189	124	14,509	98	6,378	15	31	16	10.6	134	1.2	118
Hampshire, WV	15,593	136	18,783	143	13,326	123	2,842	120	102	111	4.9	53	2.4	96
Hancock, ME	24,502	25	23,086	90	15,244	86	6,621	14	50	50	5.3	58	7.8	20
Hardy, WV	18,555	102	19,121	140	15,173	89	3,050	108	63	78	4.0	35	3.3	79
Harrison, WV	22,504	45	24,406	58	19,571	30	4,383	42	124	120	7.0	93	10.6	8
Huntingdon, PA	17,491	116	23,301	88	17,132	50	2,883	118	47	46	8.5	117	2.6	93
Indiana, PA	20,809	62	25,054	40	33,551	3	3,777	68	63	79	6.8	89	5.0	52
Jackson, WV	18,128	108	25,194	36	14,815	94	2,935	112	111	116	7.5	103	4.1	66
Jefferson, NY	20,832	61	26,229	23	13,854	114	3,165	102	60	73	9.3	128	1.8	106
Jefferson, PA	20,979	60	23,313	87	23,588	11	3,901	60	61	76	6.9	91	5.0	51
Juniata, PA	19,140	90	21,751	105	16,532	63	3,763	69	19	3	5.9	70	6.1	38
Kennebec, ME	23,502	34	25,347	34	14,317	103	3,997	55	90	104	4.5	48	3.0	84
Kent, MD	26,128	13	22,193	100	13,725	117	9,324	4	41	34	3.8	33	1.6	110

Employment			Demographic Components								Miscellaneous				
Govt. Employment (%)		Rate of Net Migration		Youth Retention Ratio		Birth-to-Death Ratio		Adjusted Death Rates		Patents Granted per worker (#)		Housing Stock Growth (%)		County, State	
Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank		
10.9	37	0.9	23	1.62	49	1.27	28	-0.17	67	27	55	22.1	6	Adams, PA	
9.0	14	0.3	51	1.38	126	1.51	7	-1.26	20	36	32	13.0	20	Addison, VT	
18.7	123	-0.2	94	1.70	29	1.30	25	0.21	90	125	5	5.3	97	Allegany, NY	
11.6	46	-0.3	97	1.65	37	0.89	115	0.65	108	36	32	3.4	118	Armstrong, PA	
14.2	78	-0.9	139	1.51	82	0.91	111	1.65	140	3	115	3.5	115	Aroostook, ME	
15.0	86	-0.7	130	1.80	11	0.89	115	0.07	80	0	118	1.6	127	Barbour, WV	
9.8	21	0.5	38	1.65	37	1.14	57	-0.94	33	30	43	8.4	52	Bedford, PA	
9.9	22	1.3	7	1.74	18	1.04	82	0.37	97	44	28	8.9	46	Belknap, NH	
8.0	6	0.2	56	1.61	50	0.89	115	1.52	138	28	48	9.5	40	Bennington, VT	
16.1	98	0.1	65	1.55	63	1.43	11	-0.31	56	0	118	3.8	110	Boone, WV	
10.1	25	-0.5	114	1.42	114	1.08	72	0.31	93	48	22	5.9	86	Bradford, PA	
14.6	83	0.2	55	1.85	8	0.78	137	1.56	139	0	118	0.1	142	Braxton, WV	
11.7	47	0.8	27	1.46	98	1.05	80	0.08	81	25	57	8.6	49	Caledonia, VT	
14.9	85	0.7	30	1.54	67	0.84	130	0.57	107	0	118	0.0	147	Calhoun, WV	
11.8	50	-0.6	128	1.45	99	0.94	105	-0.69	45	29	46	5.0	99	Cameron, PA	
10.3	29	0.2	59	1.75	15	1.39	14	0.15	82	0	118	20.5	10	Caroline, MD	
8.9	13	2.1	3	1.40	119	0.86	123	-0.01	75	26	56	9.3	41	Carroll, NH	
18.1	120	-0.8	137	1.53	74	1.25	30	0.43	100	15	81	6.7	70	Cattaraugus, NY	
16.8	105	-0.8	134	1.23	145	1.20	43	-0.11	68	48	22	7.9	61	Chenango, NY	
11.0	38	0.3	46	1.54	67	1.21	42	-0.75	41	28	48	8.7	48	Cheshire, NH	
16.4	101	-0.2	89	1.48	92	1.06	78	1.21	132	19	67	5.4	93	Clarion, PA	
21.9	139	0.7	29	1.93	5	1.14	57	0.96	119	0	118	3.8	109	Clay, WV	
11.3	43	0.1	67	1.67	35	0.95	102	0.19	85	14	84	6.6	76	Clearfield, PA	
19.3	127	-0.5	118	1.53	74	1.46	9	-0.33	53	22	63	6.5	78	Clinton, NY	
16.3	100	-0.5	114	1.65	37	1.01	89	1.42	137	6	109	8.5	50	Clinton, PA	
14.7	84	-0.3	99	2.07	3	1.03	83	-1.08	26	28	48	6.2	82	Columbia, NY	
12.6	60	0.0	76	1.74	18	0.76	140	2.37	144	0	118	3.5	116	Coos, NH	
14.4	80	-0.8	134	2.54	1	1.38	17	1.08	127	29	46	6.4	79	Cortland, NY	
10.1	25	-0.3	102	1.52	79	1.16	54	0.34	95	9	98	7.4	66	Crawford, PA	
18.0	119	0.1	70	1.67	35	0.90	114	0.43	100	46	24	5.8	87	Delaware, NY	
15.6	90	-1.0	140	1.57	58	1.18	50	-1.18	23	0	118	0.0	147	Doddridge, WV	
10.5	32	0.3	44	1.43	111	1.01	89	0.97	120	19	67	10.0	38	Dorchester, MD	
10.6	35	0.9	18	1.68	33	1.39	14	-2.60	1	46	24	20.9	8	Dukes, MA	
6.9	1	-0.8	136	1.73	23	1.02	86	0.48	102	14	84	8.4	53	Elk, PA	
21.4	137	-0.2	89	1.53	74	1.07	74	-0.57	46	31	41	7.9	60	Essex, NY	
13.4	69	0.9	17	1.23	145	0.97	97	-1.43	15	0	118	5.6	91	Essex, VT	
21.6	138	-0.8	133	1.28	143	1.09	68	1.00	122	6	109	6.7	72	Fayette, WV	
20.2	129	0.6	35	1.36	131	0.55	147	1.06	126	49	21	12.8	21	Forest, PA	
12.8	61	0.0	79	1.73	23	1.23	35	-1.28	17	35	35	6.6	75	Franklin, MA	
11.0	38	-0.2	92	1.58	55	1.08	72	-0.02	74	12	93	4.9	101	Franklin, ME	
28.2	145	-0.4	110	1.45	99	1.13	61	-0.75	41	0	118	5.3	96	Franklin, NY	
12.0	54	0.2	62	1.34	136	1.27	28	-0.76	40	12	93	13.2	19	Franklin, PA	
18.2	121	-0.6	125	1.70	29	1.13	61	-0.06	71	30	43	3.1	119	Fulton, NY	
10.4	30	0.2	63	1.71	27	1.68	4	-2.46	2	0	118	8.4	54	Fulton, PA	
8.8	12	0.3	48	1.39	122	1.09	68	1.13	129	18	72	23.3	5	Garrett, MD	
25.2	143	-0.5	120	1.73	23	0.97	97	1.34	133	0	118	0.0	145	Gilmer, WV	
10.1	25	0.2	57	1.50	85	1.20	43	-0.09	69	52	20	6.6	74	Grafton, NH	
16.0	95	0.0	74	1.57	58	1.17	51	-1.19	22	0	118	10.4	31	Grant, WV	
12.8	61	0.1	73	1.22	147	0.88	119	0.51	105	0	118	10.2	36	Greenbrier, WV	
21.0	133	0.3	48	1.44	108	1.19	47	-1.57	11	33	38	6.7	69	Greene, NY	
16.8	105	-0.2	87	1.45	99	0.85	127	0.50	104	13	88	3.8	111	Greene, PA	
25.8	144	0.4	39	1.38	126	0.62	146	-2.23	4	82	12	6.5	77	Hamilton, NY	
17.6	114	1.1	14	1.49	88	1.32	21	-1.09	25	16	75	3.5	117	Hampshire, WV	
9.4	17	-0.2	87	1.34	136	0.85	127	0.04	79	24	61	10.3	33	Hancock, ME	
8.1	8	1.0	15	1.63	48	1.00	92	-0.51	48	0	118	22.0	7	Hardy, WV	
19.1	126	-0.6	124	1.99	4	0.92	108	0.03	77	2	116	5.6	92	Harrison, WV	
16.8	105	-0.2	86	1.87	7	1.22	39	-1.10	24	6	109	10.3	34	Huntingdon, PA	
16.8	105	-0.6	127	1.64	45	1.02	86	1.34	133	31	41	5.7	89	Indiana, PA	
11.2	40	0.9	20	1.38	126	1.23	35	-1.81	8	8	102	4.9	100	Jackson, WV	
17.8	116	-1.8	145	1.56	60	1.95	2	0.74	111	15	81	3.8	108	Jefferson, NY	
9.2	15	-0.1	83	1.48	92	0.94	105	0.84	115	13	88	6.1	84	Jefferson, PA	
7.2	2	0.1	65	1.39	122	1.23	35	-0.24	60	33	38	12.4	23	Juniata, PA	
21.3	135	0.1	69	1.35	134	1.03	83	0.24	91	8	102	8.8	47	Kennebec, ME	
8.3	9	0.6	31	1.40	119	0.84	130	0.77	112	9	98	16.4	14	Kent, MD	

County, State	Income										Employment			
	Per Capita Income		Wage and Salary		Self Employment		Per Capita Wealth		Food Stamps per capita		Unemployment		Employment	
	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Rate (%)	Rank	Level	Rank
Knox, ME	24,475	26	22,226	99	15,950	77	6,901	12	66	85	3.0	18	4.6	59
Lamoille, VT	23,221	38	19,975	128	14,152	108	4,971	23	56	61	4.0	35	8.3	17
Lawrence, PA	21,223	58	24,406	57	22,326	13	3,709	71	77	94	5.7	67	4.7	56
Lewis, NY	16,922	121	23,737	79	14,930	92	2,971	111	48	47	9.1	125	1.1	119
Lewis, WV	16,116	126	20,329	123	14,475	100	3,356	90	143	127	8.3	115	2.2	97
Lincoln, ME	25,321	20	20,626	118	11,221	137	8,351	6	64	80	2.9	15	7.6	24
Lincoln, WV	13,836	144	19,107	141	16,923	54	1,624	147	198	144	11.9	141	2.1	99
Litchfield, CT	31,914	4	30,988	6	21,080	22	6,221	16	17	2	2.6	8	6.7	32
Logan, WV	17,303	120	26,522	21	14,286	105	2,337	138	174	140	12.2	142	0.3	128
Marion, WV	19,374	85	23,905	75	14,824	93	3,858	62	126	121	8.0	111	-1.9	142
Mason, WV	16,844	123	28,192	14	10,139	144	2,529	129	135	125	13.3	144	-5.2	145
McDowell, WV	13,786	145	22,180	101	10,943	140	2,192	142	286	148	14.5	145	-6.3	146
McKean, PA	22,045	50	24,231	63	27,019	7	4,059	52	74	93	5.3	58	1.4	114
Mercer, WV	20,384	74	23,006	92	15,326	84	3,885	61	146	129	4.9	53	3.8	75
Merrimack, NH	29,438	7	29,161	13	16,480	65	5,775	17	23	7	2.1	3	6.5	35
Mifflin, PA	18,761	97	24,235	62	20,320	24	2,908	116	55	57	6.7	87	-1.0	139
Mingo, WV	16,792	124	30,753	7	36,020	2	2,359	137	220	145	15.2	147	-10.2	148
Monongalia, WV	22,758	42	23,992	73	15,846	80	4,347	44	72	90	3.4	25	0.4	126
Monroe, PA	22,396	46	24,327	61	15,161	90	3,978	56	39	27	6.2	82	8.1	18
Monroe, WV	14,917	138	19,778	130	16,250	72	2,365	136	85	100	4.3	45	4.2	65
Montour, PA	31,402	5	36,381	1	16,522	64	3,817	66	40	32	2.6	8	2.2	98
Morgan, WV	19,281	86	19,537	136	16,688	60	3,596	78	81	98	2.6	8	4.4	63
Nantucket, MA	44,267	1	30,071	10	26,525	9	11,685	1	25	8	1.7	1	15.9	3
Newport, RI	31,054	6	31,031	5	16,347	68	7,784	7	44	39	3.7	28	4.7	55
Nicholas, WV	15,713	132	20,681	116	28,322	5	2,666	127	149	133	9.7	131	5.2	49
Northumberland, PA	21,089	59	23,966	74	19,362	34	3,548	82	40	31	5.0	56	0.1	129
Orange, VT	20,438	69	21,183	113	13,060	127	4,425	40	54	56	2.4	4	2.8	89
Orleans, VT	19,010	93	20,988	115	13,842	115	3,715	70	107	112	6.3	83	1.4	116
Otsego, NY	20,762	64	24,031	70	16,698	58	4,250	45	32	17	5.3	58	3.4	78
Oxford, ME	19,257	87	23,009	91	13,860	113	3,495	85	91	105	6.7	87	6.3	36
Pendleton, WV	18,563	100	19,389	138	12,041	134	3,779	67	58	64	4.6	49	2.0	101
Piscataquis, ME	17,742	113	20,640	117	15,267	85	3,245	95	88	101	7.1	95	2.9	87
Pleasants, WV	20,136	76	29,787	12	9,916	145	3,095	107	96	108	8.8	122	9.0	11
Pocahontas, WV	19,082	91	19,899	129	16,077	74	3,193	97	89	103	8.6	120	11.1	6
Potter, PA	21,644	56	24,639	50	25,205	10	3,181	100	65	83	5.4	62	8.6	14
Preston, WV	15,183	137	20,148	125	13,073	126	2,580	128	115	118	6.3	83	2.8	88
Raleigh, WV	20,027	77	24,058	69	16,873	55	3,106	106	127	122	7.3	97	7.8	19
Randolph, WV	18,035	109	19,188	139	18,331	42	3,165	103	113	117	7.5	103	3.0	82
Ritchie, WV	15,672	135	20,083	126	12,603	131	2,511	130	107	113	9.7	131	1.1	120
Roane, WV	15,720	131	20,359	121	14,073	110	2,323	139	149	134	12.4	143	1.7	107
Rutland, VT	23,617	33	24,225	64	16,087	73	4,681	32	65	81	3.7	28	4.4	62
Sagadahoc, ME	23,236	37	30,100	9	12,551	132	4,356	43	52	54	3.0	18	1.4	113
Schuyler, NY	17,715	114	22,914	94	14,408	102	2,899	117	37	23	5.9	70	1.5	111
Schuylkill, PA	21,777	53	24,587	51	22,133	15	3,960	58	40	33	6.8	89	0.7	123
Seneca, NY	21,875	52	25,715	28	16,002	76	3,850	64	33	19	5.5	65	5.2	48
Snyder, PA	25,237	21	22,874	95	21,402	19	4,444	39	25	9	4.1	39	2.7	91
Somerset, MD	16,006	127	23,467	84	10,203	143	2,692	125	89	102	3.1	21	6.0	40
Somerset, ME	17,548	115	24,457	54	16,559	62	2,311	140	130	123	7.4	101	7.2	28
St. Lawrence, NY	18,141	106	26,311	22	16,867	57	2,876	119	58	65	8.5	117	1.9	104
St. Mary's, MD	27,354	11	33,992	2	10,857	141	4,102	50	40	30	7.5	103	24.2	1
Steuben, NY	22,657	44	31,691	4	16,869	56	3,703	72	59	68	5.8	69	1.9	103
Sullivan, NH	24,199	28	24,415	56	16,605	61	5,252	21	27	11	2.7	11	3.0	83
Sullivan, NY	23,925	29	24,496	53	26,816	8	4,890	24	50	49	6.0	74	-0.4	134
Sullivan, PA	20,179	75	19,643	134	18,871	36	4,687	31	40	29	6.1	78	-0.3	132
Summers, WV	14,274	143	19,437	137	9,757	146	2,383	135	149	132	9.1	125	2.9	85
Susquehanna, PA	20,409	71	20,010	127	21,523	18	3,696	73	53	55	5.0	56	0.8	122
Sussex, DE	22,766	41	22,788	96	13,384	122	5,111	22	59	70	4.3	45	9.3	10
Talbot, MD	32,754	3	25,504	30	12,926	128	11,046	3	38	26	2.8	13	7.4	26
Taylor, WV	14,908	139	21,386	110	7,635	148	2,272	141	132	124	8.0	111	3.1	81
Tioga, PA	18,799	96	22,071	103	17,610	47	3,320	92	45	41	4.7	52	4.1	67
Tompkins, NY	22,089	47	27,545	16	16,299	71	4,764	27	33	18	2.9	15	-0.4	133
Tucker, WV	16,351	125	17,075	146	18,753	38	2,981	110	80	97	9.2	127	-3.2	144
Tyler, WV	15,691	133	29,873	11	10,478	142	3,113	104	115	119	7.4	101	1.6	108
Ulster, NY	23,817	30	24,956	45	13,769	116	4,868	25	38	25	3.6	27	6.1	39

Employment		Demographic Components								Miscellaneous				County, State
Govt. Employment		Rate of Net		Youth Retention		Birth-to-Death		Adjusted Death		Patents Granted		Building Permits		
(%)		Migration		Ratio		Ratio		Rates		per worker (#)		per resident (#)		
Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	
9.7	20	0.6	35	1.39	122	0.98	96	-0.75	41	32	40	10.4	30	Knox, ME
10.0	23	0.7	28	1.47	94	1.91	3	-1.86	7	40	29	11.5	26	Lamoille, VT
10.4	30	-0.3	103	1.40	119	0.95	102	0.19	85	21	65	6.2	81	Lawrence, PA
20.2	129	-1.0	141	1.36	131	1.68	4	-0.93	34	19	67	14.8	16	Lewis, NY
18.8	124	-0.7	130	1.39	122	0.83	134	-0.09	69	0	118	1.0	133	Lewis, WV
9.4	17	0.6	33	1.09	148	1.02	86	-2.26	3	22	63	7.6	64	Lincoln, ME
21.0	133	0.6	32	1.55	63	1.12	63	0.56	106	45	26	2.2	121	Lincoln, WV
8.3	9	0.4	42	1.35	134	1.16	54	-1.55	13	130	4	9.8	39	Litchfield, CT
13.6	72	-2.4	148	1.54	67	1.24	31	0.19	85	0	118	1.0	132	Logan, WV
16.2	99	-0.9	138	1.65	37	0.94	105	-0.18	65	23	62	0.6	137	Marion, WV
15.2	87	0.3	52	1.44	108	1.07	74	0.19	85	0	118	1.3	130	Mason, WV
28.9	146	-2.2	147	1.38	126	0.87	122	3.03	145	0	118	0.9	135	McDowell, WV
12.2	57	-0.6	125	1.43	111	0.92	108	0.85	116	38	30	4.5	105	McKean, PA
16.0	95	-0.4	106	1.45	99	1.05	80	1.16	130	7	107	1.4	128	Mercer, WV
16.7	104	1.3	10	1.47	94	1.33	20	-0.91	36	56	18	10.0	37	Merrimack, NH
7.8	4	-0.5	121	1.45	99	1.10	66	0.32	94	5	112	8.3	55	Mifflin, PA
14.5	81	-1.7	144	1.69	31	1.29	27	1.67	141	0	118	0.7	136	Mingo, WV
32.5	148	-1.1	142	1.61	50	1.62	6	-0.21	61	34	36	3.6	113	Monongalia, WV
16.0	95	2.1	2	1.56	60	1.31	23	-1.32	16	30	43	24.5	4	Monroe, PA
17.3	113	0.9	18	1.24	144	0.89	115	-1.24	21	0	118	0.3	140	Monroe, WV
10.0	23	0.2	59	1.65	37	0.84	130	3.91	146	14	84	13.4	18	Montour, PA
17.2	111	1.2	11	1.49	88	1.11	64	-1.27	19	131	3	11.5	27	Morgan, WV
7.9	5	3.3	1	1.31	141	1.31	23	-0.19	64	25	57	31.5	1	Nantucket, MA
15.4	88	0.2	57	1.37	130	1.32	21	-0.99	29	122	7	7.6	65	Newport, RI
16.9	110	0.0	78	1.32	140	0.91	111	0.03	77	28	48	1.3	131	Nicholas, WV
11.2	40	-0.5	122	1.93	5	0.78	137	1.35	136	2	116	4.7	103	Northumberland, PA
14.0	76	-0.3	98	1.41	116	1.40	12	-1.89	6	64	17	5.7	90	Orange, VT
11.9	53	0.3	48	1.45	99	1.20	43	-0.34	52	0	118	8.3	56	Orleans, VT
14.5	81	0.2	59	1.49	88	0.92	108	0.48	102	19	67	16.2	15	Otsego, NY
11.8	50	1.0	16	1.78	12	0.86	123	1.34	133	16	75	7.7	62	Oxford, ME
12.8	61	-0.2	89	1.68	33	0.86	123	0.19	85	0	118	10.2	35	Pendleton, WV
12.9	64	-0.4	105	1.64	45	0.80	135	0.81	113	0	118	3.1	120	Piscataquis, ME
13.0	66	0.4	43	1.47	94	0.97	97	0.18	84	0	118	4.2	106	Pleasants, WV
15.7	93	-0.2	92	1.49	88	0.96	100	-1.00	28	19	67	0.1	141	Pocahontas, WV
11.5	45	-0.2	94	1.74	18	1.17	51	-0.72	44	11	95	7.2	67	Potter, PA
15.6	90	0.0	82	1.58	55	1.10	66	-0.37	51	0	118	0.9	134	Preston, WV
13.3	68	-0.6	123	1.36	131	1.19	47	-0.99	29	13	88	4.6	104	Raleigh, WV
14.2	78	0.0	76	1.78	12	0.96	100	-0.29	57	7	107	1.8	122	Randolph, WV
12.0	54	1.3	9	1.74	18	0.74	142	1.88	143	45	26	1.7	124	Ritchie, WV
10.5	32	0.8	26	1.81	9	0.84	130	0.82	114	16	75	0.5	138	Roane, WV
12.0	54	-0.3	99	1.78	12	1.07	74	0.30	92	16	75	5.3	95	Rutland, VT
9.3	16	1.3	8	1.53	74	1.51	7	-1.57	11	15	81	10.5	29	Sagadahoc, ME
16.5	103	-0.1	84	1.51	82	1.36	18	-1.80	9	136	2	4.1	107	Schuyler, NY
11.2	40	-0.5	119	1.55	63	0.73	143	1.17	131	28	48	5.4	94	Schuykill, PA
17.6	114	-0.2	94	1.45	99	1.24	31	-0.32	54	95	11	7.7	63	Seneca, NY
12.3	58	-0.4	110	1.34	136	1.22	39	-0.90	37	9	98	9.2	44	Snyder, PA
29.3	147	0.2	54	1.45	99	0.76	140	4.01	147	11	95	11.6	25	Somerset, MD
10.6	35	0.3	47	1.45	99	1.11	64	0.42	99	4	114	3.6	114	Somerset, ME
21.3	135	-0.4	107	1.54	67	1.14	57	0.99	121	14	84	6.1	83	St. Lawrence, NY
21.9	139	0.4	40	1.64	45	2.25	1	-0.99	29	8	102	31.1	2	St. Mary's, MD
15.6	90	-0.4	113	1.69	31	1.16	54	-0.18	65	82	12	5.8	88	Steuben, NY
13.9	75	0.8	25	1.55	63	1.09	68	-0.41	49	78	14	6.7	73	Sullivan, NH
18.6	122	-0.4	108	1.81	9	1.20	43	-0.20	62	16	75	8.0	58	Sullivan, NY
13.1	67	0.4	41	1.58	55	0.45	148	4.37	148	34	36	11.2	28	Sullivan, PA
20.2	129	0.1	67	1.52	79	0.64	145	1.05	125	0	118	1.7	125	Summers, WV
12.9	64	0.3	52	1.65	37	1.03	83	-0.05	72	73	15	9.2	43	Susquehanna, PA
8.3	9	1.9	5	1.41	116	1.17	51	0.35	96	9	98	28.1	3	Sussex, DE
7.6	3	1.2	12	1.43	111	0.88	119	-1.45	14	8	102	20.6	9	Talbot, MD
23.5	141	0.3	44	1.31	141	0.79	136	1.03	124	21	65	1.6	126	Taylor, WV
15.7	93	0.5	37	1.65	37	0.88	119	0.38	98	16	75	10.4	32	Tioga, PA
10.1	25	0.0	81	1.54	67	1.46	9	0.02	76	154	1	8.9	45	Tompkins, NY
19.0	125	-0.7	132	1.60	52	0.70	144	-1.28	17	105	9	1.7	123	Tucker, WV
15.4	88	-0.4	109	1.34	136	0.78	137	1.09	128	115	8	0.1	143	Tyler, WV
16.4	101	0.1	71	2.12	2	1.23	35	-0.92	35	100	10	6.7	71	Ulster, NY

County, State	Income								Employment						
	Per Capita Income		Wage and Salary		Self Employment		Per Capita Wealth		Food Stamps per capita (\$)		Unemployment Rate (%)		Employment Change (%)		
	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	
Union, PA	21,516	57	25,181	38	20,487	23	4,135	47	23	23	6	3.0	18	6.8	31
Upshur, WV	15,688	134	20,413	120	12,684	130	2,920	114	146	130	7.6	106	8.4	15	
Venango, PA	24,583	24	25,266	35	19,823	26	3,840	65	71	88	5.9	70	5.5	45	
Waldo, ME	19,070	92	20,350	122	15,922	78	3,499	84	109	115	4.4	47	11.8	4	
Warren, PA	22,685	43	25,454	31	20,002	25	3,939	59	49	48	4.0	35	-1.8	141	
Washington, ME	18,129	107	19,676	133	11,375	136	2,915	115	147	131	8.8	122	6.5	34	
Washington, VT	24,787	23	24,868	47	13,711	119	4,802	26	55	58	3.4	25	3.7	76	
Wayne, PA	20,701	65	21,912	104	18,461	39	4,647	34	51	51	6.1	78	7.1	29	
Webster, WV	12,723	148	23,476	83	9,111	147	1,638	146	237	147	9.6	130	2.5	94	
Wetzel, WV	19,161	89	19,618	135	14,302	104	3,362	89	144	128	10.9	137	-0.8	136	
Wicomico, MD	22,929	40	25,103	39	12,421	133	4,061	51	74	92	4.6	49	5.2	47	
Windham, CT	25,328	19	27,805	15	16,698	59	3,503	83	37	24	3.7	28	4.4	64	
Windham, VT	25,368	18	25,571	29	13,573	121	5,660	18	57	63	2.8	13	2.5	95	
Windsor, VT	26,700	12	24,429	55	14,429	101	6,977	11	47	44	2.5	6	5.6	42	
Wirt, WV	14,872	140	16,583	148	13,639	120	1,966	144	160	137	14.8	146	-6.4	147	
Worcester, MD	25,109	22	19,709	132	15,514	83	7,112	9	51	52	8.8	122	3.9	73	
Wyoming, NY	18,157	105	25,191	37	14,204	106	2,921	113	27	10	7.3	97	4.1	67	
Wyoming, WV	14,690	142	25,952	26	14,710	95	1,907	145	184	143	10.7	135	7.0	30	
Yates, NY	19,004	94	21,681	106	15,141	91	3,856	63	42	36	4.2	42	6.6	33	
York, ME	23,708	31	24,974	43	15,192	87	4,579	37	59	71	2.9	15	5.4	46	
Connecticut	37,338		40,064		26,583		6,789		48		3.2		4.8		
Metro portion	38,089		40,749		27,277		6,938		50		3.1		4.8		
Nonmetro portion	29,501		29,846		19,845		5,225		25		3.2		5.1		
Delaware	29,383		32,980		19,943		5,734		43		3.5		8.0		
Metro portion	30,879		34,778		21,960		5,874		40		3.5		7.7		
Nonmetro portion	22,766		22,788		13,384		5,111		59		4.3		9.6		
Maine	23,499		25,385		15,109		4,513		79		4.1		5.7		
Metro portion	26,111		27,058		16,007		4,877		73		3.5		7.2		
Nonmetro portion	21,751		23,776		14,589		4,269		83		5.3		4.3		
Maryland	30,557		32,664		18,502		5,537		53		3.5		5.8		
Metro portion	31,081		33,178		19,075		5,572		53		3.4		5.6		
Nonmetro portion	23,905		25,672		12,953		5,103		58		5.5		8.6		
Massachusetts	33,496		36,825		28,193		6,083		35		3.2		6.6		
Metro portion	33,573		36,958		28,423		6,081		35		3.1		6.6		
Nonmetro portion	28,426		26,140		18,955		6,208		27		3.2		7.8		
New Hampshire	29,480		30,322		20,266		5,474		25		2.7		9.0		
Metro portion	30,716		32,661		21,716		5,074		24		2.8		10.0		
Nonmetro portion	27,409		26,611		18,234		6,145		27		2.6		7.5		
New Jersey	34,383		38,448		33,851		6,311		46		4.6		6.0		
Metro portion	34,383		38,448		33,851		6,311		46		4.6		6.0		
Nonmetro portion	n/a		n/a		n/a		n/a		n/a		n/a		n/a		
New York	32,108		39,751		38,439		5,806		81		5.2		4.0		
Metro portion	33,101		40,732		40,630		5,979		84		4.7		4.2		
Nonmetro portion	20,915		25,650		16,515		3,856		49		6.5		1.2		
Pennsylvania	27,469		30,887		27,429		5,167		62		4.4		4.6		
Metro portion	28,586		31,750		28,786		5,411		65		4.3		4.8		
Nonmetro portion	21,374		24,559		20,760		3,836		51		5.7		2.9		
Rhode Island	28,262		29,399		22,447		5,533		61		4.1		3.4		
Metro portion	28,007		29,249		23,112		5,327		63		4.1		3.3		
Nonmetro portion	31,054		31,031		16,347		7,784		44		3.7		4.6		
Vermont	24,602		25,883		14,904		5,129		56		3.0		5.1		
Metro portion	26,787		29,604		15,859		5,004		47		2.8		6.7		
Nonmetro portion	23,544		23,715		14,513		5,190		61		3.8		4.2		
West Virginia	20,185		24,639		17,162		3,516		121		6.6		3.6		
Metro portion	23,217		26,056		18,441		4,143		98		5.3		4.7		
Nonmetro portion	18,002		23,206		16,211		3,064		138		9.0		2.5		

Employment		Demographic Components						Miscellaneous						
Govt. Employment (%)		Rate of Net Migration		Youth Retention Ratio		Birth-to-Death Ratio		Adjusted Death Rates		Patents Granted per worker (#)		Building Permits per resident (#)		County, State
Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank	
16.8	105	0.6	34	1.56	60	1.09	68	-0.56	47	13	88	11.8	24	Union, PA
11.8	50	0.0	74	1.75	15	1.00	92	0.70	109	0	118	6.0	85	Upshur, WV
14.1	77	-0.5	117	1.47	94	1.06	78	-0.29	57	28	48	3.7	112	Venango, PA
10.5	32	0.9	20	1.74	18	1.35	19	-1.95	5	13	88	7.2	68	Waldo, ME
12.5	59	-0.6	128	1.51	82	1.01	89	0.16	83	36	32	4.8	102	Warren, PA
13.7	73	-0.5	114	1.73	23	0.86	123	1.83	142	5	112	6.4	80	Washington, ME
17.2	111	0.0	80	1.50	85	1.14	57	-0.77	39	17	73	8.2	57	Washington, VT
11.7	47	1.4	6	1.52	79	1.00	92	0.94	118	25	57	14.5	17	Wayne, PA
20.6	132	-1.9	146	1.75	15	0.91	111	-0.05	72	0	118	0.0	146	Webster, WV
17.9	117	-0.4	110	1.59	54	0.95	102	-0.29	57	123	6	1.3	129	Wetzel, WV
11.4	44	-0.3	104	1.41	116	1.39	14	1.02	123	8	102	18.1	11	Wicomico, MD
13.4	69	0.1	71	1.71	27	1.30	25	-0.20	62	37	31	9.2	42	Windham, CT
8.0	6	-0.3	101	1.65	37	1.24	31	-0.97	32	25	57	5.1	98	Windham, VT
13.8	74	0.2	63	1.60	52	1.00	92	-1.64	10	72	16	8.0	59	Windsor, VT
19.5	128	0.8	24	1.54	67	1.07	74	-0.32	54	0	118	0.3	139	Wirt, WV
9.5	19	2.0	4	1.54	67	0.85	127	0.89	117	17	73	17.6	12	Worcester, MD
23.5	141	-0.1	84	1.44	108	1.24	31	-0.88	38	11	95	8.5	51	Wyoming, NY
17.9	117	-1.5	143	1.50	85	1.19	47	-0.39	50	0	118	0.0	144	Wyoming, WV
11.7	47	0.9	20	1.53	74	1.22	39	0.70	109	53	19	16.6	13	Yates, NY
13.4	69	1.1	13	1.42	114	1.40	12	-1.06	27	28	48	12.5	22	York, ME
10.1		-0.3		1.58		1.45		-0.49		87		6.9		Connecticut
10.1		-0.4		1.57		1.47		-0.36		86		6.6		Metro portion
10.1		0.3		1.65		1.21		-0.88		98		9.6		Nonmetro portion
11.3		0.6		1.94		1.59		0.68		82		26.8		Delaware
11.9		0.3		1.93		1.72		0.85		96		24.8		Metro portion
8.3		1.9		1.99		1.17		0.35		9		28.1		Nonmetro portion
12.3		0.3		1.58		1.13		0.14		16		8.7		Maine
10.9		0.2		1.66		1.22		1.16		17		9.2		Metro portion
13.5		0.4		1.52		1.08		-0.10		16		8.3		Nonmetro portion
15.4		-0.1		1.90		1.68		-0.07		49		15.5		Maryland
15.5		-0.1		1.91		1.73		-0.55		52		15.1		Metro portion
13.3		0.5		1.77		1.24		0.72		11		19.7		Nonmetro portion
10.5		-0.1		1.73		1.46		0.13		87		6.9		Massachusetts
10.5		-0.1		1.72		1.47		0.54		88		6.8		Metro portion
11.7		0.4		2.15		1.26		-1.36		36		13.7		Nonmetro portion
10.3		0.8		2.04		1.53		-0.07		82		10.3		New Hampshire
9.0		0.7		2.16		1.87		-0.41		106		11.9		Metro portion
12.5		0.9		1.86		1.12		0.08		45		8.1		Nonmetro portion
12.1		-0.4		1.65		1.56		-0.47		82		7.9		New Jersey
12.1		-0.4		1.65		1.56		-0.47		82		7.9		Metro portion
n/a		n/a		n/a		n/a		n/a		n/a		n/a		Nonmetro portion
13.7		-0.9		1.59		1.66		-0.13		63		4.8		New York
13.4		-1.0		1.60		1.69		-0.03		63		4.5		Metro portion
17.5		-0.4		1.43		1.25		-0.29		52		7.1		Nonmetro portion
10.5		-0.3		1.48		1.15		0.41		49		8.4		Pennsylvania
10.2		-0.4		1.50		1.17		0.47		54		8.3		Metro portion
12.3		0.0		1.38		1.01		0.35		22		9.2		Nonmetro portion
11.6		-0.1		1.65		1.29		-0.10		50		6.7		Rhode Island
11.3		-0.1		1.66		1.29		0.13		43		6.6		Metro portion
15.4		0.2		1.60		1.32		-0.99		122		7.6		Nonmetro portion
11.7		0.1		1.71		1.35		-0.85		84		9.2		Vermont
11.4		0.2		1.92		1.92		-1.21		183		13.0		Metro portion
11.9		0.1		1.61		1.16		-0.75		31		7.7		Nonmetro portion
16.0		-0.3		1.20		1.07		0.09		22		4.9		West Virginia
13.9		-0.3		1.30		1.11		-0.06		30		7.0		Metro portion
17.9		-0.4		1.13		1.05		0.13		15		3.3		Nonmetro portion

Conclusion

This report suggests that there is significant variation in the economic conditions of non-metro counties within the Northeast, and that is imprudent to talk about the region as a single, homogenous entity. Furthermore, although we did not report data on per capita income growth over time, the data reveal that counties with higher incomes per capita also experienced more rapid income growth between 1995 and 1998 than did counties with lower income levels. This is an important finding. It means that the degree of income inequality among the non-metro counties of the Northeast is growing over time, or that the lagging counties are falling further and further behind the booming counties.

One important challenge is to begin to classify non-metro counties in terms of the external forces that are bearing down on them, such as globalization, urban sprawl, technological change and federal devolution. These effects can be measured both in terms of changing economic and social well-being, and quality of life in general—including natural amenities. Once this has been accomplished, it should become easier to develop and implement a set of common policies that redress or ameliorate any negative effects of these external forces, especially in the lagging counties. By grouping counties according to a common set of characteristics, we may learn why higher-income counties are faring better and whether successful strategies exist that can be transferred from the booming to the lagging counties. It may also be easier for these lagging counties to speak with a single, coherent voice that better articulates their needs.

References

Altobelli, Joyce and Max J. Pfeffer. *Metropolitan Agriculture: A Chartbook of Trends and Statistics for the United States, the Northeast Region, and New York State*, Dept. of Rural Sociology, New York State Agricultural Experiment Station, Cornell University, July 2000.

Beeson, Elizabeth and Marty Strange, *Why Rural Matters—The Need for Every State to Take Action on Rural Education*, A Report of the Rural School and Community Trust Policy Program, Washington, DC, August 2000, 86pp.

Goetz, Stephan J. *Rural Development Issues in the Northeast: 2000-2005*. The Northeast Regional Center for Rural Development, Working Paper 99-01, December, 1999.

US Department of Commerce, Bureau of Economic Analysis. *Regional Economic Information System CD-ROM*, Washington, DC: Bureau of Economic Analysis, 2000.

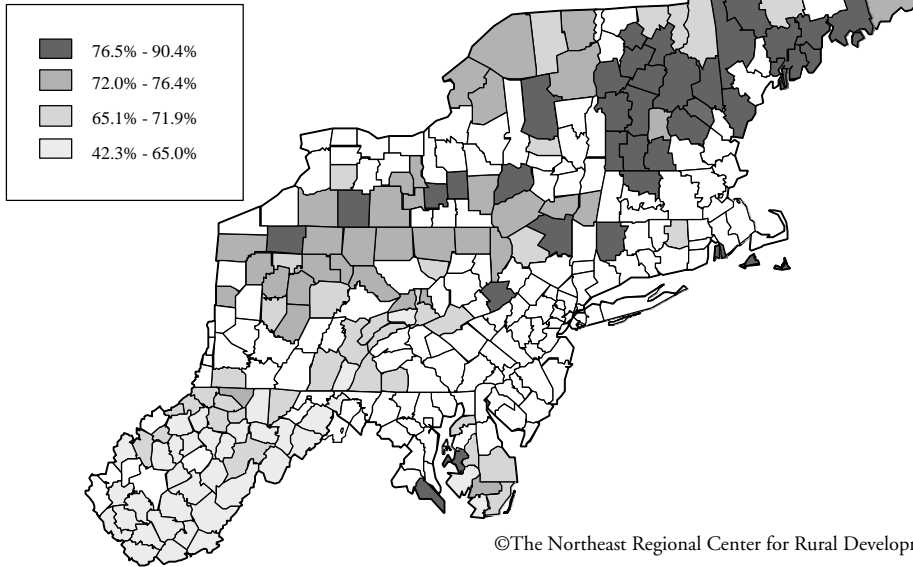
US Department of Commerce, Bureau of Census. Internet site: <<http://www.census.gov>>

US Department of Housing and Urban Development, *Now is the Time: Places Left Behind in the New Economy*—special supplement: America's Northeast, Washington, DC, November 1999, 60pp.

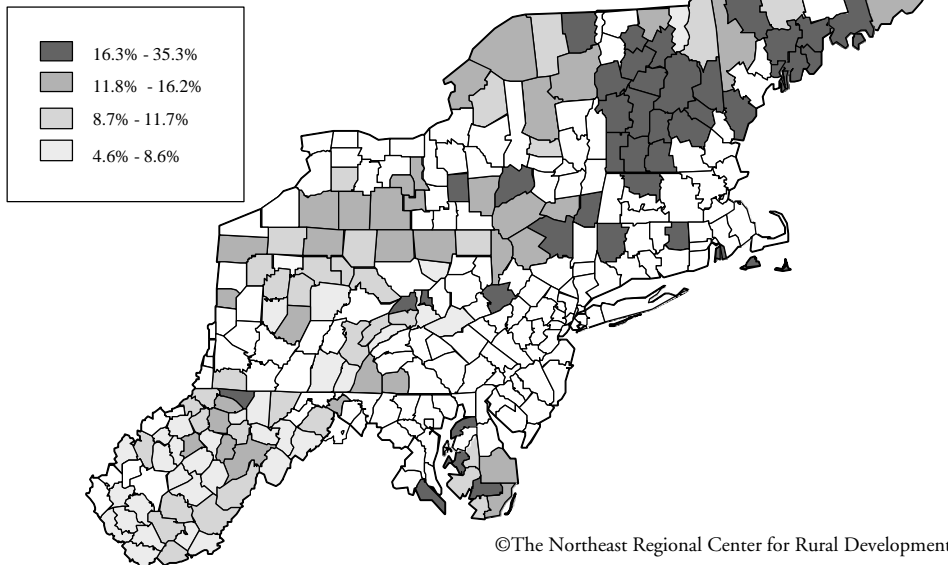
Zlatkovich, Charles P. and Karl B. Putnam, *Business Opportunity Index, 2000: Detailed Economic Information for all States and Metropolitan Areas*, El Paso, Texas: Westerner Press, 2000, 114pp.

Appendix

Percent of Population w/ High School Degree or higher: 1990 Census



Percent of Population w/ Bachelor's Degree or higher: 1990 Census



County, State	High School Degree		Bachelor's Degree	
	Level	Rank	Level	Rank
Adams, PA	70.0	92	13.2	60
Addison, VT	82.0	9	25.1	9
Allegany, NY	76.9	33	15.6	45
Armstrong, PA	71.1	80	8.1	125
Aroostook, ME	70.9	82	12.5	70
Barbour, WV	59.8	133	10.1	99
Bedford, PA	68.5	99	7.8	133
Belknap, NH	80.4	19	20.5	25
Bennington, VT	77.8	27	23.5	16
Boone, WV	54.1	141	6.4	141
Bradford, PA	75.7	42	12.9	65
Braxton, WV	56.8	137	8.1	125
Caledonia, VT	77.4	29	19.0	28
Calhoun, WV	56.3	139	6.8	137
Cameron, PA	73.1	65	9.8	100
Caroline, MD	66.8	106	10.8	90
Carroll, NH	83.5	4	23.4	17
Cattaraugus, NY	74.5	51	12.8	66
Chenango, NY	75.5	43	13.1	62
Cheshire, NH	80.8	17	23.9	13
Clarion, PA	73.1	65	11.7	80
Clay, WV	49.4	145	6.2	143
Clearfield, PA	70.2	89	8.6	114
Clinton, NY	74.2	52	16.5	42
Clinton, PA	72.5	73	11.7	80
Columbia, NY	73.6	62	18.5	31
Coos, NH	70.0	92	11.0	88
Cortland, NY	76.8	35	18.2	33
Crawford, PA	74.1	57	11.8	77
Delaware, NY	74.0	58	13.2	60
Doddridge, WV	64.6	114	10.3	98
Dorchester, MD	64.7	113	10.9	89
Dukes, MA	90.4	1	32.1	3
Elk, PA	74.9	50	9.5	105
Essex, NY	74.2	52	15.8	44
Essex, VT	68.0	104	8.5	119
Fayette, WV	57.1	136	8.8	111
Forest, PA	70.5	86	7.9	132
Franklin, MA	82.4	8	24.2	12
Franklin, ME	79.7	22	17.7	35
Franklin, NY	69.5	95	11.7	80
Franklin, PA	69.4	96	12.4	72
Fulton, NY	70.5	86	11.4	85
Fulton, PA	64.0	117	7.4	134
Garrett, MD	68.4	101	9.5	105
Gilmer, WV	56.6	138	14.2	53
Grafton, NH	81.4	11	26.4	6
Grant, WV	60.2	132	8.6	114
Greenbrier, WV	63.0	121	11.5	84
Greene, NY	72.8	71	13.4	59
Greene, PA	68.0	104	11.3	86
Hamilton, NY	77.3	31	15.1	46
Hampshire, WV	61.8	125	9.0	108
Hancock, ME	83.3	5	21.4	23
Hardy, WV	55.3	140	7.3	135
Harrison, WV	70.6	85	13.5	58
Huntingdon, PA	71.2	78	9.4	107
Indiana, PA	74.0	58	14.4	50
Jackson, WV	65.4	110	8.7	112
Jefferson, NY	76.4	39	13.6	56
Jefferson, PA	72.6	72	8.9	110
Juniata, PA	65.2	111	7.3	135
Kennebec, ME	78.9	25	18.1	34
Kent, MD	71.4	76	16.9	38

County, State	High School Degree		Bachelor's Degree	
	Level	Rank	Level	Rank
Knox, ME	80.8	17	19.8	27
Lamoille, VT	80.2	21	23.9	13
Lawrence, PA	73.0	69	11.8	77
Lewis, NY	73.6	62	10.5	95
Lewis, WV	62.1	123	8.2	123
Lincoln, ME	81.4	11	22.2	19
Lincoln, WV	49.1	146	4.7	147
Litchfield, CT	80.9	16	25.0	10
Logan, WV	53.4	142	6.3	142
Marion, WV	71.4	76	12.5	70
Mason, WV	61.1	129	6.8	137
McDowell, WV	42.3	148	4.6	148
McKean, PA	75.4	44	12.2	74
Mercer, WV	63.1	120	11.6	83
Merrimack, NH	83.2	6	25.4	7
Mifflin, PA	68.2	103	8.7	112
Mingo, WV	50.4	144	6.6	139
Monongalia, WV	75.4	44	28.1	5
Monroe, PA	78.0	26	17.6	36
Monroe, WV	62.1	123	8.0	129
Montour, PA	75.2	47	18.7	30
Morgan, WV	64.8	112	11.8	77
Nantucket, MA	89.4	2	32.9	2
Newport, RI	82.8	7	30.1	4
Nicholas, WV	61.2	127	8.0	129
Northumberland, PA	68.5	99	8.6	114
Orange, VT	80.4	19	21.9	20
Orleans, VT	70.7	84	14.2	53
Otsego, NY	77.7	28	19.9	26
Oxford, ME	76.9	33	12.7	67
Pendleton, WV	60.6	130	8.2	123
Piscataquis, ME	75.4	44	12.3	73
Pleasants, WV	68.7	97	8.5	119
Pocahontas, WV	60.6	130	9.7	102
Potter, PA	73.8	60	9.8	100
Preston, WV	62.7	122	8.3	122
Raleigh, WV	63.2	119	10.7	92
Randolph, WV	65.9	109	11.9	76
Ritchie, WV	61.5	126	6.0	145
Roane, WV	57.2	135	6.6	139
Rutland, VT	79.4	24	20.6	24
Sagadahoc, ME	81.1	15	21.6	21
Schuyler, NY	74.2	52	13.6	56
Schuylkill, PA	68.4	101	8.1	125
Seneca, NY	76.2	40	14.2	53
Snyder, PA	64.4	115	10.6	94
Somerset, MD	61.2	127	9.6	104
Somerset, ME	71.9	75	10.5	95
St. Lawrence, NY	73.1	65	15.1	46
St. Mary's, MD	77.1	32	16.8	39
Steuben, NY	75.0	48	14.4	50
Sullivan, NH	75.0	48	16.5	42
Sullivan, NY	71.2	78	14.4	50
Sullivan, PA	70.2	89	8.6	114
Summers, WV	58.0	134	8.5	119
Susquehanna, PA	76.0	41	11.1	87
Sussex, DE	69.7	94	13.0	64
Talbot, MD	76.5	38	23.0	18
Taylor, WV	66.0	108	8.1	125
Tioga, PA	72.9	70	12.6	69
Tompkins, NY	87.2	3	41.7	1
Tucker, WV	64.0	117	8.6	114
Tyler, WV	68.7	97	9.0	108
Ulster, NY	76.6	36	21.6	21

County, State	High School Degree		Bachelor's Degree	
	Level	Rank	Level	Rank
Union, PA	73.1	65	17.5	37
Upshur, WV	64.3	116	12.0	75
Venango, PA	74.2	52	10.8	90
Waldo, ME	77.4	29	16.8	39
Warren, PA	76.6	36	10.7	92
Washington, ME	73.2	64	12.7	67
Washington, VT	81.3	13	24.4	11
Wayne, PA	74.2	52	13.1	62
Webster, WV	46.5	147	5.6	146
Wetzel, WV	70.1	91	10.4	97
Wicomico, MD	72.1	74	18.5	31
Windham, CT	71.1	80	16.8	39
Windham, VT	81.7	10	25.2	8
Windsor, VT	81.3	13	23.6	15
Wirt, WV	66.2	107	8.0	129
Worcester, MD	70.8	83	14.8	49
Wyoming, NY	70.3	88	9.7	102
Wyoming, WV	53.0	143	6.2	143
Yates, NY	73.7	61	15.0	48
York, ME	79.5	23	19.0	28
Connecticut	79.2		34.3	
Metro portion	79.4		34.8	
Nonmetro portion	77.4		28.5	
Delaware	77.5		27.6	
Metro portion	79.2		29.4	
Nonmetro portion	69.7		18.6	
Maine	78.8		23.8	
Metro portion	80.5		26.8	
Nonmetro portion	77.7		21.8	
Maryland	78.4		33.7	
Metro portion	79.0		34.6	
Nonmetro portion	71.2		21.7	
Massachusetts	80.0		34.0	
Metro portion	79.9		34.1	
Nonmetro portion	84.0		30.9	
New Hampshire	82.2		29.7	
Metro portion	83.3		30.7	
Nonmetro portion	80.3		28.0	
New Jersey	76.7		32.4	
Metro portion	76.7		32.4	
Nonmetro portion	n/a		n/a	
New York	74.8		30.9	
Metro portion	74.8		31.6	
Nonmetro portion	75.1		22.4	
Pennsylvania	74.7		24.0	
Metro portion	75.2		25.5	
Nonmetro portion	71.8		15.6	
Rhode Island	72.0		29.5	
Metro portion	71.0		28.8	
Nonmetro portion	82.8		36.4	
Vermont	80.8		30.1	
Metro portion	83.7		34.7	
Nonmetro portion	79.5		28.0	
West Virginia	66.0		18.7	
Metro portion	71.6		20.7	
Nonmetro portion	61.8		16.9	