

A Socioeconomic Atlas for the



Appalachian National Scenic Trail and its Region

2007



**A Socioeconomic Atlas
for the
Appalachian National Scenic Trail
and its Region**

by

Jean E. McKendry

Melanie H. Johnson

2007

About this Atlas

This atlas for the Appalachian National Scenic Trail and its region is one of 16 similar atlases that have been prepared for the National Park Service (NPS). The purposes of these atlases are to supplement the scientific knowledge of park managers with information on socioeconomic conditions in the regions surrounding national park units. Each atlas presents information about population, economy and commerce, social and cultural characteristics, recreation and tourism, administration and government, and land use for counties that surround a national park unit.

Regional socioeconomic atlases have been completed for Blue Ridge Parkway, Big Thicket National Preserve, Canyon De Chelly National Monument, Chickamauga and Chattanooga National Military Park, Flight 93 National Memorial, Harpers Ferry National Historical Park, John Day Fossil Beds National Monument, Joshua Tree National Park, King's Mountain National Military Park, Mount Rainier National Park, National Capital Parks, New River Gorge National River, Rosie the Riveter/World War II Home Front National Historical Park, Saguaro National Park, and Wilson's Creek National Battlefield.

An atlas of regional socioeconomic trends benefits each park unit in specific ways. For example, this atlas provides important and timely information about the spatial character of human activities and changing land use in the region adjacent to the Appalachian National Scenic Trail (AT). The data and maps can be linked to management planning and serve other planning needs. The atlas can be used as a tool to orient AT staff (and their management partners) about regional trends. The atlas can be used as a public participation tool with local communities. Presentation graphics delivered with each atlas can be used directly in management, education, outreach, and planning efforts.

For more information about the socioeconomic atlases, please contact Dr. Jean McKendry, Principal Scientist, College of Natural Resources, University of Idaho, P.O. Box 441133, Moscow, ID 83844-1133, (jeanm@uidaho.edu).

Acknowledgments

We would like to express our appreciation to the staff of the Appalachian National Scenic Trail for their enthusiasm and interest throughout this project, especially Park Manager Pamela Underhill and Rita Hennessy of her staff. We would also like to thank Dr. Gary Machlis, NPS Visiting Senior Scientist, for continuing to share his knowledge and insights related to "people and parks," his experience with the National Park Service, and specific ideas on how to improve each atlas. Finally, Dr. Lee Vierling, Assistant Professor of Spatial Ecology at the University of Idaho helped supervise the graduate research assistant and provided valuable feedback throughout the project.

Funding from the National Park Service Recreational Fee Demonstration Program supported the preparation of this socioeconomic atlas for the Appalachian National Scenic Trail and its region.

About the Authors

Jean McKendry is Principal Scientist with the University of Idaho, College of Natural Resources. She is assigned to work on this project under a cooperative agreement with the National Park Service. She serves as Principal Investigator/Project Manager for this atlas series.

Melanie Johnson is a doctoral student in Environmental Science in the Geospatial Laboratory for Environmental Dynamics at the University of Idaho. She specializes in landscape dynamics and land use change.

Final Version Date: 09/30/2007

Preface

Protection of the National Park System requires active and scientifically informed management. If park resources – both natural and cultural – are to be protected for future generations, the NPS must develop efficient ways to monitor the condition and trends of natural and human systems. Such monitoring must provide usable knowledge that managers can apply to the preservation of resources. And the NPS must share this information with surrounding communities, stakeholders, and partners to help them make important choices about their future.

Because of these reasons and more, the NPS has embarked on a significant initiative – the Natural Resource Challenge, an action plan for preserving natural resources and our country’s natural heritage within the complexities of modern landscapes (<http://www1.nature.nps.gov/challenge/index.htm>).

This socioeconomic atlas is one component in that effort. It is a tool for trail managers, planners, community leaders, and others to use in addressing the challenge of preserving the natural and cultural resources of the Appalachian National Scenic Trail (AT). Part of that challenge involves understanding conditions in the region surrounding the AT – conditions which can have significant impacts on its resources. Systematic study and monitoring of regional conditions involves, to a large degree, investigation of human activities. This atlas focuses on such human activities, characterizing them in terms of standardized measures known as socioeconomic indicators.

The atlas can currently serve as an aid to management and planning, as a training tool, and as a means to facilitate public participation. It can be of long-term benefit by establishing baseline data for monitoring changing conditions and trends in the region, particularly as the AT increasingly serves as a “mega transect.” Through these and other potential uses, the atlas supports the critical goal of improving trail management through a greater reliance on usable scientific knowledge, and contributes to meeting the Natural Resource Challenge.

Gary E. Machlis
Visiting Senior Scientist
National Park Service

Table of Contents

Introduction.....	3
Socioeconomic Indicators: Valuable Management Tools.....	4
The Region.....	8
Using the Socioeconomic Indicators and Maps.....	10
The Socioeconomic Indicators	11
General Population.....	12
Economy and Commerce.....	28
Social and Cultural Characteristics.....	52
Recreation and Tourism.....	60
Administration and Government.....	66
Land Use.....	74
Conclusion: Using This Atlas for Trail Management.....	88
Appendices.....	90
Appendix 1: Data Sources for Indicators.....	90
Appendix 2: Technical Notes on Map Design.....	95
Appendix 3: Technical Notes on Measurement of Selected Indicators	96

Introduction

The purpose of this atlas is to provide trail managers, planners, community leaders, and others with a better understanding of changing human activities and socioeconomic conditions in the region surrounding the Appalachian National Scenic Trail (AT). Such changes can create complex trail management challenges. Information about regional trends and conditions is needed in order to manage and conserve trail resources – both natural and cultural – more effectively. This atlas provides such information in a series of maps, complemented by tables, other graphics, and explanatory text.

Maps are effective ways of conveying information. A map can highlight geographical patterns in data by showing the relationship between what is happening and where it is happening. The maps in this atlas combine *contextual* information (such as boundary lines) with *thematic* information (such as demographic or economic statistics). This combination of contextual and thematic information helps the reader observe general trends inherent in the distribution of data. For example, a map that shows the population growth rate for each county in the trail region may reveal that many of the highest growth rates are concentrated in counties south of the trail.

Each map, together with tabular data and other graphics, is designed to allow for easy comparison, so readers can see how conditions and trends in their own counties compare with those in other counties and relate to larger regional patterns. The consistent map design allows readers to make comparisons among two or more maps. For example, comparing maps of federal expenditures per person and poverty rates might reveal that federal expenditures tend to be higher in a region's poorer counties.

There are many potential uses for this atlas. For example, trail managers can share the atlas with new staff, management partners, regional NPS staff, the media, or policy makers as a way of orienting them to the basic facts about the region. Planners can use the atlas to examine emerging trends in the region surrounding the

AT and to prioritize actions to mitigate any anticipated adverse impacts on trail resources. Local and regional leaders can consult the atlas to develop environmental policies that support trail management goals while remaining responsive to local needs. Researchers can use the atlas to design studies that have practical benefit to trail and ecosystem management. Additional uses are discussed in the atlas' concluding section, pages 88-89. Regardless of how it is used, the atlas can serve as a useful reference tool that adds to the body of usable scientific knowledge about the Appalachian National Scenic Trail and its surrounding region.

Note: There are several approaches to the use of and display of data in tabular and/or map form. Percentages are a common way to specify and standardize data, and are an accessible approach for users of the atlases in this series.

Socioeconomic Indicators: Valuable Management Tools

The Relevance of Human Activities to Resource Management

The management of park and trail resources always requires attention to human behavior and activities. Protection of a threatened archaeological site can mean educating visitors about the Antiquities Act. Controlling non-native plant species can require close collaboration with trail neighbors and volunteers. Preservation of scenic values can depend upon the monitoring of emissions from electrical generation plants several states away.

While there is an on-going and healthy debate about how to address this “human factor” in park and trail management, a consensus has emerged about three basic principles:

- people are part of ecosystems, and their needs and activities must be considered in management plans;
- park and trail managers should be concerned with short and long-term trends, as well as the local, regional, and national consequences of actions; and
- where appropriate, decisions about park and trail resources should be made collaboratively, including federal agencies, local governments, and citizens in the process.

Managing parks and trails in accordance with these principles requires careful planning, for people have many competing needs.

Careful planning requires an accurate and objective assessment of current conditions as well as on-going trends. Hence, understanding the social, cultural, and economic characteristics of the Appalachian National Scenic Trail (AT) region is crucial for successful trail management.

The Value of Socioeconomic Indicators

One approach to understanding social, cultural, and economic conditions and trends is to use *socioeconomic indicators*. Socioeconomic indicators are regularly collected economic or social statistics that describe or predict changes and trends in the general state of society. For example, the consumer price index (CPI) keeps track of changes in the price of a typical group of consumer goods. The CPI is used to monitor inflation, to compare the cost-of-living in one region of the country to another, and to support economic policy-making. Socioeconomic indicators can address historical trends, present conditions, or future projections.

An integrated set of socioeconomic indicators can be effective in presenting the “basic facts” about the people of a region. Such basic facts are important to trail management, and can be used in many ways: assessing the potential impact of government policies, developing sound resource management strategies, designing effective interpretive programs, increasing public involvement in the planning process, and so forth. Like measures of water quality or wildlife populations, socioeconomic indicators enable managers and citizens to make scientifically informed decisions concerning public resources.

The Integrated Set of Indicators

The indicators in this atlas are not simply a collection of various statistics displayed in maps, but an integrated set of indicators organized around broad areas of human activity that are of particular relevance to park and trail management. The selection of a broad range of relevant indicators is important because the dynamics of human interaction on a regional scale are complex. For example, the growth of a new industry can influence immigration, which in turn can influence other human activities such as housing development. While industry, immigration, and housing are categorically different indicators, each one could be important for a trail manager trying to anticipate growth issues that might impact visitation or ecological systems.

The integrated set of indicators displayed in this atlas encompasses six general categories:

- *General population* indicators measure how many people live in a given area, where those people are concentrated, their ages, patterns of migration, and so forth. General population indicators provide a profile of the people who are neighbors to the trail and potential partners in trail management.
- *Economy and commerce* indicators measure the flow and distribution of money, materials, and labor. Economy and commerce indicators provide an overview of the interdependent economic relationships among people, businesses, industries, and government within the region.
- *Social and cultural* indicators measure aspects of personal and group identity such as cultural origin, political and religious beliefs, health, and language. Social and cultural indicators provide insights into the varying perceptions and expectations that people bring with them when they go to their place of work, participate in a public meeting, or visit a trail interpretive site.
- *Recreation and tourism* indicators measure activities specifically related to the provision of accommodations, entertainment, and personal services. Recreation and tourism indicators provide a way to analyze the economic role that travelers, vacationers, and other recreationists play in the region surrounding the trail, which is itself closely linked to the recreation/tourism sector.
- *Administration and government* indicators measure the structure, resources, and actions of government organizations. Administration and government indicators provide an orientation to the role of government – local, state, and federal – in the region.
- *Land use* indicators measure the interactions between people and terrestrial resources such as land, water supply, and vegetation. Land use indicators provide a way to gauge the impact of human activities such as farming, forestry, and urban development upon ecosystems within the region.

Selecting Specific Indicators

Drawing from the six general categories of socioeconomic indicators described above, a menu of 67 socioeconomic indicators was developed. Each indicator was determined to be readily available and mappable at the county level.

From this menu, 17 *core indicators* were selected that are common to all atlases published through this project. The core indicators provide information useful to all park and trail managers.

Incorporating these core indicators throughout the series of atlases enables comparisons among national park units in different regions of the country. Appalachian National Scenic Trail managers chose additional indicators from the menu described above. Staff selected these indicators to customize the atlas so that it would target information relevant to their particular management needs. Figure 1 shows the six general categories and the specific indicators included in this atlas; for each category, indicators are listed in the order they appear in the atlas.

The maps in this atlas are based on county-level data wherever possible. County-level data have several advantages. Good quality data are available at this scale, are consistently collected at regular intervals, and are comparable across all U.S. counties. Also, counties are stable geographic units for monitoring trends, as little change in county boundaries occurs over time.

Finally, as administrative and political units, counties significantly influence environmental change and can be important partners in park and trail management.

Technical Notes

Appendix 1 provides the data sources for the indicators presented in this atlas. Appendix 2 provides technical information on the design of the maps. Appendix 3 includes endnotes and text that provide additional information on the measurement of selected indicators.

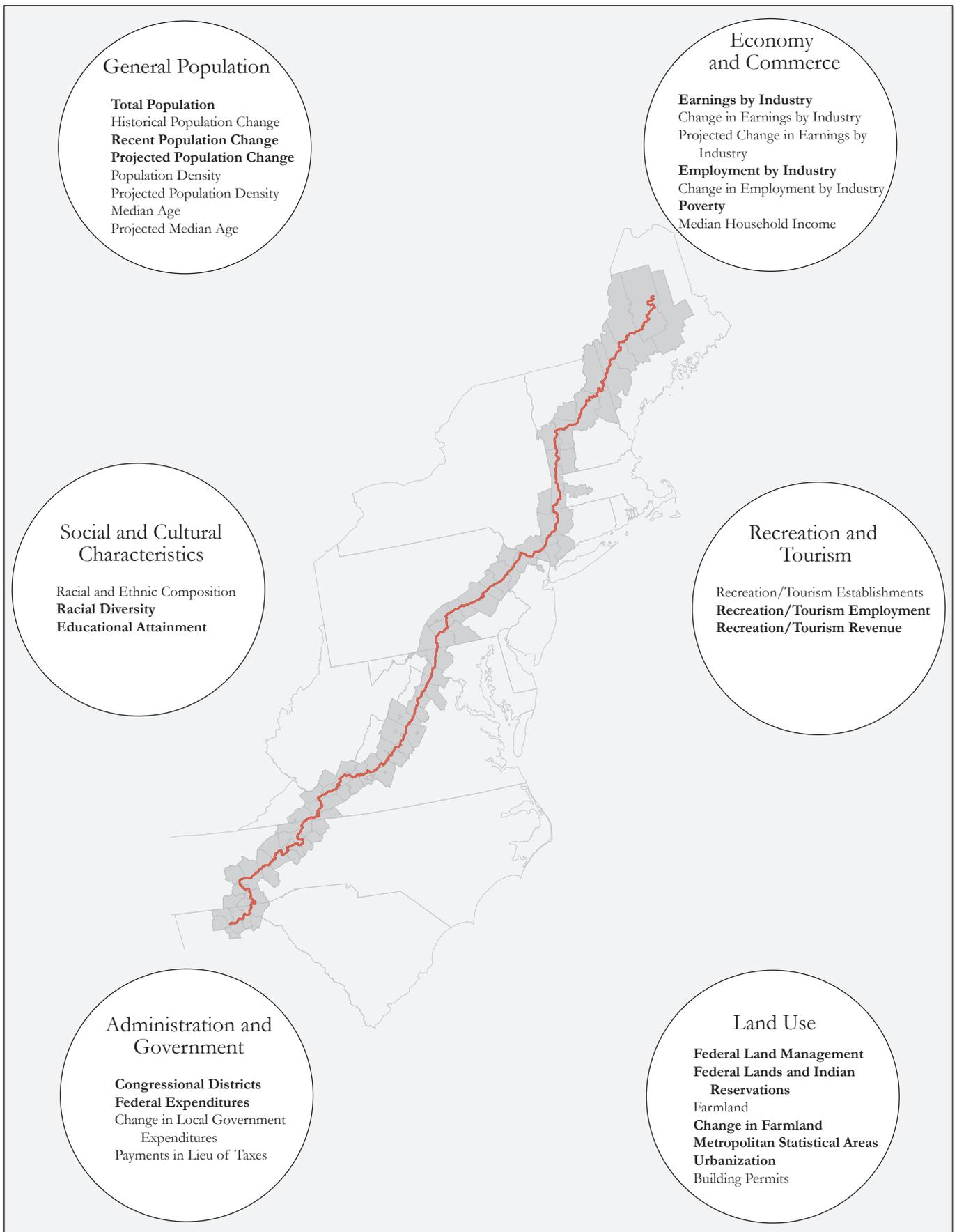


Figure 1. Indicators Included in this Atlas

core indicator additional indicator

The Region

Appalachian National Scenic Trail (AT) staff were asked to define the geographic area that has the most significant impact on the AT's management. This area is the "region of interest" covered by this atlas. Because the atlas relies on county-level socioeconomic data, the region of interest was restricted to entire counties. The region selected includes 102 counties, 11 independent cities, and 14 states. The map on the facing page depicts the region in its larger context.

The AT runs 2,175 miles from Katahdin in Maine to Springer Mountain in Georgia. Designated by Congress in 1968, it was the first National Scenic Trail. The corridor encompassing the trail averages about 1,000 feet wide through a combination of publicly owned and easement lands. There are over 2,000 instances of rare, threatened, endangered and sensitive plant and animal species in this corridor. It crosses eight national forests (NF), six units of the NPS, one National Wildlife Refuge (NWR), and numerous other state and local parks, forests and wildlife areas. Over 5,500 volunteers every year help to maintain the trail in coordination with the NPS, the U.S. Forest Service, the U.S. Fish and Wildlife Service, the Appalachian Trail Conservancy and over 30 volunteer clubs from Maine to Georgia.

Ecologically, the region is quite diverse. Ecoregion provinces range from the Laurentian Mixed Forest Province in the northeast, the Eastern Broadleaf Forest (Oceanic) Province in the central area, the Southeastern Mixed Forest Province in the south central portion, and the Central Appalachian Broadleaf Forest-Coniferous Forest-Meadow Province in the south.

The climate in the north is Humid continental, characterized by variable weather conditions with warm summer months and cold winters. In the south, the Humid subtropical climate is characterized by hot, humid summers and cool, mild winters. Average annual precipitation ranges from 35 to 110 inches, with higher amounts generally occurring in higher elevations.

Elevation ranges from a low of 124 feet in Harriman-Bear Mountain State Park (NY) to a high of 6,625 feet at Clingman's Dome in Great Smoky Mountains National Park (NC).

The population distribution in the region is diverse, ranging from numerous high density metropolitan areas, to rural areas with extremely low population density. Large urban areas such as New York, NY; Boston, MA; Philadelphia, PA; Washington, DC; and Atlanta, GA are major influences in the region.

The region has an extremely rich history. Before the arrival of European settlers, the region was the home to much of the Iroquois confederacy and many other American Indian tribes. The Iroquois confederacy consisted of the Mohawk, the Oneida, the Onondaga, the Cayuga, the Seneca and the Tuscarora. There are presently over 20 federally-recognized tribes in the region including the Cherokee, Chippewa, Micmac, Mohegan and Narragansett.

Tourism is a major contributor to the economy throughout the entire region. An estimated 4,000,000 people per year access portions of the trail.

The trail's region can be divided into five sections. The Northern New England section in the north contains the White Mountains, the Mahoosuc Range, and the "Hundred Miles" stretch of the trail. The Southern New England section contains the Green Mountains and the Berkshires. The mid section is the Mid-Atlantic, with the Hudson Highlands and the Blue Ridge Mountains. The Virginias section contains the Blue Ridge and the Great Valley of the Appalachians. The southernmost section is the Southern Appalachians, with the Smoky Mountains.

The six national parks traversed by the trail are: Delaware Water Gap National Recreation Area, Chesapeake and Ohio Canal National Historical Park, Harpers Ferry National Historical Park, Shenandoah National Park, Blue Ridge Parkway, and Great Smoky Mountains National Park. The eight NF units intersecting the trail are: White Mountain NF, Green Mountain NF, George Washington NF, Jefferson NF, Cherokee NF, Pisgah NF, Nantahala NF and Chattahoochee NF. The NWR is the Walkkill River NWR.

Appalachian National Scenic Trail and its Region



Using the Socioeconomic Indicators and Maps

The socioeconomic indicators for the Appalachian National Scenic Trail region of interest are presented in a series of maps. The best available county-level data are presented for each indicator. The following information is provided for each indicator:

- a brief description of the socioeconomic indicator and an observation about the spatial variation in the data as displayed on the map.
- a table that shows the data and relative rank for each county. The median value is highlighted in bold. The table allows the reader to look up and compare specific indicator values for each county. National data are included for comparison with county data.
- a map legend describing how the indicator is measured, the year that the data were gathered, and the range of values for each quintile grouping.
- the name of the general category to which this particular indicator belongs (such as general population or land use). Maps in the same general category share similar sets of color symbols.

Land Use

Appalachian National Scenic Trail and Region

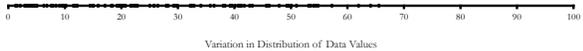
Farmland

The relative importance of farming within a county can be indicated by the percentage of the county's total land area that is classified as farmland. Farming includes crop cultivation as well as pasturing and grazing of livestock. Because damaged or degraded natural resources present a long-term threat to the health and profitability of farming, farm operators are potentially key partners in local and regional resource protection issues.

Trail management can require close coordination with area farmers on many issues, such as control of non-native species, species reintroduction, preservation of scenic values, allocation of scarce water supplies, or management of agricultural runoff.

Within the Appalachian National Scenic Trail region, the percentage of total county land area classified as farmland (2002) ranges from 1.3% (Passaic, NY) to 65.6% (Clarke, VA).²⁰

% land classified as farmland (2002)	County	Value	County	Value	County	Value
	Fannin, GA	6.3	Habersham, GA	21.7	Rockbridge, VA	41.0
	Macon, NC	6.8	Dutchess, NY	21.9	Bland, VA	41.1
	Cherokee, NC	7.6	Schuylkill, PA	22.3	Lehigh, PA	41.1
	Rockland, NY	-	Unioncoi, TN	7.8	Sussex, NJ	22.6
	Bedford, VA (city)	-	Grafton, NH	7.8	Craig, VA	22.8
	Bristol, VA (city)	-	Carbon, PA	7.9	Orange, VT	25.0
	Buena Vista, VA (city)	-	Monroe, PA	8.5	Johnson, TN	25.7
	Charlottesville, VA (city)	-	Gilmer, GA	9.0	Watauga, NC	25.8
	Harrisonburg, VA (city)	-	Bennington, VT	9.5	Cocke, TN	26.4
	Lexington, VA (city)	-	Clay, NC	9.8	Botetourt, VA	27.9
	Radford, VA (city)	-	Towns, GA	10.2	Nelson, VA	28.0
	Roanoke, VA (city)	-	Berkshire, MA	11.5	Dauphin, PA	28.3
	Salem, VA (city)	-	Lumpkin, GA	11.7	Madison, NC	29.3
	Staunton, VA (city)	-	Union, GA	12.0	Blount, TN	29.4
	Waynesboro, VA (city)	-	Windham, VT	12.2	Columbia, NY	29.4
	Passaic, NJ	1.3	Windsor, VT	14.5	Giles, VA	29.9
	Piscataquis, ME	1.6	Hampshire, MA	15.0	Page, VA	32.2
	Swain, NC	2.1	Dawson, GA	15.0	Northampton, PA	32.4
	Pike, PA	2.9	Litchfield, CT	15.9	Greene, VA	32.4
	Fairfield, CT	3.2	Carter, TN	17.1	Amherst, VA	32.8
	Westchester, NY	3.6	Haywood, NC	18.2	Warren, NJ	34.1
	Coos, NH	3.8	Mitchell, NC	18.4	Warren, VA	35.7
	Rabun, GA	4.2	Roanoke, VA	19.2	Perry, PA	36.4
	Graham, NC	4.3	Yancey, NC	19.4	Sullivan, TN	38.0
	Somerset, ME	4.4	Avery, NC	19.4	Albemarle, VA	38.3
	Putnam, NY	4.5	White, GA	19.6	Berks, PA	39.2
	Franklin, ME	4.6	Sevier, TN	19.9	Pulaski, VA	39.4
	Penobscot, ME	4.9	Rutland, VT	20.3	Ash, NC	39.6
	Carroll, NH	5.0	Orange, NY	20.7	Montgomery, VA	40.1
	Oxford, ME	5.1	Mercer, WV	20.7	Cumberland, PA	40.7
					United States	41.4

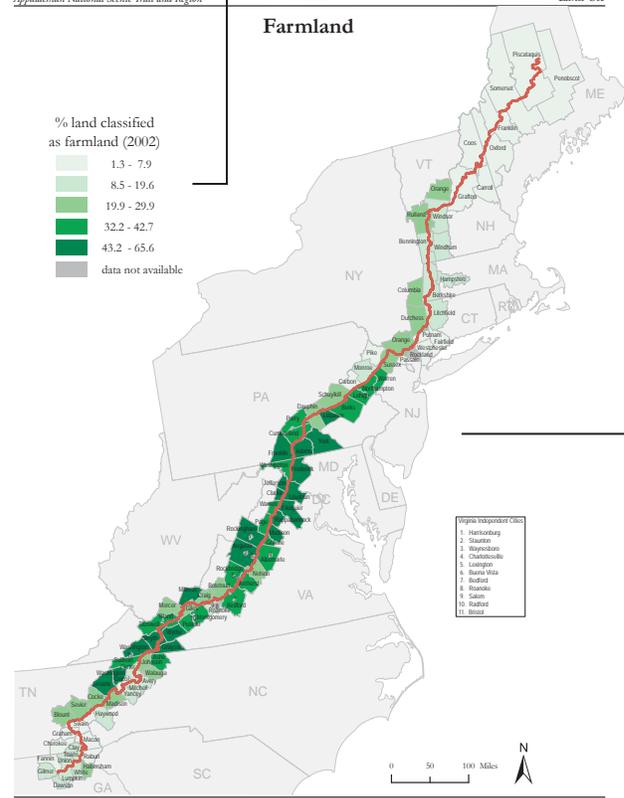
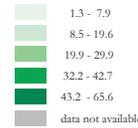


Appalachian National Scenic Trail and Region

Land Use

Farmland

% land classified as farmland (2002)



- a number line that shows the distribution of values for the indicator, useful in understanding patterns in the data.
- a map that displays general patterns inherent in the data. For most indicators, counties are grouped into five classes that correspond to five sub-ranges of data values. These groups are called quintiles. The highest-ranked quintile receives the darkest shading. For more information on quintile classification, see Appendix 2, page 95.

The Socioeconomic Indicators



Total Population

Population size is one of the most important influences on the character of human activities in a place and a key influence on resource use. People bring labor, knowledge, and economic activity to a place. At the same time, they generate demand for natural resources, goods, and services ranging from food to recreational opportunities.

Within the Appalachian National Scenic Trail region, population (2005) ranges from 5,154 (Craig, VA) to 940,807 (Westchester, NY).¹

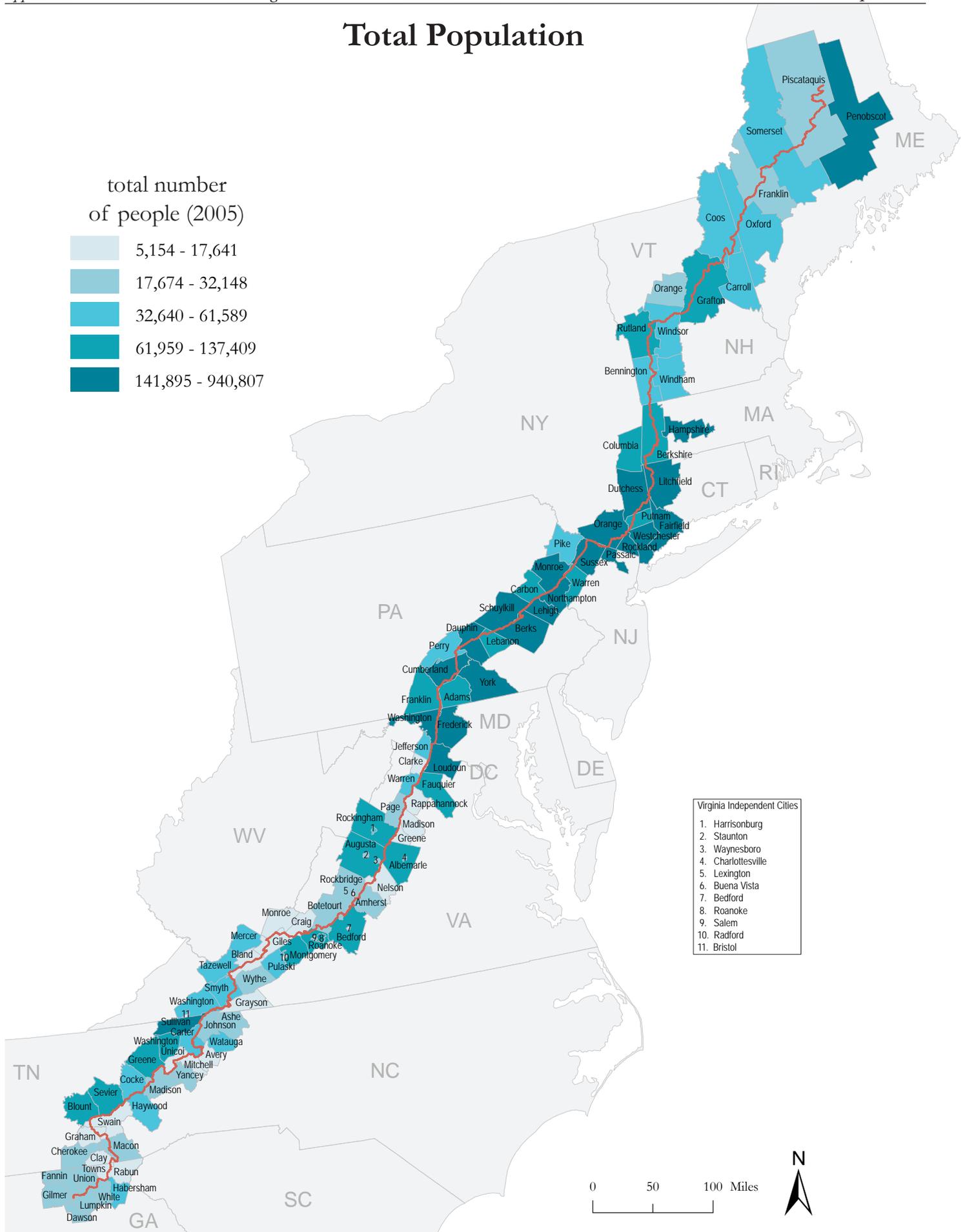
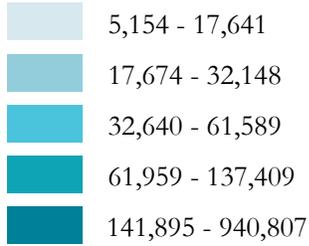
total number of people (2005)							
	Union, GA	19,782	Perry, PA	44,728	Blount, TN	115,535	
	Madison, NC	20,256	Tazewell, VA	44,795	Lebanon, PA	125,578	
	Rockbridge, VA	21,242	Carroll, NH	47,439	Berkshire, MA	131,868	
Craig, VA	5,154	Waynesboro, VA (city)	21,269	Jefferson, WV	49,206	Franklin, PA	137,409
Bedford, VA (city)	6,211	Fannin, GA	21,887	Somerset, ME	51,667	Washington, MD	141,895
Buena Vista, VA (city)	6,437	Staunton, VA (city)	23,337	Washington, VA	52,085	Penobscot, ME	147,068
Lexington, VA (city)	6,776	Page, VA	23,831	Pike, PA	56,337	Schuylkill, PA	147,447
Bland, VA	6,943	White, GA	24,055	Haywood, NC	56,482	Sullivan, TN	152,716
Rappahannock, VA	7,271	Lumpkin, GA	24,324	Oxford, ME	56,628	Sussex, NJ	153,130
Graham, NC	8,085	Salem, VA (city)	24,654	Windsor, VT	58,028	Hampshire, MA	153,339
Clay, NC	9,765	Ashe, NC	25,347	Carter, TN	58,865	Monroe, PA	163,234
Towns, GA	10,315	Cherokee, NC	25,796	Mercer, WV	61,589	Litchfield, CT	190,071
Swain, NC	13,167	Gilmer, GA	27,335	Carbon, PA	61,959	Frederick, MD	220,701
Madison, VA	13,398	Wythe, VA	28,421	Columbia, NY	63,622	Cumberland, PA	223,089
Monroe, WV	13,507	Orange, VT	29,287	Rutland, VT	63,743	Dauphin, PA	253,995
Clarke, VA	14,205	Franklin, ME	29,704	Fauquier, VA	64,997	Loudoun, VA	255,518
Radford, VA (city)	14,575	Botetourt, VA	32,027	Bedford, VA	65,286	Northampton, PA	287,767
Nelson, VA	15,101	Amherst, VA	32,134	Greene, TN	65,318	Rockland, NY	292,916
Mitchell, NC	15,784	Macon, NC	32,148	Augusta, VA	69,725	Dutchess, NY	294,849
Rabun, GA	16,087	Smyth, VA	32,640	Rockingham, VA	71,251	Lehigh, PA	330,433
Grayson, VA	16,366	Coos, NH	33,655	Sevier, TN	79,282	Orange, NY	372,893
Giles, VA	17,098	Cocke, TN	34,929	Montgomery, VA	84,303	Berks, PA	396,314
Bristol, VA (city)	17,335	Pulaski, VA	35,081	Grafton, NH	84,708	York, PA	408,801
Greene, VA	17,418	Warren, VA	35,556	Roanoke, VA (city)	88,172	Passaic, NJ	499,060
Unicoi, TN	17,572	Bennington, VT	36,999	Albemarle, VA	90,717	Fairfield, CT	902,775
Avery, NC	17,641	Habersham, GA	39,603	Roanoke, VA	92,631	Westchester, NY	940,807
Piscataquis, ME	17,674	Charlottesville, VA (city)	40,437	Adams, PA	99,749		
Johnson, TN	18,116	Harrisonburg, VA (city)	40,438	Putnam, NY	100,507		
Yancey, NC	18,201	Watauga, NC	42,472	Warren, NJ	110,376		
Dawson, GA	19,731	Windham, VT	44,143	Washington, TN	112,507	United States	296,410,404



Variation in Distribution of Data Values

Total Population

total number of people (2005)



Historical Population Change

Population change is due to births, deaths, and migration. Trends in historical population change (1985 - 2005) provide a context from which to view recent population change (1995 - 2005). The direction and rate of population change are important socioeconomic trends. For example, population growth increases the size of the economy and can generate changes in land use that affect natural ecosystems.

Within the Appalachian National Scenic Trail region, county growth rates (1985 - 2005) ranged from a decrease of 13.4% (Mercer, WV) to an increase of 280.1% (Loudoun, VA).

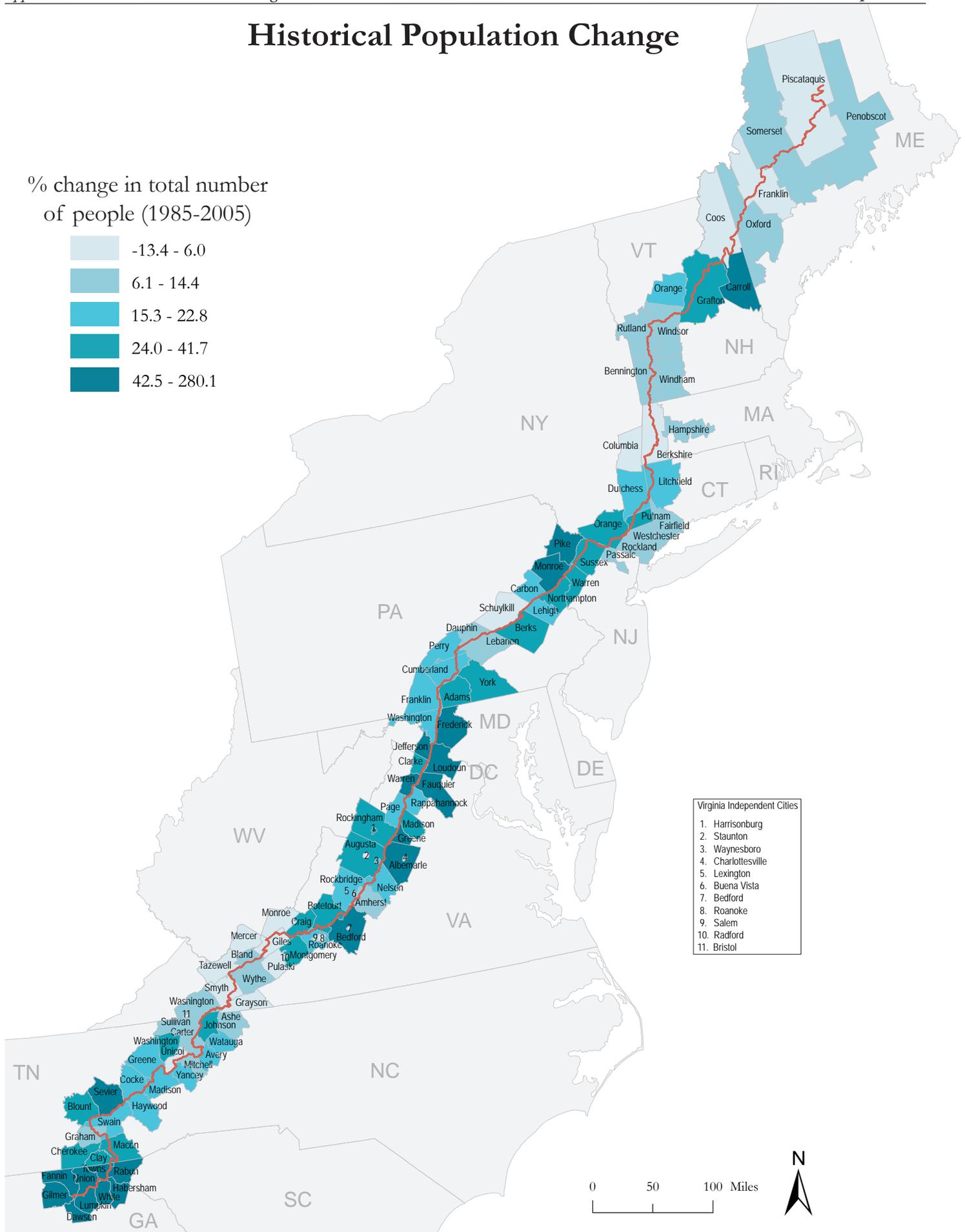
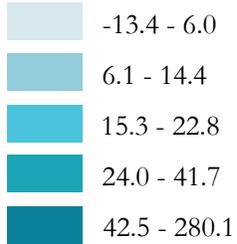
% change in total number of people (1985 - 2005)		Westchester, NY 7.8		Lehigh, PA 18.9		Adams, PA 40.4	
		Bland, VA 7.8		Madison, NC 18.9		Augusta, VA 41.1	
		Dauphin, PA 8.7		Perry, PA 18.9		Macon, NC 41.3	
Mercer, WV	-13.4	Fairfield, CT 8.7		Haywood, NC 19.3		Blount, TN 41.7	
Tazewell, VA	-8.7	Passaic, NJ 8.7		Cocke, TN 19.4		Fannin, GA 42.5	
Bristol, VA (city)	-7.7	Hampshire, MA 8.8		Avery, NC 19.8		Rabun, GA 47.1	
Berkshire, MA	-6.4	Mitchell, NC 9.6		Cumberland, PA 20.5		Albemarle, VA 48.2	
Roanoke, VA (city)	-6.4	Somerset, ME 10.5		Nelson, VA 20.6	Harrisonburg, VA (city) 50.6		
Schuylkill, PA	-5.1	Rockland, NY 10.8		Watauga, NC 21.1	Habersham, GA 51.3		
Staunton, VA (city)	-3.0	Windsor, VT 11.1		Swain, NC 21.4	Jefferson, WV 52.1		
Piscataquis, ME	-1.5	Graham, NC 11.2		Washington, MD 22.7	Warren, VA 57.1		
Coos, NH	-1.2	Ashe, NC 11.6		Orange, VT 22.8	Fauquier, VA 59.3		
Lexington, VA (city)	-0.8	Amherst, VA 11.9		Washington, TN 24.0	Carroll, NH 60.9		
Grayson, VA	-0.8	Wythe, VA 12.4		Madison, VA 24.1	Towns, GA 64.9		
Smyth, VA	-0.5	Windham, VT 13.3		Berks, PA 24.6	Bedford, VA 66.4		
Buena Vista, VA (city)	-0.5	Carter, TN 13.4		Grafton, NH 25.0	Sevier, TN 70.6		
Giles, VA	-0.5	Lebanon, PA 13.8		Northampton, PA 25.0	Frederick, MD 71.7		
Pulaski, VA	-0.4	Washington, VA 13.9		Craig, VA 25.1	Union, GA 91.8		
Radford, VA (city)	0.1	Oxford, ME 14.4		Sussex, NJ 25.2	Greene, VA 98.2		
Charlottesville, VA (city)	0.4	Carbon, PA 15.3		Montgomery, VA 25.3	Lumpkin, GA 99.0		
Bedford, VA (city)	3.2	Waynesboro, VA (city) 15.9		Putnam, NY 25.7	White, GA 109.4		
Salem, VA (city)	3.2	Greene, TN 16.4		York, PA 27.7	Monroe, PA 116.9		
Columbia, NY	3.8	Dutchess, NY 16.8		Warren, NJ 27.8	Gilmer, GA 129.8		
Unicoi, TN	4.4	Roanoke, VA 16.9		Johnson, TN 28.9	Pike, PA 185.9		
Monroe, WV	5.6	Litchfield, CT 17.0		Clarke, VA 30.0	Dawson, GA 190.9		
Franklin, ME	6.0	Rappahannock, VA 17.5		Cherokee, NC 31.1	Loudoun, VA 280.1		
Penobscot, ME	6.1	Franklin, PA 17.6		Rockingham, VA 33.0			
Sullivan, TN	6.1	Rockbridge, VA 18.5		Orange, NY 33.4			
Bennington, VT	6.2	Yancey, NC 18.6		Botetourt, VA 34.5			
Rutland, VT	7.6	Page, VA 18.7		Clay, NC 39.4			
					United States 24.6		



Variation in Distribution of Data Values

Historical Population Change

% change in total number of people (1985-2005)



- Virginia Independent Cities
1. Harrisonburg
 2. Staunton
 3. Waynesboro
 4. Charlottesville
 5. Lexington
 6. Buena Vista
 7. Bedford
 8. Roanoke
 9. Salem
 10. Radford
 11. Bristol

Recent Population Change

Measuring recent population change provides an indication of the extent to which population change is influencing current local or regional priorities. For example, population growth changes the tax base, adds new voters, and can increase demand for services ranging from schools to transportation to outdoor recreation.

Within the Appalachian National Scenic Trail region, recent change in county population (1995 - 2005) ranges from a decrease of 7.2% (Radford, VA) to an increase of 118.6% (Loudon, VA).

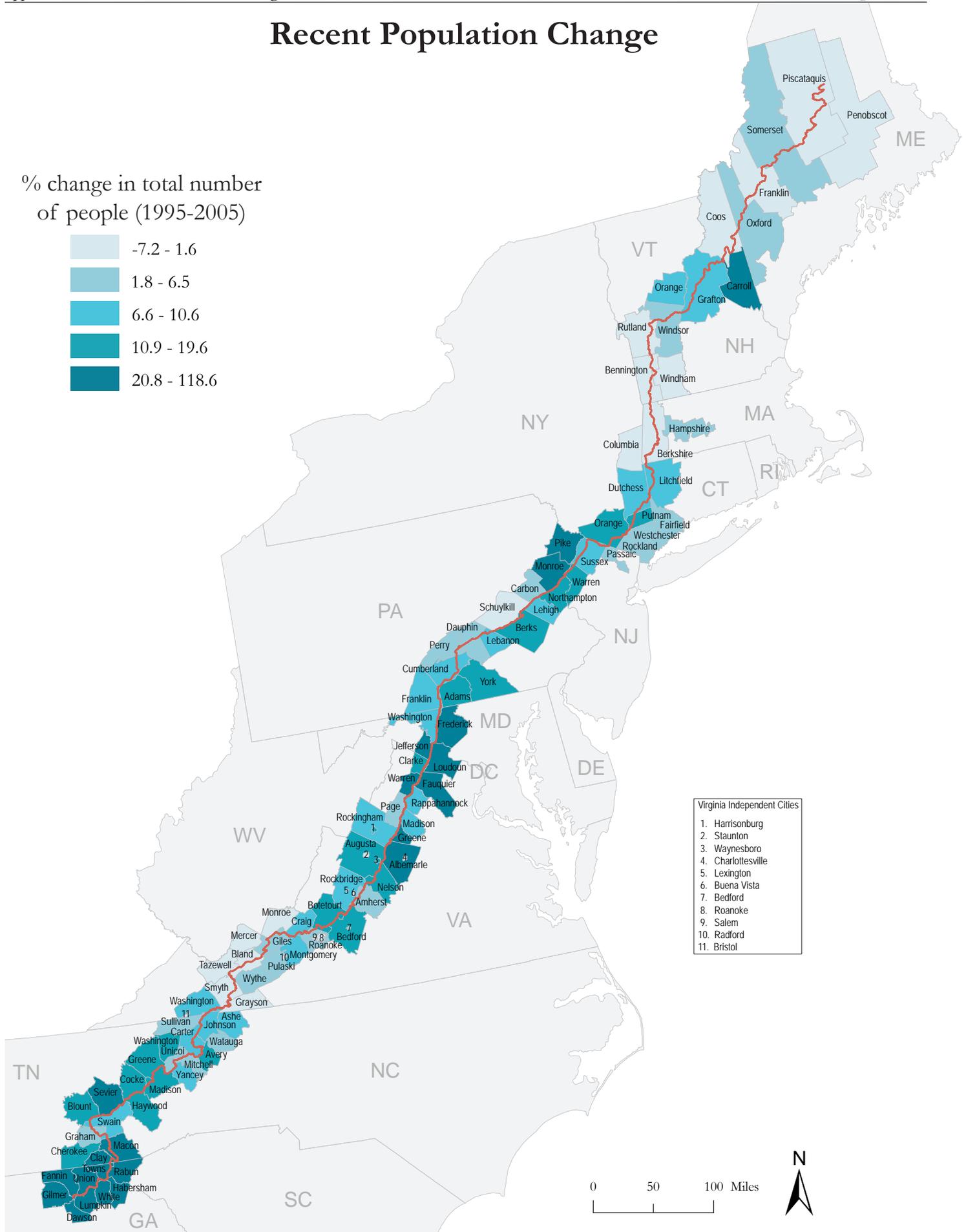
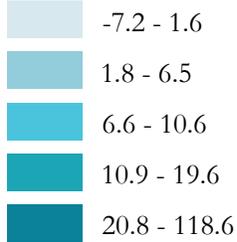
% change in total number of people (1995-2005)		Hampshire, MA 1.9		Ashe, NC 8.6		Adams, PA 17.3	
		Dauphin, PA 2.2		Franklin, PA 8.6		Cherokee, NC 17.4	
		Somerset, ME 2.8		Johnson, TN 8.9		Blount, TN 18.3	
Radford, VA (city) -7.2		Unicoi, TN 3.1		Lehigh, PA 9.1		Bedford, VA 19.6	
Bristol, VA (city) -5.5		Passaic, NJ 4.0		Rockbridge, VA 9.5		Warren, VA 20.8	
Roanoke, VA (city) -5.1		Perry, PA 4.1		Swain, NC 9.6		Albemarle, VA 21.3	
Staunton, VA (city) -4.7		Windsor, VT 4.1		Yancey, NC 9.8		Rabun, GA 21.6	
Schuylkill, PA -4.6		Giles, VA 4.1		Madison, VA 10.0		Carroll, NH 21.8	
Mercer, WV -4.3		Mitchell, NC 4.7		Rockingham, VA 10.0		Macon, NC 22.2	
Grayson, VA -4.0		Watauga, NC 4.7		Washington, MD 10.2		Clay, NC 23.8	
Berkshire, MA -3.7		Westchester, NY 4.8		Sussex, NJ 10.5		Fannin, GA 24.0	
Charlottesville, VA (city) -3.5		Graham, NC 4.9		Dutchess, NY 10.6		Jefferson, WV 25.4	
Tazewell, VA -3.1		Page, VA 5.3		Cocke, TN 10.9		Frederick, MD 25.5	
Lexington, VA (city) -2.8		Carbon, PA 5.7		Berks, PA 11.0		Habersham, GA 25.9	
Smyth, VA -2.0		Amherst, VA 5.7		Northampton, PA 11.0		Fauquier, VA 28.9	
Piscataquis, ME -1.6		Rockland, NY 5.9		Madison, NC 11.3		Sevier, TN 29.5	
Buena Vista, VA (city) -0.7		Oxford, ME 6.1		Putnam, NY 11.7		Towns, GA 32.1	
Coos, NH -0.4		Wythe, VA 6.2		York, PA 11.7		Greene, VA 36.7	
Monroe, WV -0.4		Roanoke, VA 6.4		Haywood, NC 11.8		Monroe, PA 37.1	
Columbia, NY -0.3		Fairfield, CT 6.5		Greene, TN 11.8		Union, GA 38.7	
Penobscot, ME 0.9		Litchfield, CT 6.6		Washington, TN 12.2		Lumpkin, GA 42.3	
Bennington, VT 0.9		Lebanon, PA 6.6		Avery, NC 12.6		Pike, PA 46.3	
Franklin, ME 1.0		Craig, VA 6.6		Waynesboro, VA (city) 12.8		White, GA 51.2	
Bland, VA 1.1		Washington, VA 6.8		Nelson, VA 13.1		Gilmer, GA 59.0	
Rutland, VT 1.3		Montgomery, VA 6.9		Warren, NJ 13.8		Dawson, GA 66.0	
Windham, VT 1.6		Orange, VT 7.2		Harrisonburg, VA (city) 14.7		Loudoun, VA 118.6	
Salem, VA (city) 1.6		Grafton, NH 7.3		Botetourt, VA 15.0			
Sullivan, TN 1.8		Cumberland, PA 7.6		Orange, NY 15.3			
Pulaski, VA 1.8		Rappahannock, VA 7.8		Augusta, VA 15.5			
Bedford, VA (city) 1.8		Carter, TN 8.4		Clarke, VA 16.0		United States 12.0	



Variation in Distribution of Data Values

Recent Population Change

% change in total number of people (1995-2005)

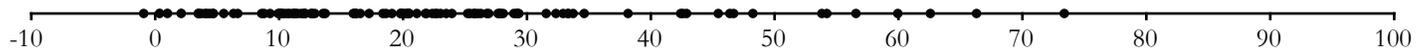


Projected Population Change

Population projections can be made with some accuracy for short and mid-range time spans. Projections can help planners anticipate potential impacts on trail resources. For example, population growth can generate changes in land use and transportation, growth of new and existing communities, and increases in the demand for trail experiences.

Within the Appalachian National Scenic Trail region, the projected change in county population by the year 2025 ranges from a decrease of 0.9% (Schuylkill, PA) to an increase of 73.4% (Loudoun, VA).²

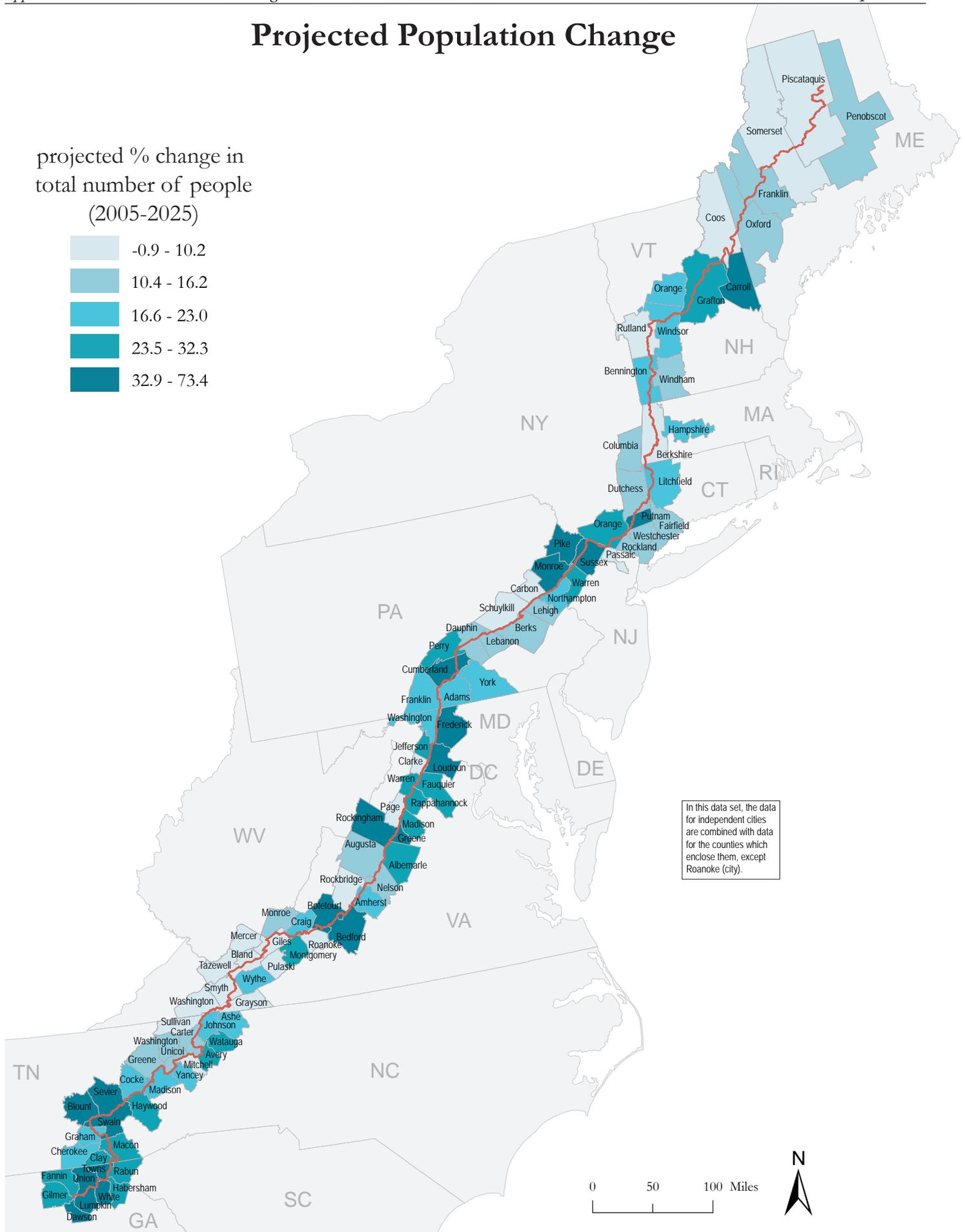
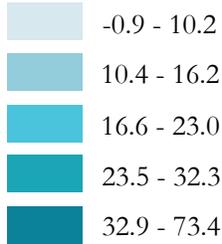
projected % change in total number of people (2005 - 2025)					
Schuylkill, PA	-0.9	Berks, PA	11.3	Ashe, NC	21.8
Roanoke, VA (city)	0.2	Fairfield, CT	11.5	Hampshire, MA	21.9
Smyth, VA	0.8	Unicoi, TN	11.8	Yancey, NC	22.4
Pulaski, VA	1.9	Augusta, VA	12.0	Cherokee, NC	22.6
Piscataquis, ME	3.5	Lebanon, PA	12.0	Madison, NC	22.7
Page, VA	3.5	Penobscot, ME	12.1	Adams, PA	23.0
Clarke, VA	3.7	Monroe, WV	12.6	Jefferson, WV	23.5
Grayson, VA	4.0	Lehigh, PA	12.7	Clay, NC	24.0
Mercer, WV	4.2	Carter, TN	12.9	Orange, NY	25.2
Berkshire, MA	4.4	Franklin, ME	13.5	Perry, PA	25.4
Washington, VA	4.7	Oxford, ME	13.7	Madison, VA	25.8
Coos, NH	4.7	Washington, TN	16.0	Grafton, NH	25.8
Tazewell, VA	5.5	Windham, VT	16.1	Warren, NJ	26.0
Giles, VA	6.3	Dutchess, NY	16.2	Montgomery, VA	26.3
Sullivan, TN	6.7	Rockland, NY	16.2	Avery, NC	26.8
Rutland, VT	8.6	Amherst, VA	16.6	Haywood, NC	26.9
Somerset, ME	8.8	Washington, MD	17.3	Rabun, GA	27.7
Carbon, PA	9.3	Graham, NC	18.4	Habersham, GA	27.8
Bland, VA	9.9	Roanoke, VA	18.4	Rappahannock, VA	27.9
Mitchell, NC	10.0	Franklin, PA	18.6	Warren, VA	28.1
Passaic, NJ	10.1	Litchfield, CT	19.1	Fauquier, VA	29.0
Rockbridge, VA	10.2	Wythe, VA	19.8	Fannin, GA	29.2
Columbia, NY	10.4	Bennington, VT	19.8	Gilmer, GA	29.2
Greene, TN	10.7	Windsor, VT	19.9	Macon, NC	29.3
Nelson, VA	10.9	Northampton, PA	20.1	Watauga, NC	31.6
Westchester, NY	11.1	Craig, VA	20.3	Albemarle, VA	32.3
Dauphin, PA	11.2	York, PA	20.4	Greene, VA	32.9
		Orange, VT	20.5	Sussex, NJ	33.3
		Johnson, TN	20.5	Swain, NC	33.3
		Cocke, TN	21.1	Carroll, NH	33.7
				United States	21.5



Variation in Distribution of Data Values

Projected Population Change

projected % change in total number of people (2005-2025)



Population Density

Population density is a measure of population in terms of persons per square mile. Higher concentrations of people tend to support more business activities and can generate greater demand for public goods ranging from roads to open space. Thus, monitoring differences in population density can be an important way to detect potential stresses and impacts on natural resources in the trail region.

Within the Appalachian National Scenic Trail region, county population density (2005) ranges from 4.5 people per square mile (Piscataquis, ME) to 3,941.2 people per square mile (Charlottesville, VA).³

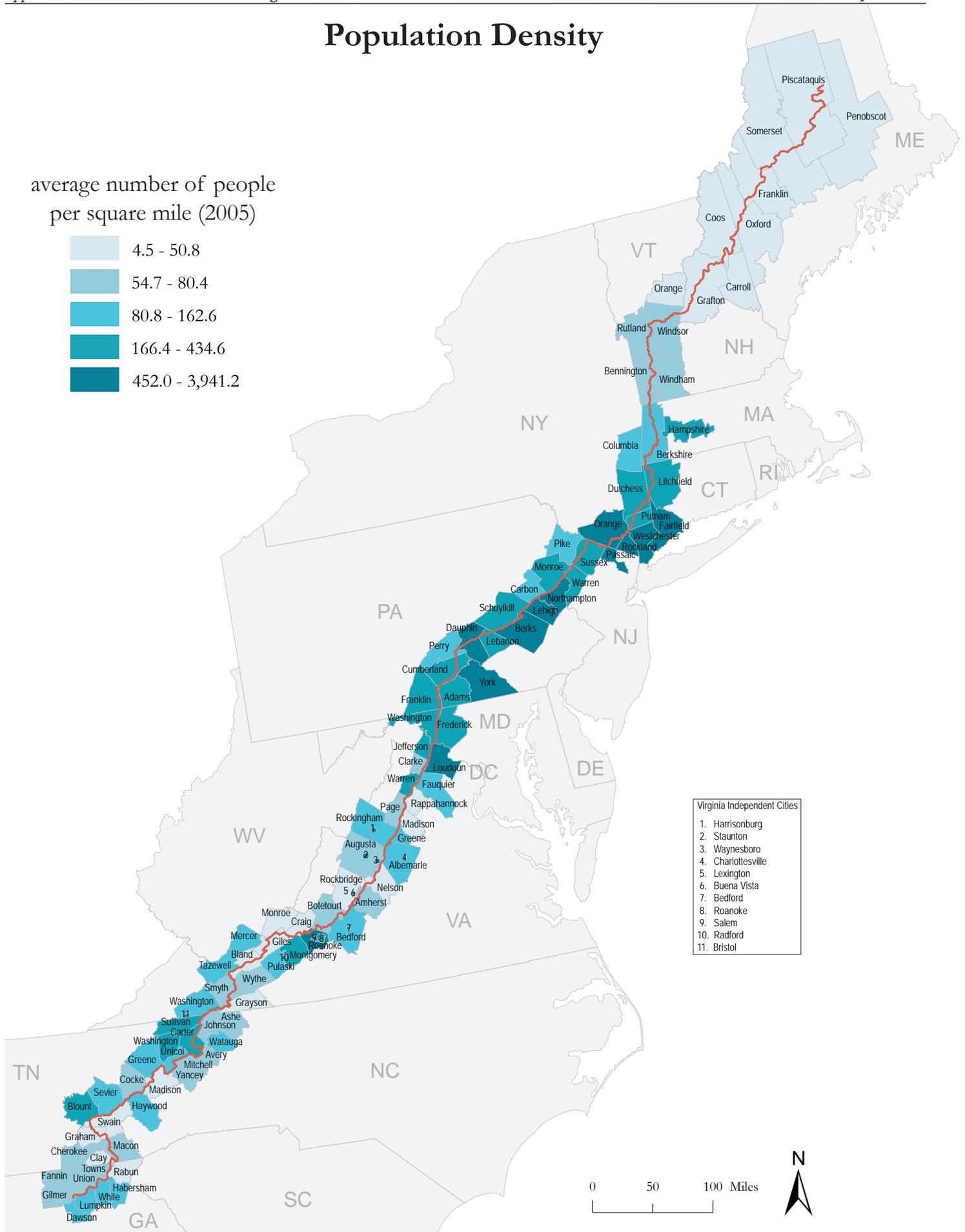
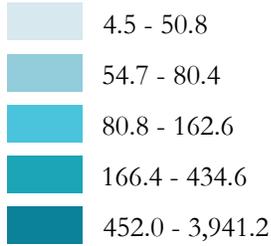
average number of people per square mile (2005)							
		Yancey, NC	58.3	Haywood, NC	102.0	Roanoke, VA (city)	369.2
		Botetourt, VA	59.0	Pike, PA	103.0	Sullivan, TN	369.8
		Ashe, NC	59.5	Greene, TN	105.1	Cumberland, PA	405.5
Piscataquis, ME	4.5	Windsor, VT	59.8	Pulaski, VA	109.4	Putnam, NY	434.6
Somerset, ME	13.2	Johnson, TN	60.7	Greene, VA	111.2	York, PA	452.0
Craig, VA	15.6	Union, GA	61.3	Albemarle, VA	125.5	Orange, NY	456.8
Franklin, ME	17.5	Wythe, VA	61.4	Sevier, TN	133.9	Berks, PA	461.4
Coos, NH	18.7	Towns, GA	61.9	Watauga, NC	135.9	Dauphin, PA	483.5
Bland, VA	19.4	Macon, NC	62.2	Berkshire, MA	141.6	Loudoun, VA	491.5
Swain, NC	24.9	Gilmer, GA	64.1	Habersham, GA	142.4	Northampton, PA	769.8
Oxford, ME	27.3	Amherst, VA	67.6	Mercer, WV	146.5	Bedford, VA (city)	901.5
Rappahannock, VA	27.3	Rutland, VT	68.4	Carbon, PA	162.6	Buena Vista, VA (city)	942.5
Graham, NC	27.7	Mitchell, NC	71.3	Warren, VA	166.4	Lehigh, PA	953.2
Monroe, WV	28.5	Avery, NC	71.4	Carter, TN	172.6	Staunton, VA (city)	1,184.0
Nelson, VA	32.0	Augusta, VA	71.9	Franklin, PA	178.0	Bristol, VA (city)	1,343.8
Rockbridge, VA	35.4	Smyth, VA	72.2	Schuylkill, PA	189.4	Waynesboro, VA (city)	1,384.7
Grayson, VA	37.0	Page, VA	76.6	Adams, PA	191.8	Fairfield, CT	1,442.6
Madison, VA	41.7	Cocke, TN	80.4	Litchfield, CT	206.6	Radford, VA (city)	1,484.2
Orange, VT	42.5	Clarke, VA	80.4	Blount, TN	206.8	Rockland, NY	1,681.3
Penobscot, ME	43.3	Perry, PA	80.8	Montgomery, VA	217.2	Salem, VA (city)	1,689.8
Rabun, GA	43.4	Rockingham, VA	83.7	Jefferson, WV	234.8	Roanoke, VA	2,056.3
Madison, NC	45.1	Lumpkin, GA	85.5	Monroe, PA	268.3	Westchester, NY	2,173.7
Clay, NC	45.5	Tazewell, VA	86.2	Hampshire, MA	289.8	Harrisonburg, VA (city)	2,302.8
Giles, VA	47.8	Bedford, VA	86.5	Sussex, NJ	293.8	Passaic, NJ	2,693.4
Grafton, NH	49.4	Washington, VA	92.5	Warren, NJ	308.4	Lexington, VA (city)	2,721.3
Carroll, NH	50.8	Dawson, GA	93.5	Washington, MD	309.7	Charlottesville, VA (city)	3,941.2
Bennington, VT	54.7	Unicoi, TN	94.4	Frederick, MD	332.9		
Windham, VT	56.0	White, GA	99.6	Washington, TN	344.8		
Cherokee, NC	56.7	Fauquier, VA	100.0	Lebanon, PA	347.0		
Fannin, GA	56.7	Columbia, NY	100.1	Dutchess, NY	367.8	United States	83.8



Variation in Distribution of Data Values

Population Density

average number of people per square mile (2005)



- Virginia Independent Cities
1. Harrisonburg
 2. Staunton
 3. Waynesboro
 4. Charlottesville
 5. Lexington
 6. Buena Vista
 7. Bedford
 8. Roanoke
 9. Salem
 10. Radford
 11. Bristol

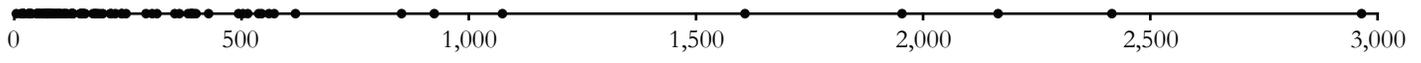


Projected Population Density

Population density projections are based on population projections. Future regional variations in county population density suggest variations in how counties will approach decisions about natural resource-related issues such as transportation, zoning, and water supply. Significantly increased population density can generate rising land costs as well as increased demand for open space to be used for recreation or conservation.

Within the Appalachian National Scenic Trail region, projected county population density for the year 2025 ranges from 4.6 people per square mile (Piscataquis, ME) to 2,964.7 people per square mile (Passaic, NJ).⁴

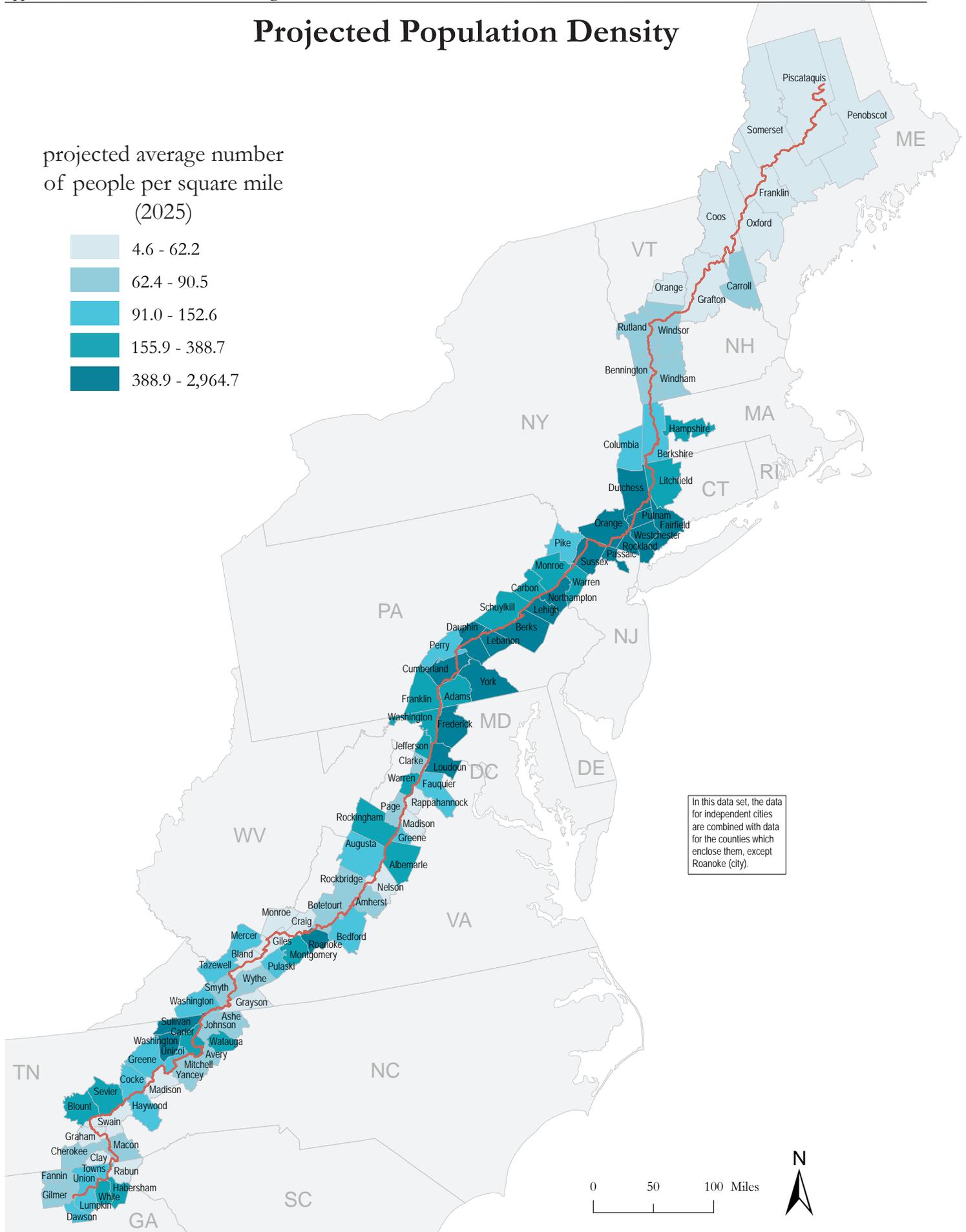
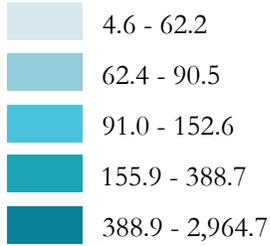
county	projected average number of people per square mile (2025)	county	projected average number of people per square mile (2025)	county	projected average number of people per square mile (2025)
Piscataquis, ME	4.6	Windsor, VT	71.7	Pike, PA	147.2
Somerset, ME	14.3	Ashe, NC	72.5	Berkshire, MA	147.8
Craig, VA	18.8	Smyth, VA	72.8	Greene, VA	147.9
Coos, NH	19.6	Johnson, TN	73.1	Dawson, GA	152.0
Franklin, ME	19.9	Fannin, GA	73.3	Mercer, WV	152.6
Bland, VA	21.3	Wythe, VA	73.5	White, GA	155.9
Oxford, ME	31.0	Rutland, VT	74.2	Rockbridge, VA	173.1
Monroe, WV	32.1	Mitchell, NC	78.4	Carbon, PA	177.7
Graham, NC	32.8	Amherst, VA	78.8	Watauga, NC	178.8
Swain, NC	33.2	Page, VA	79.3	Habersham, GA	182.0
Rappahannock, VA	34.9	Macon, NC	80.5	Schuykill, PA	187.7
Nelson, VA	35.4	Gilmer, GA	82.8	Carter, TN	194.8
Grayson, VA	38.5	Clarke, VA	83.4	Franklin, PA	211.2
Penobscot, ME	48.6	Botetourt, VA	85.8	Warren, VA	213.1
Giles, VA	50.9	Avery, NC	90.5	Sevier, TN	222.6
Orange, VT	51.3	Tazewell, VA	91.0	Adams, PA	236.0
Madison, VA	52.4	Towns, GA	95.2	Albemarle, VA	236.8
Madison, NC	55.3	Cocke, TN	97.4	Litchfield, CT	246.1
Rabun, GA	55.3	Union, GA	98.1	Jefferson, WV	290.0
Clay, NC	56.4	Perry, PA	101.3	Blount, TN	303.4
Grafton, NH	62.2	Unicoi, TN	105.5	Montgomery, VA	313.7
Roanoke, VA	62.4	Columbia, NY	110.5	Hampshire, MA	353.4
Windham, VT	65.0	Pulaski, VA	111.5	Washington, MD	363.2
Bennington, VT	65.6	Greene, TN	116.3	Monroe, PA	382.5
Carroll, NH	67.9	Lumpkin, GA	125.2	Warren, NJ	388.7
Cherokee, NC	69.5	Rockingham, VA	126.2	Lebanon, PA	388.9
Yancey, NC	71.3	Augusta, VA	127.4	Sussex, NJ	391.6
		Fauquier, VA	129.0	Sullivan, TN	394.4
		Haywood, NC	129.5	Washington, TN	399.9
		Bedford, VA	144.8	Dutchess, NY	427.4
				Frederick, MD	493.6
				Washington, VA	503.2
				Berks, PA	513.7
				Dauphin, PA	537.7
				York, PA	544.1
				Cumberland, PA	560.2
				Orange, NY	572.0
				Putnam, NY	618.9
				Loudoun, VA	852.1
				Northampton, PA	924.4
				Lehigh, PA	1,074.0
				Fairfield, CT	1,608.1
				Rockland, NY	1,953.7
				Roanoke, VA (city)	2,165.0
				Westchester, NY	2,415.5
				Passaic, NJ	2,964.7
				United States	101.8



Variation in Distribution of Data Values

Projected Population Density

projected average number of people per square mile (2025)



In this data set, the data for independent cities are combined with data for the counties which enclose them, except Roanoke (city).

Median Age

Median age expresses the age of a “typical” county resident for whom half the population is older and half is younger. Just as age is an important influence on individual behavior, the median age of a county’s population can influence its character in many ways. For example, a relatively young county population might place a higher priority on schools, while a relatively old county population might place a higher priority on health care.

Within the Appalachian National Scenic Trail region, the median age of the total population (2000) ranges from 22.9 (Harrisonburg, VA (city)) to 48.6 (Towns, GA).

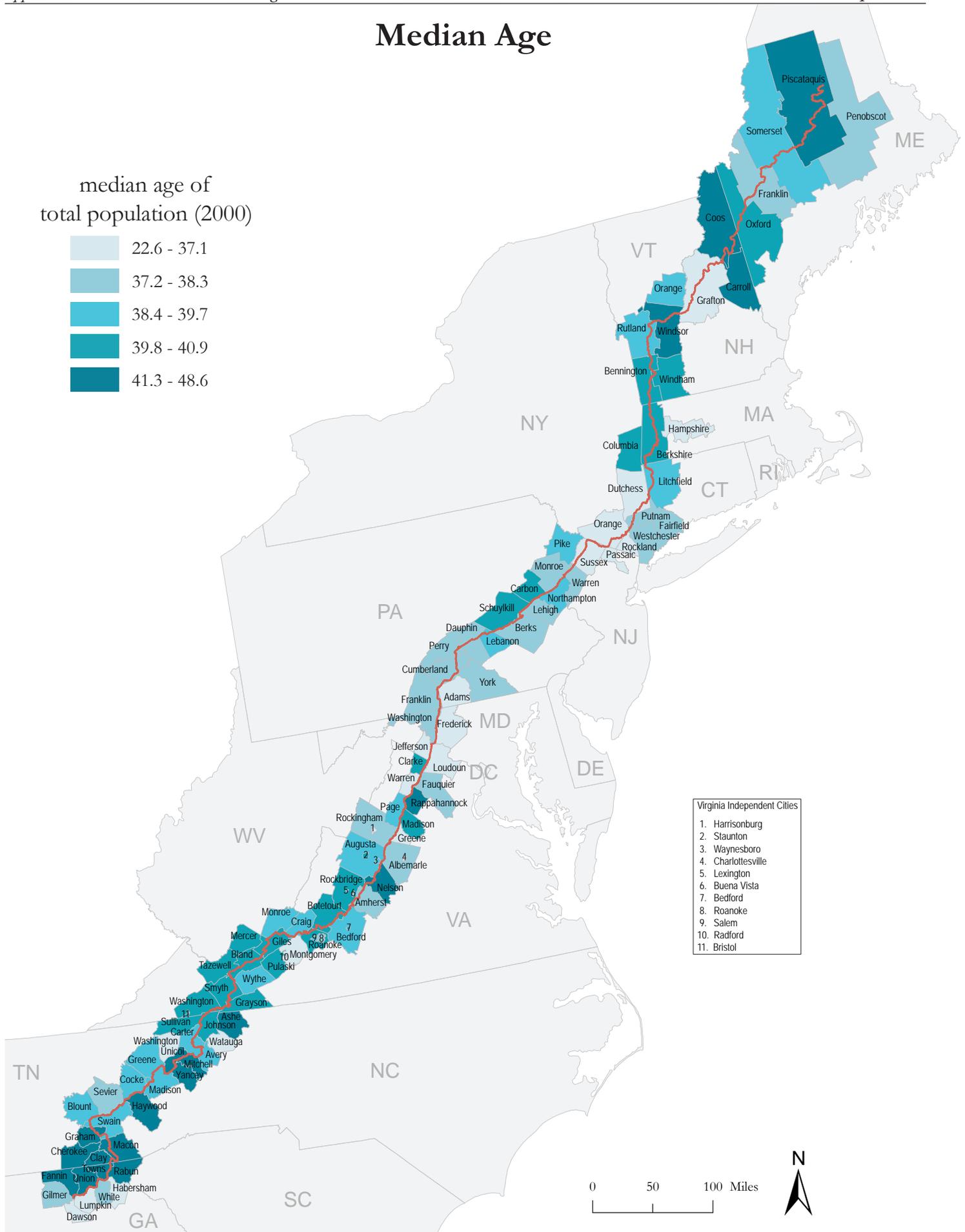
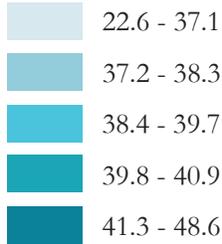
median age of total population (2000)	Washington, MD	37.4	Waynesboro, VA (city)	38.9	Clarke, VA	40.6
	Putnam, NY	37.4	Augusta, VA	39.0	Botetourt, VA	40.7
	Berks, PA	37.4	Page, VA	39.0	Tazewell, VA	40.7
Harrisonburg, VA (city)	Albemarle, VA	37.4	Salem, VA (city)	39.2	Schuylkill, PA	40.9
Radford, VA (city)	Perry, PA	37.5	Madison, NC	39.3	Roanoke, VA	40.9
Lexington, VA (city)	Rockingham, VA	37.5	Wythe, VA	39.4	Bedford, VA (city)	40.9
Charlottesville, VA (city)	Warren, NJ	37.6	Rutland, VT	39.5	Windsor, VT	41.3
Montgomery, VA	Westchester, NY	37.6	Litchfield, CT	39.6	Bristol, VA (city)	41.3
Watauga, NC	Roanoke, VA (city)	37.6	Pike, PA	39.6	Coos, NH	41.5
Lumpkin, GA	York, PA	37.8	Craig, VA	39.6	Graham, NC	41.5
Loudoun, VA	Fauquier, VA	37.8	Bedford, VA	39.7	Unicoi, TN	41.5
Hampshire, MA	Dauphin, PA	37.9	Monroe, WV	39.7	Yancey, NC	41.9
Orange, NY	Buena Vista, VA (city)	37.9	Staunton, VA (city)	39.8	Rabun, GA	42.0
Passaic, NJ	Amherst, VA	38.0	Johnson, TN	40.0	Mitchell, NC	42.0
Greene, VA	Cumberland, PA	38.1	Windham, VT	40.0	Piscataquis, ME	42.1
Frederick, MD	Sevier, TN	38.1	Madison, VA	40.0	Ashe, NC	42.1
Dawson, GA	Franklin, ME	38.2	Smyth, VA	40.0	Haywood, NC	42.3
Rockland, NY	White, GA	38.3	Sullivan, TN	40.1	Carroll, NH	42.5
Habersham, GA	Franklin, PA	38.3	Oxford, ME	40.2	Rappahannock, VA	42.6
Dutchess, NY	Lehigh, PA	38.3	Giles, VA	40.2	Nelson, VA	42.8
Jefferson, WV	Avery, NC	38.4	Mercer, WV	40.2	Fannin, GA	43.1
Grafton, NH	Blount, TN	38.4	Bennington, VT	40.3	Cherokee, NC	44.0
Adams, PA	Northampton, PA	38.5	Bland, VA	40.3	Union, GA	44.8
Sussex, NJ	Carter, TN	38.5	Pulaski, VA	40.3	Macon, NC	45.2
Washington, TN	Cocke, TN	38.6	Washington, VA	40.3	Clay, NC	46.7
Warren, VA	Orange, VT	38.6	Rockbridge, VA	40.4	Towns, GA	48.6
Penobscot, ME	Lebanon, PA	38.7	Berkshire, MA	40.5		
Monroe, PA	Swain, NC	38.8	Columbia, NY	40.5		
Fairfield, CT	Somerset, ME	38.9	Grayson, VA	40.5		
Gilmer, GA	Greene, TN	38.9	Carbon, PA	40.6	United States	35.3



Variation in Distribution of Data Values

Median Age

median age of total population (2000)



Projected Median Age

Median age expresses the age of a “typical” county resident for whom half the population is older and half is younger. Projected median age is an estimate of how that mid-point will change in future. Median age that is projected to be higher in the future is one indicator that the population is aging. Trail managers may need to be responsive to the possibility that the activities, priorities, and interests of a population that is aging may change.

Within the Appalachian National Scenic Trail region, projections for median age in the year 2025 range from 30.5 (Loudoun, VA) to 53.4 (Piscataquis, ME).

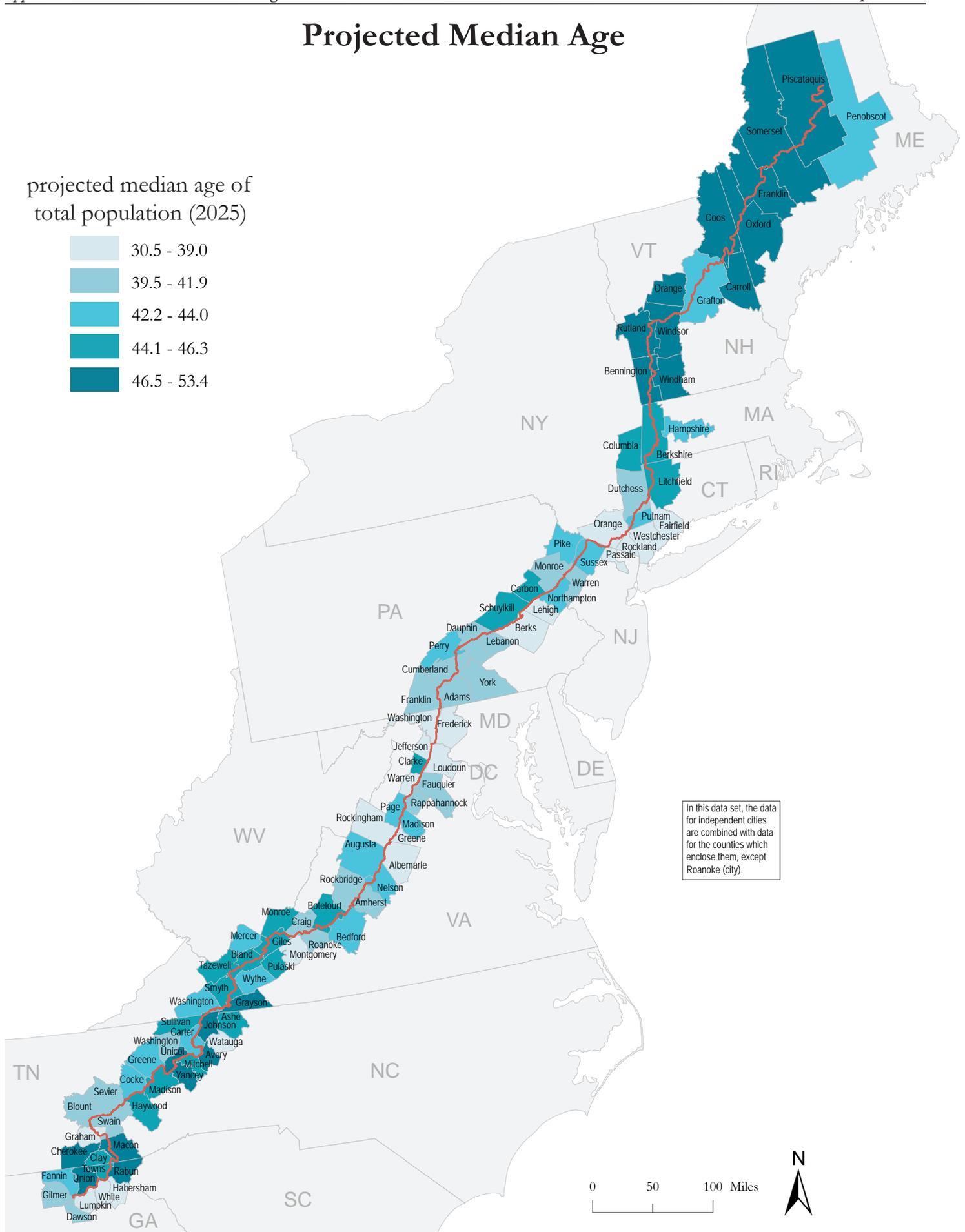
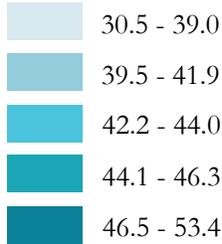
projected median age of total population (2025)							
		Monroe, PA	39.8	Pike, PA	43.5	Rutland, VT	47.3
		Sevier, TN	40.3	Penobscot, ME	43.5	Grayson, VA	47.5
		York, PA	40.5	Carter, TN	43.7	Union, GA	47.5
Loudoun, VA	30.5	Washington, TN	40.6	Madison, VA	43.7	Franklin, ME	47.7
Montgomery, VA	34.0	Rappahannock, VA	40.6	Nelson, VA	43.9	Yancey, NC	47.9
Albemarle, VA	34.0	Warren, NJ	40.8	Hampshire, MA	44.0	Oxford, ME	48.1
Rockingham, VA	34.7	Dawson, GA	40.9	Clarke, VA	44.1	Bennington, VT	48.4
Lumpkin, GA	35.5	Adams, PA	41.1	Madison, NC	44.2	Orange, VT	48.5
Passaic, NJ	36.1	Amherst, VA	41.1	Columbia, NY	44.4	Unicoi, TN	48.6
Frederick, MD	36.2	Franklin, PA	41.1	Litchfield, CT	44.5	Rabun, GA	48.8
Orange, NY	36.6	Gilmer, GA	41.2	Sullivan, TN	44.5	Johnson, TN	48.9
Watauga, NC	36.8	Cumberland, PA	41.3	Giles, VA	44.5	Carroll, NH	49.1
Berks, PA	37.4	Blount, TN	41.7	Clay, NC	44.5	Coos, NH	50.8
Habersham, GA	37.9	Rockbridge, VA	41.8	Carbon, PA	44.7	Windham, VT	50.8
Rockland, NY	38.0	Lebanon, PA	41.9	Bland, VA	44.8	Windsor, VT	50.9
Washington, MD	38.2	Sussex, NJ	42.2	Towns, GA	45.1	Piscataquis, ME	53.4
Westchester, NY	38.3	Roanoke, VA	42.3	Monroe, WV	45.2		
Graham, NC	38.4	Northampton, PA	42.4	Botetourt, VA	45.4		
Roanoke (city), VA	38.4	Greene, TN	42.5	Berkshire, MA	45.4		
Warren, VA	38.4	Bedford, VA	42.6	Haywood, NC	45.7		
Greene, VA	38.7	Cocke, TN	42.7	Mitchell, NC	45.7		
Fairfield, CT	38.8	Grafton, NH	42.9	Smyth, VA	45.8		
Lehigh, PA	38.9	Wythe, VA	42.9	Ashe, NC	46.1		
White, GA	39.0	Augusta, VA	43.0	Tazewell, VA	46.2		
Jefferson, WV	39.0	Perry, PA	43.1	Pulaski, VA	46.3		
Fauquier, VA	39.5	Page, VA	43.2	Schuylkill, PA	46.3		
Dutchess, NY	39.5	Fannin, GA	43.3	Macon, NC	46.5		
Dauphin, PA	39.5	Washington, VA	43.3	Avery, NC	46.5		
Craig, VA	39.5	Mercer, WV	43.3	Cherokee, NC	46.6		
Swain, NC	39.6	Putnam, NY	43.5	Somerset, ME	46.6	United States	38.2



Variation in Distribution of Data Values

Projected Median Age

projected median age of total population (2025)

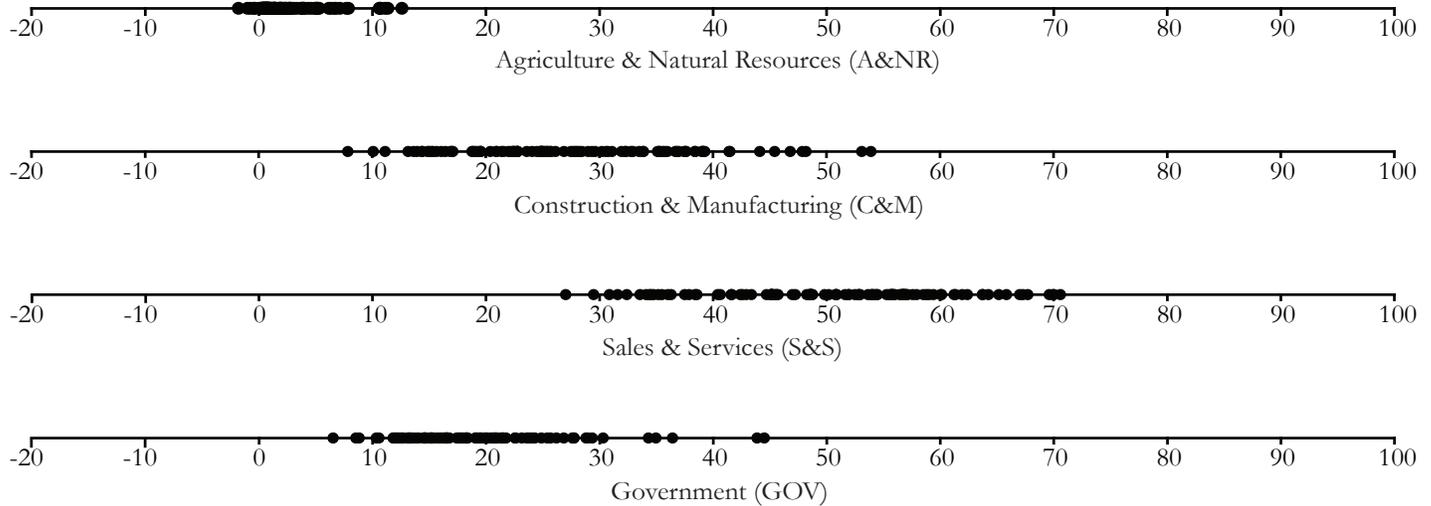


Earnings by Industry

Earnings by industry are indicative of the overall size of a local economy as well as the relative importance of each major industrial sector within that economy. The diversity of economic activities in the region presents an array of challenges to trail management. For example, relatively mobile industries such as light manufacturing or financial services may be concerned with land costs and tax rates, whereas natural resource dependent industries such as farming or mining may be concerned with land use regulations and other environmental policies.

Within the Appalachian National Scenic Trail region (2003), the leading sector of earnings in 87 of the 103 counties is Sales and Services. The second-ranking sector is Construction and Manufacturing.⁵

Note: Data are presented in a two-page table that follows the adjacent map.



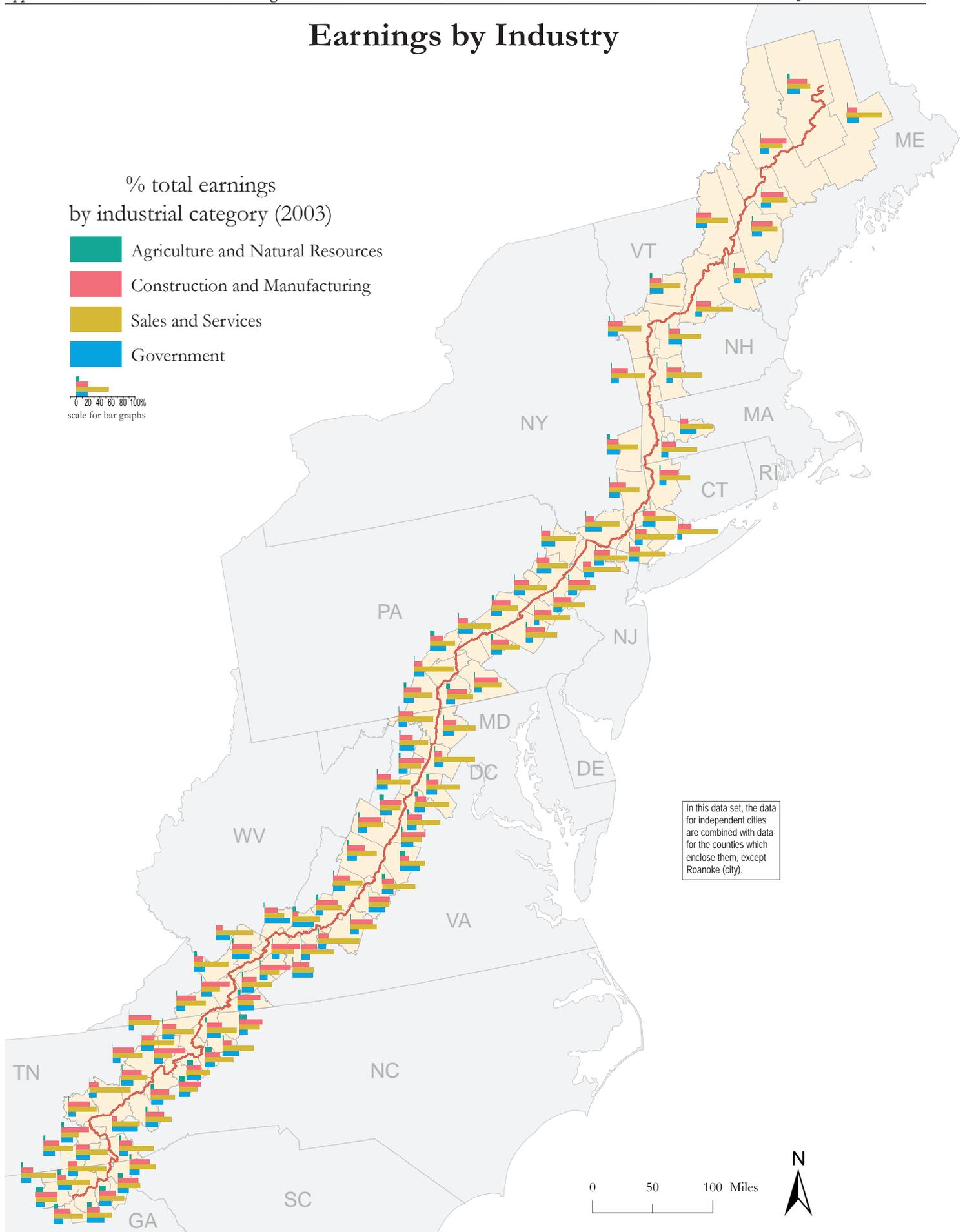
Variation in Distribution of Data Values

Earnings by Industry

% total earnings
by industrial category (2003)

-  Agriculture and Natural Resources
-  Construction and Manufacturing
-  Sales and Services
-  Government


0 20 40 60 80 100%
scale for bar graphs



In this data set, the data for independent cities are combined with data for the counties which enclose them, except Roanoke (city).

Earnings by Industry

% total earnings by industrial category (2003)

	A&NR	C&M	S&S	GOV		A&NR	C&M	S&S	GOV
Fairfield, CT	1	23	70	7	Dutchess, NY	1	29	52	18
Litchfield, CT	2	33	53	12	Orange, NY	1	14	58	28
Dawson, GA	7	28	49	16	Putnam, NY	2	21	56	21
Fannin, GA	3	21	59	17	Rockland, NY	1	19	64	17
Gilmer, GA	12	38	36	15	Westchester, NY	1	19	67	13
Habersham, GA	8	35	38	19	Ashe, NC	13	39	35	14
Lumpkin, GA	7	22	42	29	Avery, NC	11	25	48	16
Rabun, GA	3	35	45	17	Cherokee, NC	3	27	50	20
Towns, GA	1	16	66	17	Clay, NC	-1	23	54	24
Union, GA	6	15	56	23	Graham, NC	4	47	29	19
White, GA	11	28	42	20	Haywood, NC	3	31	45	21
Franklin, ME	1	38	45	17	Macon, NC	3	22	59	15
Oxford, ME	2	36	45	18	Madison, NC	5	32	42	21
Penobscot, ME	1	17	61	21	Mitchell, NC	11	25	41	24
Piscataquis, ME	4	34	40	22	Swain, NC	0	8	47	44
Somerset, ME	1	45	39	15	Watauga, NC	2	15	54	28
Frederick, MD	2	23	56	19	Yancey, NC	11	37	32	20
Washington, MD	1	25	60	14	Adams, PA	6	35	45	15
Berkshire, MA	1	25	62	12	Berks, PA	2	32	54	12
Hampshire, MA	1	14	56	29	Carbon, PA	1	25	56	18
Carroll, NH	1	19	67	12	Cumberland, PA	1	14	68	18
Coos, NH	1	26	55	18	Dauphin, PA	1	17	57	25
Grafton, NH	1	25	64	10	Franklin, PA	4	30	49	18
Passaic, NJ	1	26	57	16	Lebanon, PA	3	30	49	18
Sussex, NJ	1	14	65	19	Lehigh, PA	1	29	61	9
Warren, NJ	2	37	47	15	Monroe, PA	1	22	53	25
Columbia, NY	5	20	54	22	Northampton, PA	1	31	54	15

A&NR = Agriculture and Natural Resources

C&M = Construction and Manufacturing

S&S = Sales and Services

GOV = Government

Percentages may not add to one hundred due to rounding.

Earnings by Industry

% total earnings by industrial category (2003)

	A&NR	C&M	S&S	GOV		A&NR	C&M	S&S	GOV
Perry, PA	7	22	43	27	Loudoun, VA	1	13	70	15
Pike, PA	1	15	60	24	Madison, VA	3	25	57	16
Schuylkill, PA	4	32	46	18	Nelson, VA	5	20	56	19
York, PA	1	41	46	12	Page, VA	7	37	35	21
Blount, TN	1	38	49	12	Pulaski, VA	1	53	34	13
Carter, TN	1	24	54	21	Rappahannock, VA	5	19	59	17
Cocke, TN	1	34	45	20	Smyth, VA	1	48	32	19
Greene, TN	0	36	51	13	Tazewell, VA	5	16	59	20
Johnson, TN	-2	26	52	24	Warren, VA	2	24	57	18
Sevier, TN	0	16	71	13	Wythe, VA	2	25	52	21
Sullivan, TN	0	38	52	9	Roanoke (city), VA	1	17	70	13
Unicoi, TN	0	54	31	15	Albemarle, VA	8	15	43	34
Washington, TN	0	22	57	21	Augusta, VA	2	31	51	16
Bennington, VT	1	28	58	13	Bedford, VA	1	39	45	14
Orange, VT	4	20	53	23	Montgomery, VA	1	28	36	35
Rutland, VT	2	25	57	16	Roanoke, VA	1	27	57	15
Windham, VT	2	25	62	11	Rockbridge, VA	1	28	50	21
Windsor, VT	2	20	56	23	Rockingham, VA	3	39	43	15
Amherst, VA	1	36	35	28	Washington, VA	1	33	51	15
Bland, VA	2	34	34	30	Jefferson, WV	2	23	49	26
Botetourt, VA	4	37	45	13	Mercer, WV	0	11	64	24
Clarke, VA	3	44	38	15	Monroe, WV	-1	23	34	44
Craig, VA	5	10	48	36					
Fauquier, VA	4	21	57	18					
Giles, VA	1	48	38	13					
Grayson, VA	5	39	27	29					
Greene, VA	2	42	35	21	United States	2	21	60	16

A&NR = Agriculture and Natural Resources

C&M = Construction and Manufacturing

S&S = Sales and Services

GOV = Government

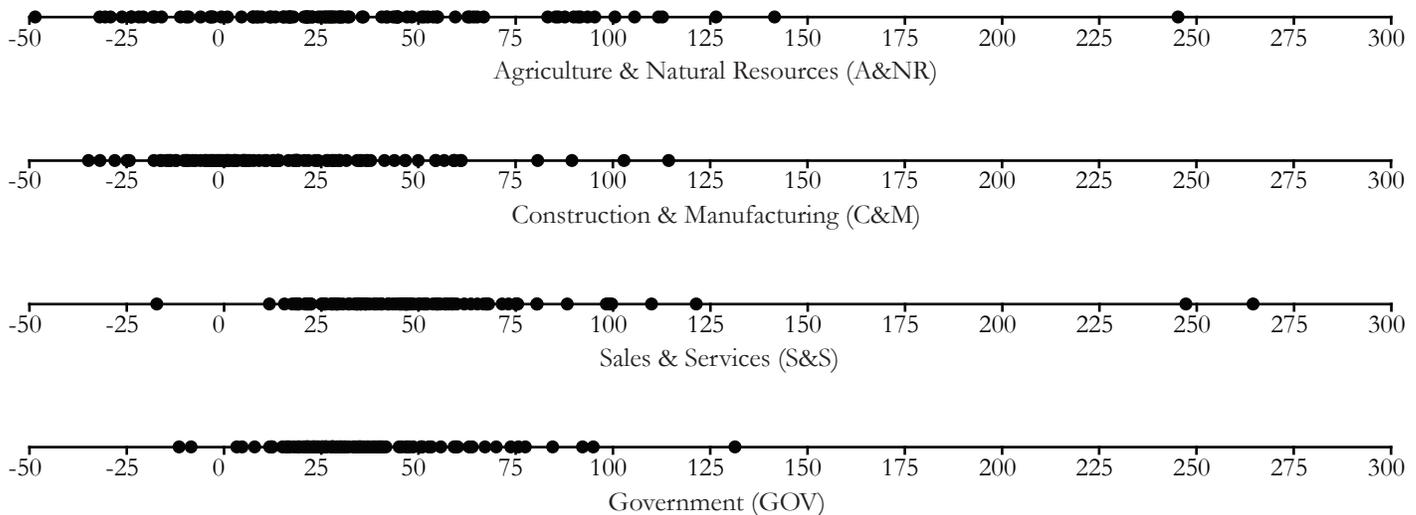
Percentages may not add to one hundred due to rounding.

Change in Earnings by Industry

Change in earnings by industry may be indicative of the overall growth, stability, or decline of a local economy. In addition, an industrial sector that shows significantly increased (or decreased) earnings relative to other sectors may reveal a local economy that is undergoing some restructuring. Changing economic activities within a region can have an impact on land use, migration of people in response to changes in jobs and services, and other livelihood concerns. Understanding trends in the economic activities can assist trail managers in being responsive to change.

Within the Appalachian National Scenic Trail region (1995-2005), earnings have generally increased in Sales and Services and in Government. The other two sectors show a mix of increases and decreases. Change in earnings ranges from a decrease in Agriculture and Natural Resources of 49% (Giles, VA) to an increase in Agriculture and Natural Resources of 2,615% (Sevier, TN).⁶

Note: Number line for Agriculture and Natural Resources (below) does not include the value for Sevier, TN. Data are presented in a two-page table that follows the adjacent map.

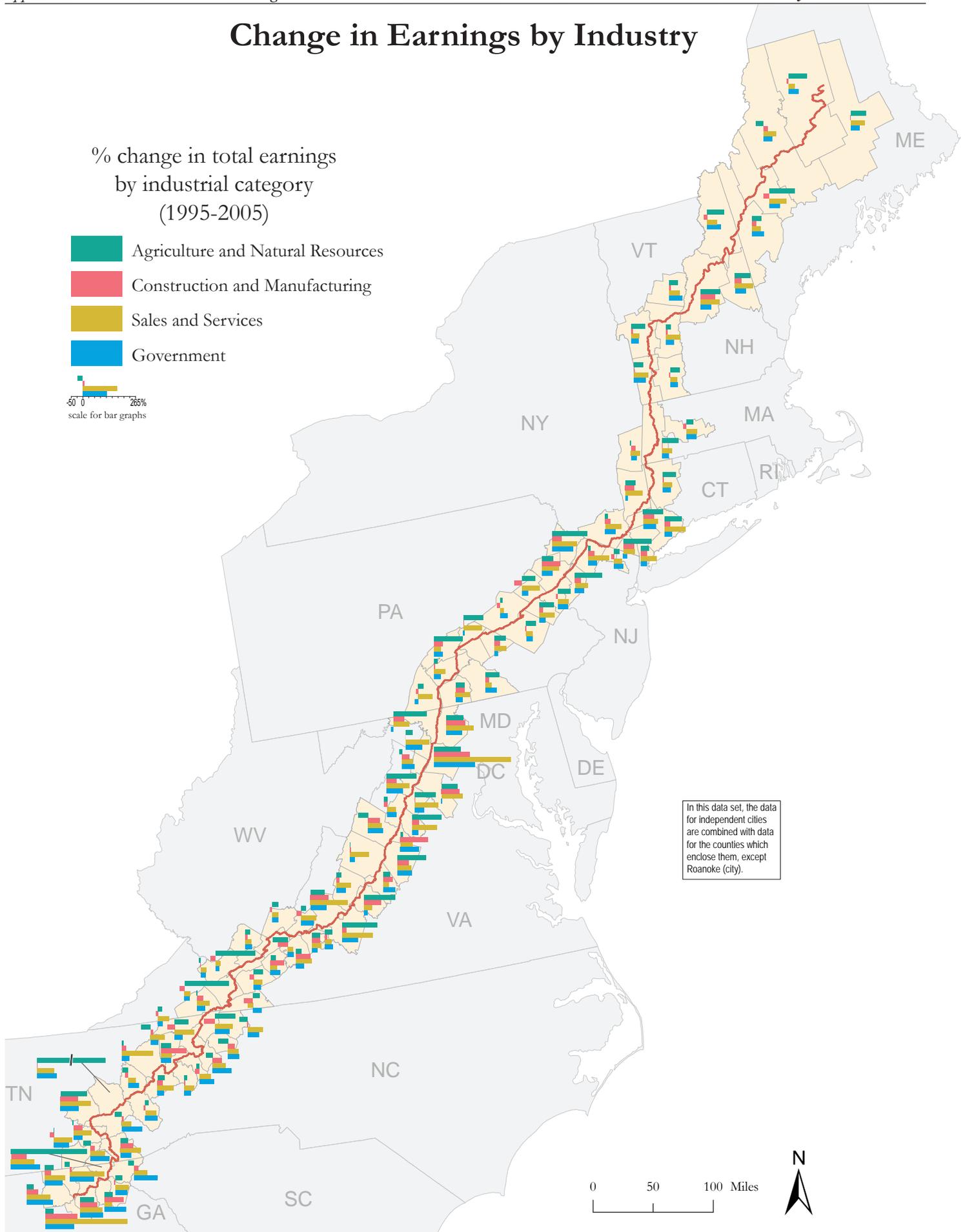
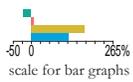


Variation in Distribution of Data Values

Change in Earnings by Industry

% change in total earnings
by industrial category
(1995-2005)

-  Agriculture and Natural Resources
-  Construction and Manufacturing
-  Sales and Services
-  Government



Change in Earnings by Industry

% change in total earnings by industrial category (1995-2005)

	A&NR	C&M	S&S	GOV		A&NR	C&M	S&S	GOV
Fairfield, CT	55	18	67	24	Dutchess, NY	32	29	54	8
Litchfield, CT	42	3	29	25	Orange, NY	9	18	52	35
Dawson, GA	26	103	265	92	Putnam, NY	64	35	47	40
Fannin, GA	27	19	65	56	Rockland, NY	90	34	37	12
Gilmer, GA	21	37	75	84	Westchester, NY	26	19	50	19
Habersham, GA	22	-4	43	39	Ashe, NC	-26	-3	48	37
Lumpkin, GA	44	55	71	74	Avery, NC	-21	30	42	60
Rabun, GA	-18	13	42	76	Cherokee, NC	-1	-14	58	49
Towns, GA	245	50	75	95	Clay, NC	-24	13	47	60
Union, GA	-16	6	110	77	Graham, NC	-4	27	57	28
White, GA	27	61	25	70	Haywood, NC	12	-5	35	40
Franklin, ME	83	-18	55	34	Macon, NC	24	41	67	35
Oxford, ME	30	14	28	39	Madison, NC	22	17	52	21
Penobscot, ME	48	-2	44	28	Mitchell, NC	-10	-14	37	46
Piscataquis, ME	59	-6	21	33	Swain, NC	-22	5	29	64
Somerset, ME	-24	14	40	28	Watauga, NC	-32	22	34	37
Frederick, MD	55	61	88	51	Yancey, NC	10	4	32	22
Washington, MD	106	35	50	-8	Adams, PA	28	28	46	23
Berkshire, MA	52	2	31	21	Berks, PA	31	-3	22	21
Hampshire, MA	21	-10	34	32	Carbon, PA	42	-25	57	19
Carroll, NH	51	21	59	35	Cumberland, PA	12	3	36	22
Coos, NH	54	-12	32	45	Dauphin, PA	63	1	59	5
Grafton, NH	63	47	62	34	Franklin, PA	17	-8	47	-12
Passaic, NJ	17	-10	26	30	Lebanon, PA	36	18	39	12
Sussex, NJ	7	19	68	28	Lehigh, PA	47	11	48	19
Warren, NJ	88	19	41	29	Monroe, PA	36	59	55	35
Columbia, NY	-3	14	30	18	Northampton, PA	41	-5	35	31

A&NR = Agriculture and Natural Resources

C&M = Construction and Manufacturing

S&S = Sales and Services

GOV = Government

Change in Earnings by Industry

% change in total earnings by industrial category (1995-2005)

	A&NR	C&M	S&S	GOV		A&NR	C&M	S&S	GOV
Perry, PA	92	28	21	28	Loudoun, VA	86	114	247	131
Pike, PA	112	30	80	67	Madison, VA	94	23	80	21
Schuylkill, PA	8	-9	12	25	Nelson, VA	23	30	19	38
York, PA	45	11	19	36	Page, VA	-11	-12	28	30
Blount, TN	85	57	98	59	Pulaski, VA	16	44	22	31
Carter, TN	45	-24	63	25	Rappahannock, VA	67	-1	75	29
Cocke, TN	-18	-9	25	35	Smyth, VA	142	-16	19	17
Greene, TN	5	14	100	24	Tazewell, VA	-6	-1	18	16
Johnson, TN	65	-35	56	47	Warren, VA	95	32	73	53
Sevier, TN	2615	1	55	63	Wythe, VA	29	-14	28	23
Sullivan, TN	13	-7	36	15	Roanoke (city), VA	23	7	22	26
Unicoi, TN	32	81	35	31	Albemarle, VA	91	37	45	47
Washington, TN	-29	8	46	24	Augusta, VA	1	3	60	16
Bennington, VT	30	1	47	39	Bedford, VA	113	14	99	51
Orange, VT	28	5	34	42	Montgomery, VA	18	47	51	26
Rutland, VT	44	5	26	23	Roanoke, VA	25	26	29	17
Windham, VT	30	-3	22	23	Rockbridge, VA	15	9	47	30
Windsor, VT	17	6	46	26	Rockingham, VA	-31	38	45	48
Amherst, VA	101	54	26	12	Washington, VA	-3	19	40	26
Bland, VA	127	-15	16	12	Jefferson, WV	21	0	76	53
Botetourt, VA	45	59	121	51	Mercer, WV	16	8	21	22
Clarke, VA	-9	24	34	40	Monroe, WV	20	-5	19	20
Craig, VA	15	-16	49	41					
Fauquier, VA	51	59	68	3					
Giles, VA	-49	-32	18	20					
Grayson, VA	21	-28	-17	28					
Greene, VA	8	89	39	60	United States	29	23	48	29

A&NR = Agriculture and Natural Resources

C&M = Construction and Manufacturing

S&S = Sales and Services

GOV = Government

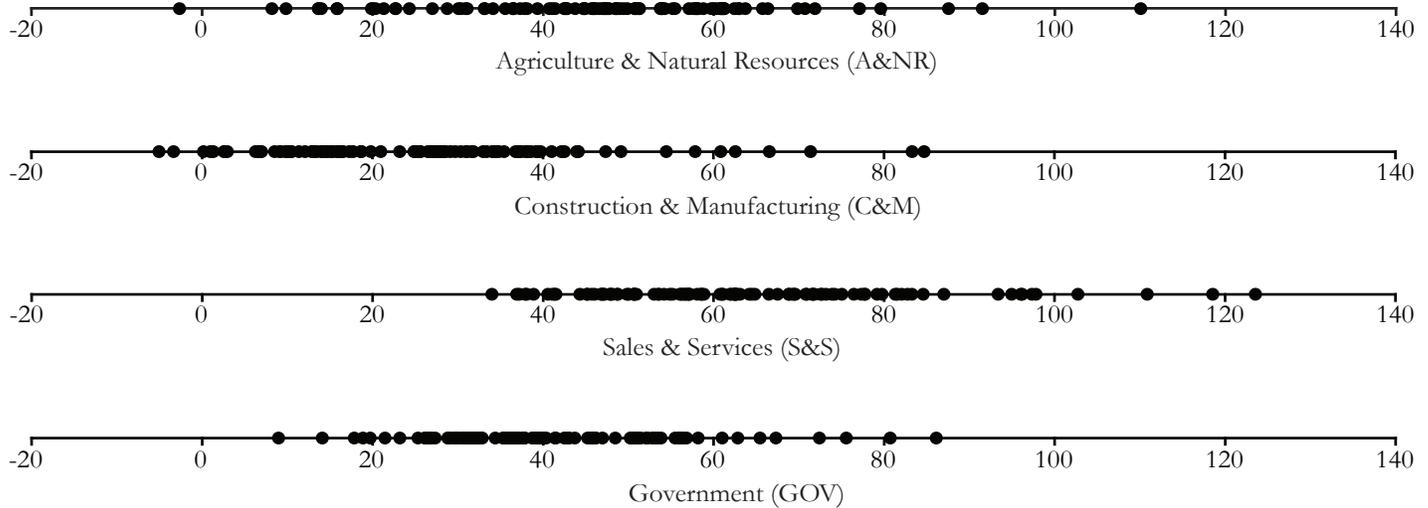
Projected Change in Earnings by Industry

Projected change in earnings by industry may be indicative of growth, stability, or decline in specific sectors of the local economy in each county. Such projections may serve as an early predictor of localized economic restructuring. Different economic activities within the region present an array of challenges to trail management. Monitoring trends in the relative stability of these economic activities can assist trail managers in being responsive to change.

Service. Projected change ranges from a decrease of 5% (Bennington, VT) in Construction and Manufacturing to an increase of 124% (Loudon, VA) in Sales and Services.⁷

Note: Data are presented in a two-page table that follows the adjacent map.

Within the Appalachian National Scenic Trail region (2005-2025), the relative rates of projected change vary by county, but largely show an increase in earnings in all industrial categories, particularly in Sales and



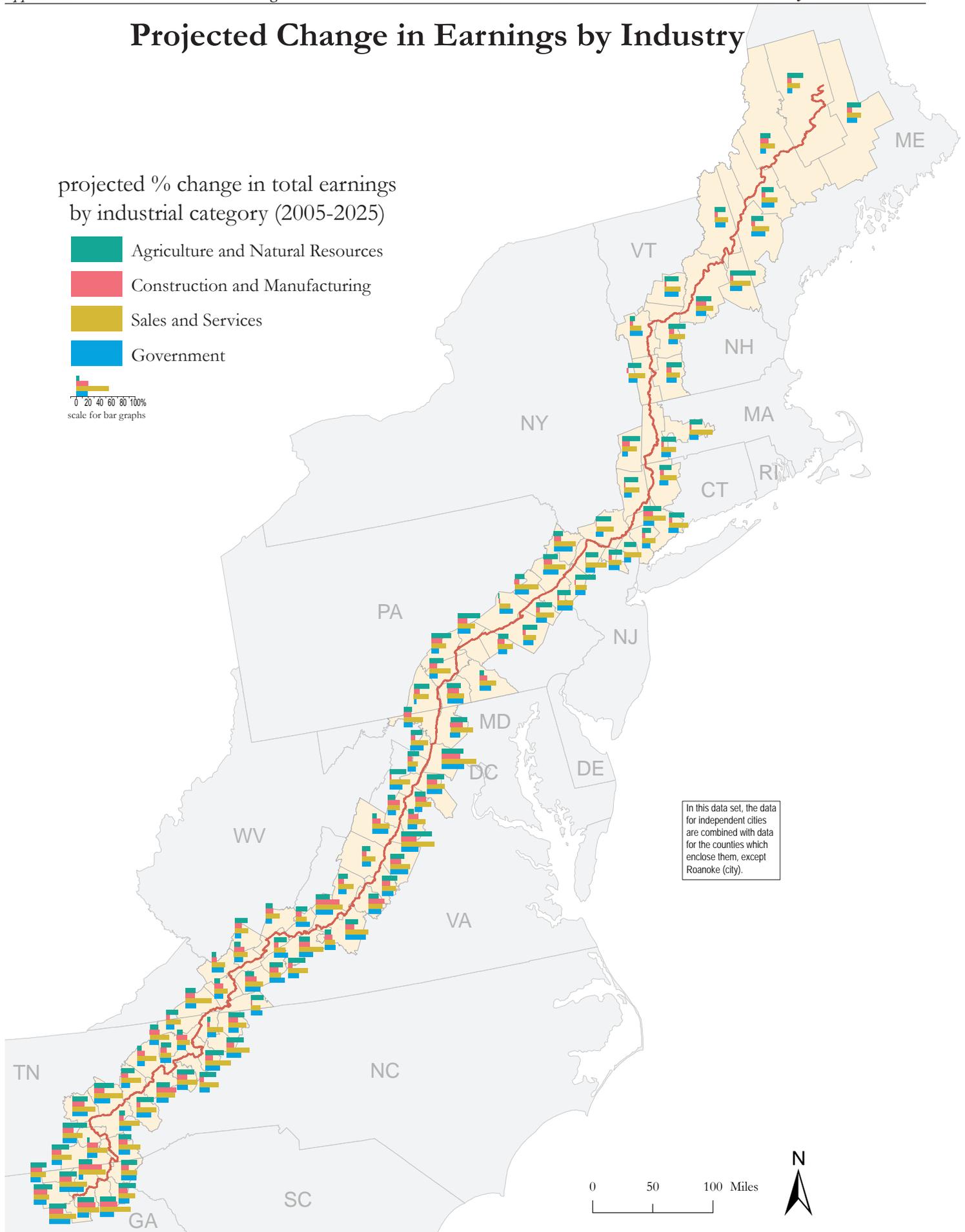
Variation in Distribution of Data Values

Projected Change in Earnings by Industry

projected % change in total earnings
by industrial category (2005-2025)

-  Agriculture and Natural Resources
-  Construction and Manufacturing
-  Sales and Services
-  Government


0 20 40 60 80 100%
scale for bar graphs



In this data set, the data for independent cities are combined with data for the counties which enclose them, except Roanoke (city).

Projected Change in Earnings by Industry

projected % change in total earnings by industrial category (2005-2025)

	A&NR	C&M	S&S	GOV		A&NR	C&M	S&S	GOV
Fairfield, CT	55	10	69	35	Dutchess, NY	51	3	56	27
Litchfield, CT	42	13	59	31	Orange, NY	54	1	62	27
Dawson, GA	61	49	97	76	Putnam, NY	64	33	80	39
Fannin, GA	57	40	56	37	Rockland, NY	43	0	62	25
Gilmer, GA	66	47	55	46	Westchester, NY	31	10	47	30
Habersham, GA	61	31	59	39	Ashe, NC	58	34	64	37
Lumpkin, GA	60	63	78	40	Avery, NC	66	27	93	51
Rabun, GA	58	27	58	56	Cherokee, NC	62	34	71	35
Towns, GA	48	83	96	14	Clay, NC	8	38	73	37
Union, GA	61	43	98	86	Graham, NC	88	39	72	51
White, GA	58	61	111	50	Haywood, NC	63	13	70	52
Franklin, ME	43	13	57	46	Macon, NC	45	32	77	40
Oxford, ME	43	12	63	51	Madison, NC	47	71	66	43
Penobscot, ME	49	19	50	36	Mitchell, NC	60	15	69	37
Piscataquis, ME	58	15	45	18	Swain, NC	20	15	73	43
Somerset, ME	37	30	53	20	Watauga, NC	61	27	82	52
Frederick, MD	60	44	81	35	Yancey, NC	61	37	74	38
Washington, MD	30	26	68	32	Adams, PA	49	42	61	58
Berkshire, MA	51	9	51	33	Berks, PA	51	9	46	36
Hampshire, MA	46	7	82	31	Carbon, PA	33	16	85	50
Carroll, NH	92	10	73	43	Cumberland, PA	51	28	76	29
Coos, NH	38	11	47	37	Dauphin, PA	80	34	61	46
Grafton, NH	54	35	62	37	Franklin, PA	55	20	54	9
Passaic, NJ	48	11	45	38	Lebanon, PA	37	25	54	32
Sussex, NJ	46	1	75	33	Lehigh, PA	58	13	65	38
Warren, NJ	72	-3	41	36	Monroe, PA	51	28	78	53
Columbia, NY	63	27	51	19	Northampton, PA	48	6	56	53

A&NR = Agriculture and Natural Resources

C&M = Construction and Manufacturing

S&S = Sales and Services

GOV = Government

Projected Change in Earnings by Industry

projected % change in total earnings by industrial category (2005-2025)

	A&NR	C&M	S&S	GOV		A&NR	C&M	S&S	GOV
Perry, PA	70	39	51	26	Loudoun, VA	77	67	124	81
Pike, PA	33	25	79	67	Madison, VA	21	37	64	34
Schuylkill, PA	-3	3	39	48	Nelson, VA	54	29	49	41
York, PA	16	27	59	41	Page, VA	27	44	44	29
Blount, TN	54	44	83	56	Pulaski, VA	47	31	42	56
Carter, TN	37	33	95	39	Rappahannock, VA	38	39	57	26
Cocke, TN	47	25	72	31	Smyth, VA	20	32	48	31
Greene, TN	14	28	69	27	Tazewell, VA	14	17	47	44
Johnson, TN	10	9	57	32	Warren, VA	59	7	74	46
Sevier, TN	71	37	103	56	Wythe, VA	31	41	63	54
Sullivan, TN	44	14	53	30	Roanoke (city), VA	23	27	37	39
Unicoi, TN	37	23	38	39	Albemarle, VA	49	38	71	65
Washington, TN	30	35	69	33	Augusta, VA	29	15	48	30
Bennington, VT	47	-5	61	32	Bedford, VA	45	30	83	72
Orange, VT	50	7	57	50	Montgomery, VA	61	16	72	38
Rutland, VT	16	10	41	46	Roanoke, VA	39	39	87	51
Windham, VT	54	17	48	36	Rockbridge, VA	34	19	55	29
Windsor, VT	61	18	57	33	Rockingham, VA	14	29	62	57
Amherst, VA	36	58	51	45	Washington, VA	20	38	46	32
Bland, VA	23	37	49	32	Jefferson, WV	41	16	63	47
Botetourt, VA	49	85	96	61	Mercer, WV	46	25	47	21
Clarke, VA	41	16	37	30	Monroe, WV	24	27	50	23
Craig, VA	41	21	38	50					
Fauquier, VA	61	35	63	53					
Giles, VA	45	14	41	51					
Grayson, VA	46	3	34	40					
Greene, VA	110	54	119	63	United States	45	26	66	41

A&NR = Agriculture and Natural Resources

C&M = Construction and Manufacturing

S&S = Sales and Services

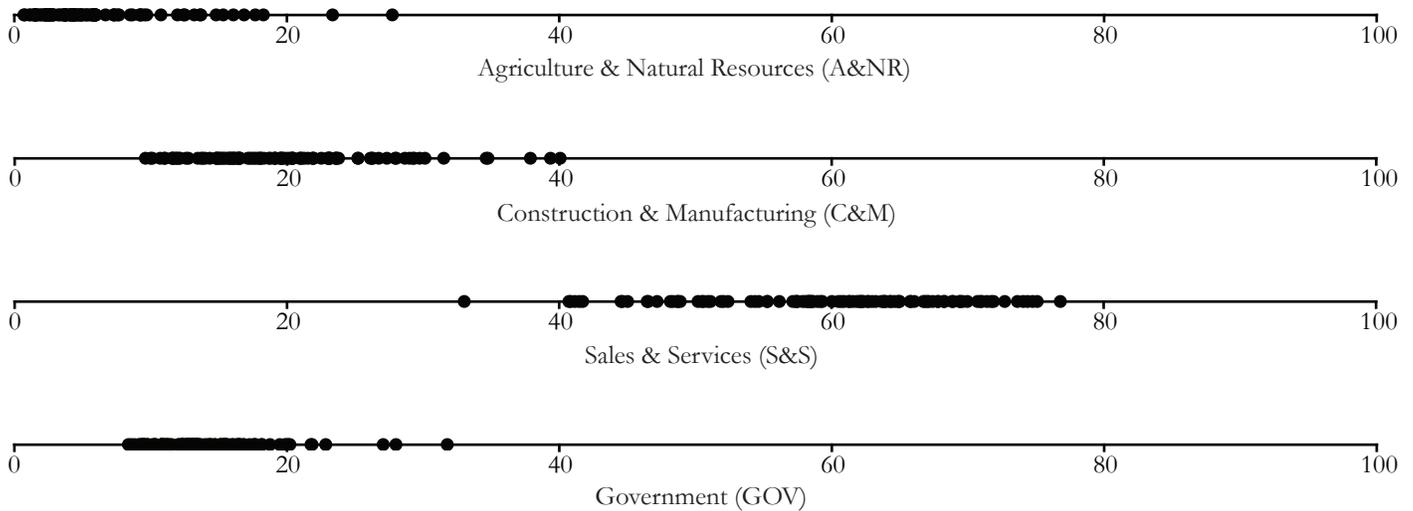
GOV = Government

Employment by Industry

One indicator of the way a particular county's job market is structured is the percentage of workers employed in each of the four major industrial sectors. This employment distribution is indicative of the kinds of skills, knowledge, and concerns that are most prevalent among workers. Occupational patterns can influence people's priorities and actions with regard to trails and resource protection. For example, construction workers might welcome the prospect of rapid growth, whereas government workers such as teachers and police might worry that rapid growth would stress existing government resources.

Within the Appalachian National Scenic Trail region (2003), the leading sector of employment in all counties is Sales and Services. The second-ranking sector is Construction and Manufacturing.⁸

Note: Data are presented in a two-page table that follows the adjacent map.



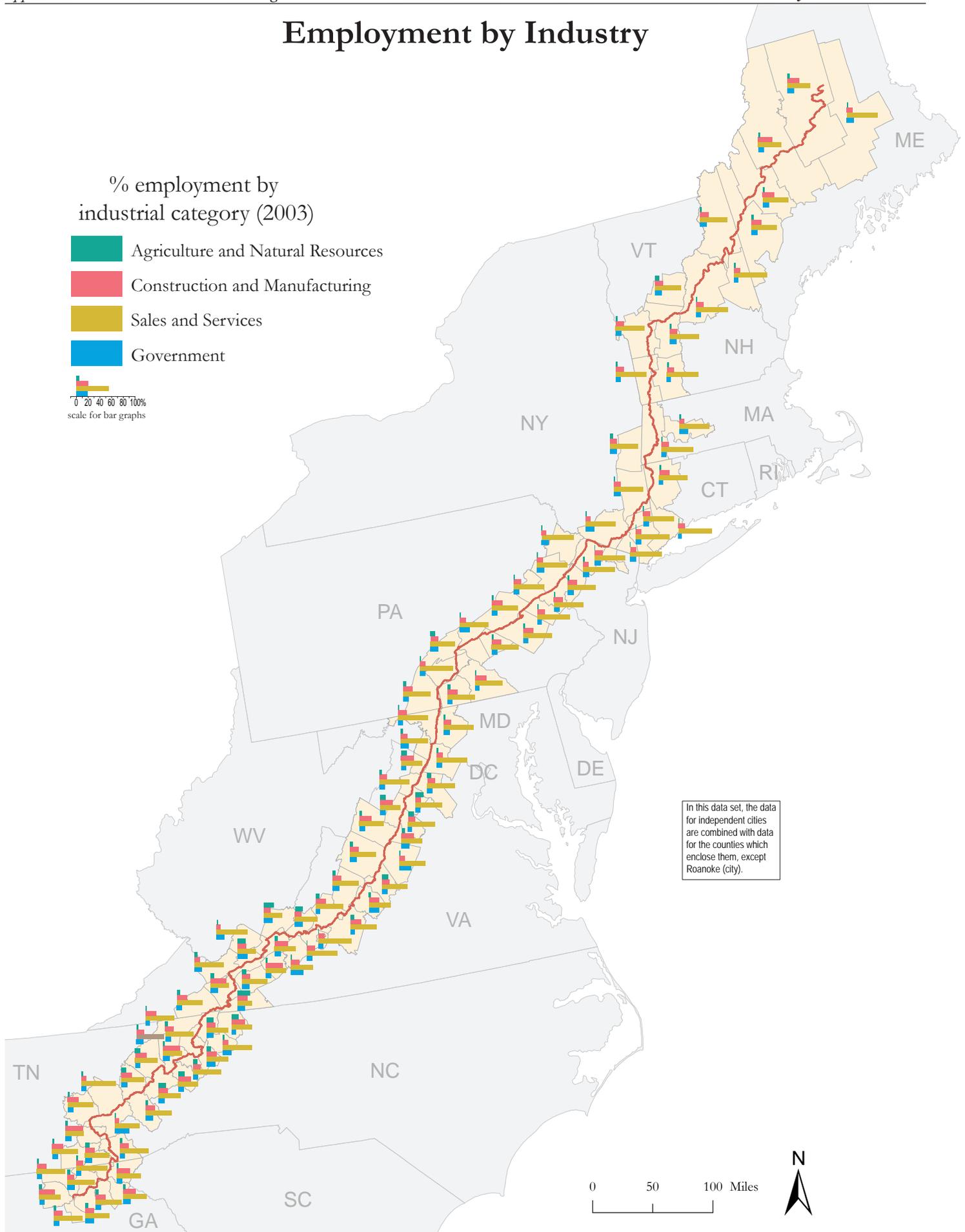
Variation in Distribution of Data Values

Employment by Industry

% employment by industrial category (2003)

-  Agriculture and Natural Resources
-  Construction and Manufacturing
-  Sales and Services
-  Government


0 20 40 60 80 100%
scale for bar graphs



In this data set, the data for independent cities are combined with data for the counties which enclose them, except Roanoke (city).

Employment by Industry

% employment by industrial category (2003)

	A&NR	C&M	S&S	GOV		A&NR	C&M	S&S	GOV
Fairfield, CT	1	15	75	8	Dutchess, NY	2	16	66	16
Litchfield, CT	4	23	64	9	Orange, NY	2	11	67	20
Dawson, GA	5	19	64	13	Putnam, NY	2	16	69	13
Fannin, GA	4	21	64	11	Rockland, NY	1	13	72	14
Gilmer, GA	6	35	48	11	Westchester, NY	1	12	75	12
Habersham, GA	5	28	52	16	Ashe, NC	15	29	46	9
Lumpkin, GA	6	20	54	20	Avery, NC	9	17	63	11
Rabun, GA	4	30	54	12	Cherokee, NC	4	25	58	13
Towns, GA	4	15	70	11	Clay, NC	9	21	55	15
Union, GA	6	15	62	17	Graham, NC	5	40	41	14
White, GA	6	23	58	13	Haywood, NC	5	20	59	16
Franklin, ME	4	26	57	13	Macon, NC	5	20	64	10
Oxford, ME	5	23	58	14	Madison, NC	16	20	50	13
Penobscot, ME	2	13	68	16	Mitchell, NC	10	22	49	19
Piscataquis, ME	5	27	52	15	Swain, NC	2	10	56	32
Somerset, ME	4	32	52	13	Watauga, NC	4	12	65	19
Frederick, MD	3	16	67	13	Yancey, NC	14	29	45	13
Washington, MD	2	19	67	11	Adams, PA	6	23	61	10
Berkshire, MA	2	16	71	10	Berks, PA	3	22	64	11
Hampshire, MA	3	10	67	20	Carbon, PA	2	17	68	13
Carroll, NH	3	14	74	9	Cumberland, PA	2	12	74	12
Coos, NH	3	19	62	15	Dauphin, PA	2	13	64	22
Grafton, NH	2	16	71	11	Franklin, PA	6	21	61	12
Passaic, NJ	1	18	68	14	Lebanon, PA	4	21	61	13
Sussex, NJ	4	12	71	14	Lehigh, PA	2	17	73	9
Warren, NJ	4	20	63	13	Monroe, PA	2	14	68	17
Columbia, NY	6	16	63	16	Northampton, PA	2	20	66	12

A&NR = Agriculture and Natural Resources

C&M = Construction and Manufacturing

S&S = Sales and Services

GOV = Government

Percentages may not add to one hundred due to rounding.

Employment by Industry

% employment by industrial category (2003)

	A&NR	C&M	S&S	GOV		A&NR	C&M	S&S	GOV
Perry, PA	10	17	55	18	Loudoun, VA	4	14	69	13
Pike, PA	2	11	72	16	Madison, VA	13	16	61	9
Schuylkill, PA	4	24	59	13	Nelson, VA	14	16	57	13
York, PA	3	26	62	9	Page, VA	12	29	45	13
Blount, TN	4	25	58	13	Pulaski, VA	4	38	45	13
Carter, TN	6	19	63	13	Rappahannock, VA	18	12	60	10
Cocke, TN	11	24	51	14	Smyth, VA	7	35	41	17
Greene, TN	12	26	51	11	Tazewell, VA	6	12	66	17
Johnson, TN	15	20	49	16	Warren, VA	5	16	67	12
Sevier, TN	3	11	77	10	Wythe, VA	9	18	57	16
Sullivan, TN	3	24	65	9	Roanoke (city), VA	1	14	74	11
Unicoi, TN	4	39	42	15	Albemarle, VA	3	12	59	27
Washington, TN	4	17	62	16	Augusta, VA	6	20	59	15
Bennington, VT	3	18	69	10	Bedford, VA	8	24	59	10
Orange, VT	9	18	58	15	Montgomery, VA	2	19	50	28
Rutland, VT	4	18	65	13	Roanoke, VA	1	18	69	12
Windham, VT	4	15	71	9	Rockbridge, VA	6	20	59	15
Windsor, VT	4	16	65	15	Rockingham, VA	5	27	55	13
Amherst, VA	5	23	49	23	Washington, VA	7	23	58	12
Bland, VA	18	19	41	22	Jefferson, WV	5	15	62	18
Botetourt, VA	8	22	61	10	Mercer, WV	3	10	70	18
Clarke, VA	13	29	47	11	Monroe, WV	23	15	41	20
Craig, VA	17	15	51	18					
Fauquier, VA	9	17	62	12					
Giles, VA	7	30	48	14					
Grayson, VA	28	22	33	17					
Greene, VA	7	28	47	18	United States	4	15	67	14

A&NR = Agriculture and Natural Resources

C&M = Construction and Manufacturing

S&S = Sales and Services

GOV = Government

Percentages may not add to one hundred due to rounding.

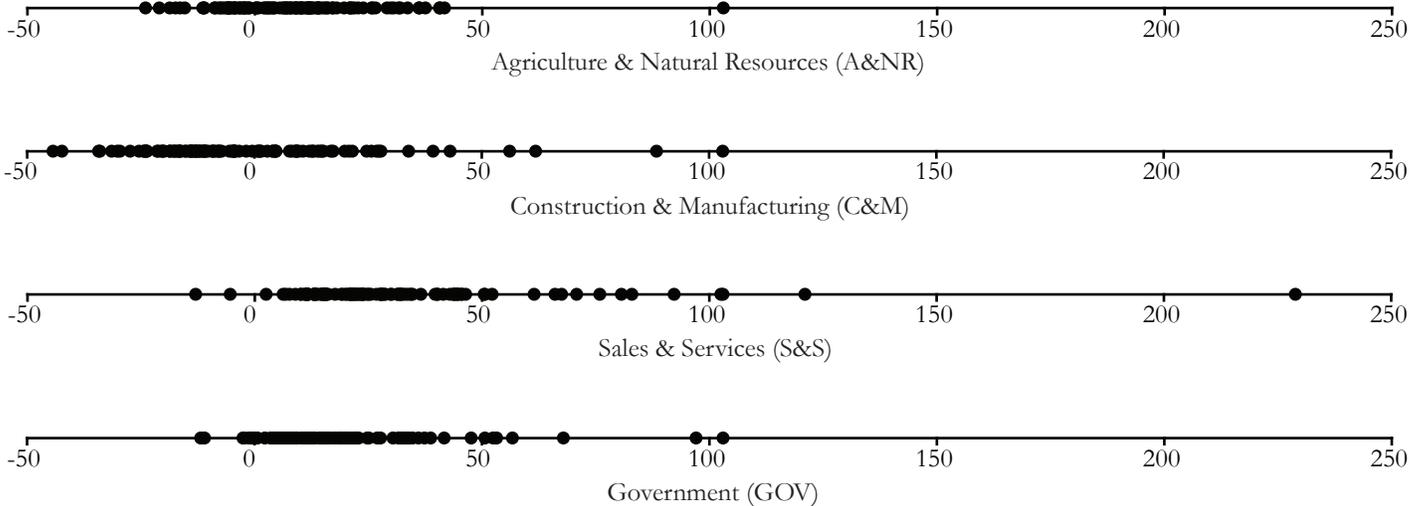
Change in Employment by Industry

Jobs are of critical importance to individuals, families, and communities. Change in the proportion of people employed by various industries within an economy can create a cascading set of impacts. A declining industry's displacement of workers whose skills are in less demand can generate stress within households and communities. A growing industry's demand for new sets of skills can influence migration patterns and educational priorities. Local and regional political decisions, including those that impact trail management goals, often place priority on

protecting existing jobs or attracting new employment opportunities.

Within the Appalachian National Scenic Trail region (1995-2005), employment decreased in Construction and Manufacturing in sixty-three counties while Sales and Services had the greatest increases in employment.⁹

Note: Data are presented in a two-page table that follows the adjacent map.

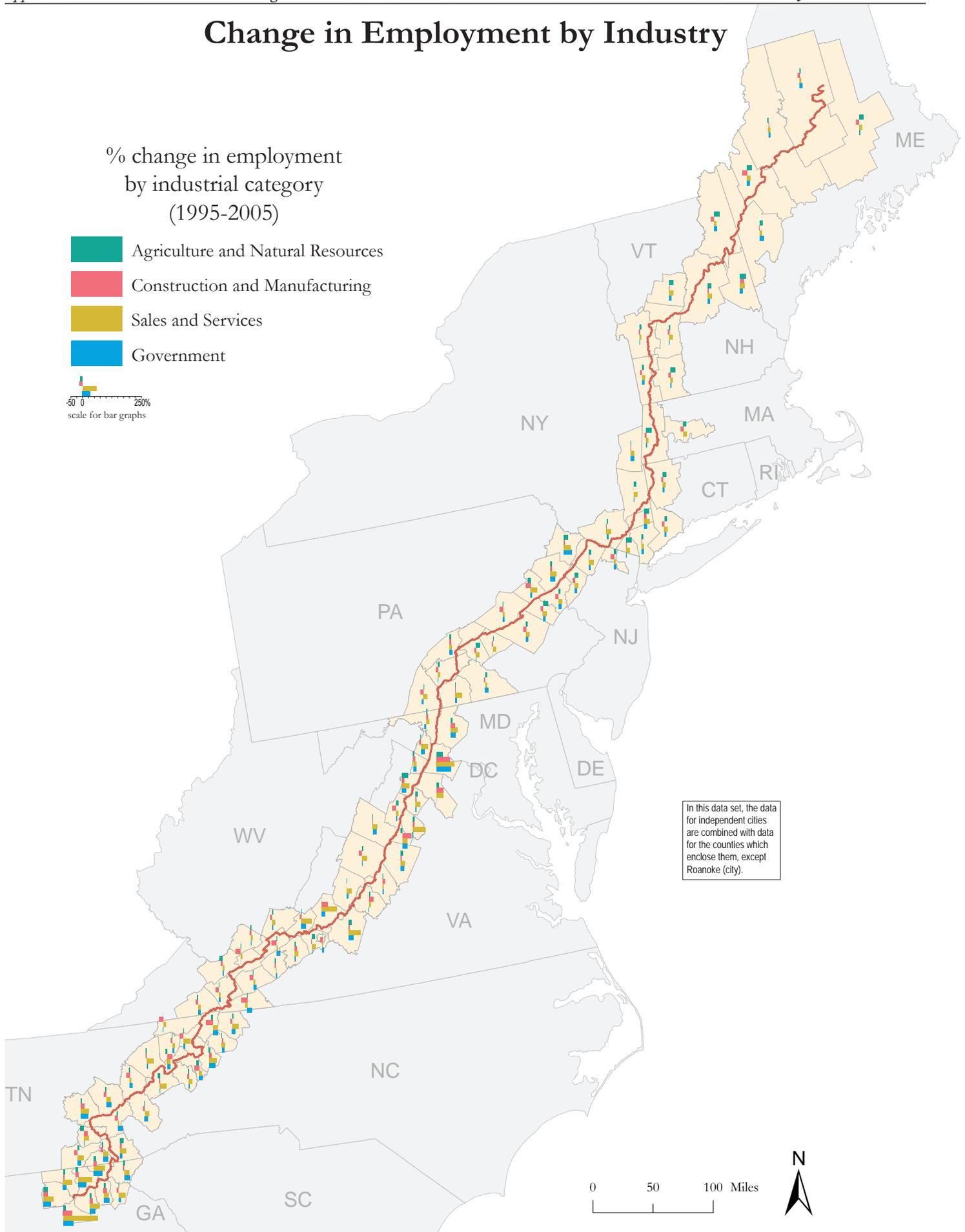
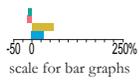


Variation in Distribution of Data Values

Change in Employment by Industry

% change in employment
by industrial category
(1995-2005)

- Agriculture and Natural Resources
- Construction and Manufacturing
- Sales and Services
- Government



In this data set, the data for independent cities are combined with data for the counties which enclose them, except Roanoke (city).

Change in Employment by Industry

% change in employment by industrial category (1995-2005)

	A&NR	C&M	S&S	GOV		A&NR	C&M	S&S	GOV
Fairfield, CT	15	-16	21	12	Dutchess, NY	17	0	25	4
Litchfield, CT	24	-11	19	11	Orange, NY	6	-4	30	11
Dawson, GA	16	62	229	68	Putnam, NY	31	15	37	21
Fannin, GA	12	9	61	22	Rockland, NY	36	4	24	4
Gilmer, GA	29	27	66	51	Westchester, NY	10	-3	15	15
Habersham, GA	3	-13	44	14	Ashe, NC	9	-9	40	22
Lumpkin, GA	9	17	68	36	Avery, NC	10	17	51	42
Rabun, GA	-9	-6	33	39	Cherokee, NC	11	-21	40	23
Towns, GA	16	20	76	57	Clay, NC	-7	-17	32	32
Union, GA	-16	-19	92	52	Graham, NC	-24	26	34	5
White, GA	10	22	31	37	Haywood, NC	-3	-11	28	22
Franklin, ME	32	-30	25	19	Macon, NC	22	13	41	16
Oxford, ME	20	-4	16	28	Madison, NC	-15	-5	46	5
Penobscot, ME	30	-19	21	7	Mitchell, NC	-17	-30	18	22
Piscataquis, ME	6	-14	12	19	Swain, NC	-6	-18	8	35
Somerset, ME	-9	2	13	11	Watauga, NC	-4	8	22	15
Frederick, MD	9	27	46	32	Yancey, NC	-8	-9	23	8
Washington, MD	6	13	19	-12	Adams, PA	-2	3	43	9
Berkshire, MA	36	-10	15	6	Berks, PA	10	-18	21	16
Hampshire, MA	21	-17	23	0	Carbon, PA	-19	-31	45	12
Carroll, NH	42	25	32	18	Cumberland, PA	13	-14	15	4
Coos, NH	38	-21	14	20	Dauphin, PA	27	-12	24	-1
Grafton, NH	23	5	26	15	Franklin, PA	4	-20	28	-11
Passaic, NJ	17	-24	12	16	Lebanon, PA	4	-7	20	0
Sussex, NJ	14	1	33	11	Lehigh, PA	34	-14	27	15
Warren, NJ	21	-14	24	13	Monroe, PA	9	9	40	30
Columbia, NY	-4	4	24	22	Northampton, PA	12	-20	22	20

A&NR = Agriculture and Natural Resources

C&M = Construction and Manufacturing

S&S = Sales and Services

GOV = Government

Change in Employment by Industry

% change in employment by industrial category (1995-2005)

	A&NR	C&M	S&S	GOV		A&NR	C&M	S&S	GOV
Perry, PA	12	12	15	20	Loudoun, VA	41	88	121	97
Pike, PA	26	5	44	53	Madison, VA	11	11	83	5
Schuylkill, PA	-3	-24	10	10	Nelson, VA	1	14	6	5
York, PA	12	-8	13	22	Page, VA	14	-24	16	7
Blount, TN	8	21	52	48	Pulaski, VA	-5	-8	3	6
Carter, TN	4	-25	44	11	Rappahannock, VA	14	9	35	9
Cocke, TN	-6	-24	10	19	Smyth, VA	3	-20	11	13
Greene, TN	-6	-8	46	8	Tazewell, VA	-21	-13	11	6
Johnson, TN	-11	-44	28	33	Warren, VA	41	14	51	27
Sevier, TN	-5	-15	29	34	Wythe, VA	-4	-24	11	19
Sullivan, TN	0	-27	16	-1	Roanoke (city), VA	-1	-15	-5	9
Unicoi, TN	-11	34	23	20	Albemarle, VA	15	5	29	22
Washington, TN	-4	-12	15	12	Augusta, VA	8	-17	34	4
Bennington, VT	12	-12	20	13	Bedford, VA	18	8	81	34
Orange, VT	26	-2	28	17	Montgomery, VA	7	15	22	8
Rutland, VT	13	-5	12	5	Roanoke, VA	21	-4	23	2
Windham, VT	32	-14	13	8	Rockbridge, VA	2	1	30	11
Windsor, VT	7	-11	21	4	Rockingham, VA	-2	1	31	25
Amherst, VA	7	28	13	-2	Washington, VA	-7	-16	15	16
Bland, VA	-1	-34	13	1	Jefferson, WV	-2	-11	44	25
Botetourt, VA	0	39	103	21	Mercer, WV	-6	-13	9	-2
Clarke, VA	-6	10	21	20	Monroe, WV	7	-10	18	8
Craig, VA	-2	-9	71	33					
Fauquier, VA	14	43	45	-1					
Giles, VA	3	-34	7	22					
Grayson, VA	2	-42	-13	32					
Greene, VA	-11	56	32	32	United States	6	-3	23	12

A&NR = Agriculture and Natural Resources

C&M = Construction and Manufacturing

S&S = Sales and Services

GOV = Government

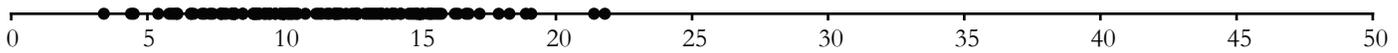
Poverty

Poverty is officially defined as the condition of living in a household with income below the federally-determined poverty threshold (\$19,484 in 2004 for a family of four people). The extent of poverty can be measured as the percentage of the total population living below that threshold. Those living in poverty can face such difficulties as finding adequate housing and health care, getting enough food, and reaching job sites and government services. The level of poverty

in the region necessarily becomes significant to trail management decisions and priorities.

Within the Appalachian National Scenic Trail region, the incidence of poverty (2004) ranges from 3.4% (Loudoun, VA) to 21.8 (Johnson, TN).¹⁰

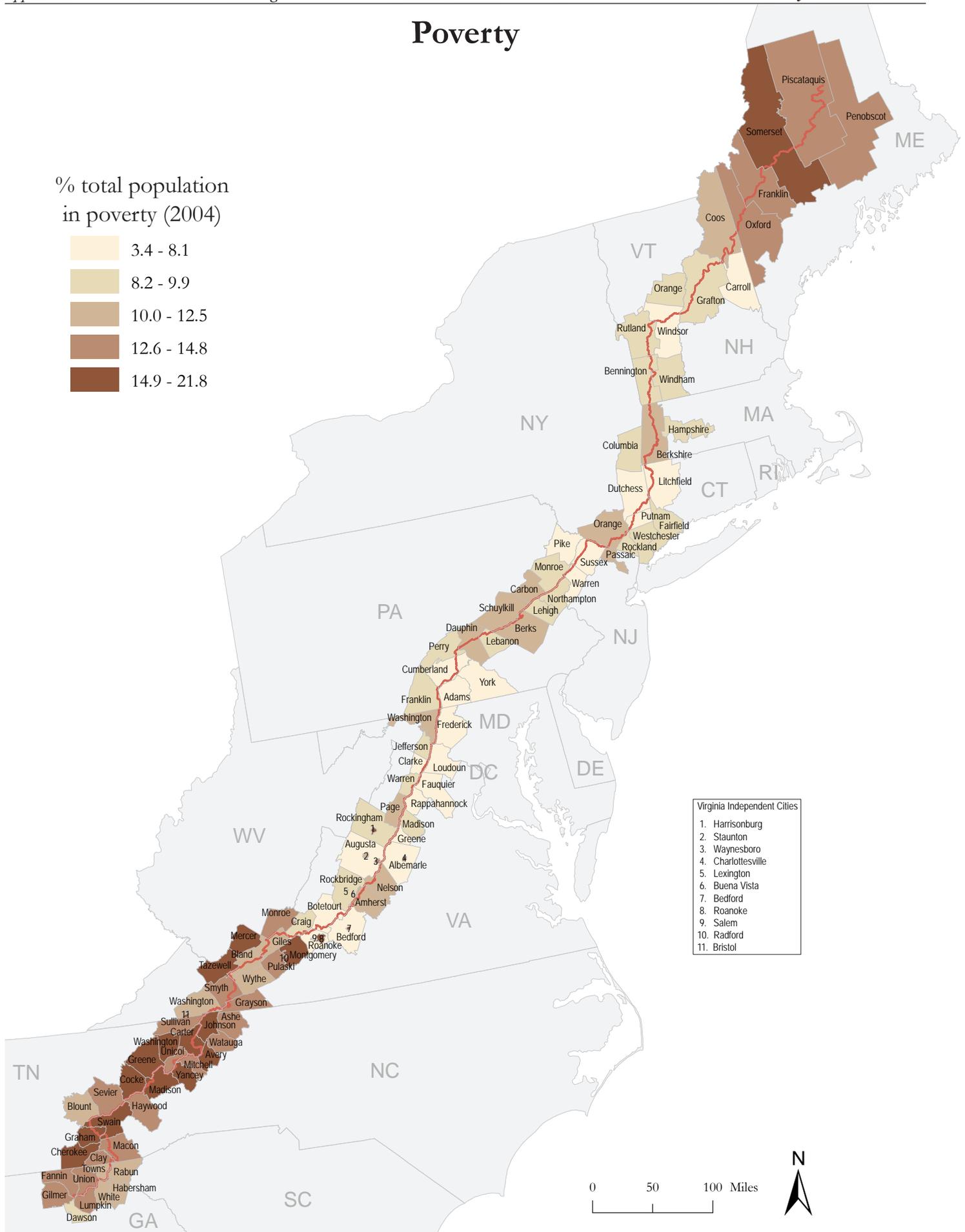
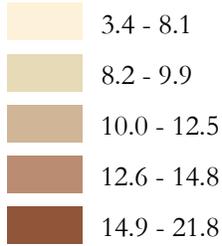
% total population in poverty (2004)							
		Fairfield, CT	8.5	Blount, TN	11.3	Monroe, WV	14.3
		Rockingham, VA	8.5	Buena Vista, VA (city)	11.4	Mitchell, NC	14.6
		Westchester, NY	8.9	Page, VA	11.6	Watauga, NC	14.7
Loudoun, VA	3.4	Orange, VT	8.9	Habersham, GA	11.7	Unicoi, TN	14.8
Sussex, NJ	4.4	Warren, VA	8.9	Towns, GA	11.9	Washington, TN	14.9
Putnam, NY	4.5	Lebanon, PA	9.0	Bland, VA	11.9	Montgomery, VA	14.9
Warren, NJ	5.4	Windham, VT	9.0	Wythe, VA	11.9	Cherokee, NC	15.1
Fauquier, VA	5.8	Jefferson, WV	9.0	White, GA	12.0	Bedford, VA (city)	15.1
Frederick, MD	5.9	Craig, VA	9.1	Passaic, NJ	12.0	Greene, TN	15.3
Botetourt, VA	6.0	Madison, VA	9.1	Rabun, GA	12.1	Madison, NC	15.4
Litchfield, CT	6.1	Monroe, PA	9.3	Washington, VA	12.3	Swain, NC	15.4
Clarke, VA	6.1	Rockbridge, VA	9.3	Staunton, VA (city)	12.5	Avery, NC	15.5
Rappahannock, VA	6.6	Bennington, VT	9.4	Oxford, ME	12.6	Somerset, ME	15.6
Roanoke, VA	6.6	Dawson, GA	9.5	Gilmer, GA	12.7	Tazewell, VA	15.7
Cumberland, PA	6.7	Rockland, NY	9.5	Union, GA	12.7	Lexington, VA (city)	15.8
Carroll, NH	7.0	Hampshire, MA	9.7	Clay, NC	12.7	Roanoke, VA (city)	16.3
Augusta, VA	7.1	Columbia, NY	9.7	Waynesboro, VA (city)	12.7	Yancey, NC	16.4
Albemarle, VA	7.3	Lehigh, PA	9.9	Lumpkin, GA	13.0	Graham, NC	16.7
Pike, PA	7.4	Rutland, VT	9.9	Pulaski, VA	13.1	Bristol, VA (city)	16.8
Dutchess, NY	7.7	Carbon, PA	10.0	Fannin, GA	13.2	Charlottesville, VA (city)	17.2
Adams, PA	7.7	Washington, MD	10.1	Macon, NC	13.3	Harrisonburg, VA (city)	17.9
Bedford, VA	7.7	Coos, NH	10.2	Sevier, TN	13.4	Carter, TN	18.3
Greene, VA	7.8	Orange, NY	10.2	Piscataquis, ME	13.5	Mercer, WV	18.9
Salem, VA (city)	7.9	Dauphin, PA	10.3	Franklin, ME	13.6	Radford, VA (city)	19.1
York, PA	8.1	Giles, VA	10.3	Penobscot, ME	13.6	Cocke, TN	21.4
Windsor, VT	8.1	Nelson, VA	10.4	Haywood, NC	13.8	Johnson, TN	21.8
Grafton, NH	8.2	Berkshire, MA	10.5	Sullivan, TN	14.0		
Franklin, PA	8.2	Berks, PA	10.5	Smyth, VA	14.0		
Northampton, PA	8.2	Schuylkill, PA	10.8	Ashe, NC	14.1		
Perry, PA	8.2	Amherst, VA	11.2	Grayson, VA	14.3	United States	12.7



Variation in Distribution of Data Values

Poverty

% total population in poverty (2004)



Median Household Income

Median household income is indicative of the general level of income among households in a county. The median value is the central value in a ranked dataset, with an equal number of observations both above and below the median. General income measures can provide insights into the opportunities and time available for recreation in the trail region.

Within the Appalachian National Scenic Trail region, median household income (2004) ranges from \$25,628 (Johnson, TN) to \$94,225 (Loudon, VA).

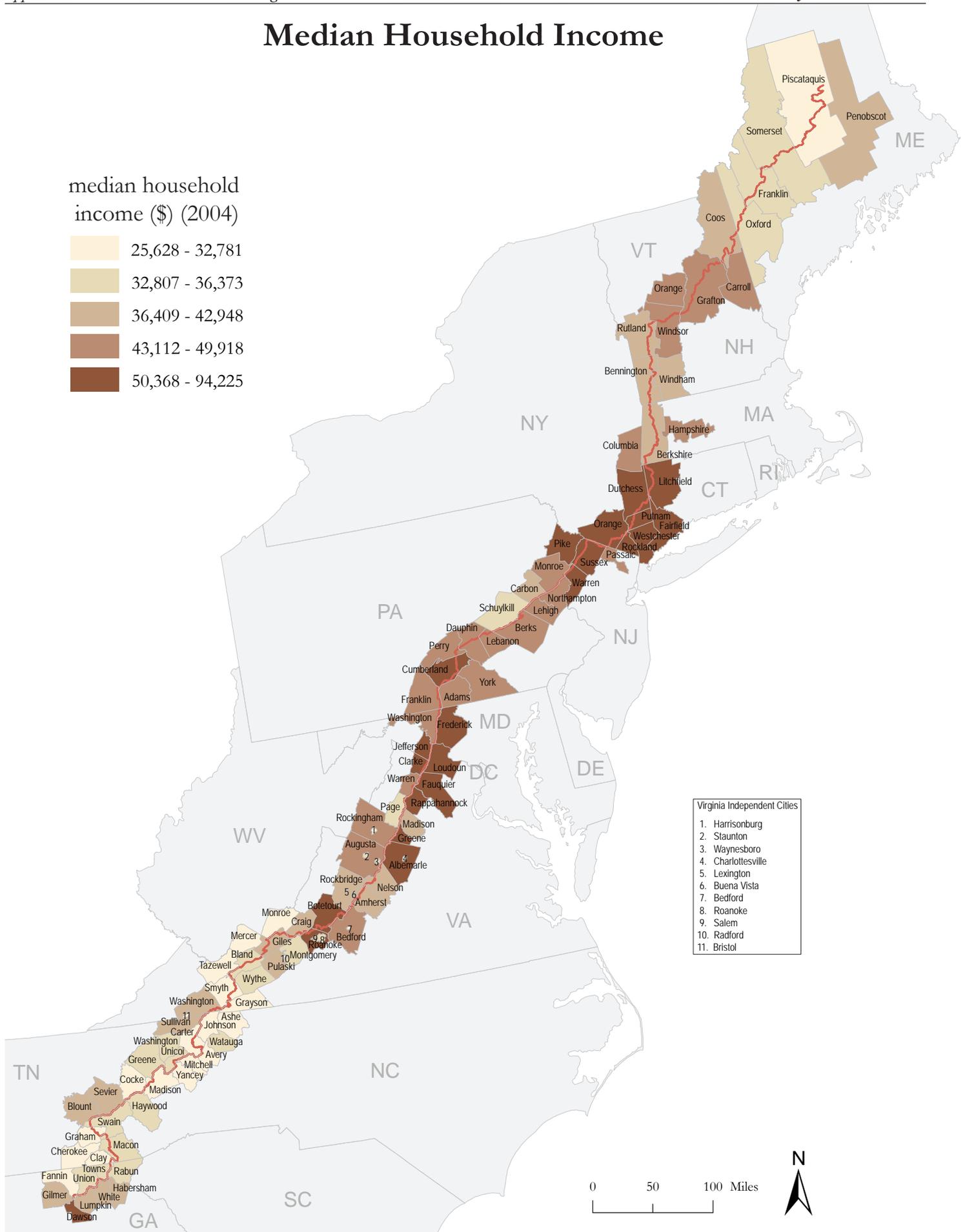
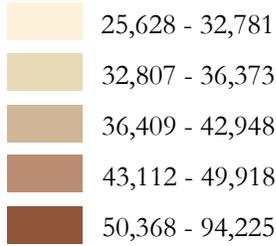
median household income (\$) (2004)	Greene, TN	33,917	Rutland, VT	39,607	Warren, VA	49,193	
	Bland, VA	34,001	Carbon, PA	39,678	York, PA	49,292	
	Swain, NC	34,123	Craig, VA	39,826	Northampton, PA	49,667	
Johnson, TN	25,628	Watauga, NC	34,165	Nelson, VA	40,000	Monroe, PA	49,918
Cocke, TN	27,003	Macon, NC	34,501	Rockbridge, VA	40,081	Pike, PA	50,368
Radford, VA (city)	27,585	Towns, GA	34,767	Lumpkin, GA	40,923	Dawson, GA	50,686
Mercer, WV	28,965	Franklin, ME	34,846	Windham, VT	41,271	Cumberland, PA	50,733
Graham, NC	29,609	Union, GA	34,903	Bennington, VT	41,411	Greene, VA	51,221
Bristol, VA (city)	29,816	Buena Vista, VA (city)	34,982	Salem, VA (city)	41,517	Jefferson, WV	51,930
Carter, TN	29,834	Wythe, VA	35,121	Berkshire, MA	41,589	Roanoke, VA	52,577
Cherokee, NC	30,177	Montgomery, VA	35,319	Blount, TN	41,639	Rappahannock, VA	53,062
Grayson, VA	30,260	Staunton, VA (city)	35,417	Madison, VA	42,948	Botetourt, VA	53,211
Tazewell, VA	30,576	Rabun, GA	35,441	Columbia, NY	43,112	Orange, NY	54,771
Yancey, NC	31,033	Waynesboro, VA (city)	35,455	Orange, VT	43,333	Albemarle, VA	55,118
Avery, NC	31,069	Page, VA	35,720	Windsor, VT	44,440	Clarke, VA	56,839
Monroe, WV	31,069	Oxford, ME	35,979	Carroll, NH	44,452	Dutchess, NY	56,971
Charlottesville, VA (city)	31,246	Schuylkill, PA	36,115	Lebanon, PA	44,636	Litchfield, CT	59,546
Ashe, NC	31,297	Haywood, NC	36,213	Rockingham, VA	45,238	Fairfield, CT	60,790
Harrisonburg, VA (city)	31,565	Washington, TN	36,373	Washington, MD	45,344	Warren, NJ	61,281
Bedford, VA (city)	31,754	Pulaski, VA	36,409	Franklin, PA	45,454	Westchester, NY	63,924
Piscataquis, ME	31,784	Sullivan, TN	36,562	Perry, PA	45,892	Rockland, NY	67,852
Fannin, GA	32,290	Gilmer, GA	36,570	Berks, PA	46,008	Frederick, MD	69,005
Mitchell, NC	32,334	Coos, NH	36,587	Lehigh, PA	46,015	Fauquier, VA	70,652
Madison, NC	32,541	Washington, VA	36,725	Dauphin, PA	46,761	Sussex, NJ	71,013
Smyth, VA	32,659	Sevier, TN	37,105	Grafton, NH	46,952	Putnam, NY	75,514
Clay, NC	32,781	Giles, VA	37,241	Augusta, VA	47,039	Loudoun, VA	94,225
Roanoke, VA (city)	32,807	Penobscot, ME	37,650	Passaic, NJ	47,861		
Somerset, ME	33,094	White, GA	38,380	Hampshire, MA	48,359		
Lexington, VA (city)	33,190	Habersham, GA	38,407	Adams, PA	48,439		
Unicoi, TN	33,704	Amherst, VA	38,891	Bedford, VA	48,518	United States	44,334



Variation in Distribution of Data Values

Median Household Income

median household income (\$) (2004)



- Virginia Independent Cities
1. Harrisonburg
 2. Staunton
 3. Waynesboro
 4. Charlottesville
 5. Lexington
 6. Buena Vista
 7. Bedford
 8. Roanoke
 9. Salem
 10. Radford
 11. Bristol

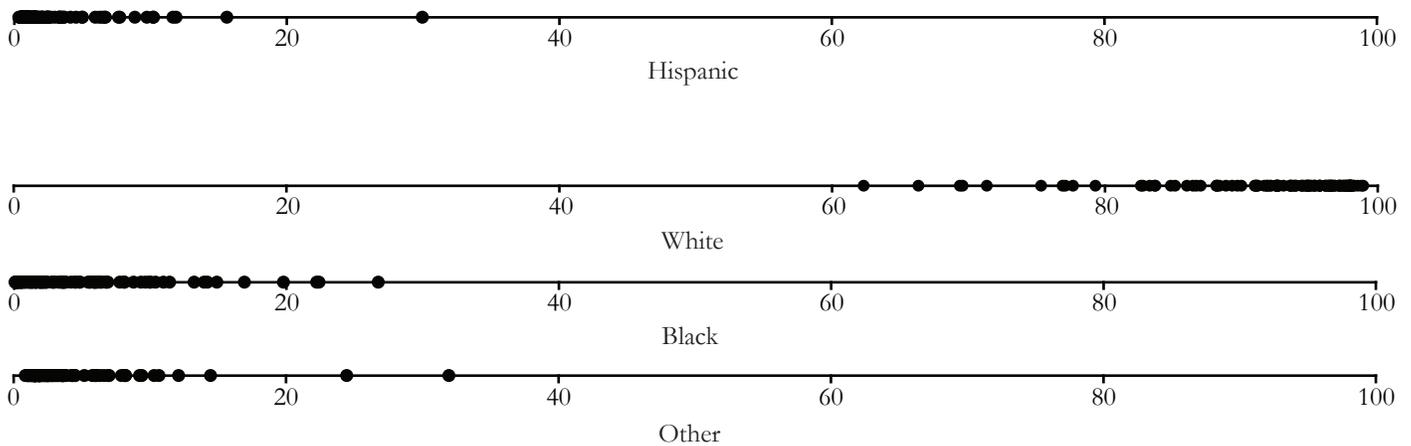
Racial and Ethnic Composition

Racial and ethnic composition is indicated by the relative size of each of the major race groups and the separate Hispanic ethnic category as classified by the U.S. Census Bureau. These characteristics of the region’s population reveal its diversity, which informs trail activities such as interpretation and outreach.

Within the Appalachian National Scenic Trail region (2000), Whites constitute the largest racial group in all 113 counties. Passaic County, NJ has the largest percentage

of Hispanic persons (30%). Swain County, NC has the largest percentage of American Indian/Alaska Native persons (29%). Roanoke, VA (city) has the largest percentage of Black persons (27%).¹¹

Note: Data are presented in a two-page table that follows the adjacent map.

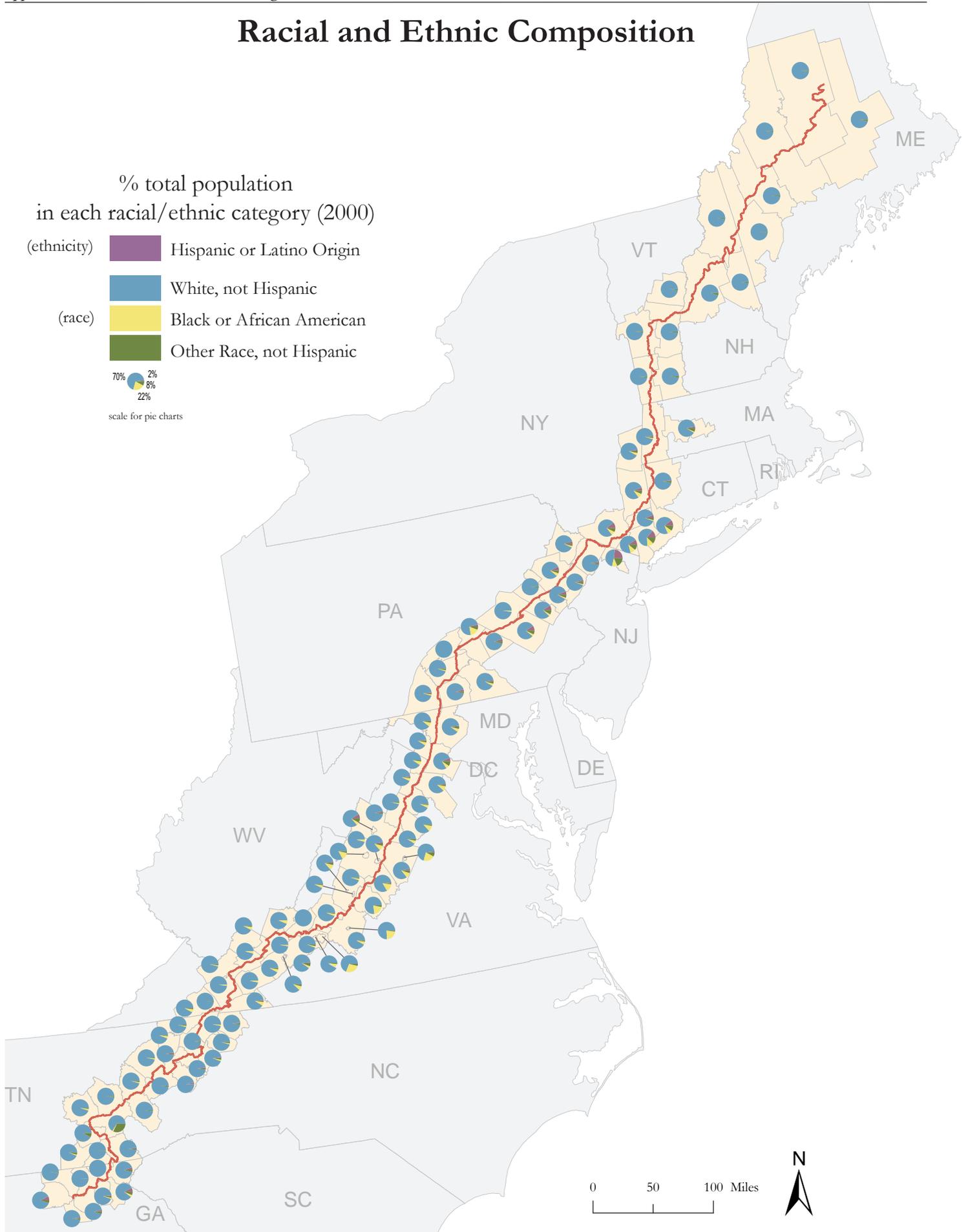
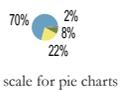


Variation in Distribution of Data Values

Racial and Ethnic Composition

% total population
in each racial/ethnic category (2000)

- (ethnicity) Hispanic or Latino Origin
- White, not Hispanic
- (race) Black or African American
- Other Race, not Hispanic



Racial and Ethnic Composition

% total population in each racial/ethnic category (2000)

	H	W	B	AI	A	NH	O	T		H	W	B	AI	A	NH	O	T
Fairfield, CT	12	79	10	0	3	0	5	2	Putnam, NY	6	94	2	0	1	0	2	1
Litchfield, CT	2	96	1	0	1	0	1	1	Rockland, NY	10	77	11	0	6	0	4	3
Dawson, GA	2	97	0	0	0	0	1	1	Westchester, NY	16	71	14	0	4	0	7	3
Fannin, GA	1	98	0	0	0	0	0	1	Ashe, NC	2	97	1	0	0	0	1	1
Gilmer, GA	8	94	0	0	0	0	4	1	Avery, NC	2	94	3	0	0	0	1	1
Habersham, GA	8	89	4	0	2	0	3	1	Cherokee, NC	1	95	2	2	0	0	0	1
Lumpkin, GA	3	94	1	1	0	0	2	2	Clay, NC	1	98	1	0	0	0	0	1
Rabun, GA	5	95	1	0	0	0	3	1	Graham, NC	1	92	0	7	0	0	0	1
Towns, GA	1	99	0	0	0	0	0	0	Haywood, NC	1	97	1	0	0	0	0	1
Union, GA	1	98	1	0	0	0	0	1	Macon, NC	2	97	1	0	0	0	0	1
White, GA	2	95	2	0	1	0	1	1	Madison, NC	1	98	1	0	0	0	0	1
Franklin, ME	1	98	0	0	0	0	0	1	Mitchell, NC	2	98	0	0	0	0	1	1
Oxford, ME	1	98	0	0	0	0	0	1	Swain, NC	1	66	2	29	0	0	0	2
Penobscot, ME	1	97	0	1	1	0	0	1	Watauga, NC	1	96	2	0	1	0	0	1
Piscataquis, ME	1	98	0	1	0	0	0	1	Yancey, NC	3	98	1	0	0	0	0	1
Somerset, ME	0	98	0	0	0	0	0	1	Adams, PA	4	95	1	0	0	0	2	1
Frederick, MD	2	89	6	0	2	0	1	1	Berks, PA	10	88	4	0	1	0	5	2
Washington, MD	1	90	8	0	1	0	0	1	Carbon, PA	1	98	1	0	0	0	0	1
Berkshire, MA	2	95	2	0	1	0	1	1	Cumberland, PA	1	94	2	0	2	0	0	1
Hampshire, MA	3	91	2	0	3	0	1	2	Dauphin, PA	4	77	17	0	2	0	2	2
Carroll, NH	0	98	0	0	0	0	0	1	Franklin, PA	2	95	2	0	1	0	1	1
Coos, NH	1	98	0	0	0	0	0	1	Lebanon, PA	5	94	1	0	1	0	2	1
Grafton, NH	1	96	1	0	2	0	0	1	Lehigh, PA	10	87	4	0	2	0	5	2
Passaic, NJ	30	62	13	0	4	0	16	4	Monroe, PA	7	88	6	0	1	0	2	2
Sussex, NJ	3	96	1	0	1	0	1	1	Northampton, PA	7	91	3	0	1	0	3	1
Warren, NJ	4	95	2	0	1	0	1	1	Perry, PA	1	99	0	0	0	0	0	1
Columbia, NY	3	92	5	0	1	0	1	1	Pike, PA	5	93	3	0	1	0	1	1
Dutchess, NY	6	84	9	0	3	0	2	2	Schuylkill, PA	1	97	2	0	0	0	0	0
Orange, NY	12	84	8	0	2	0	4	2	York, PA	3	93	4	0	1	0	1	1

H = Hispanic or Latino Origin
 W = White
 B = Black or African American
 AI = American Indian or Alaska Native

A = Asian
 NH = Native Hawaiian or Other Pacific Islander
 O = Some Other Race
 T = Two or More Races

Percentages for racial categories may not add to one hundred due to rounding.

Racial and Ethnic Composition

% total population in each racial/ethnic category (2000)

	H	W	B	AI	A	NH	O	T		H	W	B	AI	A	NH	O	T
Blount, TN	1	95	3	0	1	0	0	1	Nelson, VA	2	83	15	0	0	0	1	1
Carter, TN	1	97	1	0	0	0	0	1	Page, VA	1	96	2	0	0	0	0	1
Cocke, TN	1	96	2	0	0	0	0	1	Pulaski, VA	1	93	6	0	0	0	0	1
Greene, TN	1	96	2	0	0	0	0	1	Rappahannock, VA	1	93	5	0	0	0	0	1
Johnson, TN	1	96	2	0	0	0	0	0	Roanoke, VA	1	94	3	0	2	0	0	1
Sevier, TN	1	97	1	0	1	0	0	1	Rockbridge, VA	1	95	3	0	0	0	0	1
Sullivan, TN	1	97	2	0	0	0	0	1	Rockingham, VA	3	97	1	0	0	0	1	1
Unicoi, TN	2	98	0	0	0	0	1	1	Smyth, VA	1	97	2	0	0	0	0	1
Washington, TN	1	94	4	0	1	0	1	1	Tazewell, VA	1	96	2	0	1	0	0	1
Bennington, VT	1	98	0	0	1	0	0	1	Warren, VA	2	93	5	0	0	0	0	1
Orange, VT	1	98	0	0	0	0	0	1	Washington, VA	1	98	1	0	0	0	0	1
Rutland, VT	1	98	0	0	0	0	0	1	Wythe, VA	1	96	3	0	0	0	0	1
Windham, VT	1	97	1	0	1	0	0	1	Bedford, VA (city)	1	75	22	0	1	0	0	1
Windsor, VT	1	98	0	0	1	0	0	1	Bristol, VA (city)	1	93	6	0	0	0	0	1
Albemarle, VA	3	85	10	0	3	0	1	1	Buena Vista, VA (city)	1	94	5	0	0	0	0	1
Amherst, VA	1	78	20	1	0	0	0	1	Charlottesville, VA (city)	2	70	22	0	5	0	1	2
Augusta, VA	1	95	4	0	0	0	0	1	Harrisonburg, VA (city)	9	85	6	0	3	0	3	3
Bedford, VA	1	92	6	0	0	0	0	1	Lexington, VA (city)	2	86	10	0	2	0	0	1
Bland, VA	0	95	4	0	0	0	0	1	Radford, VA (city)	1	88	8	0	1	0	0	2
Botetourt, VA	1	95	4	0	0	0	0	1	Roanoke, VA (city)	1	69	27	0	1	0	1	2
Clarke, VA	1	91	7	0	0	0	1	1	Salem, VA (city)	1	92	6	0	1	0	0	1
Craig, VA	0	99	0	0	0	0	0	0	Staunton, VA (city)	1	83	14	0	0	0	1	2
Fauquier, VA	2	88	9	0	1	0	1	1	Waynesboro, VA (city)	3	86	10	0	1	0	1	2
Giles, VA	1	97	2	0	0	0	0	1	Jefferson, WV	2	91	6	0	1	0	1	1
Grayson, VA	2	92	7	0	0	0	1	1	Mercer, WV	0	93	6	0	0	0	0	1
Greene, VA	1	91	6	0	0	0	1	1	Monroe, WV	0	93	6	0	0	0	0	1
Loudoun, VA	6	83	7	0	5	0	2	2									
Madison, VA	1	87	11	0	1	0	0	1									
Montgomery, VA	2	90	4	0	4	0	1	2	United States	13	75	12	1	4	0	5	2

H = Hispanic or Latino Origin
 W = White
 B = Black or African American
 AI = American Indian or Alaska Native

A = Asian
 NH = Native Hawaiian or Other Pacific Islander
 O = Some Other Race
 T = Two or More Races

Percentages for racial categories may not add to one hundred due to rounding.

Racial Diversity

Racial diversity is measured as the percentage of the population belonging to minority groups. In the current U.S. context, “minority” races are defined as non-White (Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, Some Other Race, and Two or More Races). Interactions among people are often influenced by racial identity. Hence, it makes sense for institutions ranging from retailers to police to parks and trails to consider regional

racial diversity when recruiting and training staff, when designing public information and educational materials, and when soliciting public involvement in decision-making.

Within the Appalachian National Scenic Trail region, the percentage of racial minorities (2000) ranges from 1.1% (Craig, VA) to 37.7% (Passaic, NJ).¹²

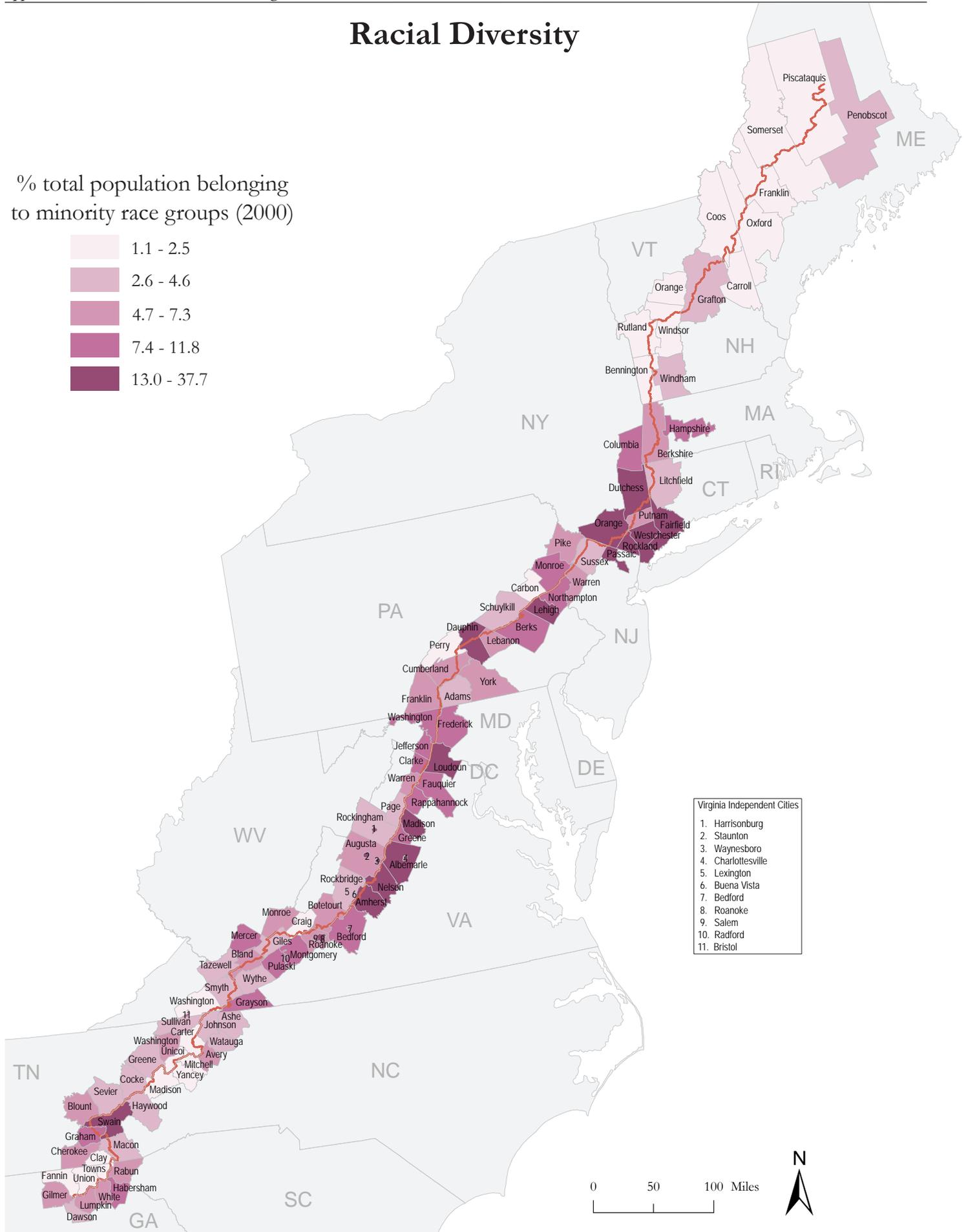
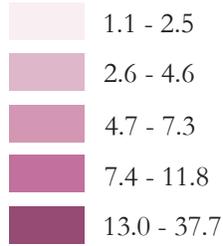
% total population belonging to minority race groups (2000)		Ashe, NC 2.8		Lebanon, PA 5.5		Habersham, GA 11.1	
			Smyth, VA 3.1		Cumberland, PA 5.6		Fauquier, VA 11.6
			Haywood, NC 3.2		Lumpkin, GA 6.0		Radford, VA (city) 11.8
	Craig, VA 1.1		Windham, VT 3.3		Avery, NC 6.0		Monroe, PA 11.8
	Towns, GA 1.2		Schuylkill, PA 3.4		Putnam, NY 6.1		Berks, PA 11.8
	Perry, PA 1.5		Penobscot, ME 3.4		Washington, TN 6.3		Lehigh, PA 13.0
	Oxford, ME 1.7		Rockingham, VA 3.4		Gilmer, GA 6.4		Madison, VA 13.3
	Carroll, NH 1.8		Sullivan, TN 3.4		Roanoke, VA 6.4		Waynesboro, VA (city) 13.5
	Rutland, VT 1.9		Watauga, NC 3.5		Buena Vista, VA (city) 6.4		Lexington, VA (city) 14.0
	Coos, NH 1.9		Greene, TN 3.6		Pike, PA 6.9		Albemarle, VA 14.8
	Orange, VT 2.0		Johnson, TN 3.6		York, PA 7.2		Harrisonburg, VA (city) 15.2
	Clay, NC 2.0		Page, VA 3.7		Warren, VA 7.3		Orange, NY 16.3
	Somerset, ME 2.0		Cocke, TN 3.8		Monroe, WV 7.3		Dutchess, NY 16.3
	Yancey, NC 2.0		Tazewell, VA 3.8		Rappahannock, VA 7.4		Staunton, VA (city) 16.7
	Fannin, GA 2.0		Litchfield, CT 4.2		Pulaski, VA 7.4		Loudoun, VA 17.2
	Unicoi, TN 2.0		Wythe, VA 4.2		Mercer, WV 7.4		Nelson, VA 17.3
	Franklin, ME 2.0		Grafton, NH 4.2		Bristol, VA (city) 7.5		Fairfield, CT 20.7
	Union, GA 2.1		Sussex, NJ 4.3		Bedford, VA 7.8		Amherst, VA 22.3
	Mitchell, NC 2.1		Rockbridge, VA 4.6		Columbia, NY 7.9		Dauphin, PA 22.9
	Piscataquis, ME 2.2		Adams, PA 4.6		Graham, NC 8.1		Rockland, NY 23.1
	Carbon, PA 2.2		Franklin, PA 4.7		Salem, VA (city) 8.1		Bedford, VA (city) 24.7
	Bennington, VT 2.3		White, GA 4.8		Grayson, VA 8.3		Westchester, NY 28.7
	Windsor, VT 2.3		Berkshire, MA 5.0		Northampton, PA 8.8		Charlottesville, VA (city) 30.4
	Madison, NC 2.4		Augusta, VA 5.0		Clarke, VA 8.9		Roanoke, VA (city) 30.6
	Washington, VA 2.4		Botetourt, VA 5.1		Hampshire, MA 8.9		Swain, NC 33.7
	Carter, TN 2.5		Rabun, GA 5.1		Jefferson, WV 9.0		Passaic, NJ 37.7
	Giles, VA 2.6		Cherokee, NC 5.2		Greene, VA 9.0		
	Sevier, TN 2.7		Bland, VA 5.2		Montgomery, VA 10.0		
	Dawson, GA 2.8		Blount, TN 5.3		Washington, MD 10.3		
	Macon, NC 2.8		Warren, NJ 5.5		Frederick, MD 10.7		United States 24.9



Variation in Distribution of Data Values

Racial Diversity

% total population belonging to minority race groups (2000)



- Virginia Independent Cities
1. Harrisonburg
 2. Staunton
 3. Waynesboro
 4. Charlottesville
 5. Lexington
 6. Buena Vista
 7. Bedford
 8. Roanoke
 9. Salem
 10. Radford
 11. Bristol

Educational Attainment

Educational attainment indicators measure the average amount of formal education that a county’s residents have received. One indicator of educational attainment is the percentage of adults who have attended or graduated from college. Educational attainment influences many aspects of life, such as how much money people earn, what they do for recreation, where they get their information, and how they participate in civic life. With regard to trail management, the educational attainment

of the general public is an important consideration in activities, such as marketing, public participation processes, and the design of interpretive programs.

Within the Appalachian National Scenic Trail region, the percentage of adults with some college education (2000) ranges from 23.1% (Cocke, TN) to 74.9% (Loudon, VA).¹³

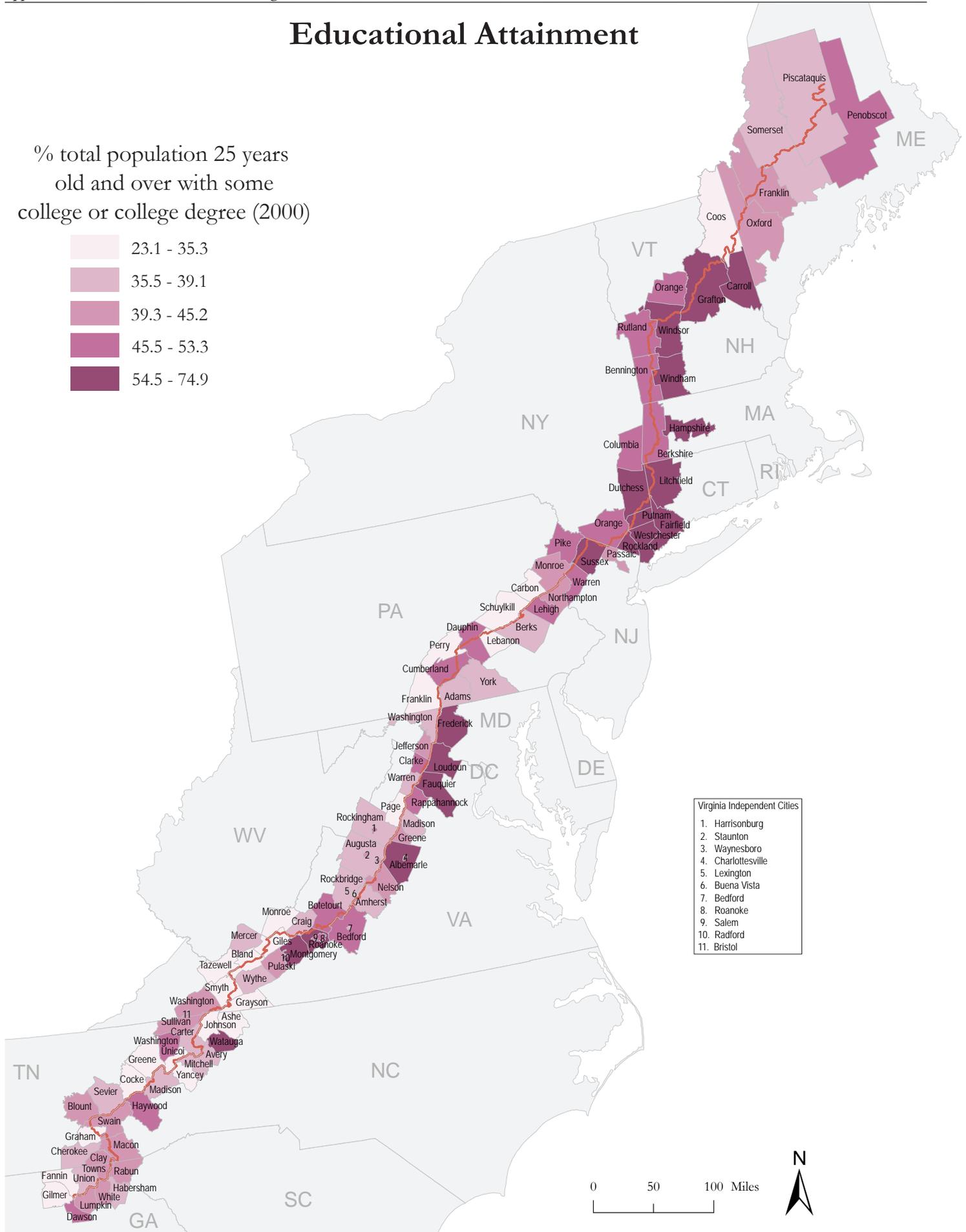
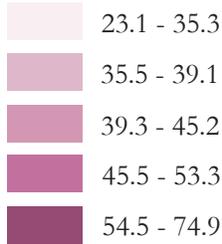
% total population 25 years old and over with some college or college degree (2000)								
	Craig, VA	35.8		Clay, NC	42.7		Orange, NY	50.8
	Adams, PA	35.9		Sullivan, TN	42.8		Berkshire, MA	50.9
	Piscataquis, ME	36.6		Bristol, VA (city)	43.1		Bennington, VT	51.8
	Cocke, TN	23.1		Rockingham, VA	37.0		Greene, VA	43.7
	Johnson, TN	23.9		Habersham, GA	37.1		Blount, TN	44.0
	Page, VA	25.1		Amherst, VA	37.2		Waynesboro, VA (city)	44.0
	Grayson, VA	26.4		Madison, NC	37.5		Northampton, PA	44.2
	Monroe, WV	26.9		Wythe, VA	37.8		Franklin, ME	44.2
	Schuylkill, PA	28.9		Warren, VA	37.8		Jefferson, WV	44.4
	Perry, PA	30.3		Augusta, VA	37.9		Staunton, VA (city)	44.5
	Carbon, PA	31.1		Sevier, TN	38.2		Macon, NC	45.1
	Unicoi, TN	31.7		Cherokee, NC	38.5		Monroe, PA	45.2
	Lebanon, PA	32.0		Bedford, VA (city)	38.5		Pike, PA	45.5
	Fannin, GA	32.0		Rockbridge, VA	38.6		Roanoke, VA (city)	45.6
	Greene, TN	32.2		Berks, PA	38.7		Haywood, NC	45.6
	Graham, NC	32.4		Avery, NC	38.8		Rappahannock, VA	45.9
	Gilmer, GA	32.7		Madison, VA	38.8		Dauphin, PA	46.0
	Bland, VA	32.8		Washington, MD	38.9		Lehigh, PA	46.2
	Smyth, VA	33.1		Union, GA	39.1		Dawson, GA	46.3
	Franklin, PA	34.0		York, PA	39.1		Orange, VT	46.6
	Yancey, NC	34.3		Oxford, ME	39.3		Penobscot, ME	47.3
	Buena Vista, VA (city)	35.0		Pulaski, VA	40.4		Bedford, VA	47.4
	Tazewell, VA	35.0		Swain, NC	40.4		Botetourt, VA	47.5
	Giles, VA	35.1		Rabun, GA	40.4		Washington, TN	48.2
	Ashe, NC	35.3		White, GA	40.8		Columbia, NY	48.3
	Coos, NH	35.3		Washington, VA	41.1		Rutland, VT	48.5
	Mercer, WV	35.5		Lumpkin, GA	41.6		Clarke, VA	49.2
	Somerset, ME	35.5		Towns, GA	41.7		Warren, NJ	49.5
	Carter, TN	35.6		Passaic, NJ	42.1		Salem, VA (city)	49.8
	Mitchell, NC	35.7		Nelson, VA	42.4		Cumberland, PA	50.3
							United States	51.8



Variation in Distribution of Data Values

Educational Attainment

% total population 25 years old and over with some college or college degree (2000)



Recreation/Tourism Establishments

The recreation and tourism industry is measured using two categories: the arts, entertainment and recreation sector (ranging from museums and concerts, to sporting events and amusement parks) and the accommodation and food services sector (ranging from hotels to campsites). The size of these sectors is a broad indicator of a county's economic reliance on recreation and tourism relative to the other sectors of the economy. Recreation and tourism establishments can be proponents of actions that enhance their area's attractiveness as a visitor destination (such as transportation improvements,

protection of scenic or cultural landmarks, or marketing campaigns). Recreation and tourism establishments also can be vulnerable to, and thus wary of, actions, policies, or chance events that could affect business, such as visitor use restrictions, fires, or economic downturns.

Within the Appalachian National Scenic Trail region, the percentage of total establishments in arts, entertainment, and recreation, and in accommodation and food services (2004) ranges from 4.3% (Madison, VA) to 30.0% (Swain, NC).¹⁴

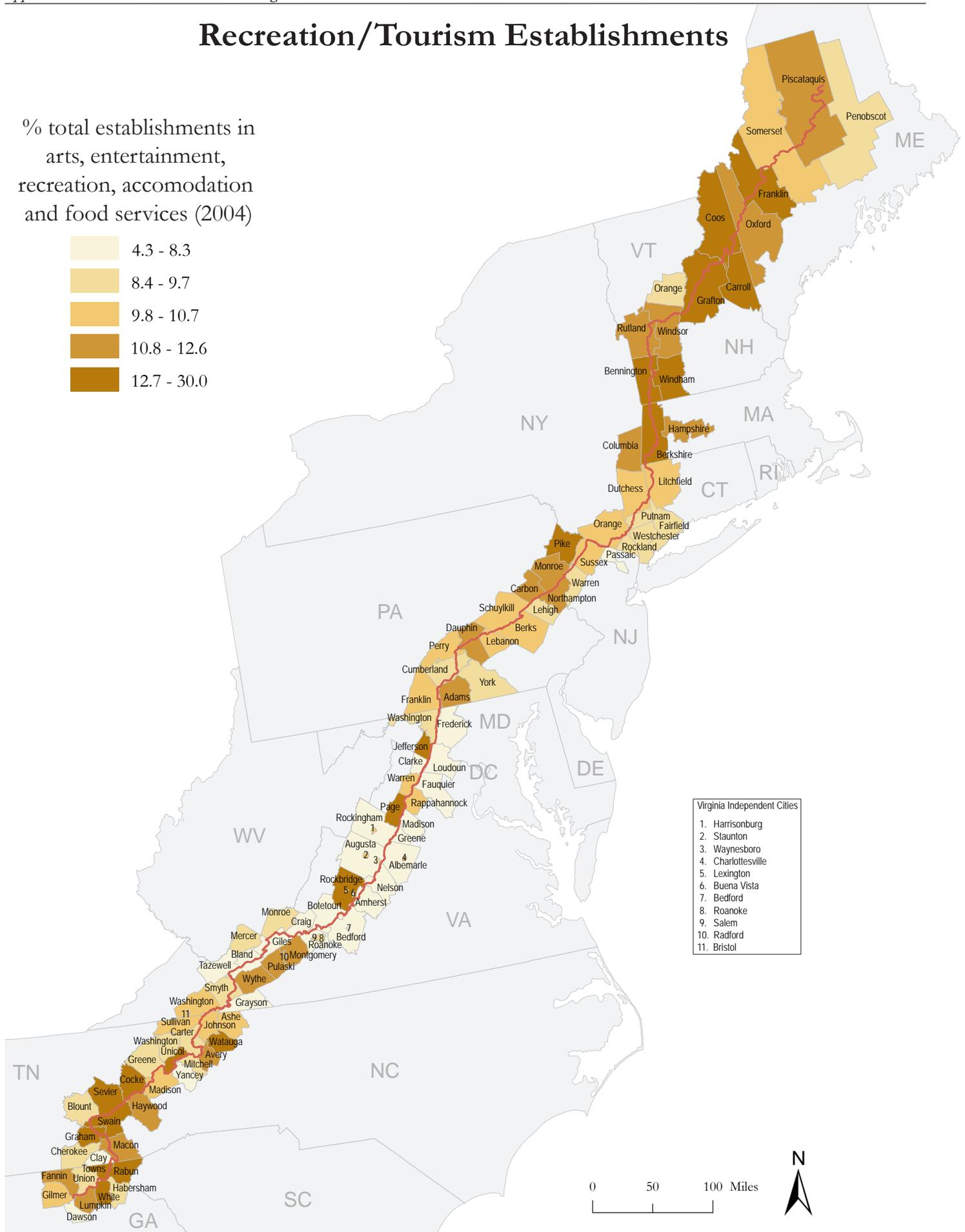
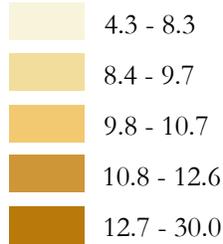
% total establishments in recreation and tourism (2004)							
		Monroe, WV	8.5	Sullivan, TN	10.0	Adams, PA	12.5
		Cherokee, NC	8.5	Litchfield, CT	10.0	Piscataquis, ME	12.5
		Waynesboro, VA (city)	8.6	Franklin, PA	10.0	Columbia, NY	12.6
Madison, VA	4.3	Greene, TN	8.7	Staunton, VA (city)	10.0	Oxford, ME	12.6
Clay, NC	4.4	Fairfield, CT	8.7	Salem, VA (city)	10.1	Monroe, PA	12.6
Craig, VA	4.5	Putnam, NY	8.8	Rappahannock, VA	10.2	Rabun, GA	12.7
Bland, VA	5.5	Rockland, NY	8.9	Washington, VA	10.2	Graham, NC	12.8
Clarke, VA	5.5	Orange, VT	8.9	Berks, PA	10.2	Unicoi, TN	12.9
Rockingham, VA	5.8	Buena Vista, VA (city)	9.0	Perry, PA	10.3	Page, VA	13.1
Tazewell, VA	6.1	Union, GA	9.0	Schuylkill, PA	10.4	Watauga, NC	13.1
Bedford, VA	6.1	Habersham, GA	9.1	Dutchess, NY	10.4	Jefferson, WV	13.3
Botetourt, VA	6.6	Roanoke, VA (city)	9.1	Somerset, ME	10.5	Towns, GA	13.7
Augusta, VA	6.9	Cumberland, PA	9.1	Harrisonburg, VA (city)	10.7	Franklin, ME	13.7
Roanoke, VA	7.0	Penobscot, ME	9.1	Bristol, VA (city)	10.7	Grafton, NH	13.8
Albemarle, VA	7.2	Lehigh, PA	9.3	Northampton, PA	10.8	Rockbridge, VA	13.8
Grayson, VA	7.2	Washington, TN	9.4	Montgomery, VA	11.0	Bennington, VT	13.9
Giles, VA	7.3	Washington, MD	9.4	Fannin, GA	11.1	Berkshire, MA	14.1
Loudoun, VA	7.4	Warren, NJ	9.5	Avery, NC	11.2	White, GA	14.2
Greene, VA	7.4	Carter, TN	9.6	Macon, NC	11.2	Pike, PA	14.6
Frederick, MD	7.7	Blount, TN	9.7	Dauphin, PA	11.3	Cocke, TN	14.7
Fauquier, VA	7.7	York, PA	9.7	Lumpkin, GA	11.4	Windham, VT	15.0
Dawson, GA	7.9	Mitchell, NC	9.7	Wythe, VA	11.4	Coos, NH	15.7
Passaic, NJ	8.1	Sussex, NJ	9.8	Pulaski, VA	11.5	Carroll, NH	17.8
Nelson, VA	8.1	Lebanon, PA	9.8	Haywood, NC	11.5	Lexington, VA (city)	20.7
Yancey, NC	8.1	Madison, NC	9.9	Rutland, VT	11.8	Sevier, TN	21.2
Bedford, VA (city)	8.3	Orange, NY	9.9	Radford, VA (city)	11.8	Swain, NC	30.0
Amherst, VA	8.3	Ashe, NC	9.9	Windsor, VT	11.9		
Mercer, WV	8.4	Warren, VA	9.9	Carbon, PA	12.4		
Westchester, NY	8.4	Gilmer, GA	9.9	Hampshire, MA	12.4		
Smyth, VA	8.4	Johnson, TN	10.0	Charlottesville, VA (city)	12.4	United States	9.6



Variation in Distribution of Data Values

Recreation/Tourism Establishments

% total establishments in arts, entertainment, recreation, accomodation and food services (2004)



- Virginia Independent Cities
1. Harrisonburg
 2. Staunton
 3. Waynesboro
 4. Charlottesville
 5. Lexington
 6. Buena Vista
 7. Bedford
 8. Roanoke
 9. Salem
 10. Radford
 11. Bristol

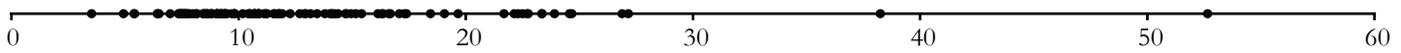
Recreation/Tourism Employment

The significance of the recreation/tourism industry to a county economy can be indicated by the percentage of county workers that it employs. Workers counted as recreation and tourism employees include country club managers, blackjack dealers, campground employees, fishing guides, motel attendants, and other providers of recreation and food services. A high level of recreation/tourism employment may mean that residents have more

disposable income or that the area attracts visitors or vacationers.

Within the Appalachian National Scenic Trail region, the percentage of total paid employees in arts, entertainment, recreation, accommodation and food services (2004) ranges from 3.5% (Clarke, VA) to 52.7% (Swain, NC).¹⁵

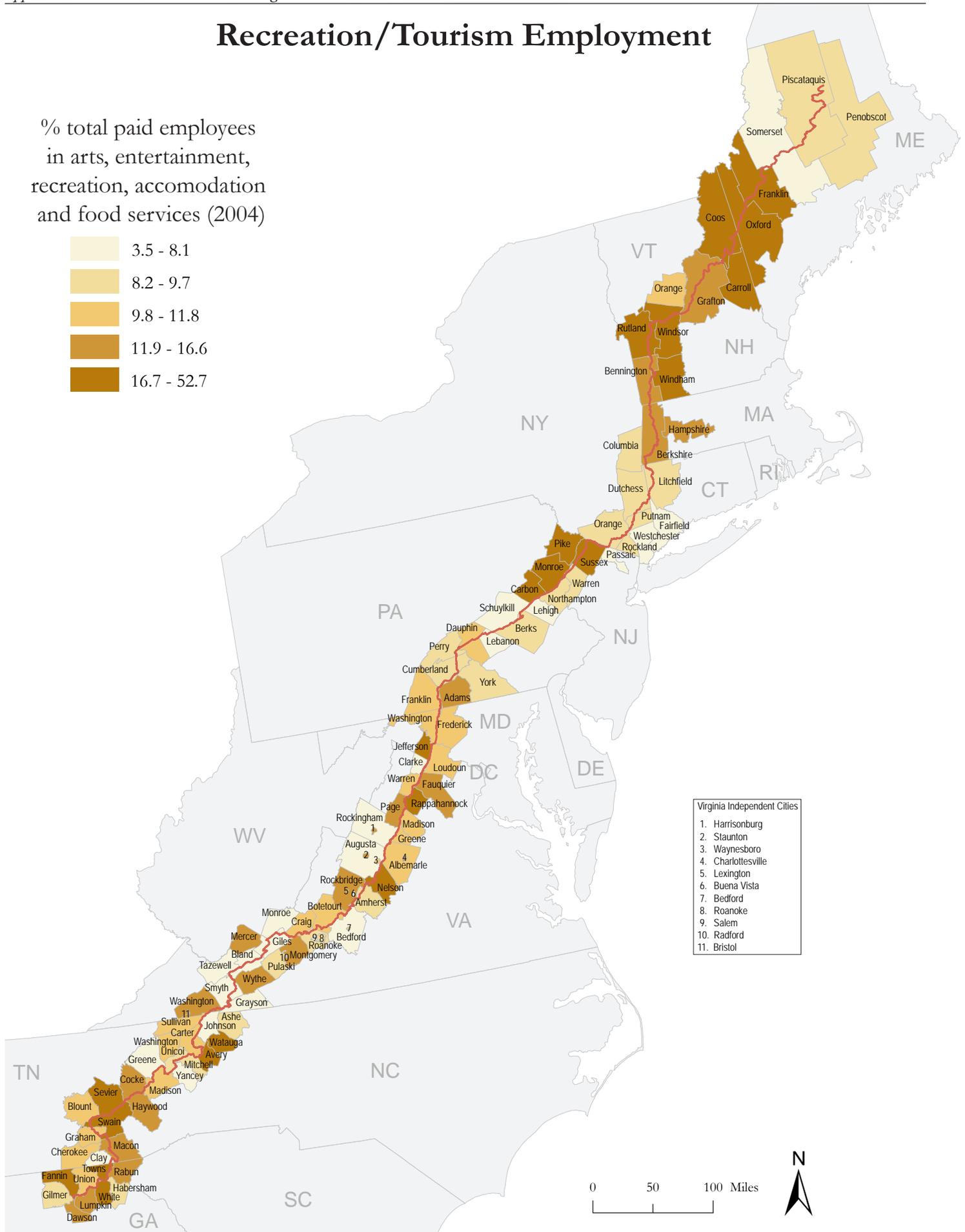
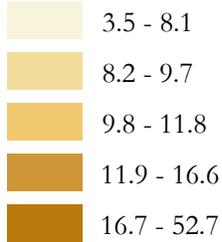
% total paid employees in recreation and tourism (2004)	County	Percentage	County	Percentage	County	Percentage
	Piscataquis, ME	8.6	Albemarle, VA	10.9	Montgomery, VA	16.1
	Roanoke, VA (city)	8.6	Union, GA	10.9	Charlottesville, VA (city)	16.3
	Unicoi, TN	8.6	Frederick, MD	10.9	Wythe, VA	16.4
Clarke, VA	Dutchess, NY	8.8	Waynesboro, VA (city)	10.9	Dawson, GA	16.6
Bland, VA	Amherst, VA	8.8	Graham, NC	11.1	Rutland, VT	16.7
Buena Vista, VA (city)	York, PA	8.8	Blount, TN	11.2	Fannin, GA	17.1
Smyth, VA	Pulaski, VA	9.0	Warren, VA	11.2	Sussex, NJ	17.3
Passaic, NJ	Putnam, NY	9.1	Botetourt, VA	11.6	Oxford, ME	17.4
Bedford, VA	Perry, PA	9.1	Greene, VA	11.6	Carbon, PA	18.5
Clay, NC	Roanoke, VA	9.1	Cherokee, NC	11.7	Monroe, PA	19.1
Augusta, VA	Gilmer, GA	9.2	Craig, VA	11.8	Franklin, ME	19.7
Schuylkill, PA	Penobscot, ME	9.2	Washington, TN	11.8	Nelson, VA	21.7
Somerset, ME	Orange, NY	9.3	Bristol, VA (city)	11.9	Windham, VT	22.1
Yancey, NC	Habersham, GA	9.3	Hampshire, MA	12.3	White, GA	22.3
Lehigh, PA	Litchfield, CT	9.4	Rockbridge, VA	12.7	Windsor, VT	22.5
Grayson, VA	Berks, PA	9.4	Staunton, VA (city)	12.9	Watauga, NC	22.7
Salem, VA (city)	Northampton, PA	9.4	Mercer, WV	13.0	Coos, NH	22.8
Greene, TN	Columbia, NY	9.5	Cocke, TN	13.2	Avery, NC	23.3
Fairfield, CT	Ashe, NC	9.7	Washington, VA	13.5	Lexington, VA (city)	23.4
Lebanon, PA	Madison, VA	9.8	Fauquier, VA	13.8	Rappahannock, VA	23.9
Monroe, WV	Orange, VT	9.8	Page, VA	14.0	Towns, GA	24.6
Giles, VA	Washington, MD	9.8	Adams, PA	14.1	Carroll, NH	24.7
Rockingham, VA	Sullivan, TN	10.2	Lumpkin, GA	14.1	Pike, PA	26.9
Tazewell, VA	Dauphin, PA	10.4	Grafton, NH	14.2	Jefferson, WV	27.2
Westchester, NY	Carter, TN	10.5	Rabun, GA	14.4	Sevier, TN	38.3
Johnson, TN	Bedford, VA (city)	10.5	Harrisonburg, VA (city)	14.7	Swain, NC	52.7
Mitchell, NC	Franklin, PA	10.7	Haywood, NC	14.7		
Rockland, NY	Radford, VA (city)	10.7	Bennington, VT	15.0		
Cumberland, PA	Loudoun, VA	10.7	Macon, NC	15.2		
Warren, NJ	Madison, NC	10.7	Berkshire, MA	15.4	United States	11.0



Variation in Distribution of Data Values

Recreation/Tourism Employment

% total paid employees
in arts, entertainment,
recreation, accomodation
and food services (2004)



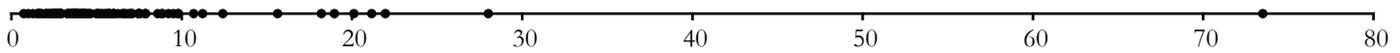
Recreation/Tourism Revenue

Recreation and tourism revenue is a key indicator of the economic importance of recreation and tourism to a county. Recreation and tourism revenue can be expressed as a percentage of total sales and service receipts. Recreation and tourism establishments can occupy an important position within a county economy because they attract visitor dollars from elsewhere. Secondary economic benefits are realized when these dollars are re-spent within

the local economy or deposited in banks, where they provide capital to other businesses.

Within the Appalachian National Scenic Trail region, the percentage of total sales from arts, entertainment, recreation, accommodation and food services (2002) ranges from 0.7% (Rockingham, VA) to 73.5% (Swain, NC).¹⁶

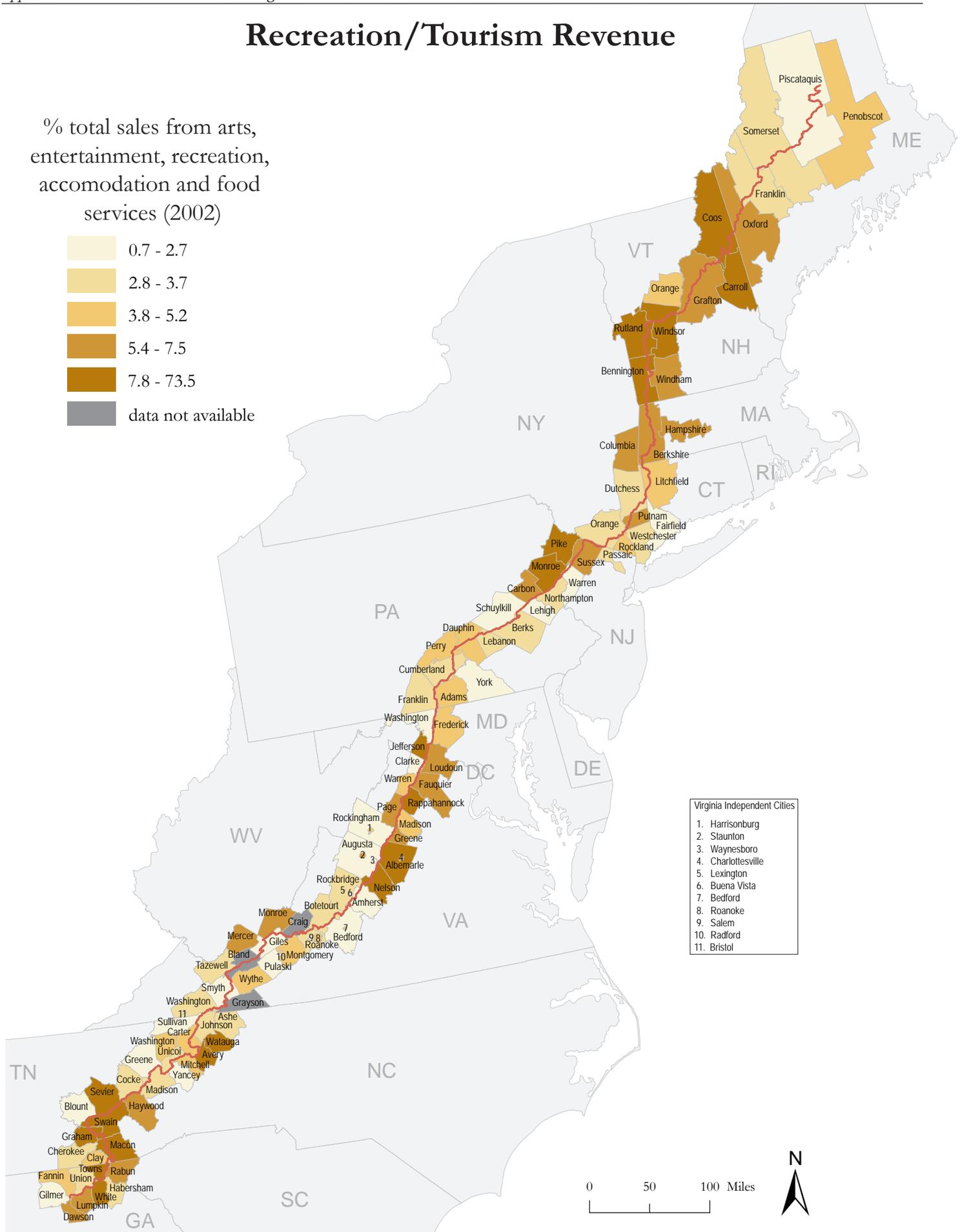
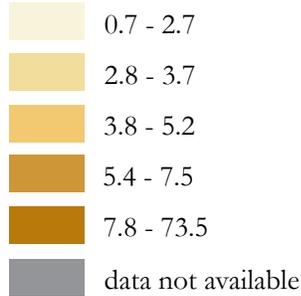
% total sales from recreation and tourism (2002)	County	Value	County	Value	County	Value	
	Washington, VA	2.8	Penobscot, ME	4.0	Sussex, NJ	7.0	
	Unicoi, TN	2.8	Carter, TN	4.1	Berkshire, MA	7.1	
	Passaic, NJ	2.8	Clay, NC	4.1	Greene, VA	7.4	
Bland, VA	-	Johnson, TN	2.8	Frederick, MD	4.2	Staunton, VA (city)	7.5
Craig, VA	-	Orange, NY	2.8	Perry, PA	4.2	Windham, VT	7.5
Grayson, VA	-	Ashe, NC	2.9	Washington, TN	4.3	Dawson, GA	7.5
Rockingham, VA	0.7	Botetourt, VA	2.9	Roanoke, VA (city)	4.3	Macon, NC	7.8
Buena Vista, VA (city)	1.0	Franklin, PA	2.9	Litchfield, CT	4.4	Rutland, VT	7.9
Warren, NJ	1.3	Somerset, ME	2.9	Bedford, VA (city)	4.5	Monroe, PA	8.6
Clarke, VA	1.5	Lebanon, PA	2.9	Wythe, VA	4.6	Bennington, VT	8.8
Augusta, VA	1.5	Franklin, ME	3.3	Dauphin, PA	4.6	Windsor, VT	8.9
Smyth, VA	1.6	Roanoke, VA	3.3	Montgomery, VA	5.0	Jefferson, WV	9.2
Giles, VA	1.6	Cherokee, NC	3.3	Fannin, GA	5.1	Albemarle, VA	9.5
Pulaski, VA	1.7	Habersham, GA	3.4	Madison, VA	5.1	White, GA	9.8
Bedford, VA	1.8	Dutchess, NY	3.5	Harrisonburg, VA (city)	5.2	Watauga, NC	9.8
Salem, VA (city)	2.0	Cumberland, PA	3.5	Haywood, NC	5.4	Rappahannock, VA	10.7
Greene, TN	2.0	Tazewell, VA	3.6	Columbia, NY	5.5	Graham, NC	11.2
Schuylkill, PA	2.2	Cocke, TN	3.6	Rabun, GA	5.6	Coos, NH	12.4
Sullivan, TN	2.2	Northampton, PA	3.6	Page, VA	5.7	Carroll, NH	15.6
Gilmer, GA	2.3	Union, GA	3.6	Putnam, NY	5.8	Lexington, VA (city)	18.2
Amherst, VA	2.4	Bristol, VA (city)	3.7	Charlottesville, VA (city)	5.8	Avery, NC	19.0
Fairfield, CT	2.5	Madison, NC	3.7	Fauquier, VA	6.0	Sevier, TN	20.1
Lehigh, PA	2.5	Rockbridge, VA	3.7	Mercer, WV	6.0	Pike, PA	21.2
York, PA	2.5	Berks, PA	3.7	Oxford, ME	6.0	Towns, GA	22.0
Blount, TN	2.5	Warren, VA	3.8	Monroe, WV	6.2	Nelson, VA	28.0
Washington, MD	2.6	Adams, PA	3.8	Carbon, PA	6.5	Swain, NC	73.5
Yancey, NC	2.6	Mitchell, NC	3.9	Loudoun, VA	6.6		
Waynesboro, VA (city)	2.7	Radford, VA (city)	3.9	Grafton, NH	6.7		
Piscataquis, ME	2.7	Rockland, NY	3.9	Hampshire, MA	6.9		
Westchester, NY	2.8	Orange, VT	3.9	Lumpkin, GA	7.0	United States	3.7



Variation in Distribution of Data Values

Recreation/Tourism Revenue

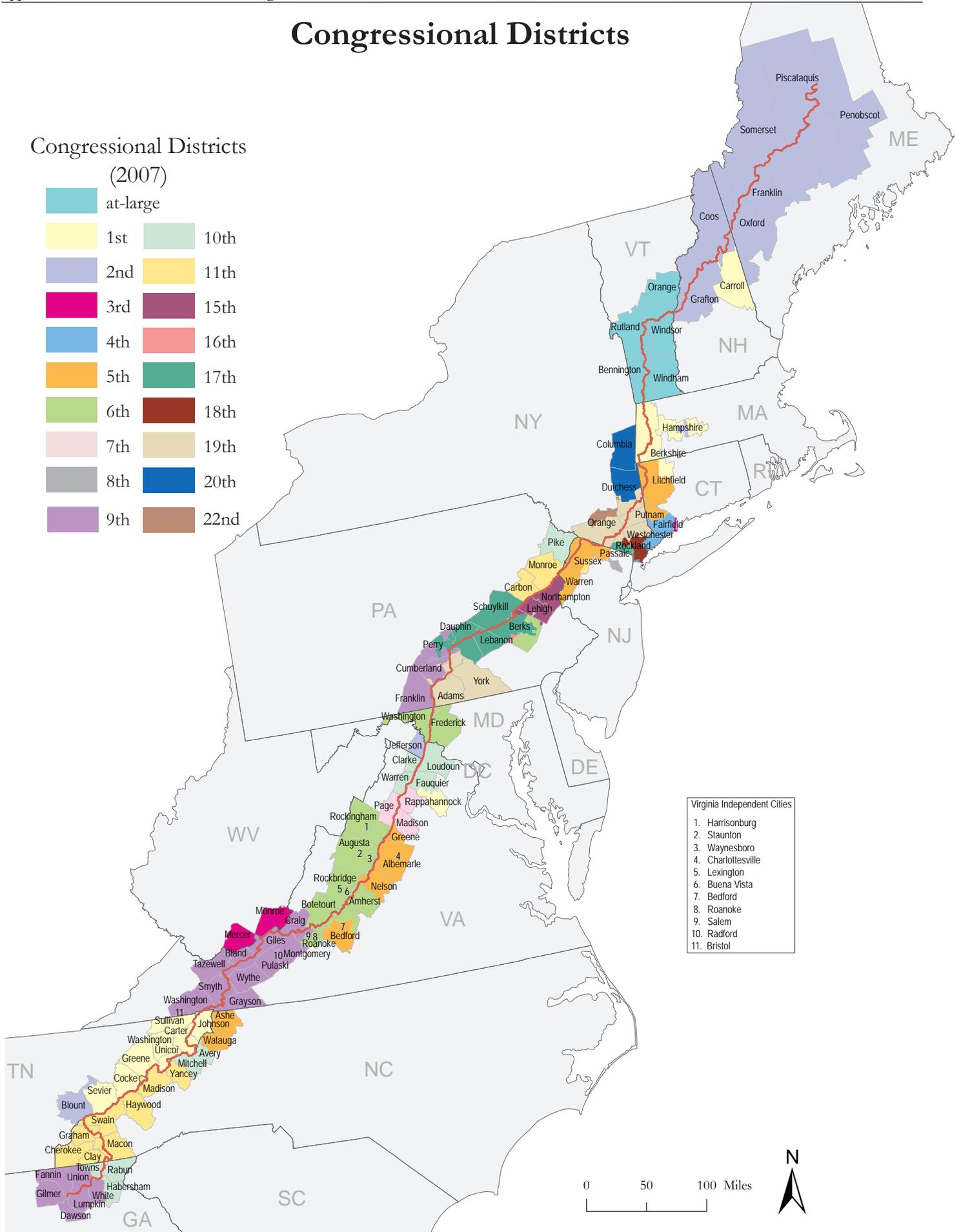
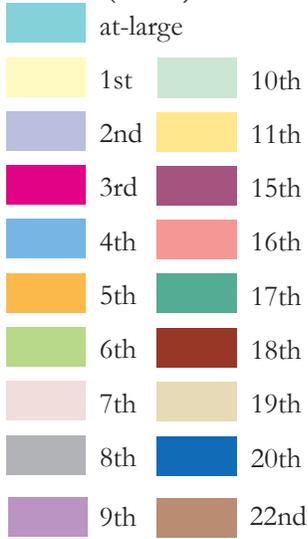
% total sales from arts, entertainment, recreation, accomodation and food services (2002)



Congressional Districts

Congressional Districts

(2007)

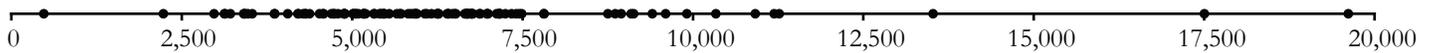


Federal Expenditures

The importance of the federal government to a county economy can be indicated by the amount of federal expenditures per person. These expenditures can be a key source of dollars flowing into the county economy (in contrast, taxes and fees are an outflow of dollars). Federal spending can influence the region through such wide-ranging initiatives as agricultural subsidies, social programs, military bases, and national park units.

Within the Appalachian National Scenic Trail region, federal expenditures per person (2004) range from \$475 (Gilmer, GA) to \$19,616 (Dauphin, PA).¹⁷

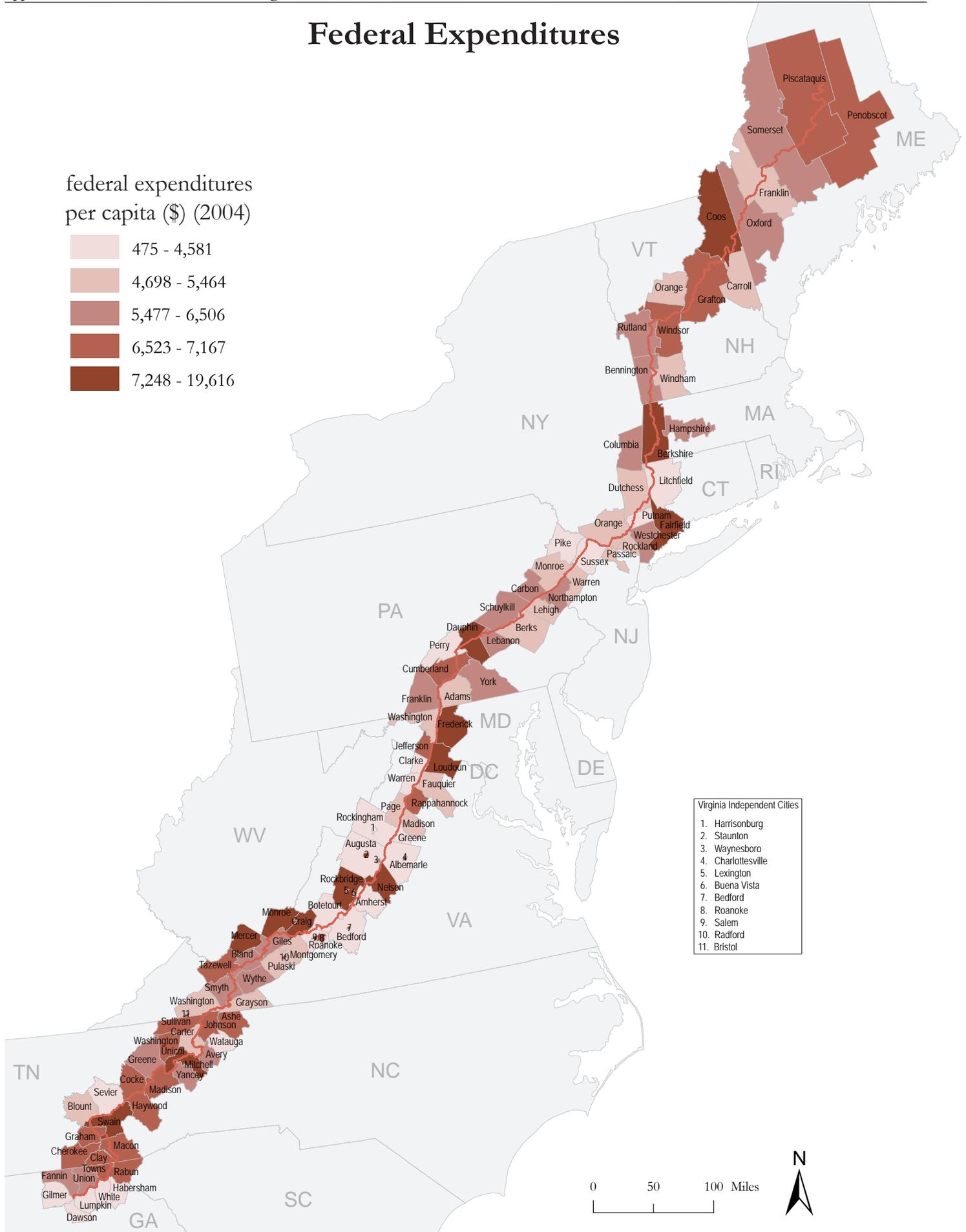
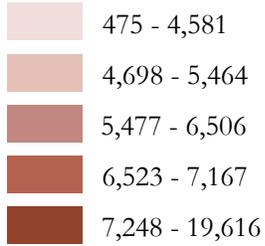
federal expenditures per capita (\$) (2004)	
Gilmer, GA	475
Roanoke, VA	2,228
Albemarle, VA	2,975
Augusta, VA	3,126
Greene, VA	3,135
Dawson, GA	3,213
Sussex, NJ	3,410
Putnam, NY	3,417
Pike, PA	3,437
Rockingham, VA	3,473
Harrisonburg, VA (city)	3,533
Watauga, NC	3,860
Lumpkin, GA	3,864
Botetourt, VA	4,055
Bedford, VA	4,204
Warren, VA	4,214
Clarke, VA	4,282
Sevier, TN	4,312
White, GA	4,321
Habersham, GA	4,376
Amherst, VA	4,521
Litchfield, CT	4,570
Perry, PA	4,581
Berks, PA	4,698
Adams, PA	4,727
Dutchess, NY	4,740
Warren, NJ	4,790
Blount, TN	4,879
Washington, VA	4,887
Lehigh, PA	4,888
Madison, VA	4,889
Fauquier, VA	5,011
Page, VA	5,016
Orange, VT	5,048
Monroe, PA	5,059
Montgomery, VA	5,093
Orange, NY	5,166
Washington, MD	5,169
Carter, TN	5,173
Rockland, NY	5,196
Grayson, VA	5,317
Pulaski, VA	5,328
Passaic, NJ	5,404
Windham, VT	5,420
Carroll, NH	5,451
Franklin, ME	5,464
Hampshire, MA	5,477
Northampton, PA	5,544
Westchester, NY	5,657
Bland, VA	5,696
York, PA	5,718
Wythe, VA	5,823
Bennington, VT	5,864
Avery, NC	5,902
Columbia, NY	5,922
Giles, VA	5,935
Union, GA	5,950
Oxford, ME	6,064
Franklin, PA	6,095
Yancey, NC	6,162
Waynesboro, VA (city)	6,245
Rutland, VT	6,255
Lebanon, PA	6,262
Somerset, ME	6,271
Fannin, GA	6,392
Smyth, VA	6,410
Schuylkill, PA	6,417
Greene, TN	6,472
Carbon, PA	6,506
Rabun, GA	6,523
Sullivan, TN	6,652
Rappahannock, VA	6,664
Buena Vista, VA (city)	6,680
Washington, TN	6,690
Cumberland, PA	6,696
Clay, NC	6,699
Ashe, NC	6,735
Johnson, TN	6,747
Cocke, TN	6,756
Macon, NC	6,763
Madison, NC	6,772
Towns, GA	6,870
Penobscot, ME	6,880
Graham, NC	6,973
Haywood, NC	6,985
Cherokee, NC	6,995
Piscataquis, ME	7,119
Tazewell, VA	7,148
Jefferson, WV	7,158
Grafton, NH	7,166
Windsor, VT	7,167
Coos, NH	7,248
Nelson, VA	7,339
Staunton, VA (city)	7,408
Fairfield, CT	7,450
Mitchell, NC	7,488
Monroe, WV	7,811
Mercer, WV	7,814
Rockbridge, VA	8,752
Berkshire, MA	8,860
Frederick, MD	8,946
Swain, NC	9,092
Craig, VA	9,129
Bristol, VA (city)	9,405
Loudoun, VA	9,599
Radford, VA (city)	9,909
Lexington, VA (city)	10,337
Salem, VA (city)	10,915
Bedford, VA (city)	11,190
Roanoke, VA (city)	11,264
Unicoi, TN	13,524
Charlottesville, VA (city)	17,503
Dauphin, PA	19,616
United States	7,363



Variation in Distribution of Data Values

Federal Expenditures

federal expenditures per capita (\$) (2004)



Change in Local Government Expenditures

The level of activity of local government can be measured by calculating the change in local government expenditures per person. As the principal means of collective decision-making at the local scale, local governments commit resources to county, state, and federally-mandated services (such as schools and law enforcement) as well as other optional or non-essential services (such as recycling and recreation services). The resources committed to programs may vary over time.

Changes in expenditures over time may be related to available revenue, voter priorities expressed through cyclical elections, or changes in the population (e.g., number of people or age structure).

Within the Appalachian National Scenic Trail region, the percentage change in local government expenditures per person (1992-2002, adjusted for inflation to 2002) ranges from a decrease of 17.3% (Towns, GA) to an increase of 124.9% (Lumpkin, GA).

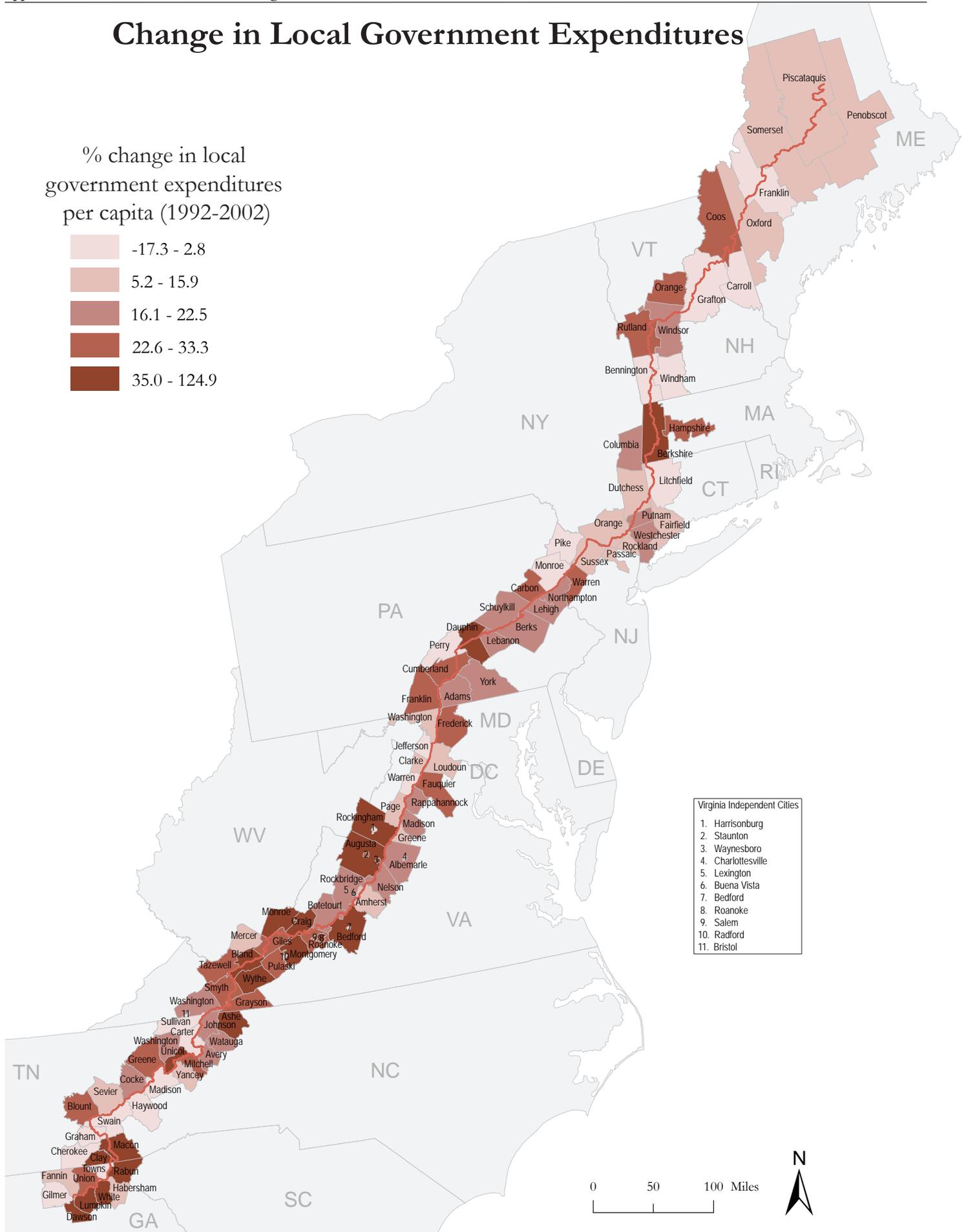
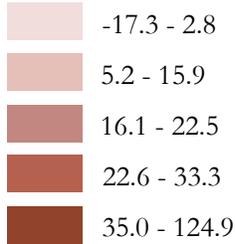
% change in local government expenditures per capita (1992-2002)							
	Piscataquis, ME	6.7	Columbia, NY	19.5	Blount, TN	30.8	
	Fannin, GA	6.7	Watauga, NC	19.6	Giles, VA	31.8	
	Washington, MD	8.0	Putnam, NY	21.3	Rutland, VT	32.7	
Towns, GA	-17.3	Charlottesville, VA (city)	8.2	Schuylkill, PA	21.4	Mitchell, NC	33.3
Pike, PA	-16.6	Loudoun, VA	8.4	Johnson, TN	21.5	Dauphin, PA	35.0
Sullivan, TN	-14.7	Somerset, ME	8.5	York, PA	21.8	White, GA	35.4
Warren, VA	-8.9	Yancey, NC	8.6	Washington, VA	21.9	Ashe, NC	37.6
Jefferson, WV	-5.0	Radford, VA (city)	9.5	Madison, VA	22.1	Unicoi, TN	37.9
Gilmer, GA	-3.9	Orange, NY	10.5	Nelson, VA	22.2	Clay, NC	38.2
Franklin, ME	-3.8	Dutchess, NY	10.5	Berks, PA	22.3	Rabun, GA	38.3
Haywood, NC	-2.3	Passaic, NJ	12.2	Rockbridge, VA	22.4	Roanoke, VA (city)	40.9
Monroe, PA	-1.9	Greene, VA	12.9	Cocke, TN	22.5	Macon, NC	41.7
Carroll, NH	-1.0	Habersham, GA	13.8	Warren, NJ	22.6	Bland, VA	45.5
Windham, VT	-0.7	Clarke, VA	13.8	Fauquier, VA	22.8	Rockingham, VA	45.9
Bristol, VA (city)	-0.1	Amherst, VA	14.0	Smyth, VA	23.2	Waynesboro, VA (city)	46.6
Swain, NC	0.1	Sevier, TN	14.4	Greene, TN	23.6	Wythe, VA	47.7
Graham, NC	0.3	Penobscot, ME	14.4	Carbon, PA	23.7	Berkshire, MA	48.2
Harrisonburg, VA (city)	0.4	Page, VA	14.8	Hampshire, MA	24.2	Augusta, VA	51.3
Bedford, VA (city)	0.5	Mercer, WV	15.9	Staunton, VA (city)	24.2	Monroe, WV	52.5
Madison, NC	1.0	Avery, NC	16.1	Salem, VA (city)	24.3	Montgomery, VA	54.7
Grafton, NH	1.2	Adams, PA	16.5	Cumberland, PA	24.4	Lexington, VA (city)	60.5
Bennington, VT	1.4	Lehigh, PA	16.9	Coos, NH	24.5	Bedford, VA	60.8
Perry, PA	1.5	Albemarle, VA	16.9	Union, GA	24.6	Craig, VA	68.3
Carter, TN	1.6	Washington, TN	17.0	Grayson, VA	24.7	Dawson, GA	68.5
Cherokee, NC	1.6	Lebanon, PA	17.0	Pulaski, VA	26.3	Buena Vista, VA (city)	79.7
Litchfield, CT	2.8	Rappahannock, VA	17.2	Frederick, MD	26.5	Lumpkin, GA	124.9
Rockland, NY	5.2	Botetourt, VA	18.2	Orange, VT	27.5		
Oxford, ME	6.1	Windsor, VT	18.3	Franklin, PA	28.1		
Fairfield, CT	6.5	Westchester, NY	18.8	Tazewell, VA	28.8		
Sussex, NJ	6.6	Northampton, PA	19.3	Roanoke, VA	28.8	United States	22.1



Variation in Distribution of Data Values

Change in Local Government Expenditures

% change in local government expenditures per capita (1992-2002)



- Virginia Independent Cities
1. Harrisonburg
 2. Staunton
 3. Waynesboro
 4. Charlottesville
 5. Lexington
 6. Buena Vista
 7. Bedford
 8. Roanoke
 9. Salem
 10. Radford
 11. Bristol



Payments in Lieu of Taxes

Payments in lieu of taxes are measured as the total dollars transferred to counties by the federal government as part of the PILT Program (Payments-In-Lieu-of-Taxes) administered by the U.S. Department of the Interior. PILT payments are calculated according to a formula that includes population and the amount of federal land within an affected county. They have a direct impact on the region as revenue for county governments. As counties use this revenue for capital projects or service provisions,

the tax burden on local residents is effectively reduced. Indirectly, PILT payments are an indication of the federal government’s presence, visibility, and perhaps influence within counties in the region.

Within the Appalachian National Scenic Trail region, payments in lieu of taxes (2006) range from \$0 (in six counties) to \$347,519 (Swain, NC), with no data reported for some counties or the independent cities of Virginia.

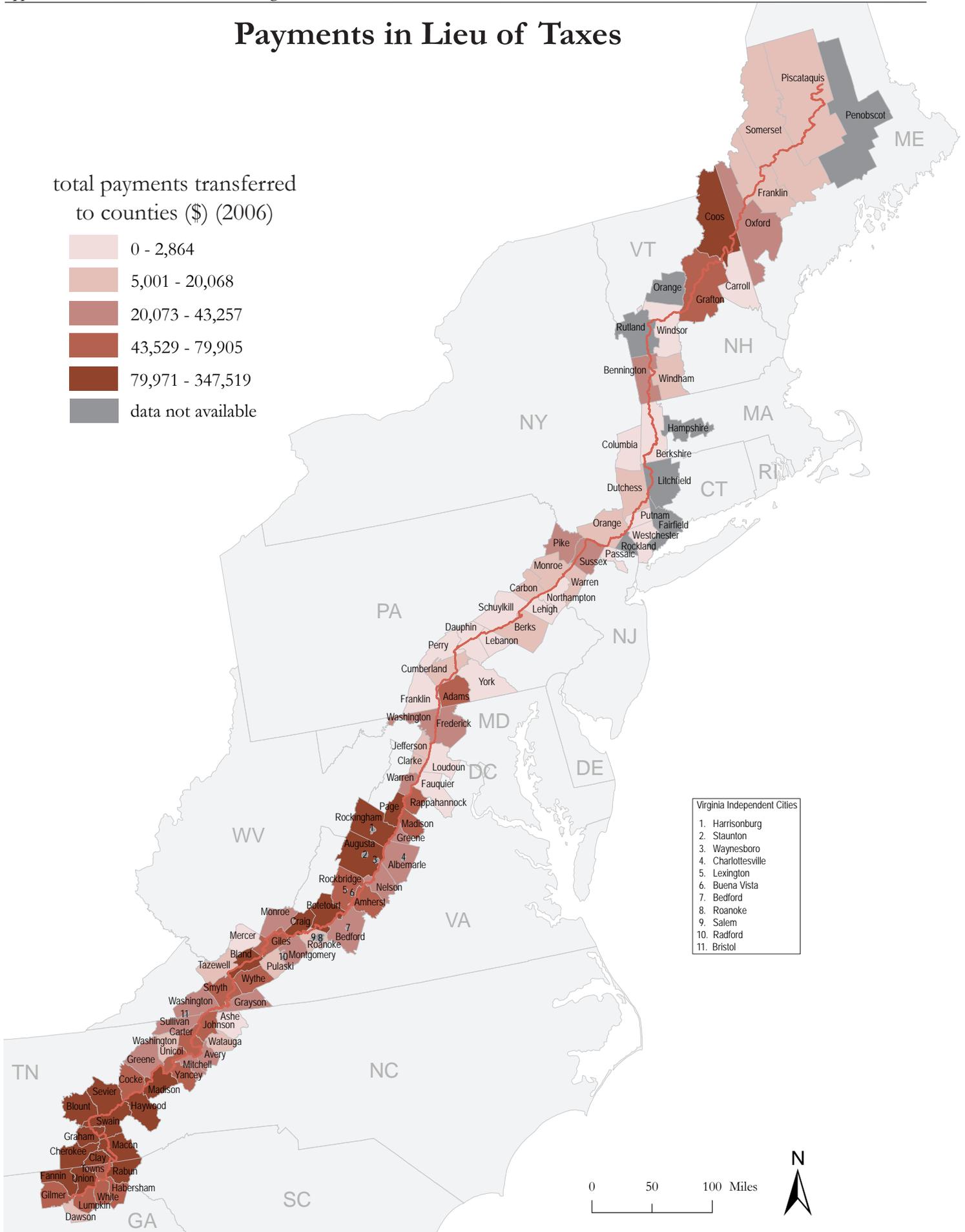
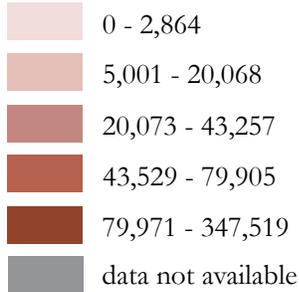
total payments transferred to counties (\$)(2006)		Franklin, PA	1,040	Frederick, MD	20,942	Lumpkin, GA	65,079
		Lebanon, PA	1,276	Bennington, VT	21,299	Giles, VA	70,883
		Putnam, NY	1,367	Albemarle, VA	21,373	Gilmer, GA	71,025
Fairfield, CT	-	Dauphin, PA	1,633	Greene, VA	22,654	Cocke, TN	71,495
Litchfield, CT	-	Fauquier, VA	1,672	Washington, VA	23,566	Rockbridge, VA	72,350
Penobscot, ME	-	Loudoun, VA	1,798	Montgomery, VA	25,244	Carter, TN	75,617
Hampshire, MA	-	Carroll, NH	2,300	Nelson, VA	28,194	Smyth, VA	79,905
Rockland, NY	-	York, PA	2,414	Mitchell, NC	28,344	Madison, NC	79,971
Orange, VT	-	Northampton, PA	2,498	Monroe, WV	29,114	Bland, VA	81,932
Rutland, VT	-	Ashe, NC	2,864	Bedford, VA	29,375	Page, VA	85,263
Bedford, VA (city)	-	Clarke, VA	5,001	Warren, VA	29,451	Botetourt, VA	90,932
Bristol, VA (city)	-	Cumberland, PA	5,686	Sullivan, TN	32,536	Clay, NC	95,595
Buena Vista, VA (city)	-	Windham, VT	7,392	Greene, TN	33,752	Union, GA	109,945
Charlottesville, VA (city)	-	Somerset, ME	7,435	Grayson, VA	36,280	Fannin, GA	112,458
Harrisonburg, VA (city)	-	Carbon, PA	7,530	Sussex, NJ	37,787	Craig, VA	123,722
Lexington, VA (city)	-	Jefferson, WV	7,893	Oxford, ME	37,954	Cherokee, NC	135,155
Radford, VA (city)	-	Franklin, ME	9,132	Pike, PA	38,763	Blount, TN	140,978
Roanoke, VA (city)	-	Orange, NY	9,306	Avery, NC	43,257	Rabun, GA	160,328
Salem, VA (city)	-	Dutchess, NY	9,916	Adams, PA	43,529	Graham, NC	164,441
Staunton, VA (city)	-	Roanoke, VA	10,599	Habersham, GA	44,346	Sevier, TN	180,219
Waynesboro, VA (city)	-	Berks, PA	10,803	White, GA	44,768	Haywood, NC	194,812
Berkshire, MA	0	Tazewell, VA	11,002	Johnson, TN	45,595	Coos, NH	196,634
Passaic, NJ	0	Dawson, GA	11,825	Rappahannock, VA	46,792	Rockingham, VA	201,215
Columbia, NY	0	Monroe, PA	11,834	Amherst, VA	47,618	Macon, NC	221,949
Westchester, NY	0	Watauga, NC	13,276	Madison, VA	48,014	Augusta, VA	224,122
Perry, PA	0	Warren, NJ	13,374	Unicoi, TN	49,773	Swain, NC	347,519
Windsor, VT	0	Washington, TN	14,105	Yancey, NC	56,318		
Mercer, WV	170	Pulaski, VA	19,821	Wythe, VA	61,537		
Lehigh, PA	635	Piscataquis, ME	20,068	Towns, GA	64,517		
Schuylkill, PA	1,033	Washington, MD	20,073	Grafton, NH	64,660	United States	232,133,759



Variation in Distribution of Data Values

Payments in Lieu of Taxes

total payments transferred to counties (\$) (2006)



- Virginia Independent Cities
1. Harrisonburg
 2. Staunton
 3. Waynesboro
 4. Charlottesville
 5. Lexington
 6. Buena Vista
 7. Bedford
 8. Roanoke
 9. Salem
 10. Radford
 11. Bristol

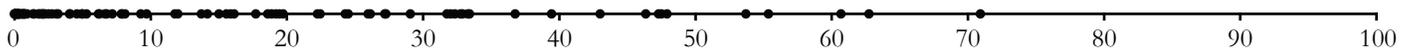
Federal Land Management

One indicator of the federal government’s role in regional resource management is the amount of land under federal management. This amount can be measured as a percentage of the total land area in each county. Stewardship of private land is carried out through a combination of regulation, market forces, and voluntary action. In contrast, stewardship of public land is carried out through direct implementation of agency policies.

Thus the variation in public versus private land ownership across the region can significantly influence the design and implementation of resource protection strategies.

Within the Appalachian National Scenic Trail region, land under federal management (2006) ranges from 0% (in 7 counties) to 70.9% (Swain, NC).¹⁸

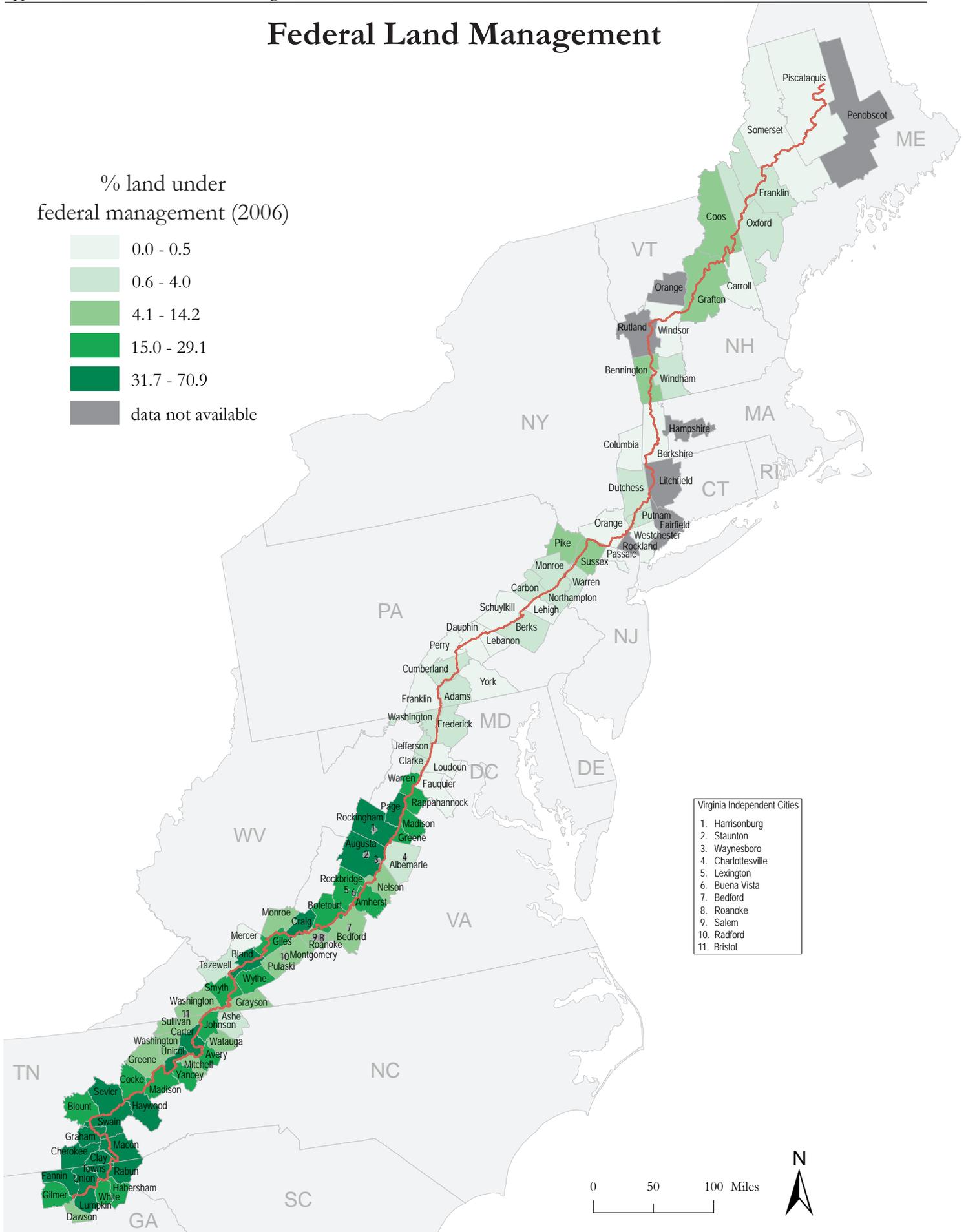
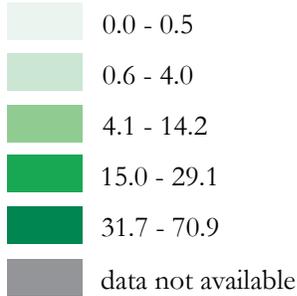
% land under federal management (2006)							
		Lehigh, PA	0.2	Watauga, NC	4.6	Botetourt, VA	24.3
		Somerset, ME	0.2	Pike, PA	4.9	Cocke, TN	24.5
		Fauquier, VA	0.2	Roanoke, VA	5.0	White, GA	26.0
Fairfield, CT	-	Carroll, NH	0.3	Bedford, VA	5.3	Smyth, VA	26.1
Litchfield, CT	-	York, PA	0.3	Bennington, VT	6.2	Blount, TN	27.2
Penobscot, ME	-	Dauphin, PA	0.3	Washington, VA	6.2	Johnson, TN	27.3
Hampshire, MA	-	Loudoun, VA	0.4	Monroe, WV	6.6	Giles, VA	29.1
Rockland, NY	-	Lebanon, PA	0.4	Sussex, NJ	6.8	Lumpkin, GA	31.7
Orange, VT	-	Piscataquis, ME	0.5	Dawson, GA	7.2	Cherokee, NC	32.0
Rutland, VT	-	Orange, NY	0.5	Montgomery, VA	7.8	Rockingham, VA	32.3
Bedford, VA (city)	-	Franklin, ME	0.6	Washington, TN	7.9	Sevier, TN	32.7
Bristol, VA (city)	-	Putnam, NY	0.6	Nelson, VA	8.1	Page, VA	32.9
Buena Vista, VA (city)	-	Ashe, NC	0.7	Pulaski, VA	9.3	Augusta, VA	33.3
Charlottesville, VA (city)	-	Northampton, PA	0.7	Greene, TN	9.7	Bland, VA	33.4
Harrisonburg, VA (city)	-	Cumberland, PA	0.8	Coos, NH	11.8	Haywood, NC	36.8
Lexington, VA (city)	-	Dutchess, NY	0.9	Grayson, VA	12.0	Carter, TN	39.4
Radford, VA (city)	-	Berks, PA	1.4	Mitchell, NC	13.7	Fannin, GA	43.0
Roanoke, VA (city)	-	Adams, PA	1.4	Sullivan, TN	14.2	Macon, NC	46.3
Salem, VA (city)	-	Jefferson, WV	1.8	Warren, VA	15.0	Union, GA	47.3
Staunton, VA (city)	-	Windham, VT	1.8	Greene, VA	15.5	Unicoi, TN	47.5
Waynesboro, VA (city)	-	Monroe, PA	2.0	Amherst, VA	15.9	Clay, NC	47.9
Berkshire, MA	0.0	Clarke, VA	2.0	Madison, VA	16.1	Towns, GA	53.7
Passaic, NJ	0.0	Carbon, PA	2.1	Rockbridge, VA	17.7	Craig, VA	55.3
Columbia, NY	0.0	Frederick, MD	2.2	Rappahannock, VA	18.6	Graham, NC	60.7
Westchester, NY	0.0	Oxford, ME	2.5	Avery, NC	18.9	Rabun, GA	62.7
Perry, PA	0.0	Washington, MD	2.7	Madison, NC	19.2	Swain, NC	70.9
Windsor, VT	0.0	Tazewell, VA	3.1	Yancey, NC	19.4		
Mercer, WV	0.0	Albemarle, VA	3.2	Wythe, VA	19.7		
Schuylkill, PA	0.1	Warren, NJ	4.0	Habersham, GA	22.2		
Franklin, PA	0.1	Grafton, NH	4.1	Gilmer, GA	22.4	United States	27.1



Variation in Distribution of Data Values

Federal Land Management

% land under federal management (2006)



Federal Lands & Indian Reservations

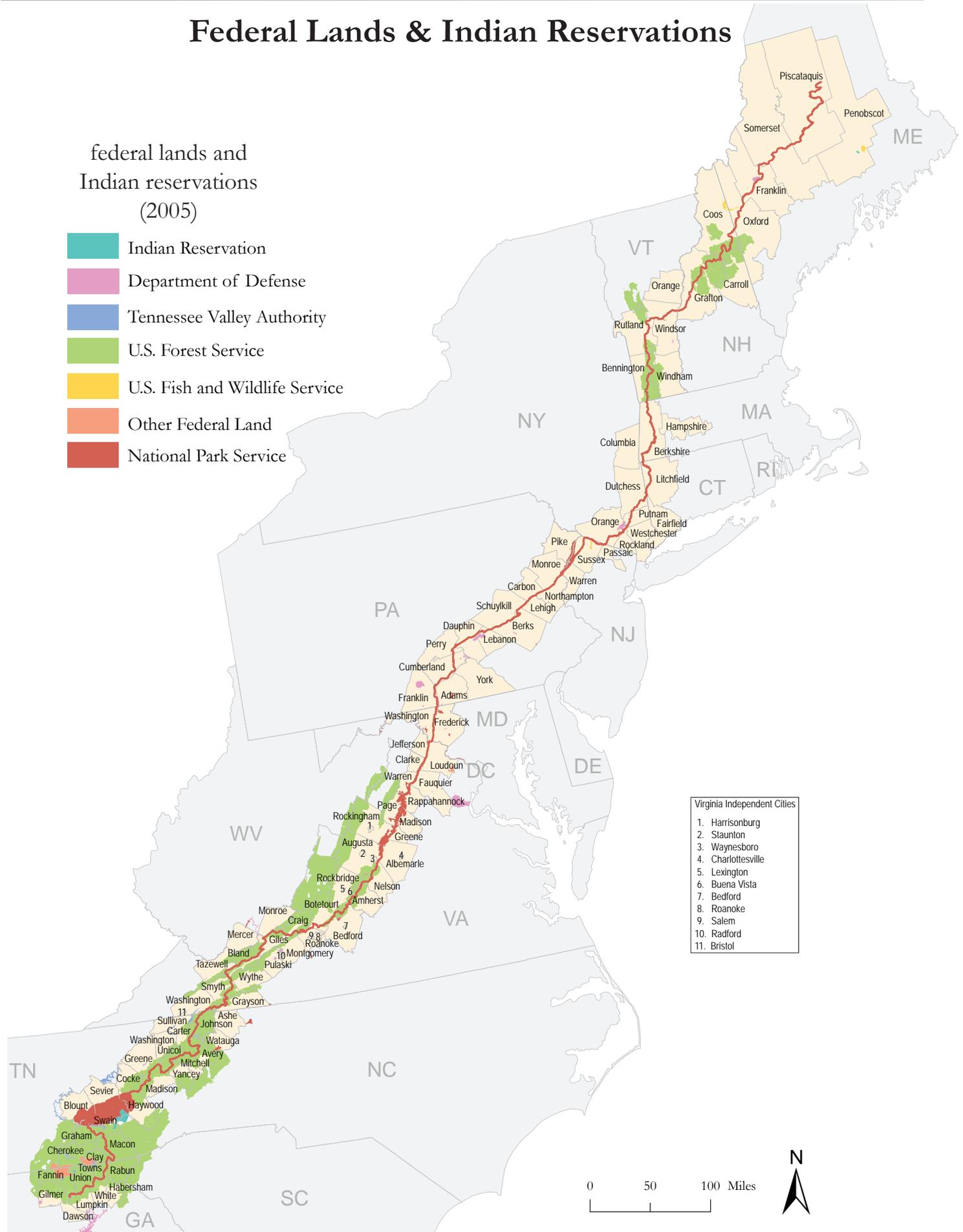
National park units, administered by the National Park Service, are part of a larger system of public lands. Other federal agencies that administer public lands include the Bureau of Land Management, Bureau of Reclamation, Department of Defense, U.S. Fish and Wildlife Service, and U.S. Forest Service. Indian reservations are also an important part of the landscape.

Public land managed by one federal agency may share boundaries with land managed by a different federal agency or with an Indian reservation. Understanding the location and pattern of federal lands (by agency) and Indian reservations can help trail managers and others in the region cooperate on resource protection and planning issues.¹⁹

Federal Lands & Indian Reservations

federal lands and
Indian reservations
(2005)

- Indian Reservation
- Department of Defense
- Tennessee Valley Authority
- U.S. Forest Service
- U.S. Fish and Wildlife Service
- Other Federal Land
- National Park Service



- Virginia Independent Cities
1. Harrisonburg
 2. Staunton
 3. Waynesboro
 4. Charlottesville
 5. Lexington
 6. Buena Vista
 7. Bedford
 8. Roanoke
 9. Salem
 10. Radford
 11. Bristol

Farmland

The relative importance of farming within a county can be indicated by the percentage of the county’s total land area that is classified as farmland. Farming includes crop cultivation as well as pasturing and grazing of livestock. Because damaged or degraded natural resources present a long-term threat to the health and profitability of farming, farm operators are potentially key partners in local and regional resource protection issues.

Trail management can require close coordination with area farmers on many issues, such as control of non-native species, species reintroduction, preservation of scenic values, allocation of scarce water supplies, or management of agricultural runoff.

Within the Appalachian National Scenic Trail region, the percentage of total county land area classified as farmland (2002) ranges from 1.3% (Passaic, NY) to 65.6% (Clarke, VA).²⁰

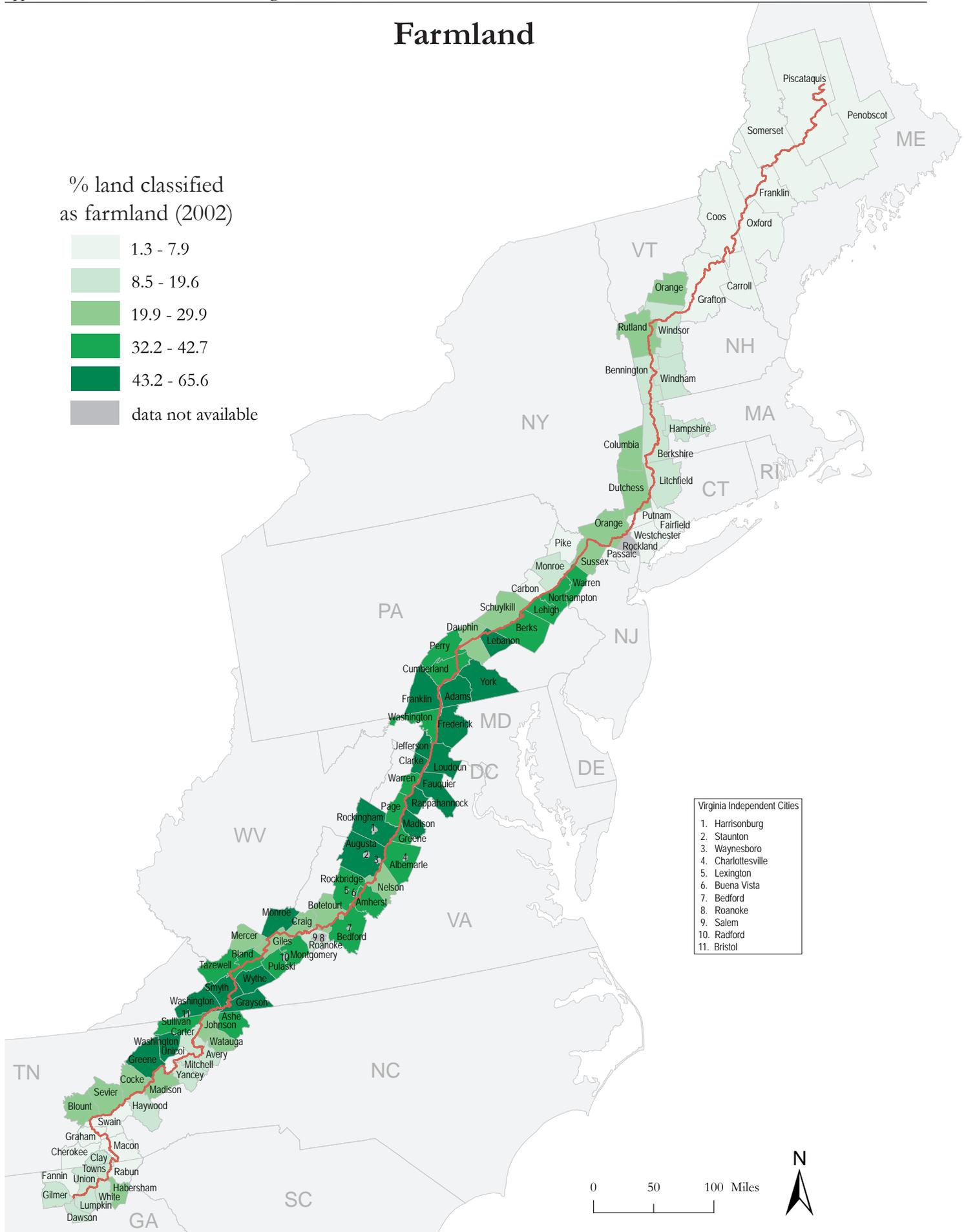
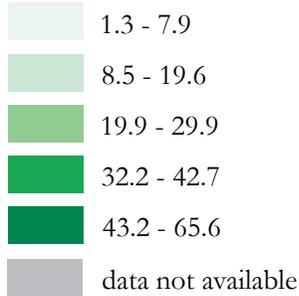
% land classified as farmland (2002)							
		Fannin, GA	6.3	Habersham, GA	21.7	Rockbridge, VA	41.0
		Macon, NC	6.8	Dutchess, NY	21.9	Bland, VA	41.1
		Cherokee, NC	7.6	Schuylkill, PA	22.3	Lehigh, PA	41.1
Rockland, NY	-	Unicoi, TN	7.8	Sussex, NJ	22.6	Bedford, VA	41.2
Bedford, VA (city)	-	Grafton, NH	7.8	Craig, VA	22.8	Tazewell, VA	41.8
Bristol, VA (city)	-	Carbon, PA	7.9	Orange, VT	25.0	Washington, MD	42.7
Buena Vista, VA (city)	-	Monroe, PA	8.5	Johnson, TN	25.7	Smyth, VA	43.2
Charlottesville, VA (city)	-	Gilmer, GA	9.0	Watauga, NC	25.8	Rockingham, VA	45.6
Harrisonburg, VA (city)	-	Bennington, VT	9.5	Cocke, TN	26.4	Rappahannock, VA	45.9
Lexington, VA (city)	-	Clay, NC	9.8	Botetourt, VA	27.9	Frederick, MD	46.2
Radford, VA (city)	-	Towns, GA	10.2	Nelson, VA	28.0	Monroe, WV	47.9
Roanoke, VA (city)	-	Berkshire, MA	11.5	Dauphin, PA	28.3	Augusta, VA	49.3
Salem, VA (city)	-	Lumpkin, GA	11.7	Madison, NC	29.3	York, PA	49.3
Staunton, VA (city)	-	Union, GA	12.0	Blount, TN	29.4	Loudoun, VA	49.5
Waynesboro, VA (city)	-	Windham, VT	12.2	Columbia, NY	29.4	Franklin, PA	49.5
Passaic, NJ	1.3	Windsor, VT	14.5	Giles, VA	29.9	Madison, VA	50.1
Piscataquis, ME	1.6	Hampshire, MA	15.0	Page, VA	32.2	Wythe, VA	51.0
Swain, NC	2.1	Dawson, GA	15.0	Northampton, PA	32.4	Grayson, VA	53.1
Pike, PA	2.9	Litchfield, CT	15.9	Greene, VA	32.4	Jefferson, WV	53.5
Fairfield, CT	3.2	Carter, TN	17.1	Amherst, VA	32.8	Lebanon, PA	54.0
Westchester, NY	3.6	Haywood, NC	18.2	Warren, NJ	34.1	Adams, PA	54.4
Coos, NH	3.8	Mitchell, NC	18.4	Warren, VA	35.7	Washington, VA	54.8
Rabun, GA	4.2	Roanoke, VA	19.2	Perry, PA	36.4	Fauquier, VA	57.2
Graham, NC	4.3	Yancey, NC	19.4	Sullivan, TN	38.0	Greene, TN	62.0
Somerset, ME	4.4	Avery, NC	19.4	Albemarle, VA	38.3	Washington, TN	64.1
Putnam, NY	4.5	White, GA	19.6	Berks, PA	39.2	Clarke, VA	65.6
Franklin, ME	4.6	Sevier, TN	19.9	Pulaski, VA	39.4		
Penobscot, ME	4.9	Rutland, VT	20.3	Ashe, NC	39.6		
Carroll, NH	5.0	Orange, NY	20.7	Montgomery, VA	40.1		
Oxford, ME	5.1	Mercer, WV	20.7	Cumberland, PA	40.7	United States	41.4



Variation in Distribution of Data Values

Farmland

% land classified as farmland (2002)



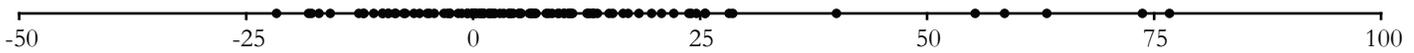
- Virginia Independent Cities
1. Harrisonburg
 2. Staunton
 3. Waynesboro
 4. Charlottesville
 5. Lexington
 6. Buena Vista
 7. Bedford
 8. Roanoke
 9. Salem
 10. Radford
 11. Bristol

Change in Farmland

Changes in the amount of farmland provide an indication of economic and land use trends among counties in the region. Land can be converted to farming because of increased demand for agricultural products or because new technology, business practices, or government programs make farming profitable. Land can be taken out of farming due to soil depletion, competition from growers elsewhere, loss of labor, or conversion of land to other (often urban) uses.

Within the Appalachian National Scenic Trail region, the change (1992-2002) ranged from a net decrease of 21.6% (Rabun, GA) to a net increase of 76.7% (Putnam, NY).²¹

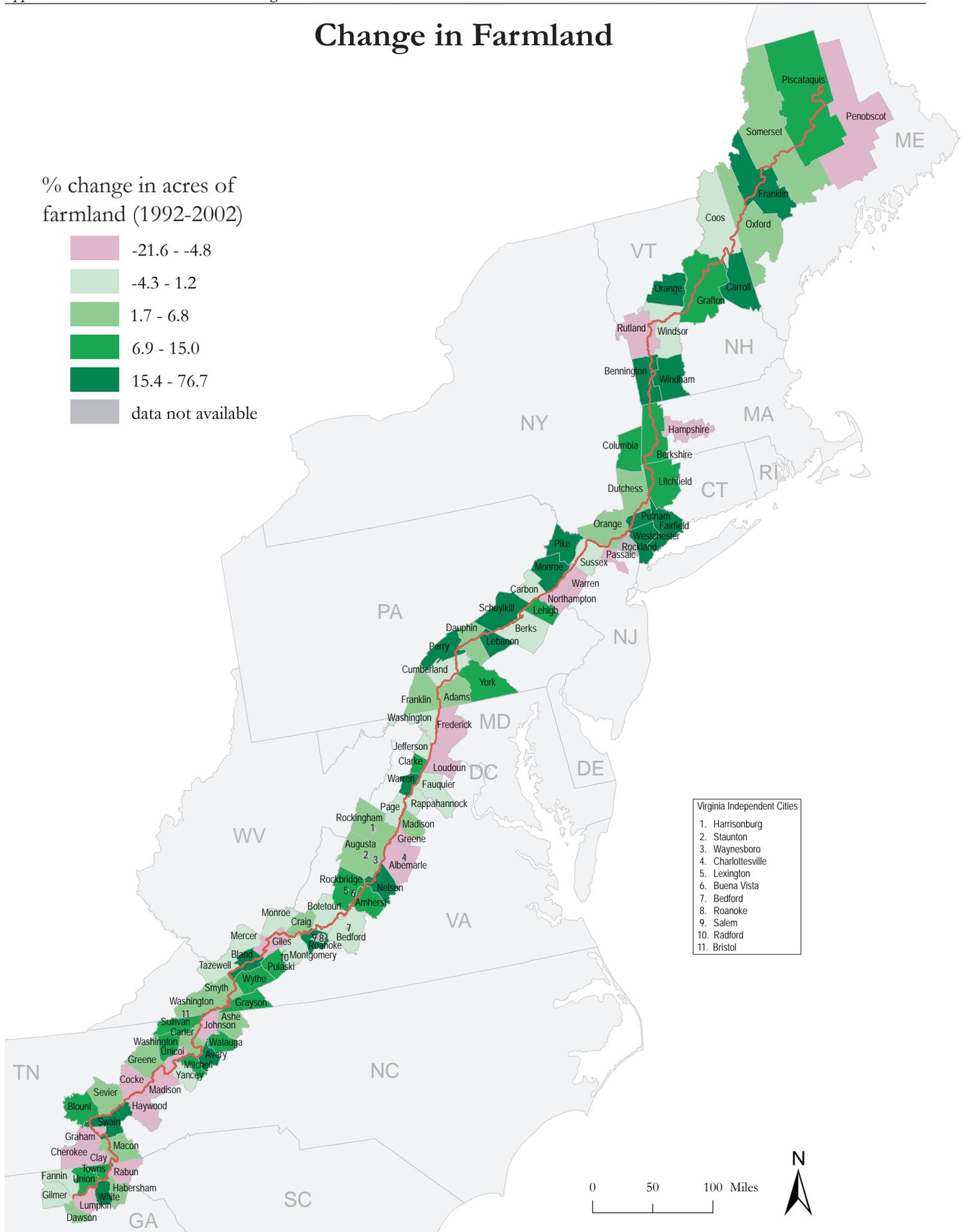
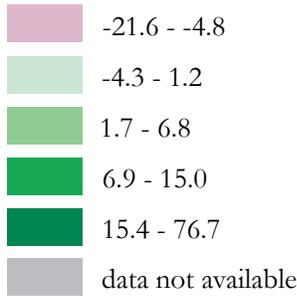
% change in acres of farmland (1992-2002)	
Rockland, NY	-
Bedford, VA (city)	-
Bristol, VA (city)	-
Buena Vista, VA (city)	-
Charlottesville, VA (city)	-
Harrisonburg, VA (city)	-
Lexington, VA (city)	-
Radford, VA (city)	-
Roanoke, VA (city)	-
Salem, VA (city)	-
Staunton, VA (city)	-
Waynesboro, VA (city)	-
Rabun, GA	-21.6
Clay, NC	-18.1
Unicoi, TN	-17.8
Passaic, NJ	-17.0
Loudoun, VA	-15.7
Cocke, TN	-12.6
Frederick, MD	-12.1
Greene, VA	-12.0
Warren, NJ	-10.9
Johnson, TN	-10.0
Madison, NC	-9.9
Penobscot, ME	-9.4
Graham, NC	-9.3
Rutland, VT	-8.6
Lumpkin, GA	-8.5
Haywood, NC	-7.6
Cherokee, NC	-7.5
Giles, VA	-6.5
Albemarle, VA	-5.9
Hampshire, MA	-5.1
Northampton, PA	-4.8
Coos, NH	-4.3
Jefferson, WV	-3.2
Berks, PA	-2.8
Gilmer, GA	-2.6
Monroe, WV	-2.5
Mercer, WV	-1.6
Page, VA	-1.3
Bedford, VA	-0.6
Rappahannock, VA	-0.6
Fannin, GA	-0.6
Sussex, NJ	-0.0
Windsor, VT	0.2
Botetourt, VA	0.3
Tazewell, VA	0.3
Yancey, NC	0.7
Montgomery, VA	0.8
Cumberland, PA	0.9
Washington, MD	1.0
Fauquier, VA	1.1
Carbon, PA	1.2
Sevier, TN	1.7
Macon, NC	1.8
Carter, TN	2.0
Madison, VA	2.3
Dutchess, NY	2.4
Somerset, ME	2.9
Ashe, NC	3.4
Washington, VA	3.9
Smyth, VA	4.1
Greene, TN	4.1
Franklin, PA	4.4
Adams, PA	5.1
Orange, NY	5.1
Dauphin, PA	5.2
Rockingham, VA	5.3
Oxford, ME	6.2
Dawson, GA	6.3
Augusta, VA	6.5
Craig, VA	6.5
Habersham, GA	6.8
Columbia, NY	6.9
Litchfield, CT	8.1
Sullivan, TN	8.3
Clarke, VA	8.7
Blount, TN	9.3
Piscataquis, ME	9.5
Towns, GA	10.0
Lehigh, PA	10.0
Grayson, VA	10.5
Amherst, VA	10.6
Watauga, NC	10.8
Rockbridge, VA	11.0
Berkshire, MA	12.5
Pulaski, VA	12.7
Union, GA	12.8
Mitchell, NC	13.2
York, PA	13.2
Grafton, NH	13.3
Washington, TN	13.7
Wythe, VA	15.0
Bland, VA	15.4
Nelson, VA	16.5
Carroll, NH	17.1
Orange, VT	18.3
Lebanon, PA	19.7
Swain, NC	20.8
Bennington, VT	22.1
Perry, PA	23.8
Roanoke, VA	24.0
Schuylkill, PA	24.6
White, GA	25.5
Warren, VA	25.6
Franklin, ME	28.2
Fairfield, CT	28.6
Windham, VT	40.0
Avery, NC	55.3
Monroe, PA	58.5
Pike, PA	63.2
Westchester, NY	73.7
Putnam, NY	76.7
United States	-0.8



Variation in Distribution of Data Values

Change in Farmland

% change in acres of farmland (1992-2002)



Metropolitan Statistical Areas

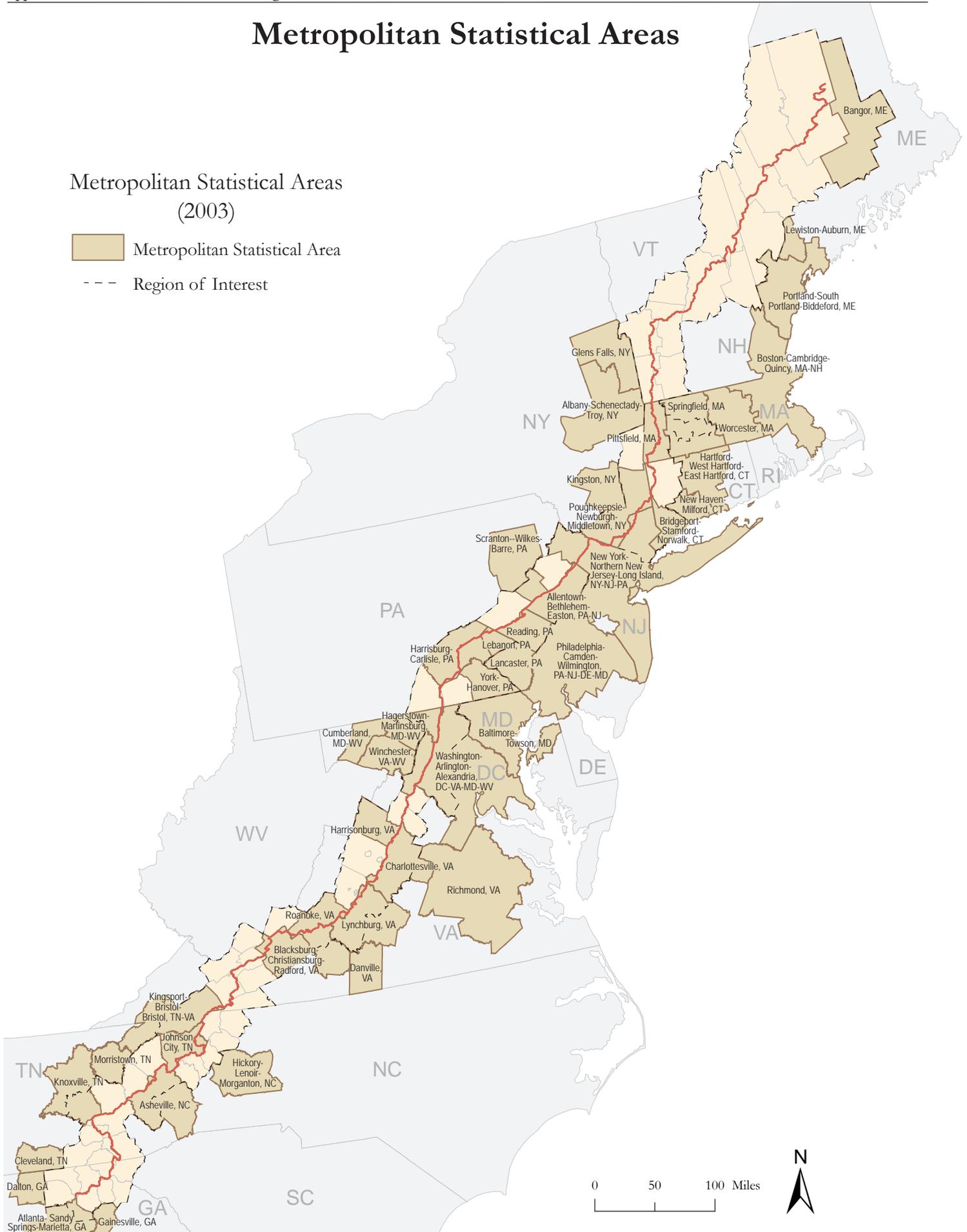
Maps of metropolitan statistical areas show trail managers densely populated urban areas that are near national parks and trails. The federal Office of Management and Budget (OMB) defines a metropolitan statistical area (MSA) as at least one population center of 50,000 people or more, combined with adjacent areas that have close economic and social integration with the population center(s). Most counties in MSAs include both urban and rural land uses.²²

The Appalachian National Scenic Trail and its region includes all or portions of 45 MSAs.

Metropolitan Statistical Areas

Metropolitan Statistical Areas
(2003)

- Metropolitan Statistical Area
- Region of Interest



Urbanization

Urbanization is a measurement of the degree to which land has been developed as towns and cities. The political and economic priorities of more urbanized counties tend to differ from those of less urbanized counties. The concentration of people in towns, cities, and large metropolitan areas creates opportunities for cooperative efforts (such as municipal water systems, public transportation, and a host of non-governmental organizations) but also can increase the incidence of problems such as congestion, air pollution, and habitat

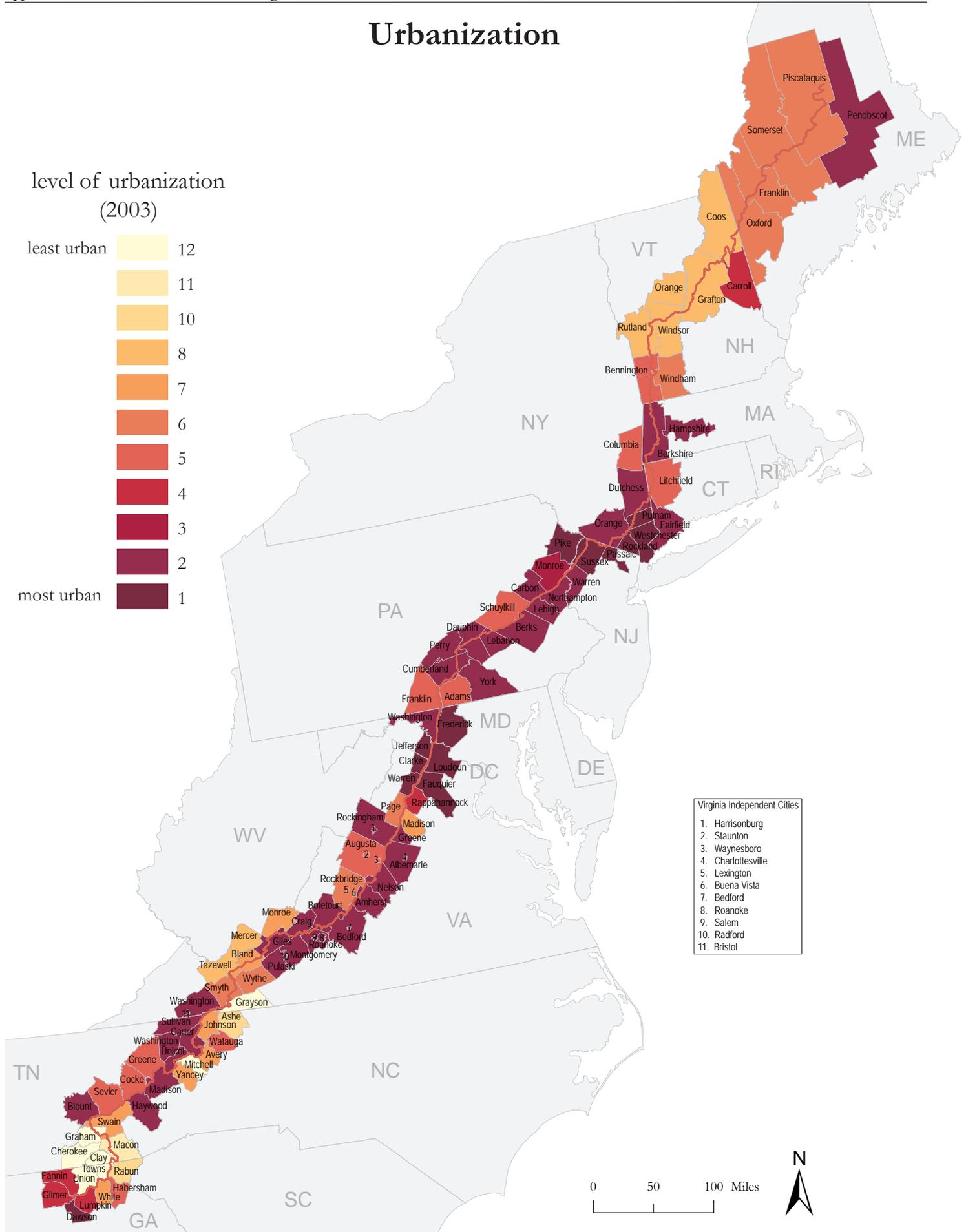
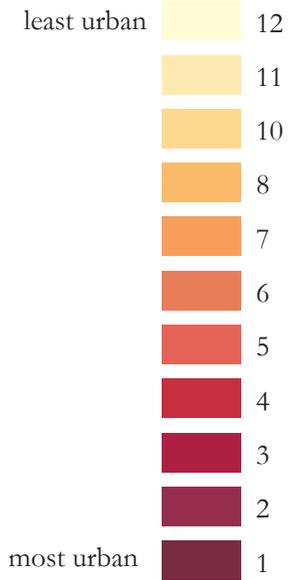
fragmentation. The Economic Research Service classifies counties' degree of urbanization along a continuum ranging from "completely rural" (not near metropolitan area and small population size) to "large metropolitan".

Within the Appalachian National Scenic Trail region (2003), 57 of the 113 counties/independent cities are classified as belonging to either "small metropolitan" or "large metropolitan" areas.²³

level of urbanization (2003)							
		Piscataquis, ME	6	Penobscot, ME	2	Montgomery, VA	2
		Somerset, ME	6	Washington, MD	2	Nelson, VA	2
		Windham, VT	6	Berkshire, MA	2	Pulaski, VA	2
Towns, GA	12	Page, VA	6	Hampshire, MA	2	Roanoke, VA	2
Union, GA	12	Rockbridge, VA	6	Warren, NJ	2	Rockingham, VA	2
Cherokee, NC	12	Smyth, VA	6	Dutchess, NY	2	Washington, VA	2
Clay, NC	12	Wythe, VA	6	Orange, NY	2	Bedford, VA (city)	2
Graham, NC	12	Buena Vista, VA (city)	6	Haywood, NC	2	Bristol, VA (city)	2
Mitchell, NC	12	Lexington, VA (city)	6	Madison, NC	2	Charlottesville, VA (city)	2
Grayson, VA	12	Litchfield, CT	5	Berks, PA	2	Harrisonburg, VA (city)	2
Macon, NC	11	Habersham, GA	5	Carbon, PA	2	Radford, VA (city)	2
Rabun, GA	10	Columbia, NY	5	Cumberland, PA	2	Roanoke, VA (city)	2
Ashe, NC	10	Watauga, NC	5	Dauphin, PA	2	Salem, VA (city)	2
Coos, NH	8	Adams, PA	5	Lebanon, PA	2	Dawson, GA	1
Grafton, NH	8	Franklin, PA	5	Lehigh, PA	2	Frederick, MD	1
Orange, VT	8	Schuylkill, PA	5	Northampton, PA	2	Passaic, NJ	1
Rutland, VT	8	Cocke, TN	5	Perry, PA	2	Sussex, NJ	1
Windsor, VT	8	Greene, TN	5	York, PA	2	Putnam, NY	1
Tazewell, VA	8	Sevier, TN	5	Blount, TN	2	Rockland, NY	1
Mercer, WV	8	Bennington, VT	5	Carter, TN	2	Westchester, NY	1
White, GA	7	Augusta, VA	5	Sullivan, TN	2	Pike, PA	1
Avery, NC	7	Staunton, VA (city)	5	Unicoi, TN	2	Clarke, VA	1
Swain, NC	7	Waynesboro, VA (city)	5	Washington, TN	2	Fauquier, VA	1
Yancey, NC	7	Fannin, GA	4	Albemarle, VA	2	Loudoun, VA	1
Johnson, TN	7	Gilmer, GA	4	Amherst, VA	2	Warren, VA	1
Bland, VA	7	Lumpkin, GA	4	Bedford, VA	2	Jefferson, WV	1
Madison, VA	7	Carroll, NH	4	Botetourt, VA	2		
Monroe, WV	7	Rappahannock, VA	4	Craig, VA	2		
Franklin, ME	6	Monroe, PA	3	Giles, VA	2		
Oxford, ME	6	Fairfield, CT	2	Greene, VA	2		

Urbanization

level of urbanization
(2003)



- Virginia Independent Cities
1. Harrisonburg
 2. Staunton
 3. Waynesboro
 4. Charlottesville
 5. Lexington
 6. Buena Vista
 7. Bedford
 8. Roanoke
 9. Salem
 10. Radford
 11. Bristol

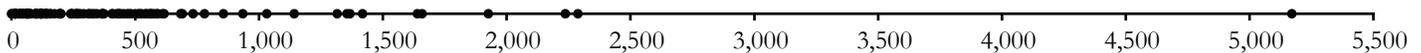
Building Permits

One indicator of growth in a local economy is the number of building permits issued for new privately-owned housing units. A large number of building permits indicates demand for construction labor, supplies, and services. It indirectly implies that families are growing, retirees are moving to an area, or industries are moving and expanding economic output. Growth can generate new political priorities (such as greater demand for roads and schools) and can increase land values. Growth also

alters the human impact within the ecosystem through effects such as increased water consumption, loss of cropland or habitat, or greater valuation of open space.

Within the Appalachian National Scenic Trail region, the average number of building permits issued annually (1995 - 2005) ranges from 1 (Monroe, WV) to 5,170 (Loudon, VA).²⁴

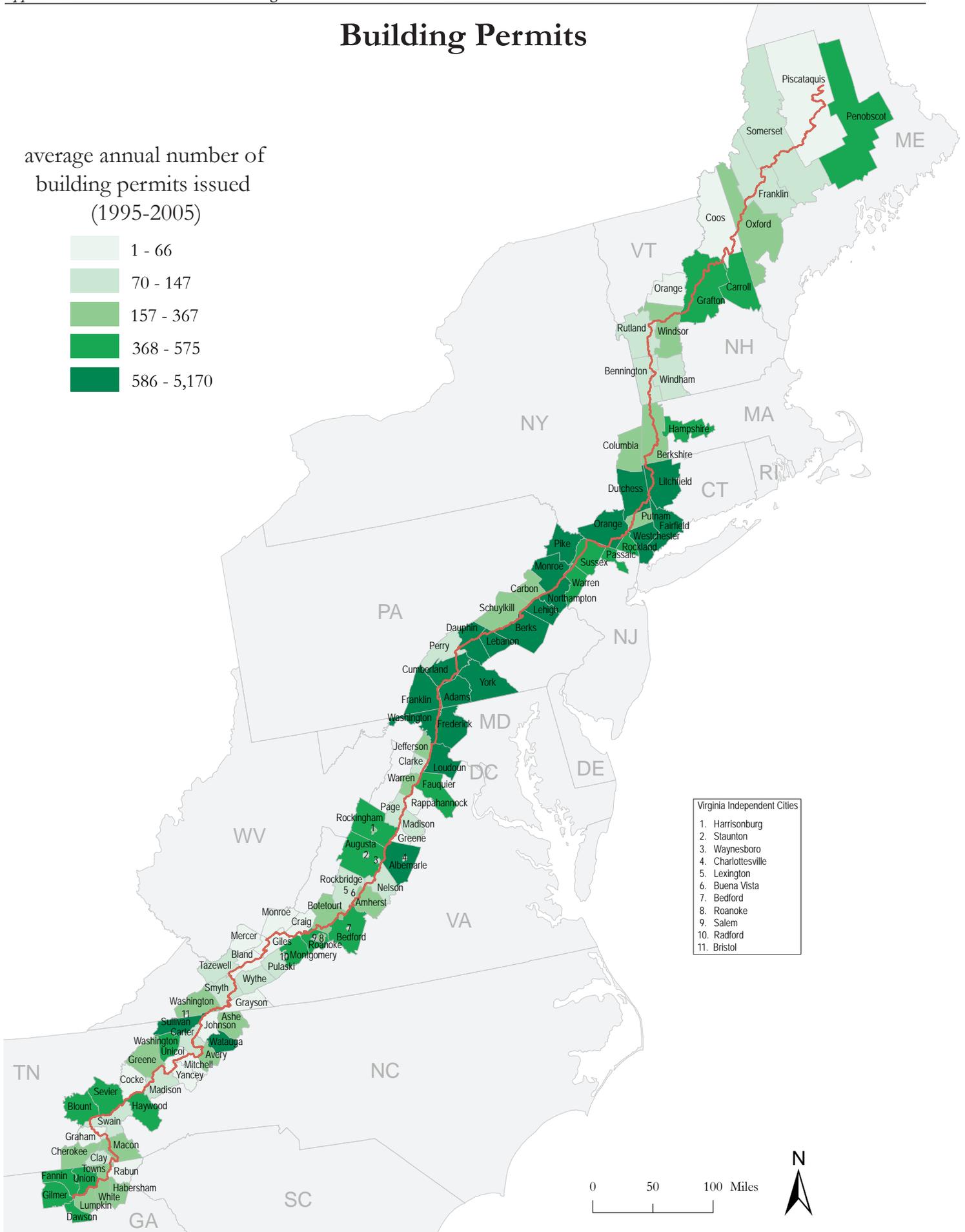
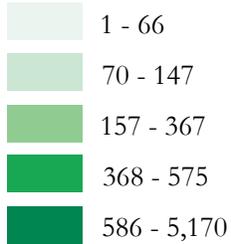
average annual number of building permits issued (1995-2005)							
		Tazewell, VA	95	White, GA	262	Washington, TN	557
		Staunton, VA (city)	97	Warren, VA	266	Warren, NJ	563
		Waynesboro, VA (city)	99	Carbon, PA	270	Bedford, VA	565
Monroe, WV	1	Franklin, ME	99	Putnam, NY	278	Sussex, NJ	575
Cocke, TN	1	Madison, VA	105	Berkshire, MA	292	Watauga, NC	586
Johnson, TN	14	Wythe, VA	108	Washington, VA	312	Lebanon, PA	590
Yancey, NC	14	Rutland, VT	117	Lumpkin, GA	315	Pike, PA	609
Lexington, VA (city)	14	Page, VA	117	Harrisonburg, VA (city)	325	Adams, PA	616
Grayson, VA	15	Bennington, VT	120	Cherokee, NC	334	Litchfield, CT	684
Bedford, VA (city)	16	Clarke, VA	120	Jefferson, WV	345	Sullivan, TN	690
Buena Vista, VA (city)	16	Swain, NC	120	Habersham, GA	367	Albemarle, VA	733
Unicoi, TN	18	Charlottesville, VA (city)	120	Macon, NC	367	Franklin, PA	779
Mercer, WV	28	Pulaski, VA	121	Grafton, NH	368	Dutchess, NY	856
Rappahannock, VA	33	Madison, NC	130	Blount, TN	373	Washington, MD	934
Craig, VA	34	Rockbridge, VA	135	Dawson, GA	406	Dauphin, PA	1,031
Radford, VA (city)	41	Windham, VT	139	Hampshire, MA	410	Cumberland, PA	1,142
Piscataquis, ME	42	Nelson, VA	140	Haywood, NC	425	Monroe, PA	1,315
Rabun, GA	47	Clay, NC	143	Carroll, NH	433	Lehigh, PA	1,355
Bland, VA	49	Perry, PA	147	Penobscot, ME	434	Northampton, PA	1,367
Orange, VT	55	Greene, TN	157	Fannin, GA	441	Westchester, NY	1,418
Giles, VA	61	Amherst, VA	159	Union, GA	453	Berks, PA	1,639
Bristol, VA (city)	62	Avery, NC	173	Gilmer, GA	466	Orange, NY	1,658
Graham, NC	63	Windsor, VT	193	Rockingham, VA	475	Frederick, MD	1,926
Mitchell, NC	64	Columbia, NY	196	Montgomery, VA	483	Fairfield, CT	2,236
Greene, VA	66	Roanoke, VA (city)	198	Sevier, TN	499	York, PA	2,288
Coos, NH	66	Oxford, ME	200	Augusta, VA	512	Loudoun, VA	5,170
Carter, TN	70	Botetourt, VA	239	Roanoke, VA	519		
Smyth, VA	71	Towns, GA	242	Passaic, NJ	525		
Somerset, ME	75	Schuylkill, PA	245	Rockland, NY	540		
Salem, VA (city)	79	Ashe, NC	257	Fauquier, VA	547	United States	1,609,937



Variation in Distribution of Data Values

Building Permits

average annual number of building permits issued (1995-2005)



Conclusion: Using This Atlas for Trail Management

National park units function as part of a regional human ecosystem. A natural ecosystem can be understood in terms of factors such as flora, fauna, rainfall, temperature, elevation, and soil. Similarly, a human ecosystem can be understood in terms of factors such as population changes, commercial activities, social and cultural practices, recreational activities, politics, and land-use patterns. Knowledge of natural and human conditions external to a national park unit is essential to park and trail management.

This atlas focuses on human activities and features in the region surrounding the Appalachian National Scenic Trail. Five primary applications of this atlas as a tool for trail management are:

- monitoring activities and analyzing trends that could have short- or long-term impacts on the trail;
- making comparative studies between the trail and other national park units, both within the region and between regions;
- assessing potential social impacts of management decisions;
- supporting collaborative decision-making and public participation; and
- educating trail staff, their management partners, and other stakeholders about regional socioeconomic trends.

Monitoring activities and analyzing trends. The standardized data sources and presentation format of this atlas allow it to serve as a baseline for long-term monitoring of human conditions and trends that impact the trail, such as immigration or economic shifts. These human conditions and trends can have significant implications for trail planning and management. For example, the atlas can be consulted to determine trends in educational attainment among regional residents. This information could be helpful in designing interpretive

and public participation programs and materials that can increase access to and understanding of the role of the trail in the region. The atlas can be used to gain knowledge about the overall structure of and local variations in the regional economy. This information could be important to developing a strong collaborative working relationship with regional business leaders. The atlas can be examined to recognize trends in land use. This information could support proactive planning to mitigate potential impacts of development such as habitat fragmentation, degradation of air or water quality, or intrusions upon historic settings and/or scenic values.

Comparative studies. This atlas can support comparative studies of two kinds. First, the atlas can be used to compare counties within the region. By displaying the range of values for a particular indicator or a set of indicators, the atlas can help guide or prioritize location-specific management planning and/or outreach activities along the AT. Second, the atlas can be used to make comparisons with the regions surrounding other national park units.

Social impact assessment. The socioeconomic indicators displayed in this atlas can help trail managers and their partners evaluate the social impacts of potential management actions. For example, the information provided in this atlas could be used to provide context for various trail management plans, from regional to more local scales.

Collaborative decision making. Distribution of this atlas to citizens, elected officials, educators, business and service groups, resource managers, and others can strengthen their ability to effectively and collaboratively participate in trail management activities and decision-making. Maps that present facts in a standardized format can be particularly helpful for establishing common ground on which to decide upon management priorities, especially for decisions that affect both the trail and the adjacent region.

Education and orientation. The atlas can be used to orient new trail staff and their management partners, as well as other NPS staff, to some of the basic facts about human activities in the trail's region of interest. It can also serve as a tool for sharing information about socioeconomic trends with the public, gateway communities, media, and Congress.

In conclusion, effective trail management requires a clear understanding of human activities in the surrounding region that can impact trail resources and operations. By providing the "basic facts" about such activities, this atlas can help managers, citizens, and others better provide for the preservation and enjoyment of the Appalachian National Scenic Trail.

Appendices

Appendix 1: Data Sources for Indicators

The data sources used to obtain the measures for the socioeconomic indicators are listed below. The indicators on the left correspond to the titles of the maps in the atlas. The measure corresponds to the legends used in the maps and the ranked data tables.

INDICATOR	MEASURE	DATA SOURCE
General Population		
*Total Population	total number of people (2005)	U.S. Department of Commerce, Census Bureau http://www.census.gov/popest/datasets.html
Historical Population Change	% change in total number of people (1985-2005)	U.S. Department of Commerce, Census Bureau http://www.census.gov/popest/datasets.html http://www.census.gov/popest/archives/1980s/
Recent Population Change	% change in total number of people (1995-2005)	U.S. Department of Commerce, Census Bureau http://www.census.gov/popest/datasets.html http://www.census.gov/popest/archives/2000s/vintage_2001/CO-EST2001-12/CO-EST2001-12.html
*Projected Population Change	projected % change in total number of people (2005-2025)	Woods & Poole Economics, Inc. 2006 Complete Economic and Demographic Data Source (CEDDS) on CD-ROM. Washington, DC. Woods & Poole Economics, Inc. provides long-term socioeconomic data projections at the state and local levels, in both hardcopy and electronic format. http://www.woodsandpoole.com
Population Density	average number of people per square mile (2005)	U.S. Department of Commerce, Census Bureau http://www.census.gov/popest/datasets.html http://www.census.gov/population/www/censusdata/density.html
Projected Population Density	projected average number of people per square mile (2025)	Woods & Poole Economics, Inc. 2006 Complete Economic and Demographic Data Source (CEDDS) on CD-ROM. Washington, DC. Woods & Poole Economics, Inc. provides long-term socioeconomic data projections at the state and local levels, in both hardcopy and electronic format. http://www.woodsandpoole.com

Appendix 1: Data Sources for Indicators (continued)

INDICATOR	MEASURE	DATA SOURCE
Median Age	median age of total population (2000)	U.S. Department of Commerce, Census Bureau http://factfinder.census.gov Census 2000 Summary File 1 (SF1) 100% Data --> Table P13
Projected Median Age	projected median age of total population (2025)	Woods & Poole Economics, Inc. 2006 Complete Economic and Demographic Data Source (CEDDS) on CD-ROM. Washington, DC. Woods & Poole Economics, Inc. provides long-term socioeconomic data projections at the state and local levels, in both hardcopy and electronic format. http://www.woodsandpoole.com
Economy and Commerce		
*Earnings by Industry	% total earnings by industrial category (2003)	Woods & Poole Economics, Inc. 2006 Complete Economic and Demographic Data Source (CEDDS) on CD-ROM. Washington, DC. Woods & Poole Economics, Inc. provides long-term socioeconomic data projections at the state and local levels, in both hardcopy and electronic format. http://www.woodsandpoole.com
Change in Earnings by Industry	% change in total earnings by industrial category (1995-2005)	Woods & Poole Economics, Inc. 2006 Complete Economic and Demographic Data Source (CEDDS) on CD-ROM. Washington, DC. Woods & Poole Economics, Inc. provides long-term socioeconomic data projections at the state and local levels, in both hardcopy and electronic format. http://www.woodsandpoole.com
Projected Change in Earnings by Industry	projected % change in total earnings by industrial category (2005-2025)	Woods & Poole Economics, Inc. 2006 Complete Economic and Demographic Data Source (CEDDS) on CD-ROM. Washington, DC. Woods & Poole Economics, Inc. provides long-term socioeconomic data projections at the state and local levels, in both hardcopy and electronic format. http://www.woodsandpoole.com

Appendix 1: Data Sources for Indicators (continued)

INDICATOR	MEASURE	DATA SOURCE
*Employment by Industry	% employment by industrial category (2003)	Woods & Poole Economics, Inc. 2006 Complete Economic and Demographic Data Source (CEDDS) on CD-ROM. Washington, DC. Woods & Poole Economics, Inc. provides long-term socioeconomic data projections at the state and local levels, in both hardcopy and electronic format. http://www.woodsandpoole.com
Change in Employment by Industry	% change in employment by industrial category (1995-2005)	Woods & Poole Economics, Inc. 2006 Complete Economic and Demographic Data Source (CEDDS) on CD-ROM. Washington, DC. Woods & Poole Economics, Inc. provides long-term socioeconomic data projections at the state and local levels, in both hardcopy and electronic format. http://www.woodsandpoole.com/
*Poverty	% total population in poverty (2004)	U.S. Department of Commerce, Census Bureau http://www.census.gov/hhes/www/saipe/county.html
Median Household Income	median household income (\$) (2004)	U.S. Department of Commerce, Census Bureau http://www.census.gov/hhes/www/saipe/county.html
Social and Cultural Characteristics		
Racial and Ethnic Composition	% total population in each racial/ethnic category (2000)	U.S. Department of Commerce, Census Bureau http://factfinder.census.gov Census 2000 Summary File 1 (SF1) 100% Data --> Tables P3 and P4
*Racial Diversity	% total population belonging to minority race groups (2000)	U.S. Department of Commerce, Census Bureau http://factfinder.census.gov Census 2000 Summary File 1 (SF1) 100% Data --> Table P3
*Educational Attainment	% total population 25 years old and over with some college or college degree (2000)	U.S. Department of Commerce, Census Bureau http://factfinder.census.gov Census 2000 Summary File 3 (SF3) --> Table P37

Appendix 1: Data Sources for Indicators (continued)

INDICATOR	MEASURE	DATA SOURCE
Recreation and Tourism		
Recreation/Tourism Establishments	% total establishments in arts, entertainment, recreation, accommodation and food services (2004)	U.S. Department of Commerce, Census Bureau http://censtats.census.gov/cbpnaic/cbpnaic.shtml
*Recreation/Tourism Employment	% total paid employees in arts, entertainment, recreation, accommodation and food services (2004)	U.S. Department of Commerce, Census Bureau http://censtats.census.gov/cbpnaic/cbpnaic.shtml
*Recreation/Tourism Revenue	% total sales from arts, entertainment, recreation, accommodation and food services (2002)	U.S. Department of Commerce, Census Bureau http://www.census.gov/econ/census02/data/us/US000.HTM
Administration and Government		
*Congressional Districts	Congressional Districts (2007)	U.S. Department of Commerce, Census Bureau http://www.census.gov/geo/www/cob/cd110.html
*Federal Expenditures	federal expenditures per capita (\$) (2004)	U.S. Department of Commerce, Census Bureau http://www.census.gov/prod/2005pubs/cffr-04.pdf -->Table 15
Change in Local Government Expenditures	% change in local government expenditures per capita (1992-2002)	U.S. Department of Commerce, Census Bureau http://www.census.gov/prod/2/gov/gc92-4/gc924-5.pdf --> Table 51 http://www.census.gov/prod/2005pubs/gc024x5.pdf -->Table 51 http://www.bls.gov/ --> Inflation Calculator
Payments in Lieu of Taxes	total payments transferred to counties (\$) (2006)	U.S. Department of Interior http://www.nbc.gov/pilt/search.cfm

Appendix 1: Data Sources for Indicators (continued)

INDICATOR	MEASURE	DATA SOURCE
Land Use		
*Federal Land Management	% land under federal management (2006)	U.S. Department of Interior http://www.nbc.gov/pilt/search.cfm
*Federal Lands and Indian Reservations	federal lands and Indian reservations (2005)	USGS National Atlas http://nationalatlas.gov/atlasftp.html
Farmland	% land classified as farmland (2002)	U.S. Department of Agriculture, National Agricultural Statistics Service http://www.nass.usda.gov/Census/Create_Census_US_CNTY.jsp --> Table 1 U.S. Department of Commerce, Census Bureau http://www.census.gov/population/www/censusdata/density.html
*Change in Farmland	% change in acres of farmland (1992-2002)	U.S. Department of Agriculture, National Agricultural Statistics Service http://www.nass.usda.gov/Census/Create_Census_US_CNTY.jsp --> Table 1 U.S. Department of Agriculture, National Agricultural Statistics Service http://www.nass.usda.gov/census/census92/volume1/ct-7/92_07_ct.htm --> Table 1
*Metropolitan Statistical Areas	metropolitan statistical areas (2003)	U.S. Department of Commerce, Census Bureau http://www.census.gov/geo/www/cob/mmsa2003.html
*Urbanization	level of urbanization (2003)	U.S. Department of Agriculture, Economic Research Service http://www.ers.usda.gov/Data/UrbanInfluenceCodes/
Building Permits	average annual number of building permits issued (1995-2005)	U.S. Department of Commerce, Census Bureau http://censtats.census.gov/bldg/bldgprmt.shtml

* Denotes a core indicator, common to all atlases in this series. Additional indicators were selected by trail managers to include information specific to their particular management needs.

Appendix 2: Technical Notes on Map Design

Selection of Base Map Data – The regional base map used to map socioeconomic indicators in this atlas includes state and county boundaries. It should be emphasized that this is not a general purpose atlas of the region, for it focuses only on socioeconomic indicators.

Choropleth Mapping – For most of the maps, data are grouped by quintiles which vary in shading from light to dark (for low to high values). This shading technique, known as choropleth mapping, is usually applied to ratio data; population density, infant deaths per 1,000 live births, and median income are examples. Maps that display total amounts (such as total population) often use other approaches, such as proportional symbols. For clarity, ease of use, and consistent design, choropleth mapping is used for most of the social indicator data.

Quintile Classification – The choice of a *quintile* classification of the data means that for most maps, counties were divided into five classes. Rather than focusing on the actual numerical value of the indicator for each county, the quintile approach emphasizes the rankings of data values among counties. The legend accompanying the map allows the reader to see the range of values among counties within a class. Quintiles make it easy for the reader to make intuitive comparisons among counties; the darkest shaded counties are in the “top quintile,” the lightest shaded counties are in the “bottom quintile,” and so forth. Quintiles also facilitate comparisons between maps in the atlas (“this county ranks in the bottom quintile on all three of these indicators”).

Two notes: (1) Whenever the number of counties cannot be evenly divided by five, the convention for this atlas series is to reduce the size of the highest quintile first, then the next quintile if needed, then the third and fourth quintile if needed. Hence 113 counties would be divided into groups of 23, 23, 23, 22, and 22, with the last groups of 22 having the highest data values/darkest shading. (2) Counties with identical data values are grouped in the same quintile, even if this results in quintiles of unequal size.

Note on Political Boundaries – The regional base map depicts the formally defined political boundaries of states and counties.

Map Sources – The regional map on the cover and at the beginning of the atlas was generated from the Global 30 Arc Second Elevation Data (GTOPO30) dataset (<http://seamless.usgs.gov/website/Seamless/>) developed at the U.S. Geological Survey’s EROS Data Center. The standard region of interest map used throughout the atlas was generated from U.S. Geological Survey shapefiles. Contextual information (state capitals, lakes and rivers) was obtained from the U.S. Geological Survey (<http://www.nationalatlas.gov>) and Environmental Systems Research Institute, Inc (ESRI) Data and Maps (<http://www.esri.com>).

Production – Indicator data for the atlas were compiled in Microsoft Excel 2000. These were linked to U.S. Geological Survey shapefiles using ESRI ArcMap GIS 9.1. The GIS files were imported into Adobe Illustrator CS2 for final map design. The final atlas layout (text, maps, graphics) was completed using Adobe InDesign CS2.

Text Sources – Additional web resources used to prepare trail and regional descriptions are:

- National Park Service;
<http://www.nps.gov/appa/>
- Appalachian Trail Conservancy;
<http://www.appalachiantrail.org>
- American Indian Resource Directory;
<http://www.indians.org>
- U.S. Department of Interior Bureau of Indian Affairs;
<http://www.doi.gov/bia/Tribal%20LeadersJune%202007-3.pdf>

Appendix 2: Technical Notes on Map Design (continued)

- U.S. Census Bureau FactFinder;
<http://factfinder.census.gov/>
- U.S. Geological Survey;
<http://nationalatlas.gov>
- UWMC Department of Geography;
http://www.uwmc.uwc.edu/geography/100/koppen_web/koppen_map.htm
- World Book Encyclopedia;
<http://www.worldbook.com>

Appendix 3: Technical Notes on Measurement of Selected Indicators

¹ Persons enumerated in the census were counted as inhabitants of their usual place of residence, which generally means the place where a person lives and sleeps most of the time. This place is not necessarily the same as the legal residence, voting residence, or domicile. In the vast majority of cases, the use of these different bases of classification would produce substantially the same statistics, although appreciable differences may exist for a few areas.

² An explanation of Woods & Poole's projection methods is available in the Woods and Poole Technical Documentation manual (page 11).

³ Population density is measured as the average number of people per square mile of land. This number is calculated by dividing the total number of people in 2005 by the total land area per county. In counties with federal lands, excluding these areas from the calculation of population density would result in a higher population density.

⁴ See note above on Population Density.

⁵ Economic activity is categorized as belonging to one of four industrial categories: agriculture/natural resources, construction/manufacturing, sales/services, and government. Individual workers, regardless of their specific job responsibilities, are classified according to the category their overall company or organization belongs to. Thus, while accounting is considered a "service" activity, an accountant for a mining company would be counted as working in "agriculture/natural resources." "Government" includes all federal government workers and all state/local employees, such as teachers, police, firefighters, etc. Even though government jobs may involve construction, natural resource management, or provision of services, they are still counted as belonging to the "government" category.

⁶ See note above on industrial categories.

⁷ See note above on industrial categories.

Appendix 3: Technical Notes on Measurement of Selected Indicators (continued)

⁸ See note above on industrial categories.

⁹ See note above on industrial categories.

¹⁰ Poverty is measured as the percentage of the total population living below the poverty level. The poverty level is defined as earnings of \$19,484 or less for a family of four persons (2004). Poverty thresholds are applied on a national basis and are not adjusted for regional, state, or local variations in the cost of living.

¹¹ Racial composition is based upon self-identification by people responding to the U.S. Census. Census respondents are asked to classify themselves according to the race with which they most closely identify. Specific responses such as “Polish,” “Haitian,” “Thai,” or “Lakota” were coded more generally as belonging to one of six general categories (White, Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and Some Other Race). Respondents to Census 2000 could indicate more than one race, and these respondents are grouped together in the category Two or More Races. Persons of Hispanic or Latino origin may be of any race. People of Hispanic origin who are not White were counted in the Hispanic group and were also counted in the Black, American Indian and Alaska Native, Asian, or Native Hawaiian or Other Pacific Islander group they indicated.

¹² Racial diversity is defined for this measure as the percentage of the population classified as being non-White. Diversity by this definition does not necessarily measure the degree of “variety” in the population. For example, a hypothetical county with a 90% Asian population would be considered more “diverse” than a county in which each of the six major race groups constituted 10% of the population (in the latter case, diversity would be measured as 60%). The Hispanic or Latino origin category was not included in this measure because persons of Hispanic or Latino origin may be of any race (including White). Data on Hispanic population are included on pages 54 and 55.

¹³ For Census 2000, persons are classified according to the highest level of school completed or the highest degree received.

¹⁴ Recreation and Tourism is composed of the arts, entertainment, and recreation sector and the accommodation and food services sector, both a part of the North American Industry Classification System (NAICS). The arts, entertainment, and recreation sector includes museums, historical sites, gambling and recreation industries, golf courses and country clubs, fitness and recreational sports centers, and all other amusement industries. The accommodation and food services sector is composed of establishments including hotels, motels, bed and breakfasts, RV parks, recreational camps, and vacation camps. For a complete definition of these NAICS categories please consult <http://www.census.gov/epcd/www/naics.html>.

¹⁵ See note above on recreation/tourism. Additionally, the number of employees was reported as a range for some counties. For these cases, the midpoint value was used for calculations.

¹⁶ See note above on recreation/tourism. Additionally, specific values were not reported for seven industries at the county level. The “total” for calculations could not include these categories. Counties with partial information were included with calculations based on available data.

¹⁷ Federal expenditures include expenditures, or obligation for, direct payments for individuals, procurement, grants, salaries and wages, direct loans, and guaranteed loans and insurance. Grant awards are reported by county of the initial recipient; thus if the initial recipient is the state government, the county in which the state capital is located is reported as having “received” that “pass-through” grant, even though the monies are subsequently distributed to other local governments.

Appendix 3: Technical Notes on Measurement of Selected Indicators (continued)

¹⁸ Federal lands include all tax-exempt federal lands administered by the Bureau of Land Management, the National Park Service, the U.S. Fish and Wildlife Service, the U.S. Forest Service, federal water projects, and some military installations (tribal lands are not included). The U.S. Department of the Interior calculates the amount of federal land within counties in order to administer the federal government's payments-in-lieu-of-taxes (PILT) program.

¹⁹ The U.S. Geological Survey produces the federal lands and Indian reservations map layer. This map layer does not include any federally and Indian held land that has an areal extent smaller than 640 acres. More information and metadata are available from the National Atlas: <http://www.nationalatlas.gov/mld/indlanp.html> <http://www.nationalatlas.gov/mld/fedlanp.html>.

²⁰ Farmland consists primarily of agricultural land used for crops, pasture, or grazing. Also included is woodland and wasteland not actually under cultivation or used for pasture or grazing, provided it was part of the farm operator's total operation. Farmland includes acres in the Conservation Reserve, Wetlands Reserve Programs, or other governmental programs. Farmland includes land owned and operated as well as land rented from others. Land used rent-free is included as land rented from others. All grazing land, except land used under government permits on a per-head basis, is included as farmland provided it was part of a farm or ranch. Land under the exclusive use of a grazing association is reported by the grazing association and included as farmland. All land in American Indian reservations used for growing crops or grazing livestock is included as farmland. Land in reservations not reported by individual American Indians or non-Native Americans is reported in the name of the cooperative group that used the land.

²¹ See note above on farmland.

²² Metropolitan Statistical Areas are defined by the federal Office of Management and Budget. They are comprised of at least one population center of 50,000 people or more, combined with adjacent areas that have close economic and social integration with the population center(s). For a complete description of Metropolitan Statistical Areas, please consult: http://www.census.gov/geo/www/cob/mmsa_meta.html

²³ The Economic Research Service classifies counties according to their level of urbanization. The classification consists of twelve mutually-exclusive codes:

METROPOLITAN COUNTIES

- 1) In large metro area of greater than 1 million residents
- 2) In small metro area of less than 1 million residents

NONMETROPOLITAN COUNTIES

- 3) Micropolitan adjacent to large metro
- 4) Noncore adjacent to large metro
- 5) Micropolitan adjacent to small metro
- 6) Noncore adjacent to small metro with own town
- 7) Noncore adjacent to small metro, no own town
- 8) Micropolitan not adjacent to a metro area
- 9) Noncore adjacent to micro with own town
- 10) Noncore adjacent to micro with no own town
- 11) Noncore not adjacent to metro or micro with own town
- 12) Noncore not adjacent to metro or micro with no own town

Appendix 3: Technical Notes on Measurement of Selected Indicators (continued)

²⁴ The issuing of building permits for privately-owned housing units does not necessarily imply that a community is growing, since any community will experience an ongoing replacement of aging houses and buildings. Also, a catastrophic event such as a major storm or fire can generate a short-term surge in the number of building permits issued. Thus a better indicator of growth is an average of annual numbers of building permits issued over a ten-year period. Changes in local codes or enforcement can also affect the number of building permits issued. This measure includes data about new housing units intended for occupancy and maintained by the occupants. It excludes hotels, motels, and group residential structures such as nursing homes and college dormitories. All public housing and nonresidential buildings are also excluded. For a complete definition see: <http://www.census.gov/ftp/pub/const/www/newresconstdoc.html>

For more information, contact:

Dr. Jean McKendry
Principal Scientist
College of Natural Resources
University of Idaho
P.O. Box 441133
Moscow, ID 83844-1133
jeanm@uidaho.edu

