

REGIONAL SNAPSHOT Mount Rogers Region, Virginia





Center for Regional Development Advancing Collaboration : Energizing Regions

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Mount Rogers Region, VA

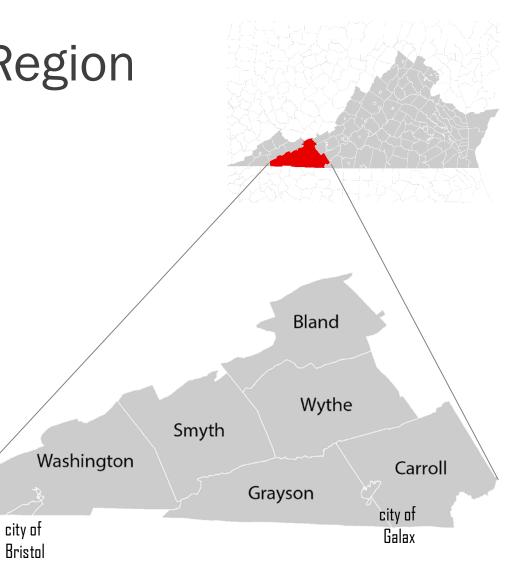
What is a regional snapshot?

Overview

Mount Rogers Region

The Mount Rogers Region is comprised of six Virginia counties and two cities. Interstate I-81 passes through the central part of the region.

- Bland
- Carroll
- Grayson
- Smyth
- Washington
- Wythe Counties
- city of Bristol
- city of Galax



Overview

What is a regional snapshot?

What is the snapshot?

This snapshot is a demographic and economic assessment of the Mount Rogers Region in Virginia. Using county-level data, PCRD analyzed a number of indicators to gauge the overall economic performance of the Mount Rogers Region in comparison to the rest of the state.

What is its purpose?

The snapshot is intended to inform the region's leaders, organizations and residents of the key attributes of the region's population and economy. In particular, it takes stock of the region's important assets and challenges. With such data in hand, regional leaders and organizations are in a better position to invest in the mix of strategies that will spur the growth of the economy and provide a higher quality of life for residents of the region.

What are its focus areas?

PCRD secured and analyzed recent data from both public and private sources to generate the snapshot. In order to build a more comprehensive picture of the region, the report presents information under four key categories.

- Demography
- Human Capital
- Labor Force
- Industry & Occupation

When appropriate or relevant, the report compares information on the region with data on the remainder of the state. By so doing, the region is better able to determine how well it is performing relative to the state on a variety of important metrics.

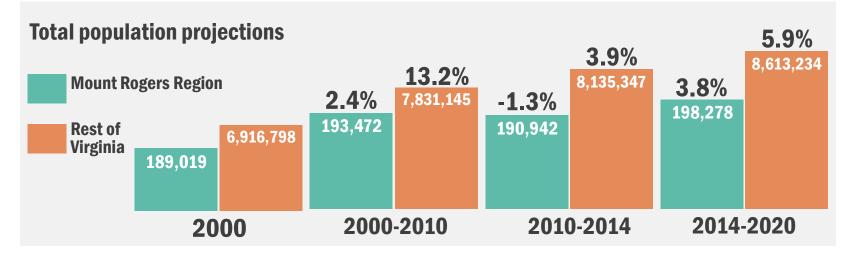
02 demography

Population change

Age structure

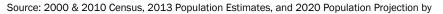
Income and poverty

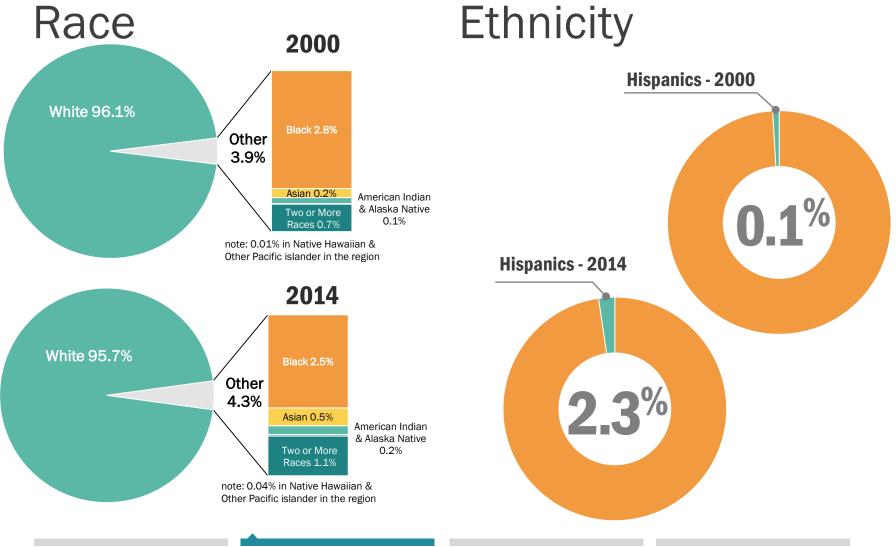
Population change



Questions:

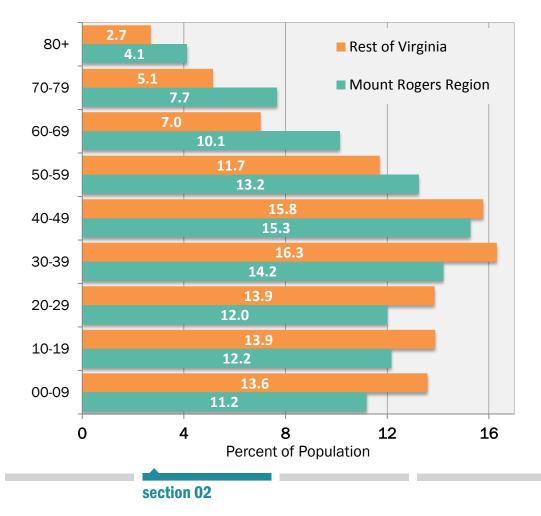
- How does the region's population trend compare to that of the state?
- What may be some of the elements driving the trends in the region? In the state?
- What strengths or challenges might these trends present?





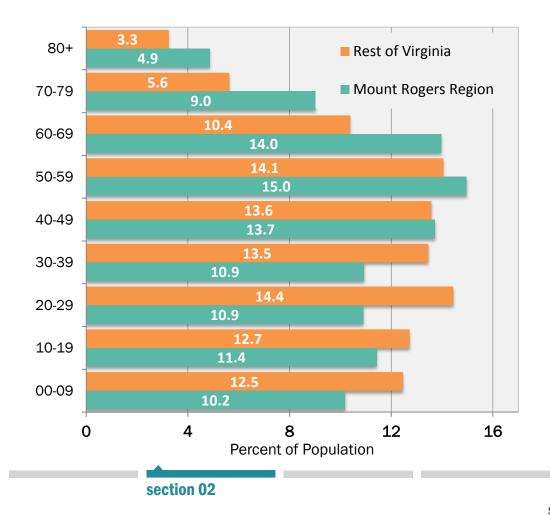
Population Age Structure, 2000

A visual presentation of the age distribution of the population (in percent)



Population Age Structure, 2014

A visual presentation of the age distribution of the population (in percent)



Questions:

- Is the region experiencing an aging of its population? How does this compare to the rest of the state?
- Is there a sizable number of people of prime working age (20-49 years of age) in the region?
- Is the youth population (under 20 years old) growing or declining?
- What are the implications of the region's age structure for the economic development efforts of the region?

Demography Income and poverty

	2003	2008	2013
Total Population in Poverty	13.8%	16.1%	16.7%
Minors (Age 0-17) in Poverty	21.5%	23.2%	25.3%
Real Median Household Income* (\$ 2013)	\$40,369	\$39,902	\$38,683

Questions:

- Is the poverty rate for individuals in the county getting better or worse?
- Is poverty for minors in the county lower or higher than the overall poverty rate for all individuals? Why?
- Has real median income
 (adjusted for inflation)
 improved or worsened over the
 2003 to 2013 time period?
 What may be reasons for these changes?

section 02

* Note: Regional Median Household income is the population-weighted average of median household income values across the Mount Rogers Virginia counties.

Source: U.S. Census Bureau – Small Area Income and Poverty Estimates (SAIPE) 11

03 human capital

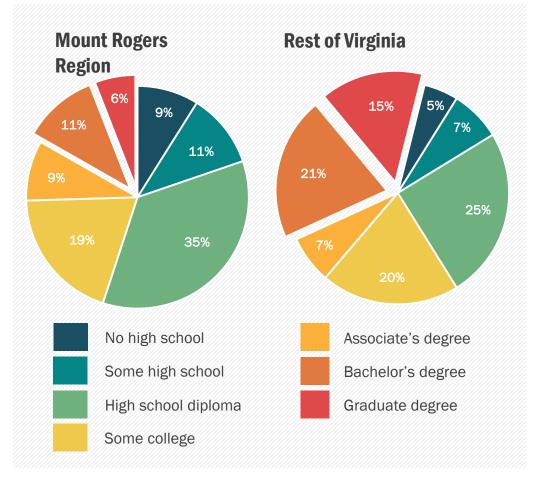
Educational attainment

Graduation rates

Patents

Human capital

Educational attainment, 2013



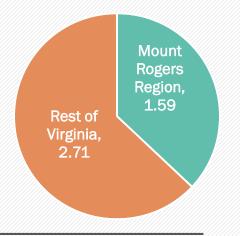
Questions:

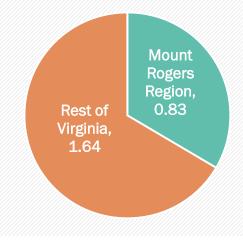
- What proportion of the adult population in the region has only a high school education?
- How many are college graduates (bachelors degree or higher)?
- How does the educational profile of the region compare to that of the rest of the state?
- What are the implications of the educational profile of the region in terms of the region's economic opportunities or workforce challenges?

Human capital Patents

Patents per 10,000 Jobs 2001-2013

From 2001 to 2013, Mount Rogers counties were issued patents at a rate of 1.59 per 10,000 jobs, while the remaining Virginia counties garnered 2.71 patents per 10,000 jobs.





Patents per 10,000 residents 2001-2013

From 2001 to 2013, 0.83 patents per 10,000 residents were issued in Mount Rogers counties. The rest of Virginia amassed 1.64 patents per 10,000 residents. Patenting trends are an important indicator of the level of innovation in a region.

Commercializing this innovation can lead to longterm growth for regional economies.

Questions:

- How does the region's patent rate compare to that of the rest of the state?
- How have rates changed over time?
- What might this data suggest for the future of the region?

section 03

Source: U.S. Patent and Trademark Office, Census, BEA, and EMSI

*Note: Patent origin is determined by the residence of the first-named inventor. Since a number of workers commute into the region, the number of patents produced in the Mount Rogers region could be high. However, among residents of the region, patent production is relatively low.

04 labor force

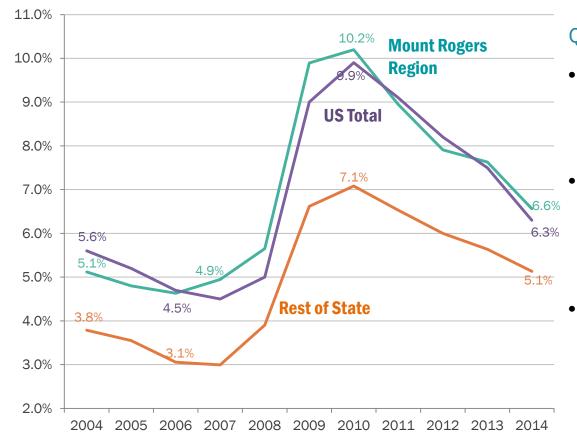
Unemployment rates

Earnings per worker

Source of labor for the region

Labor force

Unemployment rates



Questions:

- How does the region's unemployment rate compare to the rest of the state and nation?
- How does the region's unemployment peak and post-2009 recovery compare to the state and nation?
- What might this suggest for the region's economic future?

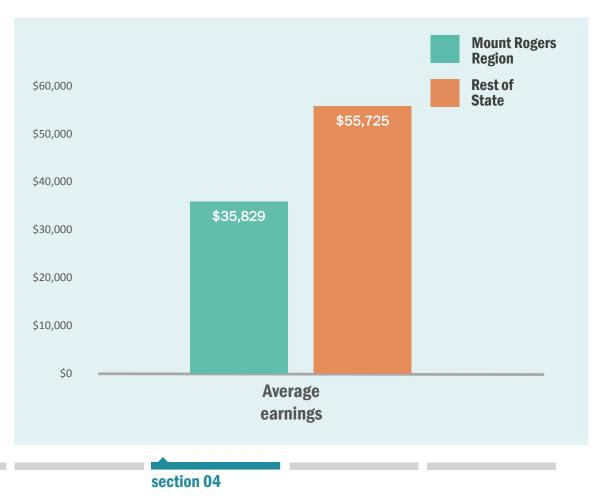
Labor force

Earnings per worker in 2014

Questions:

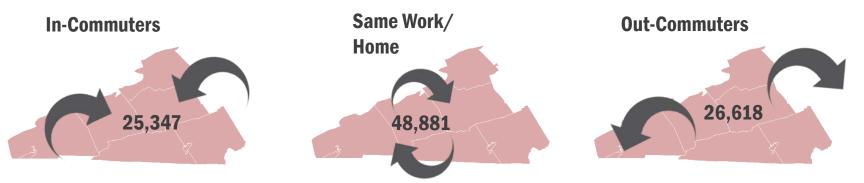
- How does the region's average earnings compare to that of the rest of the state?
- What might be some driving factors for the differences?
- Do these represent potential strengths or challenges for the region?

NOTE: Earnings include wages, salaries, supplements and earnings from partnerships and proprietorships.



Labor force

Journey to Work



Population	2013 Jobs	Proportion	Population		2013 Jobs	Proportion
Employed in Region	74,228	100.0%		Region Residents	75,499	100.0%
Employed in Region but Living Outside	25,347	34.1%	-	Employed Outside Region but Living in Region	26,618	35.3%
Employed and Living in Region	48,881	65.9%	Employed and Living in Region		48,881	64.7%

Questions:

- How many people employed in the region actually reside outside the region? How many who live in the region commute to jobs outside the region?
- What are the implications for the region's economic development efforts?

Establishments

Employment by industry

Cluster analysis

Top occupations

STEM occupations

Establishments

Components of Change for Establishments 2000-2011

Establishments Launched	14,037
Establishments Closed	7,575
Net Change	6,462
Net Migration (Establishments moving into minus establishments moving out of the region)	267
Total Change	6,729
Percent Change	83.7%

Note: In-migration and Out-migration includes movement within the Mount Rogers region.

An establishment is a physical business location. Branches, standalones and headquarters are all considered types of establishments.



Definition of Company Stages



Establishments

Number of Establishments by Company Stages

	200	2000		2011		
Stage	Establishments	Proportion	Establishments	Proportion		
Stage 0	1,969	24.5%	4,340	29.4%		
Stage 1	4,594	57.2%	8,874	60.1%		
Stage 2	1,321	16.4%	1,405	9.5%		
Stage 3	135	1.7%	136	0.9%		
Stage 4	18	0.2%	11	0.1%		
Total	8,037	100%	14,766	100%		

Questions:

- What stage businesses have shaped the region's economic growth in the last 10 years?
- Which ones are growing or declining the most?
- Which stage of establishments are likely to shape the region's future economic growth?

Establishments

Number of Jobs by Company Stages				
Year	2000	2011		
Stage 0	1,969	4,340		

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Stage 1	17,431	26,559	52.4%
Stage 2	33,686	37,810	12.2%
Stage 3	26,886	26,949	0.2%
Stage 4	7,219	9,322	29.1%
Total	87,191	104,980	20.4%

Sales (\$ 2013) by Company Stages

Year	2000	2011	% Change
Stage 0	225,789,198	292,057,777	29.3%
Stage 1	2,435,780,242	2,185,013,625	-10.3%
Stage 2	3,756,403,934	3,162,230,055	-15.8%
Stage 3	3,481,543,625	2,994,336,968	-14.0%
Stage 4	2,368,702,860	1,485,804,652	-37.3%
Total	12,268,219,860	10,119,443,077	-17.5%

Questions:

% Change

120.4%

- What establishments are the most numerous based on company stages?
- What stages have experienced the largest growth? The greatest decline?
- What company stage employs the largest number of people?
- What stage captures the most sales?
- Which ones have experienced the greatest percentage loss over the 2000-11 period?

Top ten industry sector employment growth

NAICS	Description	2009 Jobs	2014 Jobs	Change	Change (%)	State Change (%)
53	Real Estate and Rental and Leasing	2,439	2,970	531	22%	15.0%
52	Finance and Insurance	2,874	3,339	465	16%	14.2%
61	Educational Services	1,200	1,272	72	6%	13.4%
72	Accommodation and Food Services	7,084	7,299	215	3%	9.3%
54	Professional, Scientific, and Technical Services	2,327	2,394	67	3%	1.7%
31	Manufacturing	14,286	14,666	380	3%	-2.1%
62	Health Care and Social Assistance	9,152	9,290	138	2%	11.4%
90	Government	15,262	15,449	187	1%	-0.2%

Questions:

- What regional industry sectors have seen the greatest growth?
- Did they grow at the same rate as the state?
- What factors are causing the growth?

Top ten industry sector employment decline

NAICS	Description	2009 Jobs	2014 Jobs	Change	Change (%)	State Change (%)
22	Utilities	217	113	-104	-48%	-7.0%
21	Mining, Quarrying, and Oil and Gas Extraction	739	553	-186	-25%	-3.6%
56	Administrative and Support and Waste Management and Remediation Services	4,259	3,474	-785	-18%	8.6%
23	Construction	5,361	4,526	-835	-16%	-6.9%
51	Information	819	749	-70	-9%	-9.6%
48	Transportation and Warehousing	2,747	2,558	-189	-7%	4.8%
42	Wholesale Trade	2,576	2,458	-118	-5%	-1.0%
81	Other Services (except Public Administration)	5,175	4,941	-234	-5%	8.5%
44	Retail Trade	12,275	11,774	-501	-4%	4.0%
55	Management of Companies and Enterprises	925	896	-29	-3%	2.1%

Questions:

- How does the industry sector make-up of the region compare to the rest of the state?
- Which industry sectors are growing and declining the most in employment?

Industry cluster analysis

How to interpret cluster data results

The graph's four quadrants tell a different story for each cluster.

Contains clusters that are more concentrated in the region but are declining (negative growth). These clusters typically fall into the lower quadrant as job losses cause a decline in concentration.		concentr grow str	esters that are more rated in the region and are ing. These clusters are engths that help a region stand out from the competition. Small, high-growth clusters can be expected to become more dominant over time.
Contains clusters that are under-represented in the region (low concentration) and are also losing jobs Clusters in this region m indicate a gap in the workd pipeline if local industries an a future need. In general, clus quadrant show a lack of competitiveness.	ay declining) orce ticipate	eve quadra	Contains clusters that are under-represented in the region but are growing, often quickly. If growth trends continue, these clusters will entually move into the top right ant. Clusters in this quadrant dered emerging strengths n.



Distribution of clusters in the Region by quadrants



Industry cluster analysis

Mature Clusters

Electrical Equip, App. & Comp. Mfg.; 5.56; 1,110

Machinery Mfg.; 2.99; 1,826

Glass & Ceramics; 2.59; 411

Forest & Wood Products; **1.92**; 2,537

Fabricated Metal Product Mfg.; 1.46; 1,100

Mining; 1.12; 308

Level of Specialization

Star Clusters

Transportation Equipment Mfg.; 4.23; 3,430 Manufacturing Supercluster; 2.55; 7,998 Agribusiness & Food Processing; 2.43; 6,666 Apparel & Textiles; 2.38; 1,621 Chemicals & Chemical Based; 2.24; 2,518 Advanced Materials; 1.22; 3,350 Primary Metal Mfg.; 1.03; 217

Percent Growth in Specialization

Transforming Clusters

Energy (Fossil & Renewable); 0.98; 4,909

Transportation & Logistics; 0.88; 2,585

Biomedical/Biotechnical; 0.80; 5,769

Arts & Entertainment; 0.7; 2,653

Defense & Security; 0.53; 2,081

Edu. & Knowledge; 0.53; 1,138

IT & Telecommunication; 0.52; 1,885

Printing & Publishing; 0.36; 580

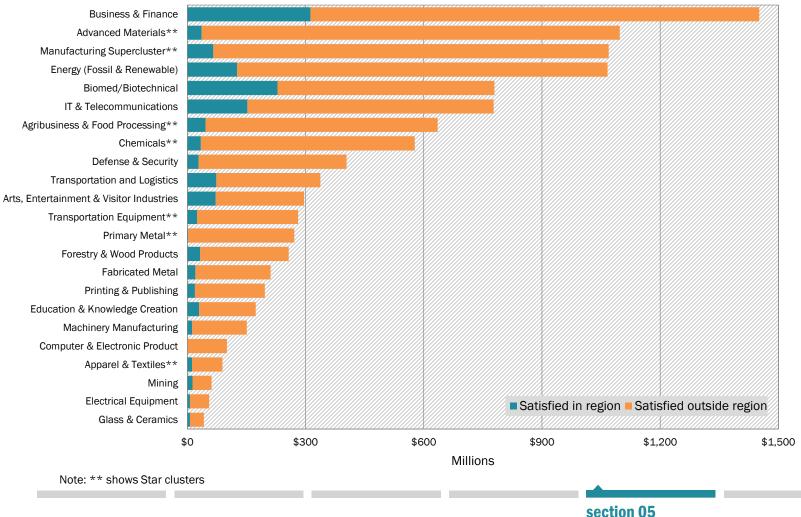
Emerging Clusters

Computer & Electron. Product Mfg.; **0.57**; 315 Business & Financial Service; **0.49**; 6,000



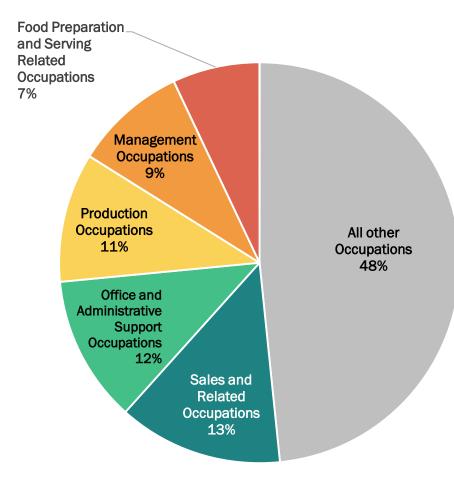
Industry Clusters: Leakages

Regional requirements, 2013



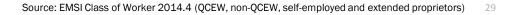
Source: EMSI 2014.4 (QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors); Industry cluster definitions by PCRD 28

Industry and occupation Top five occupations in 2014

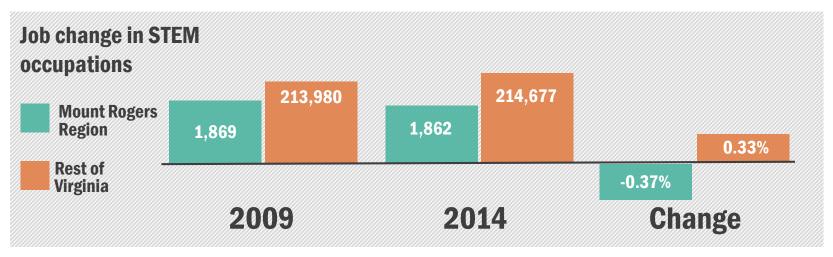


Questions:

- What are the education and skill requirements for these occupations?
- Do the emerging and star clusters align with the top occupations?
- What type salaries do these occupations typically provide?



Science, Technology, Engineering & Math



Questions:

- How do STEM jobs compare to the state?
- What has been the trend of STEM jobs over time?
- How important are STEM jobs to the region's Star and Emerging clusters?

*Note: STEM and STEM-related occupation definitions from BLS (2010)

Report Contributors

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Advancing Collaboration : Energizing Regions

The Purdue Center for Regional Development (PCRD) seeks to pioneer new ideas and strategies that contribute to regional collaboration, innovation and prosperity. **For more information,** please contact:

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