

Target Industry Cluster Analysis

Mount Rogers Region, Virginia





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01 overview

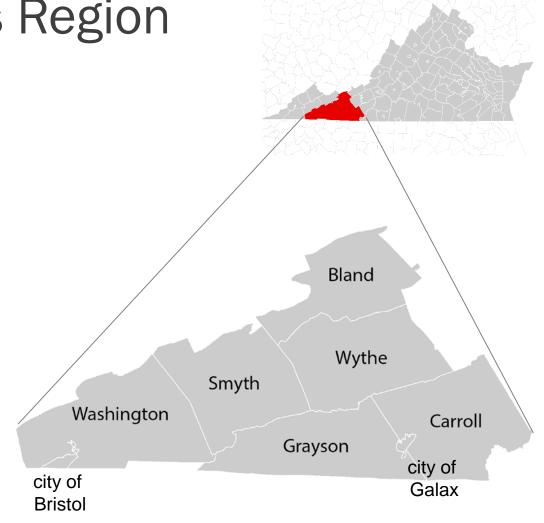
Mount Rogers Region, VA

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



02 target industry cluster

Arts, Entertainment, Recreation And Visitor Industries

Agribusiness, Food
Processing and Technology
Manufacturing Supercluster
Biomedical/Biotechnical

Shift-Share Analysis by Top Industry Sectors: Mount Rogers Region, VA

Arts, Entertainment, Recreation And Visitor Industries Cluster

Industries	Jobs 2014	National Trend, 2009- 2014	Industry Trend, 2009- 2014	Cumulative Expected Growth	Actual Job Growth, 2009-2014	Regional Performance, 2009-2014
		Α	В	C=A+B	D	D-C
Hotels (except Casino Hotels) and Motels	1,004	81	2	83	-63	-146
Independent Artists, Writers, and Performers	252	20	10	30	-10	-40
Golf Courses and Country Clubs	183	11	-5	6	34	28
Theater Companies and Dinner Theaters	177	12	13	25	15	-10
Fitness and Recreational Sports Centers	147	12	6	18	-9	-27
Sporting and Recreational Goods and Supplies Merchant Wholesalers	127	12	14	26	-37	-63
Television Broadcasting	90	12	-1	11	-69	-80
Other Spectator Sports	80	7	6	13	-14	-27
Radio Stations	74	5	-3	2	2	0
All Other Amusement and Recreation Industries	64	5	13	18	-6	-24
RV (Recreational Vehicle) Parks and Campgrounds	45	3	3	6	6	0
Sporting and Athletic Goods Manufacturing	44	11	-19	-8	-106	-98
Motion Picture Theaters (except Drive-Ins)	40	4	-9	-5	-10	-5
Museums	37	2	2	4	7	3
Bowling Centers	33	6	-8	-2	-46	-44

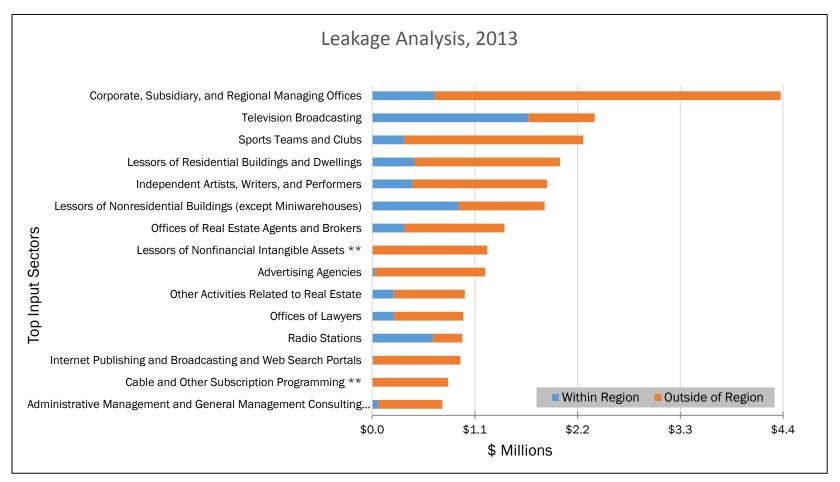
Note: Upward arrow (1) indicates regional competitiveness.

Arts, Entertainment, Recreation And Visitor Industries Cluster

Industries	Estimated Input (\$ Millions), 2013	% In-Region	% Out of Region
Corporate, Subsidiary, and Regional Managing Offices	\$4.38	15%	85%
Television Broadcasting	\$2.38	70%	30%
Sports Teams and Clubs	\$2.26	15%	85%
Lessors of Residential Buildings and Dwellings	\$2.01	22%	78%
Independent Artists, Writers, and Performers	\$1.87	23%	77%
Lessors of Nonresidential Buildings (except Miniwarehouses)	\$1.85	50%	50%
Offices of Real Estate Agents and Brokers	\$1.42	24%	76%
Lessors of Nonfinancial Intangible Assets (except Copyrighted Works) **	\$1.23	0%	100%
Advertising Agencies *	\$1.21	2%	98%
Other Activities Related to Real Estate	\$0.99	23%	77%
Offices of Lawyers	\$0.98	24%	76%
Radio Stations	\$0.97	67%	33%
Internet Publishing and Broadcasting and Web Search Portals *	\$0.94	1%	99%
Cable and Other Subscription Programming **	\$0.81	0%	100%
Administrative Management and General Management Consulting Services	\$0.75	9%	91%

Note: * industry sector has less than 10 jobs as calculated by EMSI; ** industry sector is not present in the region .

Arts, Entertainment, Recreation And Visitor Industries Cluster



Note: ** industry sector is not present in the region.

Top Occupations: Mount Rogers Region, VA

Arts, Entertainment, Recreation And Visitor Industries Cluster

Occupations	Jobs 2014		Median Hourly Earnings, 2014	Entry Level Education
Maids and Housekeeping Cleaners	255	-6%	\$7.8	Less than high school
Hotel, Motel, and Resort Desk Clerks	182	-8%	\$8.2	High school diploma or equivalent
Musicians and Singers	97	0%	\$15.0	High school diploma or equivalent
Lodging Managers	96	-19%	\$11.2	High school diploma or equivalent
Maintenance and Repair Workers, General	88	-8%	\$15.3	High school diploma or equivalent
Waiters and Waitresses	78	-8%	\$8.6	Less than high school
Recreation Workers	78	32%	\$10.6	Bachelor's degree
Writers and Authors	71	-13%	\$13.6	Bachelor's degree
Landscaping and Groundskeeping Workers	70	-10%	\$9.3	Less than high school
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	45	-2%	\$9.1	Less than high school
Fitness Trainers and Aerobics Instructors	41	-5%	\$12.1	High school diploma or equivalent
Cashiers	38	-21%	\$8.7	Less than high school
Producers and Directors	38	-14%	\$17.9	Bachelor's degree
Cooks, Restaurant	37	-5%	\$9.0	Less than high school
Office Clerks, General	37	-18%	\$11.1	High school diploma or equivalent

Note: SOC (Standard Occupation Classification) 5-digit occupations are included by jobs in 2014.

Shift-Share Analysis by Top Industry Sectors: Mount Rogers Region, VA

Agribusiness, Food Processing and Technology Cluster

Industries	Jobs 2014	National Trend, 2009- 2014	Industry Trend, 2009- 2014	Cumulative Expected Growth	Actual Job Growth, 2009-2014	Regional Performance, 2009-2014
		Α	В	C=A+B	D	D-C
Animal Production	3,684	279	-356	-77	15	92
Crop Production	1,492	117	-105	12	-50	-62
Soft Drink Manufacturing	612	42	-51	-9	52	61
Other Snack Food Manufacturing	240	15	6	21	49	28
Farm Labor Contractors and Crew Leaders	111	7	6	13	14	1
Farm Supplies Merchant Wholesalers	93	8	0	8	-19	-27
Wineries	89	4	8	12	38	26
Farm and Garden Machinery and Equipment Merchant Wholesalers	67	5	0	5	0	-5
Perishable Prepared Food Manufacturing	35	0	0	0	34	34
Soil Preparation, Planting, and Cultivating	33	2	3	5	7	2
Other Farm Product Raw Material Merchant Wholesalers	29	1	0	1	8	7
Bottled Water Manufacturing	25	0	0	0	24	24
Livestock Merchant Wholesalers	24	1	-1	0	17	17
Nonchocolate Confectionery Manufacturing	19	3	1	4	-16	-20
Fruit and Vegetable Canning	17	0	0	0	17	17

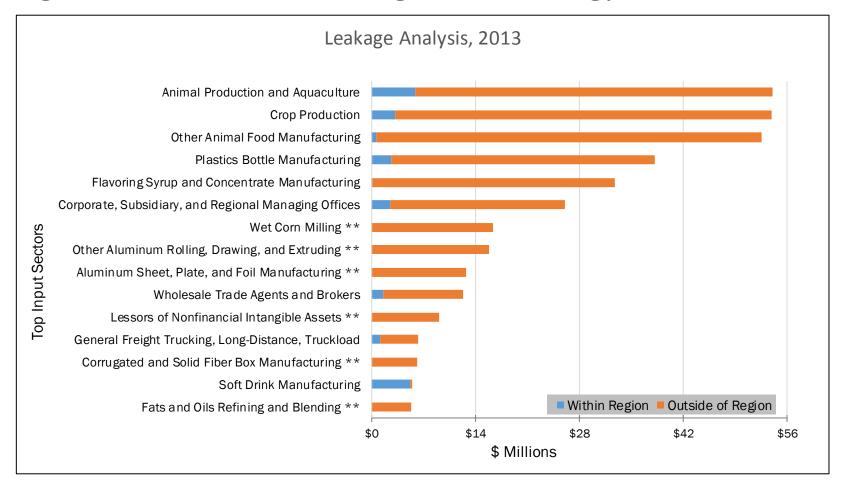
Note: Upward arrow (1) indicates regional competitiveness.

Agribusiness, Food Processing and Technology Cluster

Industries	Estimated Input (\$ Millions), 2013	% In-Region	% Out of Region
Animal Production and Aquaculture	\$54.12	11%	89%
Crop Production	\$53.94	6%	94%
Other Animal Food Manufacturing *	\$52.63	1%	99%
Plastics Bottle Manufacturing	\$38.26	7%	93%
Flavoring Syrup and Concentrate Manufacturing *	\$32.77	0%	100%
Corporate, Subsidiary, and Regional Managing Offices	\$26.09	10%	90%
Wet Corn Milling **	\$16.41	0%	100%
Other Aluminum Rolling, Drawing, and Extruding **	\$15.87	0%	100%
Aluminum Sheet, Plate, and Foil Manufacturing **	\$12.78	0%	100%
Wholesale Trade Agents and Brokers	\$12.31	13%	87%
Lessors of Nonfinancial Intangible Assets (except Copyrighted Works) **	\$9.11	0%	100%
General Freight Trucking, Long-Distance, Truckload	\$6.25	19%	81%
Corrugated and Solid Fiber Box Manufacturing **	\$6.08	0%	100%
Soft Drink Manufacturing	\$5.52	94%	6%
Fats and Oils Refining and Blending **	\$5.41	0%	100%

Note: * industry sector has less than 10 jobs as calculated by EMSI; ** industry sector is not present in the region.

Agribusiness, Food Processing and Technology Cluster



Note: ** industry sector is not present in the region.

Top Occupations: Mount Rogers Region, VA

Agribusiness, Food Processing and Technology Cluster

Occupations	Jobs 2014	,	Median Hourly Earnings, 2014	Entry Level Education
Farmers, Ranchers, and Other Agricultural Managers	4,653	-1%	\$8.5	High school diploma or equivalent
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	284	7%	\$8.6	Less than high school
Packaging and Filling Machine Operators and Tenders	118	11%	\$11.5	High school diploma or equivalent
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	85	10%	\$20.9	High school diploma or equivalent
Heavy and Tractor-Trailer Truck Drivers	62	17%	\$16.6	Postsecondary non-degree award
Demonstrators and Product Promoters	53	20%	\$19.7	High school diploma or equivalent
Laborers and Freight, Stock, and Material Movers, Hand	53	18%	\$11.3	Less than high school
Bookkeeping, Accounting, and Auditing Clerks	51	-2%	\$13.5	High school diploma or equivalent
Industrial Machinery Mechanics	49	29%	\$17.6	High school diploma or equivalent
Driver/Sales Workers	49	17%	\$12.7	High school diploma or equivalent
Industrial Truck and Tractor Operators	49	26%	\$14.8	Less than high school
Animal Trainers	45	-18%	\$9.2	High school diploma or equivalent
First-Line Supervisors of Production and Operating Workers	42	17%	\$22.3	Postsecondary non-degree award
Office Clerks, General	40	25%	\$11.1	High school diploma or equivalent
Managers, All Other	39	22%	\$18.0	High school diploma or equivalent

Note: SOC (Standard Occupation Classification) 5-digit occupations are included by jobs in 2014.

Shift-Share Analysis by Top Industry Sectors: Mount Rogers Region, VA

Manufacturing Supercluster

Industries	Jobs 2014	National Trend, 2009- 2014	Industry Trend, 2009- 2014	Cumulative Expected Growth	Actual Job Growth, 2009-2014	Perfo	gional rmance, 9-2014
		Α	В	C=A+B	D		D-C
Truck Trailer Manufacturing	1,678	58	451	509	914	1	405
Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	678	70	-76	-6	-244		-238
Other Aircraft Parts and Auxiliary Equipment Manufacturing	604	54	7	61	-101		-162
Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing	562	16	37	53	353	1	300
Power, Distribution, and Specialty Transformer Manufacturing	538	58	-46	12	-232		-244
Plate Work Manufacturing	473	27	9	36	113		77
Mining Machinery and Equipment Manufacturing	427	27	44	71	76	1	5
Machine Shops	250	19	37	56	-3		-59
Switchgear and Switchboard Apparatus Manufacturing	249	20	-12	8	-21		-29
Travel Trailer and Camper Manufacturing	247	2	9	11	225		214
Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	238	5	19	24	169	1	145
Overhead Traveling Crane, Hoist, and Monorail System Manufacturing	225	16	17	33	12		-21
Metal Can Manufacturing	187	21	-34	-13	-89		-76
Nonferrous Metal Die-Casting Foundries	171	11	34	45	21		-24
Cutting Tool and Machine Tool Accessory Manufacturing	164	19	49	68	-86		-154

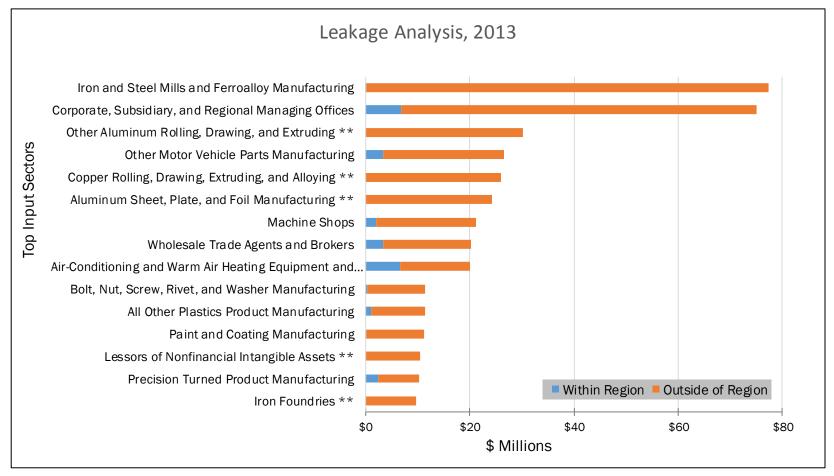
Note: Upward arrow (1) indicates regional competitiveness...

Manufacturing Supercluster

Industries	Estimated Input (\$ Millions), 2013	% In-Region	% Out of Region
Iron and Steel Mills and Ferroalloy Manufacturing	\$77.33	0%	100%
Corporate, Subsidiary, and Regional Managing Offices	\$74.94	9%	91%
Other Aluminum Rolling, Drawing, and Extruding **	\$30.12	0%	100%
Other Motor Vehicle Parts Manufacturing	\$26.62	13%	87%
Copper Rolling, Drawing, Extruding, and Alloying **	\$26.00	0%	100%
Aluminum Sheet, Plate, and Foil Manufacturing **	\$24.26	0%	100%
Machine Shops	\$21.28	10%	90%
Wholesale Trade Agents and Brokers	\$20.24	17%	83%
Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	\$20.11	33%	67%
Bolt, Nut, Screw, Rivet, and Washer Manufacturing	\$11.44	3%	97%
All Other Plastics Product Manufacturing	\$11.41	10%	90%
Paint and Coating Manufacturing *	\$11.23	0%	100%
Lessors of Nonfinancial Intangible Assets (except Copyrighted Works) **	\$10.55	0%	100%
Precision Turned Product Manufacturing	\$10.25	23%	77%
Iron Foundries **	\$9.67	0%	100%

Note: * industry sector has less than 10 jobs as calculated by EMSI; ** industry sector is not present in the region .

Manufacturing Supercluster



Note: ** industry sector is not present in the region.

Top Occupations: Mount Rogers Region, VA

Manufacturing Supercluster

Occupations	Jobs 2014	• ,	Median Hourly Earnings, 2014	Entry Level Education
Team Assemblers	1,028	28%	\$16.5	High school diploma or equivalent
Welders, Cutters, Solderers, and Brazers	612	39%	\$16.8	High school diploma or equivalent
Machinists	424	4%	\$17.4	High school diploma or equivalent
Electrical and Electronic Equipment Assemblers	387	-3%	\$11.5	High school diploma or equivalent
First-Line Supervisors of Production and Operating Workers	280	16%	\$22.3	Postsecondary non-degree award
Electromechanical Equipment Assemblers	258	0%	\$14.6	High school diploma or equivalent
Mechanical Engineers	247	6%	\$39.2	Bachelor's degree
Structural Metal Fabricators and Fitters	236	28%	\$14.9	High school diploma or equivalent
Assemblers and Fabricators, All Other	210	59%	\$11.6	High school diploma or equivalent
Inspectors, Testers, Sorters, Samplers, and Weighers	207	11%	\$14.8	High school diploma or equivalent
Maintenance and Repair Workers, General	151	21%	\$15.3	High school diploma or equivalent
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	130	14%	\$20.9	High school diploma or equivalent
Office Clerks, General	121	11%	\$11.1	High school diploma or equivalent
Industrial Machinery Mechanics	111	31%	\$17.6	High school diploma or equivalent
Shipping, Receiving, and Traffic Clerks	108	11%	\$11.6	High school diploma or equivalent

Note: SOC (Standard Occupation Classification) 5-digit occupations are included by jobs in 2014.

Shift-Share Analysis by Top Industry Sectors: Mount Rogers Region, VA

Biomedical/Biotechnical (Life Sciences) Cluster

Industries	Jobs 2014	National Trend, 2009- 2014	Industry Trend, 2009- 2014	Cumulative Expected Growth	Actual Job Growth, 2009-2014	Regional Performance, 2009-2014
		Α	В	C=A+B	D	D-C
General Medical and Surgical Hospitals	1,512	177	-111	66	-819	-885
Nursing Care Facilities (Skilled Nursing Facilities)	1,318	110	-102	8	-125	-133
Home Health Care Services	652	35	90	125	195	70
Pharmacies and Drug Stores	493	40	-50	-10	-29	-19
Ambulance Services	367	14	4	18	176	158
Assisted Living Facilities for the Elderly	277	20	20	40	13	-27
Continuing Care Retirement Communities	233	19	24	43	-20	-63
Residential Mental Health and Substance Abuse Facilities	115	6	5	11	30	19
Cosmetics, Beauty Supplies, and Perfume Stores	112	7	7	14	20	1 6
Psychiatric and Substance Abuse Hospitals	70	3	-1	2	35	33
Residential Intellectual and Developmental Disability Facilities	58	2	0	2	37	1 35
Other Residential Care Facilities	57	6	-9	-3	-23	-20
Kidney Dialysis Centers	53	4	9	13	-2	-15
All Other Miscellaneous Ambulatory Health Care Services	49	1	3	4	33	1 29
Medical Laboratories	45	1	1	2	38	36

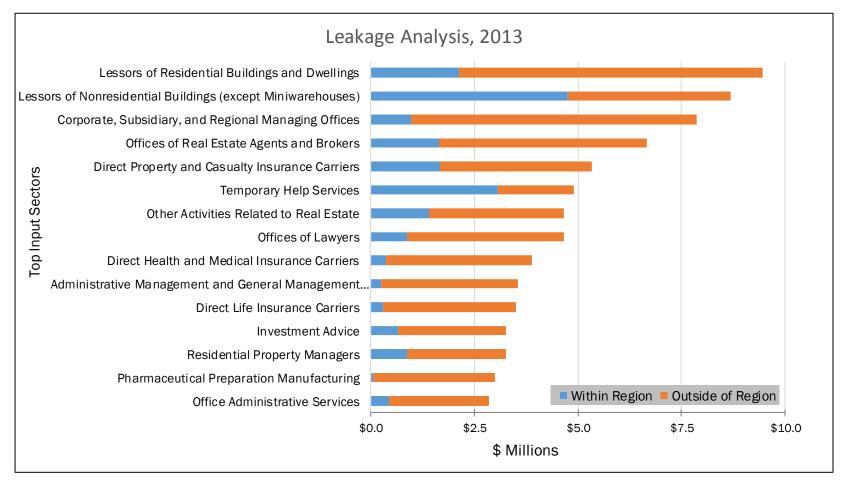
Note: Upward arrow (1) indicates regional competitiveness...

Biomedical/Biotechnical (Life Sciences) Cluster

Industries	Estimated Input (\$ Millions), 2013	% In-Region	% Out of Region
Lessors of Residential Buildings and Dwellings	\$9.46	23%	77%
Lessors of Nonresidential Buildings (except Miniwarehouses)	\$8.68	55%	45%
Corporate, Subsidiary, and Regional Managing Offices	\$7.87	12%	88%
Offices of Real Estate Agents and Brokers	\$6.66	25%	75%
Direct Property and Casualty Insurance Carriers	\$5.34	31%	69%
Temporary Help Services	\$4.90	63%	37%
Other Activities Related to Real Estate	\$4.66	30%	70%
Offices of Lawyers	\$4.65	19%	81%
Direct Health and Medical Insurance Carriers	\$3.88	10%	90%
Administrative Management and General Management Consulting Services	\$3.55	7%	93%
Direct Life Insurance Carriers	\$3.50	9%	91%
Investment Advice	\$3.26	20%	80%
Residential Property Managers	\$3.25	26%	74%
Pharmaceutical Preparation Manufacturing	\$3.00	2%	98%
Office Administrative Services	\$2.84	15%	85%

Note: * industry sector has less than 10 jobs as calculated by EMSI; ** industry sector is not present in the region .

Biomedical/Biotechnical (Life Sciences) Cluster



Top Occupations: Mount Rogers Region, VA

Biomedical/Biotechnical (Life Sciences) Cluster

Occupations	Jobs 2014		Median Hourly Earnings, 2014	Entry Level Education
Nursing Assistants	769	-12%	\$10.1	Postsecondary non-degree award
Registered Nurses	574	-28%	\$23.9	Associate's degree
Personal Care Aides	496	28%	\$8.2	Less than high school
Licensed Practical and Licensed Vocational Nurses	429	-5%	\$16.1	Postsecondary non-degree award
Home Health Aides	325	27%	\$8.5	Less than high school
Emergency Medical Technicians and Paramedics	217	82%	\$11.2	Postsecondary non-degree award
Pharmacy Technicians	176	-5%	\$12.3	High school diploma or equivalent
Cashiers	126	-10%	\$8.7	Less than high school
Retail Salespersons	97	15%	\$9.9	Less than high school
Pharmacists	92	-12%	\$58.2	Doctoral or professional degree
Maids and Housekeeping Cleaners	89	-22%	\$7.8	Less than high school
First-Line Supervisors of Retail Sales Workers	83	8%	\$13.7	High school diploma or equivalent
Office Clerks, General	72	-15%	\$11.1	High school diploma or equivalent
Medical and Health Services Managers	68	-14%	\$34.9	Bachelor's degree
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	63	103%	\$9.2	High school diploma or equivalent

Note: SOC (Standard Occupation Classification) 5-digit occupations are included by jobs in 2014.

Report Contributors

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The Purdue Center for Regional Development (PCRD) seeks to pioneer new ideas and strategies that contribute to regional collaboration, innovation and prosperity.

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