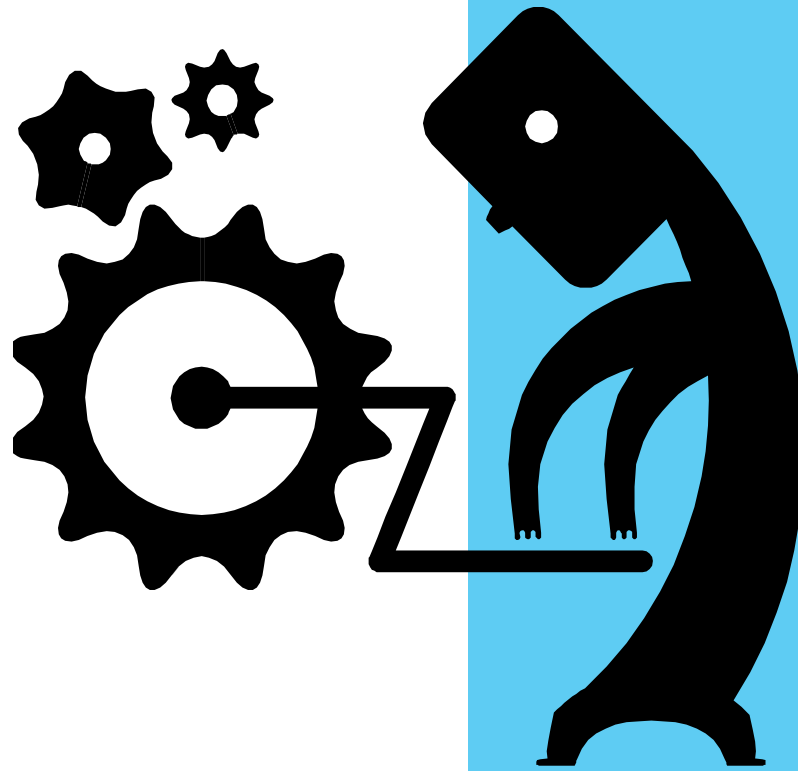


County Profiles: Manufacturing

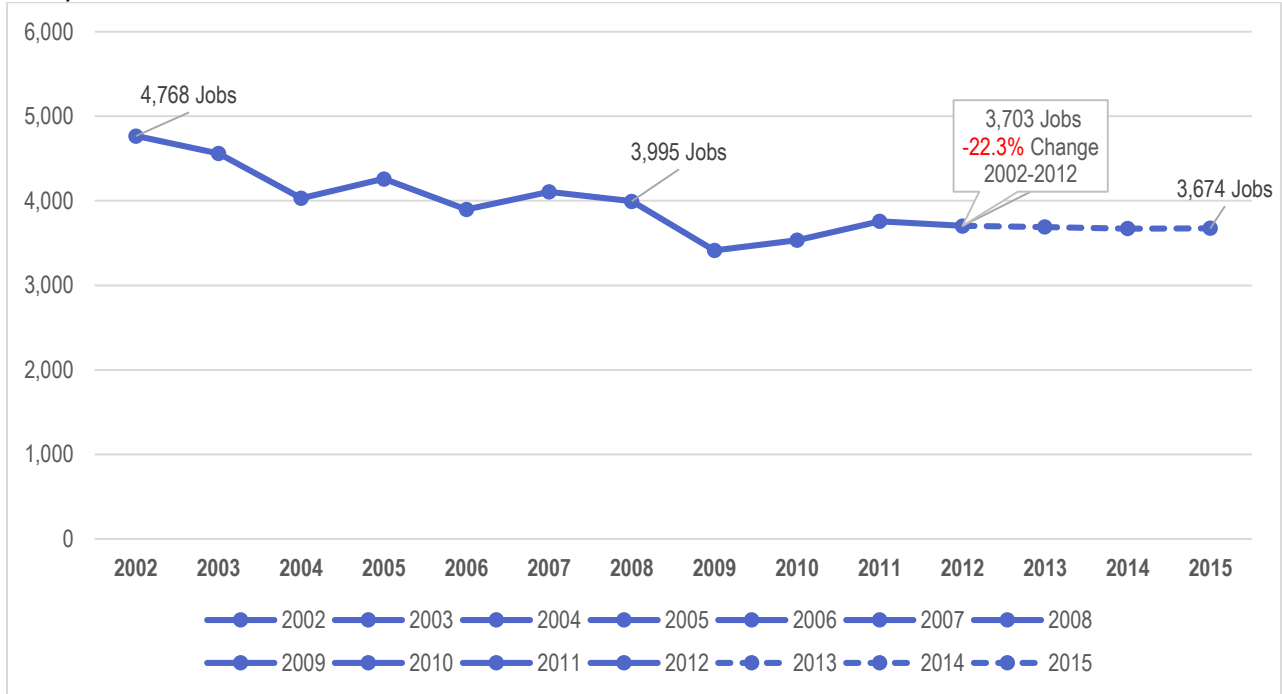


Washington County, Virginia

Supplemental Reference Materials
Supporting:
**New River/ Mount Rogers Skills Gap
Analysis**

*Prepared by:
Virginia Tech Office of Economic
Development*

Manufacturing Employment (NAICS 31-33): Washington County, VA, 2002-2012 (with projections to 2015)ⁱ



Manufacturing Employment (NAICS 31-33): Washington County vs. Neighboring Jurisdictions/Regionsⁱⁱ

	2002 Jobs	2008 Jobs	2012 Jobs	Change 2002-2012 (#)	Change 2002-2012 (%)
Washington County	4,768	3,995	3,703	(1,065)	(22.3%)
New River/Mount Rogers WIA 2	34,178	28,241	25,440	(8,738)	(25.6%)
Bluefield WV-VA, MSA	3,232	3,130	2,785	(447)	(13.8%)
Roanoke, VA MSA	19,196	16,719	14,758	(4,438)	(23.1%)
Kingsport-Bristol-Bristol, VA/TN (Minus WIA 2 Jurisdictions)	20,848	17,607	16,416	(4,432)	(21.3%)
Virginia	321,016	264,948	231,033	(89,983)	(28.0%)
United States	15,209,748	13,382,696	11,905,319	3,304,429	(21.7%)

Manufacturing Employment: Washington County, VA, by NAICS 3-Digit Industryⁱⁱⁱ

LQ>1 = Above National Average Concentration of Employment

NAICS Code	Description	2008 Jobs	2009 Jobs	2010 Jobs	2011 Jobs	2012 Jobs	Change 2008-2012	2012 National Location Quotient
333	Machinery Manufacturing	1,606	1,460	1,481	1,497	1,300	(306)	7.77
336	Transportation Equipment Manufacturing	455	258	382	590	776	321	3.48
325	Chemical Manufacturing	189	221	392	593	536	347	4.48
332	Fabricated Metal Product Manufacturing	567	533	483	511	514	(53)	2.40
331	Primary Metal Manufacturing	272	155	78	79	152	(120)	2.50
327	Nonmetallic Mineral Product Manufacturing	160	147	131	128	110	(50)	1.97
335	Electrical Equipment, Appliance, and Component Manufacturing	289	186	169	127	107	(182)	1.88
326	Plastics and Rubber Products Manufacturing	121	126	169	81	73	(48)	0.75
311	Food Manufacturing	70	55	54	47	50	(20)	0.22
312	Beverage and Tobacco Product Manufacturing	30	25	<10	18	32	2	1.09
339	Miscellaneous Manufacturing	38	36	25	<10	21	(17)	0.24
321	Wood Product Manufacturing	62	51	43	34	19	(43)	0.37
323	Printing and Related Support Activities	11	10	10	<10	<10	--	--
314	Textile Product Mills	20	12	<10	<10	<10	--	--
337	Furniture and Related Product Manufacturing	29	28	17	<10	<10	--	--
313	Textile Mills	52	68	70	37	0	(52)	0.00
334	Computer and Electronic Product Manufacturing	22	41	<10	0	0	(22)	0.00
Total		3,995	3,414	3,535	3,759	3,703	(292)	2.04

Manufacturing Earnings, by NAICS 3-Digit Industry: Washington County, VA^{iv}

NAICS Code	Description	2013 Average Earnings Per Job (Washington)	2013 Average Earnings Per Job (Kingsport-Bristol-Bristol, MSA w/o LWIA 2 Jurisdictions)	2013 Average Earnings Per Job (New River/Mount Rogers WIA)	2013 Average Earnings Per Job (Bluefield VA-WV, MSA)	2013 Average Earnings Per Job (Virginia)	2013 Average Earnings Per Job (United States)
333	Machinery Manufacturing	\$58,173	\$62,254	\$56,073	\$65,276	\$72,122	\$79,734
336	Transportation Equipment Manufacturing	\$44,842	\$65,978	\$61,329	\$63,682	\$77,640	\$87,081
325	Chemical Manufacturing	\$59,749	\$131,423	\$77,672	\$74,937	\$95,670	\$117,339
332	Fabricated Metal Product Manufacturing	\$45,501	\$43,704	\$53,921	\$52,087	\$66,359	\$63,732
331	Primary Metal Manufacturing	\$50,198	\$67,744	\$59,173	\$54,064	\$75,257	\$79,745
327	Nonmetallic Mineral Product Manufacturing	\$51,019	\$70,101	\$49,709	\$57,542	\$55,363	\$64,593
335	Electrical Equipment, Appliance, and Component Manufacturing	\$83,310	\$59,592	\$74,867	\$52,755	\$78,739	\$85,017
326	Plastics and Rubber Products Manufacturing	\$56,040	\$54,404	\$55,090	\$42,231	\$71,492	\$60,497
311	Food Manufacturing	\$44,436	\$53,194	\$49,448	--	\$47,473	\$52,522
312	Beverage and Tobacco Product Manufacturing	\$46,914	--	\$62,515	\$53,501	\$88,801	\$77,328
339	Miscellaneous Manufacturing	\$36,532	\$53,255	\$46,827	\$47,408	\$71,120	\$82,536
321	Wood Product Manufacturing	\$28,391	\$34,874	\$36,199	\$39,217	\$45,046	\$48,510
323	Printing and Related Support Activities	--	\$51,624	\$48,506	\$30,430	\$51,949	\$55,221
314	Textile Product Mills	--	\$34,753	\$42,150	\$27,967	\$39,788	\$46,010
337	Furniture and Related Product Manufacturing	--	\$48,583	\$37,127	--	\$43,443	\$49,025
313	Textile Mills	--	\$53,023	\$32,244	--	\$40,799	\$48,944
334	Computer and Electronic Product Manufacturing	--	\$66,272	\$67,258	\$35,733	\$105,679	\$119,790
Total		\$53,110	\$93,215	\$58,407	\$54,863	\$68,201	\$76,765

Manufacturing Age Demographics, by NAICS 3-Digit Industry: Washington County, VA^v

NAICS Code	Description	Age 14-18	Age 19-21	Age 22-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65-99
333	Machinery Manufacturing	0	<10	19	92	322	384	373	31
336	Transportation Equipment Manufacturing	<10	68	66	199	206	171	79	10
325	Chemical Manufacturing	<10	34	37	106	137	118	88	16
332	Fabricated Metal Product Manufacturing	<10	13	24	106	169	137	75	10
331	Primary Metal Manufacturing	0	<10	<10	37	44	52	<10	<10
327	Nonmetallic Mineral Product Manufacturing	0	<10	0	21	28	32	18	<10
335	Electrical Equipment, Appliance, and Component Manufacturing	0	<10	<10	27	41	17	<10	<10
326	Plastics and Rubber Products Manufacturing	<10	<10	<10	13	11	24	<10	<10
311	Food Manufacturing	<10	<10	<10	<10	21	14	<10	0
312	Beverage and Tobacco Product Manufacturing	0	<10	0	<10	<10	13	<10	<10
339	Miscellaneous Manufacturing	0	0	<10	<10	<10	<10	<10	0
321	Wood Product Manufacturing	0	0	<10	<10	<10	<10	<10	<10
323	Printing and Related Support Activities	0	0	0	0	<10	<10	<10	0
314	Textile Product Mills	0	0	0	0	<10	0	0	0
337	Furniture and Related Product Manufacturing	0	0	0	<10	0	<10	0	0
313	Textile Mills	0	0	0	0	0	0	0	0
334	Computer and Electronic Product Manufacturing	0	0	0	0	0	0	0	0
Total		15	135	168	620	1,005	977	678	90

Staffing Patterns for Manufacturing Employers: Washington County, Virginia (SOC: 2-Digit)^{vi}

SOC	Occupation Group	2008 Jobs	2012 Jobs	Change Jobs 2008-2012 (#)	% of Total Jobs in Washington County Manufacturing	Median Hourly Earnings
51-0000	Production Occupations	2,302	2,133	(169)	57.6%	\$28.26
43-0000	Office and Administrative Support Occupations	403	357	(46)	9.6%	\$23.15
49-0000	Installation, Maintenance, and Repair Occupations	273	304	31	8.2%	\$13.96
53-0000	Transportation and Material Moving Occupations	209	179	(30)	4.9%	\$11.86
17-0000	Architecture and Engineering Occupations	179	155	(24)	4.1%	\$35.36
13-0000	Business and Financial Operations Occupations	132	137	5	3.7%	\$26.57
11-0000	Management Occupations	168	136	(32)	3.7%	\$55.10
47-0000	Construction and Extraction Occupations	122	118	(4)	3.2%	\$17.40
41-0000	Sales and Related Occupations	114	88	(26)	2.4%	\$17.34
15-0000	Computer and Mathematical Occupations	38	37	(1)	1.0%	\$45.62
37-0000	Building and Grounds Cleaning and Maintenance Occupations	19	17	(2)	0.4%	\$12.09
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	17	15	(2)	0.4%	\$16.06
19-0000	Life, Physical, and Social Science Occupations	<10	14	--	0.4%	--
35-0000	Food Preparation and Serving Related Occupations	<10	<10	--	0.1%	--
33-0000	Protective Service Occupations	<10	<10	--	0.1%	--
29-0000	Healthcare Practitioners and Technical Occupations	<10	<10	--	0.1%	--
23-0000	Legal Occupations	<10	<10	--	0.0%	--
45-0000	Farming, Fishing, and Forestry Occupations	<10	<10	--	0.0%	--
Total		3,995	3,703	(292)	100.0%	--

Top Ten Production Occupations for Manufacturing: Washington County, VA (SOC: 5-Digit)^{vii}

	SOC	Description	2008 Jobs	2012 Jobs	Change Jobs 2008-2012 (#)	% of Total Jobs in Washington County Manufacturing	Median Hourly Earnings (All Industries)
1.	51-2092	Team Assemblers	346	287	(59)	7.8%	\$29.96
2.	51-4121	Welders, Cutters, Solderers, and Brazers	224	240	16	6.6%	\$22.35
3.	51-2023	Electromechanical Equipment Assemblers	246	221	(25)	5.6%	\$31.99
4.	51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders (Metal and Plastic)	102	173	71	4.6%	\$30.75
5.	51-1011	First-Line Supervisors of Production and Operating Workers	139	123	(16)	3.3%	\$62.73
6.	51-4041	Machinists	94	101	7	2.7%	\$32.44
7.	51-2041	Structural Metal Fabricators and Fitters	93	96	3	2.6%	\$32.01
8.	51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	81	65	(16)	1.8%	\$23.94
9.	51-8091	Chemical Plant and System Operators	19	62	43	1.6%	\$13.18
10.	51-9198	Helpers—Production Workers	72	58	(14)	1.6%	\$9.30

**Top Office and Administrative Support Occupations for Manufacturing: Washington County, VA
(SOC: 5-Digit)^{viii}**

	SOC	Description	2008 Jobs	2012 Jobs	Change Jobs 2008-2012 (#)	% of Total Jobs in Washington County Manufacturing	Median Hourly Earnings (All Industries)
1.	43-9061	Office Clerks, General	71	69	(2)	1.9%	\$13.07
2.	43-4051	Customer Service Representatives	62	56	(6)	1.5%	\$30.99
3.	43-5071	Shipping, Receiving, and Traffic Clerks	55	40	(15)	1.1%	\$14.38
4.	43-3031	Bookkeeping, Accounting, and Auditing Clerks	44	40	(4)	1.1%	\$33.57
5.	43-5081	Stock Clerks and Order Fillers	33	30	(3)	0.8%	\$12.69
6.	43-1011	First-Line Supervisors of Office and Administrative Support Workers	28	27	(1)	0.7%	\$46.19
7.	43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	24	19	(5)	0.5%	\$17.01
8.	43-5061	Production, Planning, and Expediting Clerks	24	18	(6)	0.5%	\$18.33
9.	43-3061	Procurement Clerks	11	13	2	0.3%	\$33.42
10.	43-6011	Executive Secretaries and Executive Administrative Assistants	11	10	(1)	0.3%	\$16.95
Other Titles (Each with <10 Employees): Receptionists and Information Clerks; Order Clerks; Human Resources Assistants; Billing and Posting Clerks; Payroll and Timekeeping Clerks; Dispatchers; Office and Administrative Support Workers (Other); Weighers, Measurers, Checkers, and Samplers; Data Entry Keyers							

**Top Installation, Maintenance, and Repair Occupations for Manufacturing: Washington County, VA
(SOC: 5-Digit)^x**

	SOC	Description	2008 Jobs	2012 Jobs	Change Jobs 2008-2012 (#)	% of Total Jobs in Washington County Manufacturing	Median Hourly Earnings (All Industries)
1.	49-9071	Maintenance and Repair Workers, General	101	110	9	2.9%	\$18.77
2.	49-9041	Industrial Machinery Mechanics	43	49	6	1.3%	\$12.71
3.	49-9043	Maintenance Workers, Machinery	33	34	1	0.9%	\$9.71
4.	49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	28	32	4	0.9%	\$18.40
5.	49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	11	14	3	0.4%	\$11.26
6.	49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	17	14	(3)	0.4%	\$8.57
7.	49-3042	Mobile Heavy Equipment Mechanics, Except Engines	<10	11	--	0.3%	--
Other Titles (Each with <10 Employees): Electrical and Electronics Installers and Repairers (Transportation Equipment); Electronic Equipment Installers and Repairers (Motor Vehicles); Electrical and Electronic Repairers (Industrial and Commercial Equipment); Recreational Vehicle Service Technicians; Automotive Body and Related Repairers; Automotive Service Technicians and Mechanics; Helpers—Installation, Maintenance, and Repair Workers; Millwrights; Installation, Maintenance, and Repair Workers (Other); Electric Motor, Power Tool, and Related Repairers; Rail Car Repairers; Control and Valve Installers and Repairers; Riggers; Refractory Materials Repairers							

Top Transportation and Material Moving Occupations for Manufacturing: Washington County, VA (SOC: 5-Digit)*

	SOC	Description	2008 Jobs	2012 Jobs	Change Jobs 2008-2012 (#)	% of Total Jobs in Washington County Manufacturing	Median Hourly Earnings (All Industries)
1.	53-3032	Heavy and Tractor-Trailer Truck Drivers	38	37	(1)	1.0%	\$12.41
2.	53-7062	Laborers and Freight, Stock, and Material Movers, Hand	51	35	(16)	1.0%	\$9.71
3.	53-7051	Industrial Truck and Tractor Operators	41	34	(7)	0.9%	\$8.47
4.	53-7063	Machine Feeders and Offbearers	16	13	(3)	0.3%	\$8.71
5.	53-1031	First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	<10	11	--	0.3%	--
6.	53-7064	Packers and Packagers, Hand	20	11	(9)	0.3%	\$11.77
Other Titles (Each with <10 Employees): Pump Operators (Except Wellhead Pumpers); Light Truck or Delivery Services Drivers; Cleaners of Vehicles and Equipment; First-Line Supervisors of Helpers, Laborers, and Material Movers (Hand); Driver/Sales Workers; Crane and Tower Operators; Hoist and Winch Operators; Conveyor Operators and Tenders; Tank Car, Truck, and Ship Loaders							

Top Architecture and Engineering Occupations for Manufacturing: Washington County, VA (SOC: 5-Digit)^{xi}

	SOC	Description	2008 Jobs	2012 Jobs	Change Jobs 2008-2012 (#)	% of Total Jobs in Washington County Manufacturing	Median Hourly Earnings (All Industries)
1.	17-2141	Mechanical Engineers	47	43	(4)	1.1%	\$20.46
2.	17-2199	Engineers, All Other	16	19	3	0.5%	\$16.55
3.	17-2112	Industrial Engineers	28	18	(10)	0.5%	\$22.16
4.	17-3013	Mechanical Drafters	19	16	(3)	0.4%	\$12.02
5.	17-3026	Industrial Engineering Technicians	13	12	(1)	0.3%	\$13.98
6.	17-3029	Engineering Technicians, Except Drafters, All Other	10	11	1	0.3%	\$12.50
Other Titles (Each with <10 Employees): Mechanical Engineering Technicians; Chemical Engineers; Electrical Engineers; Electrical and Electronics Engineering Technicians; Civil Engineers; Materials Engineers; Agricultural Engineers; Health and Safety Engineers; Electronics Engineers; Environmental Engineers; Drafters (All Other); Electrical and Electronics Drafters; Architectural and Civil Drafters; Electro-Mechanical Technicians							

References

- ⁱ Source: EmsiAnalyst. Version 2013.4 Class of Worker. QCEW Employment only. (QCEW: 2013 Q1)
- ⁱⁱ Source: EmsiAnalyst. Version 2013.4 Class of Worker. QCEW Employment only. (QCEW: 2013 Q1)
- ⁱⁱⁱ Source: EmsiAnalyst. Version 2013.4 Class of Worker. QCEW Employment only. (QCEW: 2013 Q1)
- ^{iv} Source: EmsiAnalyst. Version 2013.4 Class of Worker. QCEW Employment only. (QCEW: 2013 Q1)
- ^v Source: EmsiAnalyst. Version 2013.4 Class of Worker. QCEW Employment only. (QCEW: 2013 Q1)
- ^{vi} Source: EmsiAnalyst. Version 2013.4 Class of Worker. QCEW Employment only. (QCEW: 2013 Q1)
- ^{vii} Source: EmsiAnalyst. Version 2013.4 Class of Worker. QCEW Employment only. (QCEW: 2013 Q1)
- ^{viii} Source: EmsiAnalyst. Version 2013.4 Class of Worker. QCEW Employment only. (QCEW: 2013 Q1)
- ^{ix} Source: EmsiAnalyst. Version 2013.4 Class of Worker. QCEW Employment only. (QCEW: 2013 Q1)
- ^x Source: EmsiAnalyst. Version 2013.4 Class of Worker. QCEW Employment only. (QCEW: 2013 Q1)
- ^{xi} Source: EmsiAnalyst. Version 2013.4 Class of Worker. QCEW Employment only. (QCEW: 2013 Q1)