



Analysis of Regions Not Currently Involved in WIRED Grants or RIGs: Upper West Virginia Area

October 2008

Upper West Virginia Area

- Washington County, Ohio
- Calhoun County, West Virginia
- Jackson County, West Virginia
- Pleasants County, West Virginia
- Ritchie County, West Virginia
- Roane County, West Virginia
- Wirt County, West Virginia
- Wood County, West Virginia

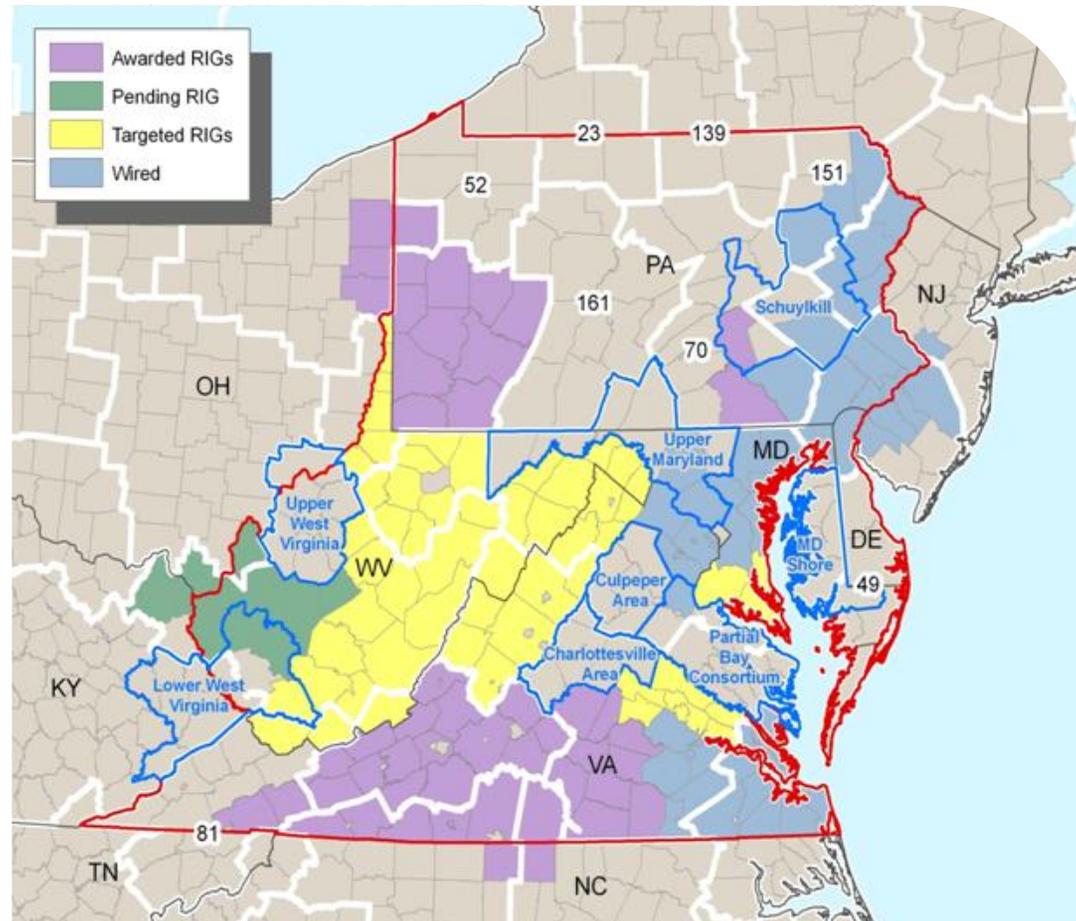




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About This Report

Chmura Economics & Analytics recognizes that accurate, timely data can be difficult to find. This regional report provides employment, wages, occupations, and skills data that can be used as background for an RIG application.

Frequently Asked Questions

What data sources were utilized in the creation of this report?

The data for this report come from a variety of sources. All data are checked, cleaned, combined, organized, and displayed in a way to maximize its usefulness. Yearly employment data in the below charts are based on four-quarter averages. Data for regions outside of Virginia and Ohio are imputed when not disclosed. A few of the sources of data which have been used in the creation of this report are:

- Quarterly Census of Employment and Wages (QCEW)
- Local Area Unemployment Statistics (LAUS)
- Occupation and Industry Forecasts
- Local Employment Dynamics (LED)
- O*Net
- National Center for Education Statistics
- Occupational Employment Statistics (OES)

Who is Chmura Economics & Analytics?

Chmura Economics & Analytics (Chmura) is a provider of applied economic consulting, quantitative research, and software solutions requiring the integration of advanced economic analysis. Chmura publishes *Virginia Economic Trends*, *Ohio Economic Trends*, electronic publications, and forecasts available via www.chmuraecon.com. Software products include JOBSeq®, WIBeq™, and OnStage.

Chmura has headquarters in Richmond, Virginia and a branch office in Cleveland, Ohio. Chmura Economics & Analytics is committed to achieving 100% customer satisfaction in all project engagements. The Chmura philosophy is that when our customer succeeds, Chmura has been successful. To contact us, send an email to info@chmuraecon.com.

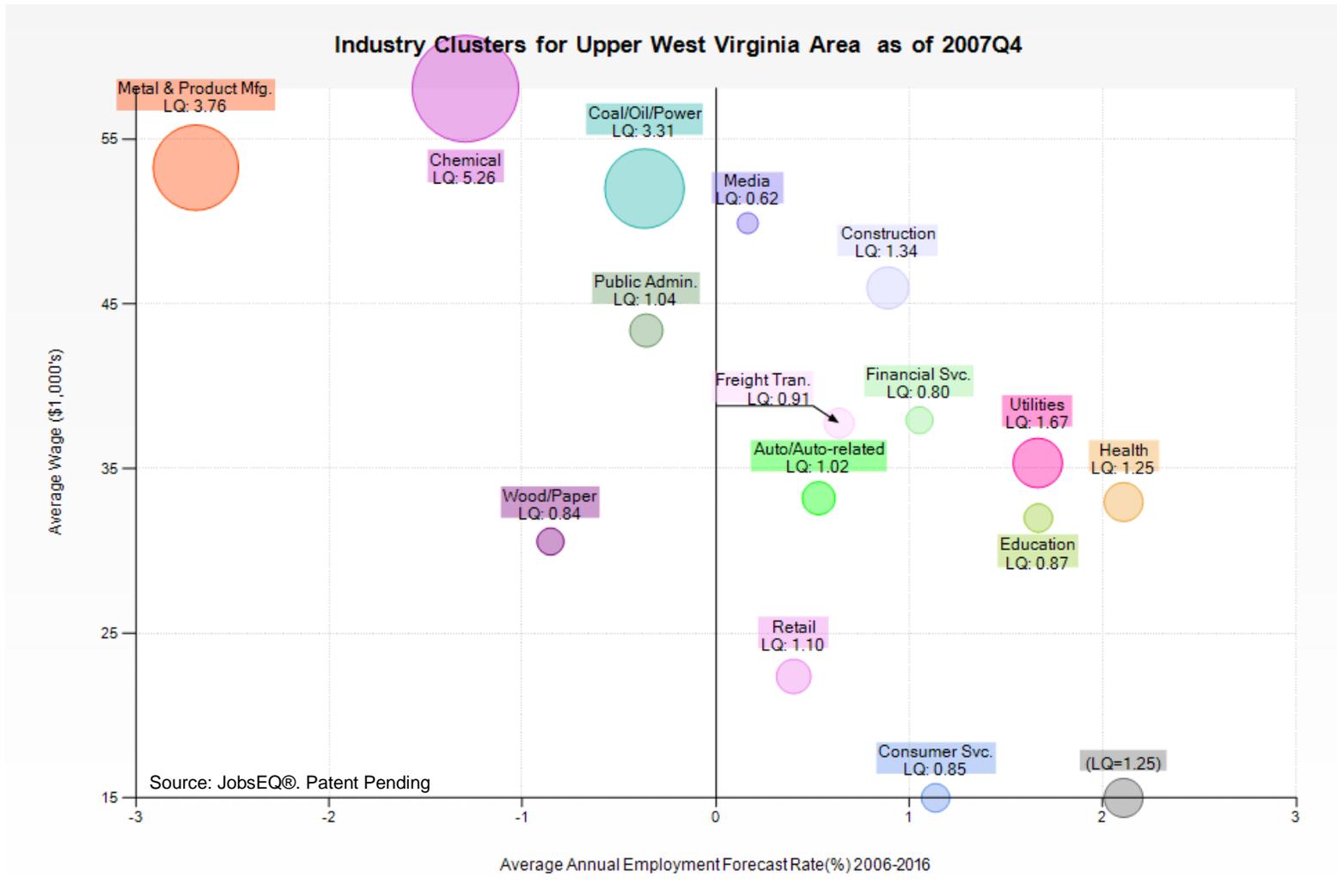


Executive Summary

The industry and occupation concentrations in the Upper West Virginia region put it in a favorable position to continue to focus on energy initiatives as a driver of future economic growth. The chemical, coal, and utility industries, which have a strong presence in the region, are good candidates for innovative technologies such as coal gasification, clean coal technology, and alternative fuel platforms. Moreover, its concentration of science and math occupations provides a strong underpinning for the skills that would be needed for such efforts.

The declining manufacturing sector will continue to displace workers with mechanical and production skills. Some of these skills are transferable to industries that can grow an energy-diverse ecosystem.

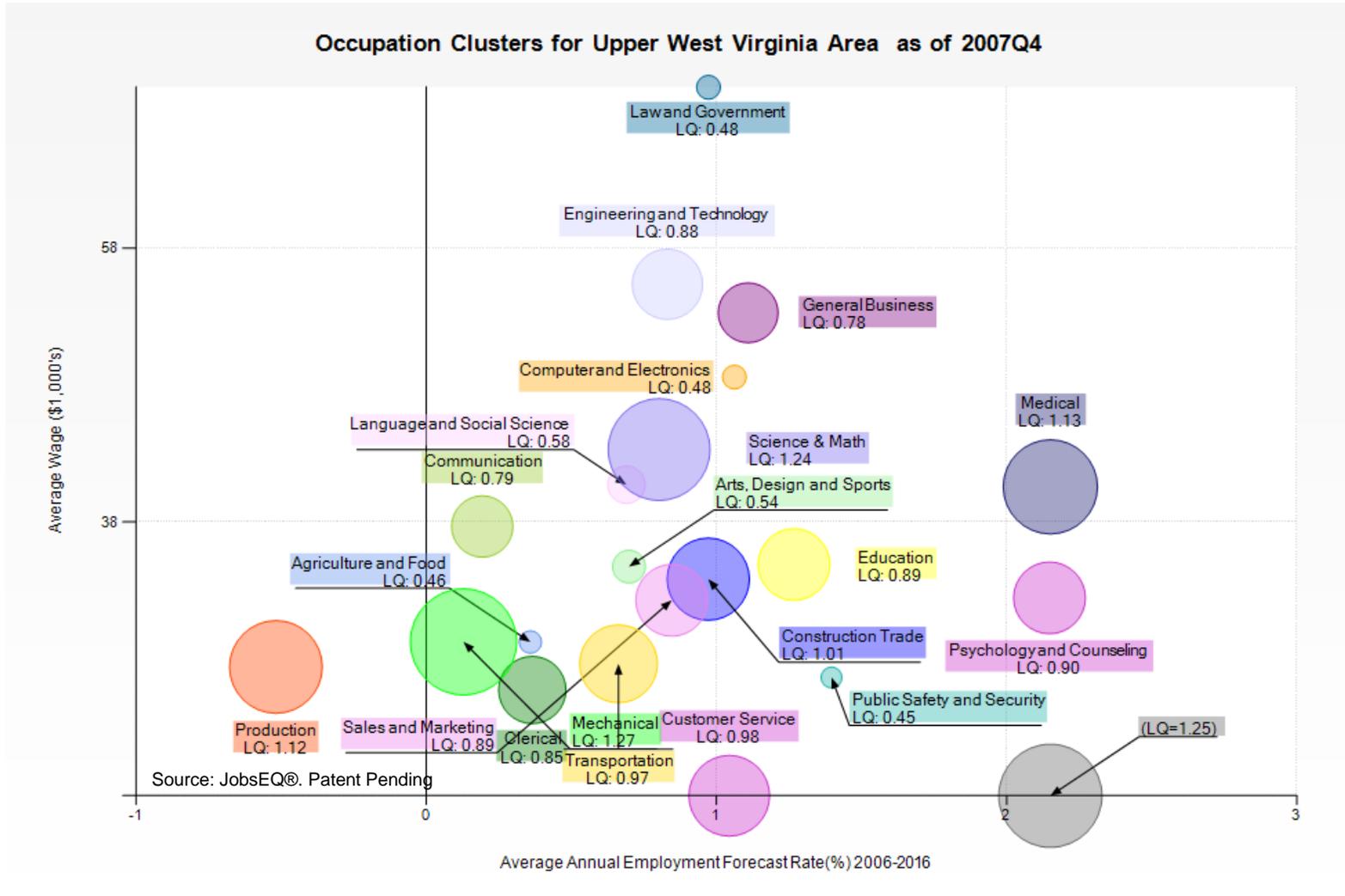
Industry and Occupation Clusters



Note: See the appendix for an explanation of how to use industry and occupation cluster charts.



Occupation Clusters for Upper West Virginia Area as of 2007Q4



Employment by Major Sector

Upper West Virginia Employment by Major Sector

NAICS	Industry Description	Employment				Employment Change		
		2007	2005	2002	Annual Aver Wages 2007	Number	Annual Average	Annual Aver Change Since 2002
0	Total	86,496	85,339	86,633	\$ 32,433	1,158	0.7%	0.0%
11	Agriculture, Forestry, Fishing and Hunting	159	218	223	\$ 17,981	(59)	-14.6%	-6.5%
21	Mining, Quarrying, and Oil and Gas Extraction	1,725	1,303	1,075	\$ 41,444	422	15.1%	9.9%
22	Utilities	1,312	984	987	\$ 61,094	328	15.4%	5.9%
23	Construction	5,759	4,976	6,150	\$ 42,598	783	7.6%	-1.3%
31	Manufacturing	12,250	13,089	15,472	\$ 50,432	(839)	-3.3%	-4.6%
42	Wholesale Trade	2,436	2,311	2,377	\$ 35,878	126	2.7%	0.5%
44	Retail Trade	12,697	12,453	12,723	\$ 19,840	244	1.0%	0.0%
48	Transportation and Warehousing	3,094	2,794	2,440	\$ 35,465	300	5.2%	4.9%
51	Information	1,380	1,359	1,246	\$ 49,815	21	0.8%	2.1%
52	Finance and Insurance	3,083	2,942	3,145	\$ 37,491	141	2.4%	-0.4%
53	Real Estate and Rental and Leasing	816	859	806	\$ 26,338	(43)	-2.5%	0.3%
54	Professional, Scientific, and Technical Services	2,013	2,004	1,878	\$ 40,941	9	0.2%	1.4%
55	Management of Companies and Enterprises	405	364	372	\$ 66,982	41	5.5%	1.7%
56	Administrative and Support and Waste Management and Remediation Services	3,333	4,064	3,121	\$ 25,149	(731)	-9.4%	1.3%
61	Educational Services	6,839	7,081	7,125	\$ 33,445	(242)	-1.7%	-0.8%
62	Health Care and Social Assistance	13,566	12,954	12,114	\$ 32,725	612	2.3%	2.3%
71	Arts, Entertainment, and Recreation	781	720	507	\$ 14,110	61	4.1%	9.0%
72	Accommodation and Food Services	7,294	7,361	7,212	\$ 12,074	(67)	-0.5%	0.2%
81	Other Services (except Public Administration)	2,590	2,762	2,883	\$ 18,371	(172)	-3.2%	-2.1%
92	Public Administration	4,927	4,713	4,746	\$ 42,937	214	2.2%	0.7%

Employment growth is the broadest and most timely indicator of the general health of an economy.

Information obtained from this table provides insight to questions such as:

- Which industries are posting the largest increases or decreases in employment? What are their average wages—will the trend lead to a decrease or increase in the region’s overall wealth?
- Are changes in employment levels cyclical or is a particularly industry in long-term decline? What is driving that trend?

Top 20 Employers by 3-Digit NAICS

Upper West Virginia Top 20 Employers by 3-Digit NAICS

NAICS	Industry Description	Employment			Annual Aver Wages 2007	Employment Change		
		2007	2005	2002		Number	Annual Average	Annual Aver Change Since 2002
611	Educational Services	6,839	7,081	7,125	\$ 33,445	(242)	-1.7%	-0.8%
722	Food Services and Drinking Places	6,642	6,712	6,440	\$ 11,057	(70)	-0.5%	0.6%
622	Hospitals	4,922	4,814	4,972	\$ 36,229	108	1.1%	-0.2%
621	Ambulatory Health Care Services	3,875	3,657	3,112	\$ 40,185	218	2.9%	4.5%
325	Chemical Manufacturing	3,442	3,589	4,234	\$ 66,946	(147)	-2.1%	-4.1%
921	Executive, Legislative, and Other General Government Support	3,131	3,048	3,101	\$ 44,618	83	1.4%	0.2%
561	Administrative and Support Services	3,012	3,753	2,908	\$ 24,796	(742)	-10.4%	0.7%
452	General Merchandise Stores	2,957	2,880	2,995	\$ 17,796	76	1.3%	-0.3%
238	Specialty Trade Contractors	2,722	2,239	2,193	\$ 40,058	482	10.2%	4.4%
331	Primary Metal Manufacturing	2,548	2,441	2,450	\$ 56,690	107	2.2%	0.8%
623	Nursing and Residential Care Facilities	2,501	2,445	2,263	\$ 22,728	56	1.1%	2.0%
624	Social Assistance	2,278	2,039	1,769	\$ 23,319	239	5.7%	5.2%
541	Professional, Scientific, and Technical Services	2,013	2,004	1,878	\$ 40,941	9	0.2%	1.4%
441	Motor Vehicle and Parts Dealers	1,807	1,956	2,066	\$ 27,964	(149)	-3.9%	-2.6%
445	Food and Beverage Stores	1,704	1,635	1,750	\$ 15,998	69	2.1%	-0.5%
522	Credit Intermediation and Related Activities	1,662	1,652	1,940	\$ 34,060	10	0.3%	-3.1%
236	Construction of Buildings	1,554	1,459	2,653	\$ 38,575	95	3.2%	-10.1%
237	Heavy and Civil Engineering Construction	1,483	1,278	1,304	\$ 51,011	205	7.7%	2.6%
423	Merchant Wholesalers, Durable Goods	1,448	1,274	1,326	\$ 36,570	174	6.6%	1.8%
326	Plastics and Rubber Products Manufacturing	1,367	1,631	1,636	\$ 35,752	(265)	-8.5%	-3.5%

The **North American Industry Classification System** (NAICS) was developed cooperatively between the United States, Canada, and Mexico to provide data users with accurate information pertaining to the economy in the 21st century. The NAICS Code is composed of six digits. The first two digits define the top-level category. The three-digit industries shown above represent components of the major sectors.

Similar to the previous table, information obtained from this table provides insight to questions such as:

- Which industries are posting the largest increases or decreases in employment? What are their average wages—will the trend lead to a decrease or increase in the region’s overall wealth?
- Are changes in employment levels cyclical or is a particularly industry in long-term decline? What is driving that trend?

Industries with Largest Employment Gains and Losses

Upper West Virginia Top 20 Industries with Largest Employment Gain by 3-Digit NAICS

NAICS	Industry Description	Employment			Annual Aver Wages 2007	Employment Change		Annual Aver Change Since 2002
		2007	2005	2002		Number	Percent	
221	Utilities	1,312	984	987	\$ 61,094	327.57	15.4%	5.9%
213	Support Activities for Mining	865	563	530	\$ 40,347	302.44	24.0%	10.3%
454	Nonstore Retailers	1,112	835	879	\$ 21,212	277.01	15.4%	4.8%
624	Social Assistance	2,278	2,039	1,769	\$ 23,319	238.88	5.7%	5.2%
621	Ambulatory Health Care Services	3,875	3,657	3,112	\$ 40,185	218.46	2.9%	4.5%
237	Heavy and Civil Engineering Construction	1,483	1,278	1,304	\$ 51,011	205.47	7.7%	2.6%
423	Merchant Wholesalers, Durable Goods	1,448	1,274	1,326	\$ 36,570	174.26	6.6%	1.8%
493	Warehousing and Storage	717	549	370	\$ 29,205	168.02	14.3%	14.1%
484	Truck Transportation	1,251	1,120	966	\$ 37,721	131.63	5.7%	5.3%
211	Oil and Gas Extraction	772	662	513	\$ 43,701	110.20	8.0%	8.5%
331	Primary Metal Manufacturing	2,548	2,441	2,450	\$ 56,690	106.95	2.2%	0.8%
922	Justice, Public Order, and Safety Activities	594	488	473	\$ 39,361	106.03	10.3%	4.6%
524	Insurance Carriers and Related Activities	1,310	1,208	1,117	\$ 39,335	101.76	4.1%	3.2%
236	Construction of Buildings	1,554	1,459	2,653	\$ 38,575	95.17	3.2%	-10.1%
921	Executive, Legislative, and Other General Government Support	3,131	3,048	3,101	\$ 44,618	83.03	1.4%	0.2%
448	Clothing and Clothing Accessories Stores	839	761	670	\$ 12,482	77.19	4.9%	4.6%
452	General Merchandise Stores	2,957	2,880	2,995	\$ 17,796	76.28	1.3%	-0.3%
445	Food and Beverage Stores	1,704	1,635	1,750	\$ 15,998	69.29	2.1%	-0.5%
713	Amusement, Gambling, and Recreation Industries	765	707	467	\$ 14,077	58.26	4.0%	10.4%
623	Nursing and Residential Care Facilities	2,501	2,445	2,263	\$ 22,728	56.35	1.1%	2.0%

Information obtained from the table above identifies the industries that are adding the largest number of jobs which translates into those creating the greatest demand for new workers.

Upper West Virginia Top 20 Industries with Largest Employment Loss by 3-Digit NAICS

NAICS	Industry Description	Employment			Employment Change			Annual Average Change Since 2002
		2007	2005	2002	Annual Average Wages 2007	Number	Annual Average	
327	Nonmetallic Mineral Product Manufacturing	747	1,010	1,386	\$ 35,024	(263)	-14.0%	-11.6%
441	Motor Vehicle and Parts Dealers	1,807	1,956	2,066	\$ 27,964	(149)	-3.9%	-2.6%
325	Chemical Manufacturing	3,442	3,589	4,234	\$ 66,946	(147)	-2.1%	-4.1%
332	Fabricated Metal Product Manufacturing	804	942	1,398	\$ 36,893	(138)	-7.6%	-10.5%
811	Repair and Maintenance	816	914	840	\$ 24,260	(97)	-5.5%	-0.6%
532	Rental and Leasing Services	369	452	392	\$ 27,154	(83)	-9.6%	-1.2%
424	Merchant Wholesalers, Nondurable Goods	777	851	954	\$ 33,402	(74)	-4.4%	-4.0%
722	Food Services and Drinking Places	6,642	6,712	6,440	\$ 11,057	(70)	-0.5%	0.6%
321	Wood Product Manufacturing	558	624	702	\$ 28,794	(66)	-5.5%	-4.5%
447	Gasoline Stations	1,058	1,117	1,124	\$ 13,441	(59)	-2.7%	-1.2%
113	Forestry and Logging	62	111	111	\$ 21,001	(49)	-25.3%	-11.1%
813	Religious, Grantmaking, Civic, Professional, and Similar Organiza	973	1,017	1,032	\$ 15,852	(45)	-2.2%	-1.2%
442	Furniture and Home Furnishings Stores	320	362	361	\$ 26,609	(41)	-5.9%	-2.4%
923	Administration of Human Resource Programs	204	241	232	\$ 41,079	(37)	-7.9%	-2.5%
453	Miscellaneous Store Retailers	584	613	629	\$ 18,239	(28)	-2.4%	-1.5%
485	Transit and Ground Passenger Transportation	174	199	222	\$ 37,322	(24)	-6.3%	-4.7%
814	Private Households	105	127	156	\$ 14,932	(23)	-9.4%	-7.7%
443	Electronics and Appliance Stores	204	227	245	\$ 23,257	(23)	-5.1%	-3.5%
311	Food Manufacturing	341	363	426	\$ 32,565	(22)	-3.1%	-4.4%
335	Electrical Equipment, Appliance, and Component Manufacturing	143	164	285	\$ 49,174	(21)	-6.5%	-12.9%

Information obtained from the table above identifies the industries that are shedding the largest number of workers which translates into the number of people who are likely looking for jobs in the region or in need of retraining.

Declining Occupations

Upper West Virginia Top 20 Declining Occupations Based on Top 20 Declining Industries

Occupation Description	SOC	Employment			Annual Aver Wages 2007	Employment Change		Annual Aver Change Since 2002
		2007	2005	2002		Number	Annual Average	
Retail Salespersons	41-2031	763	829	861	\$ 26,730	(66)	-4.0%	-2.4%
Cashiers	41-2011	1,059	1,112	1,118	\$ 14,134	(53)	-2.4%	-1.1%
Team Assemblers	51-2092	275	325	428	\$ 23,547	(49)	-7.9%	-8.4%
Farmers and Ranchers	11-9012	6	47	49	\$ 47,938	(42)	-65.0%	-34.6%
Combined Food Preparation and Serving Workers, Including Fast Food	35-3021	1,568	1,606	1,550	\$ 12,961	(37)	-1.2%	0.2%
Truck Drivers, Heavy and Tractor-Trailer	53-3032	228	259	264	\$ 29,987	(31)	-6.1%	-2.9%
Sales Representatives, Wholesale and Mfg, Ex Technical and Scientific Products	41-4012	211	242	279	\$ 49,601	(31)	-6.5%	-5.4%
Maintenance and Repair Workers, General	49-9042	243	272	316	\$ 33,368	(29)	-5.5%	-5.2%
First-Line Supervisors/Mgrs of Production and Operating Workers	51-1011	244	271	337	\$ 46,956	(27)	-5.1%	-6.2%
Laborers and Freight, Stock, and Material Movers, Hand	53-7062	341	365	421	\$ 20,342	(25)	-3.5%	-4.2%
Cooks, Fast Food	35-2011	640	665	636	\$ 13,673	(25)	-1.9%	0.1%
Inspectors, Testers, Sorters, Samplers, and Weighers	51-9061	149	173	231	\$ 29,095	(23)	-7.0%	-8.4%
Packers and Packers, Hand	53-7064	90	113	162	\$ 19,928	(23)	-10.9%	-11.1%
First-Line Supervisors/Mgrs of Retail Sales Workers	41-1011	300	321	326	\$ 36,573	(21)	-3.4%	-1.7%
General and Operations Mgrs	11-1021	291	312	338	\$ 78,686	(21)	-3.5%	-2.9%
Office Clerks, General	43-9061	229	249	265	\$ 20,476	(20)	-4.1%	-2.9%
Machinists	51-4041	66	86	106	\$ 30,310	(20)	-12.3%	-9.0%
Helpers--Production Workers	51-9198	150	169	209	\$ 21,193	(19)	-5.8%	-6.4%
Counter and Rental Clerks	41-2021	202	220	211	\$ 20,638	(19)	-4.3%	-0.9%
Welders, Cutters, Solderers, and Brazers	51-4121	82	100	116	\$ 27,079	(19)	-9.8%	-6.7%

The **Standard Occupational Classification (SOC)** system is used by all Federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. All workers are classified into one of over 820 occupations according to their occupational definition. Each occupation group includes detailed occupation(s) requiring similar job duties, skills, education, or experience. This system is provided by the U.S. Department of Labor, Bureau of Labor Statistics.

The table above identifies the most prevalent occupations in the regional industries shedding the most workers over the past year. The occupations on this list identify those that are in need of retraining or transferring to other industries.

Upper West Virginia Top 20 Declining Occupations Based on All Industries

Occupation Description	SOC	Employment			Annual Aver Wages	Employment		Annual Aver Change Since 2002 Q4
		2007 Q4	2006 Q4	2002 Q4		Number	Percent	
Combined Food Preparation and Serving Workers, Including Fast Food	35-3021	1,813	1,869	1,794	\$ 13,343	(56)	-3.0%	0.2%
Farmers and Ranchers	11-9012	64	120	104	\$ 49,120	(56)	-46.8%	-9.3%
Elementary School Teachers, Except Special Education	25-2021	944	986	989	\$ 36,325	(42)	-4.3%	-0.9%
Security Guards	33-9032	427	468	587	\$ 19,803	(41)	-8.8%	-6.2%
Customer Service Representatives	43-4051	1,254	1,292	1,224	\$ 24,992	(38)	-3.0%	0.5%
Telemarketers	41-9041	329	366	270	\$ 20,845	(36)	-10.0%	4.1%
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Met	51-4072	225	260	281	\$ 20,904	(35)	-13.4%	-4.3%
Secondary School Teachers, Except Special and Vocational Education	25-2031	680	711	712	\$ 41,910	(31)	-4.3%	-0.9%
Cashiers	41-2011	2,710	2,740	2,762	\$ 15,056	(30)	-1.1%	-0.4%
Packers and Packagers, Hand	53-7064	619	645	671	\$ 16,111	(27)	-4.2%	-1.6%
Teacher Assistants	25-9041	797	823	812	\$ 18,240	(25)	-3.1%	-0.4%
Emergency Medical Technicians and Paramedics	29-2041	125	150	113	\$ 26,956	(25)	-16.5%	2.1%
Bill and Account Collectors	43-3011	304	327	284	\$ 25,700	(23)	-7.0%	1.4%
Counter and Rental Clerks	41-2021	324	346	324	\$ 19,922	(22)	-6.3%	0.0%
Telecommunications Line Installers and Repairers	49-9052	118	139	121	\$ 37,543	(22)	-15.5%	-0.6%
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	631	652	740	\$ 44,095	(21)	-3.3%	-3.1%
Cooks, Fast Food	35-2011	651	671	645	\$ 13,697	(20)	-3.0%	0.2%
Middle School Teachers, Except Special and Vocational Education	25-2022	414	433	434	\$ 37,535	(19)	-4.3%	-0.9%
Machinists	51-4041	188	206	245	\$ 30,211	(18)	-8.9%	-5.2%
Helpers--Production Workers	51-9198	373	391	445	\$ 20,772	(18)	-4.7%	-3.5%

The table above identifies the most prevalent occupations that are declining from ALL industries in the region. The occupations on this list identify those that are in need of retraining or transferring to other industries.

Growing Occupations

Upper West Virginia Top 20 Growing Occupations Based on All Industries

Occupation Description	SOC	Employment			Annual Aver Wages 2007 Q4	Employment Change		Annual Aver Change Since 2002 Q4
		2007 Q4	2006 Q4	2002 Q4		Number	Percent	
Electricians	47-2111	485	435	430	\$ 41,330	50	11.6%	2.4%
Waiters and Waitresses	35-3031	1,407	1,359	1,332	\$ 14,204	48	3.5%	1.1%
Plumbers, Pipefitters, and Steamfitters	47-2152	360	317	308	\$ 39,952	43	13.5%	3.2%
Telecommunications Equipment Installers and Repairers, Except Line Installers	49-2022	110	72	73	\$ 42,702	38	53.5%	8.5%
Truck Drivers, Heavy and Tractor-Trailer	53-3032	1,278	1,247	1,115	\$ 31,482	31	2.5%	2.8%
Nursing Aides, Orderlies, and Attendants	31-1012	1,213	1,183	1,163	\$ 19,422	30	2.5%	0.9%
Registered Nurses	29-1111	1,934	1,906	1,878	\$ 48,716	28	1.4%	0.6%
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011	471	448	501	\$ 49,281	24	5.3%	-1.2%
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	153	133	130	\$ 35,852	20	15.4%	3.3%
Roustabouts, Oil and Gas	47-5071	115	96	70	\$ 22,668	19	20.0%	10.7%
Retail Salespersons	41-2031	2,932	2,913	2,946	\$ 21,012	19	0.7%	-0.1%
Cooks, Restaurant	35-2014	487	469	461	\$ 17,603	18	3.7%	1.1%
Stock Clerks and Order Fillers	43-5081	1,147	1,129	1,122	\$ 18,703	17	1.5%	0.4%
Carpenters	47-2031	631	616	911	\$ 34,625	15	2.4%	-7.1%
Home Health Aides	31-1011	653	639	477	\$ 17,164	14	2.2%	6.5%
Sheet Metal Workers	47-2211	113	100	122	\$ 35,193	14	13.7%	-1.4%
Painters, Construction and Maintenance	47-2141	116	103	104	\$ 29,131	12	12.0%	2.2%
Licensed Practical and Licensed Vocational Nurses	29-2061	602	590	557	\$ 32,071	12	2.0%	1.6%
Medical Secretaries	43-6013	350	338	309	\$ 25,431	12	3.4%	2.5%
Service Unit Operators, Oil, Gas, and Mining	47-5013	75	64	47	\$ 30,651	11	17.2%	9.9%

The table above identifies the most prevalent occupations that are in demand for the industries in the region that are showing the largest employment growth.

Forecast Occupation Gaps

Upper West Virginia Gaps in Top 20 Occupations (Requiring 2-Year Degree or Greater) Over Next 7 Years

Occupation Description	SOC	Annual Occupation Gaps	Employment			Annual Average Wages 2007 Q4
			2007 Q4	2006 Q4	2002 Q4	
Elementary School Teachers, Except Special Education	25-2021	115	944	986	989	\$ 36,325
Secondary School Teachers, Except Special and Vocational Education	25-2031	80	680	711	712	\$ 41,910
Registered Nurses	29-1111	64	1,934	1,906	1,878	\$ 48,716
Middle School Teachers, Except Special and Vocational Education	25-2022	59	414	433	434	\$ 37,535
Teachers and Instructors, All Other	25-3099	26	301	312	312	\$ 27,928
Electrical Power-Line Installers and Repairers	49-9051	25	169	162	100	\$ 41,177
Accountants and Auditors	13-2011	24	558	557	551	\$ 51,582
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific	41-4012	19	762	771	795	\$ 48,056
Special Education Teachers, Preschool, Kindergarten, and Elementary School	25-2041	17	138	144	143	\$ 36,735
Telecommunications Line Installers and Repairers	49-9052	16	118	139	121	\$ 37,543
Social and Human Service Assistants	21-1093	15	197	191	163	\$ 22,167
Education Administrators, Elementary and Secondary School	11-9032	15	138	144	145	\$ 58,202
Social Sciences Teachers, Postsecondary, All Other	25-1069	15	97	101	102	\$ 42,461
Preschool Teachers, Except Special Education	25-2011	14	231	224	185	\$ 21,243
Child, Family, and School Social Workers	21-1021	13	158	153	137	\$ 31,449
Licensed Practical and Licensed Vocational Nurses	29-2061	12	602	590	557	\$ 32,071
Teacher Assistants	25-9041	12	797	823	812	\$ 18,240
Educational, Vocational, and School Counselors	21-1012	11	133	136	135	\$ 36,216
Business Operations Specialists, All Other	13-1199	11	358	350	357	\$ 49,604
Special Education Teachers, Secondary School	25-2043	11	92	96	96	\$ 41,994

The **Gap** forecasts the average annual number of individuals needed in the occupation beyond the supply of new workers. It includes changes due to replacements. For example, consider the case in which a retail salesperson gets a degree, leaves their occupation, and becomes a financial analyst. This turnover dictates that a new retail salesperson is needed. Even though the total number of retail salespersons in the region is unchanged, the gap counts this situation as an increase of one in demand for retail salesperson. It also includes expected changes due to worker preferences and wages.

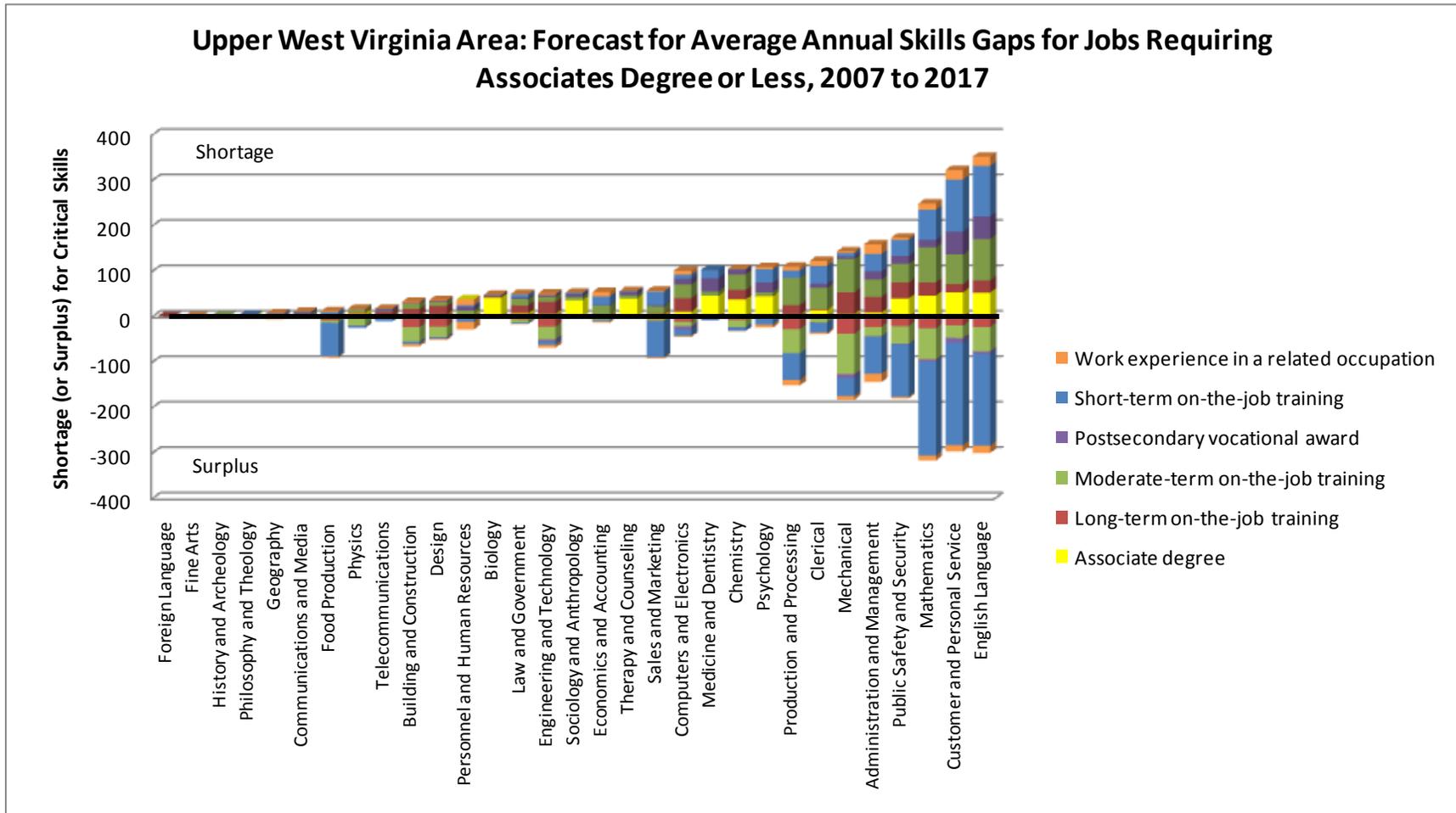
This table provides insight into the occupations that typically require a 2-year degree or greater that are expected to be in greatest demand.

Upper West Virginia Gaps in Top 20 Occupations (Requiring Less than 2-Year Degree) Over Next 7 Years

SOC	Occupation Description	Annual Occupation Gaps	Employment			Annual Average Wages 2007 Q4
			2007 Q4	2006 Q4	2002 Q4	
31-1011	Home Health Aides	33	653	639	477	\$ 17,164
51-8091	Chemical Plant and System Operators	33	314	332	373	\$ 41,260
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	28	207	224	240	\$ 24,447
31-1012	Nursing Aides, Orderlies, and Attendants	26	1,213	1,183	1,163	\$ 19,422
43-9061	Office Clerks, General	19	1,541	1,534	1,489	\$ 21,188
51-9011	Chemical Equipment Operators and Tenders	16	228	241	269	\$ 36,497
51-4051	Metal-Refining Furnace Operators and Tenders	11	121	118	117	\$ 28,913
41-2031	Retail Salespersons	11	2,932	2,913	2,946	\$ 21,012
51-9081	Dental Laboratory Technicians	10	51	58	51	\$ 32,452
43-6014	Secretaries, Except Legal, Medical, and Executive	8	976	972	950	\$ 23,528
43-6013	Medical Secretaries	8	350	338	309	\$ 25,431
39-3011	Gaming Dealers	7	61	55	23	\$ 14,632
39-4021	Funeral Attendants	6	45	44	46	\$ 18,242
43-5041	Meter Readers, Utilities	6	60	58	48	\$ 27,601
51-4052	Pourers and Casters, Metal	5	66	64	64	\$ 26,772
29-2041	Emergency Medical Technicians and Paramedics	5	125	150	113	\$ 26,956
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	4	130	145	170	\$ 24,033
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	4	36	41	54	\$ 23,357
29-2012	Medical and Clinical Laboratory Technicians	4	92	92	90	\$ 28,948
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	4	121	119	130	\$ 30,086

This table provides insight into the occupations that typically require less than a 2-year degree that are expected to be in greatest demand.

Forecast Skill Needs



The chart above identifies the skills needed for the gap occupations identified on the previous page that typically require less than a 2-year degree.



Appendix: Clusters

Cluster charts display a geographic concentration of interrelated industries or occupations.

- **Cluster**
 - Industry clusters can form and grow because of a region's competitive advantage—resources such as location, trained labor, and education systems.
 - Occupation clusters describe the specialization of a region's workforce.
- **Location Quotient - (LQ)** This value is shown by the size of the circle; the larger the circle, the larger the location quotient.
 - A location quotient greater than 1.0 indicates that the region has a higher concentration of employment in a particular industry or occupation than the nation; a location quotient less than 1 indicates the region has a lower concentration of employment in the cluster than the nation.
 - If a regional industry group has a location quotient of 1.25 or higher, it is considered to possess a *Competitive Advantage* in that industry.
 - Only industries or occupations with an LQ higher than .5 are shown in the clusters chart.
 - Nondisclosure - if cluster data are nondisclosable, a range will be given for the LQ.
- **Average Wages** - This value is shown on the vertical axis. The higher the circle is shown on the chart, the higher the average wages in that cluster.
- **Forecast Growth** - The forecast growth rate for a cluster is the annual average percentage change in employment expected over the given period. This value is shown along the horizontal axis. The further to the right a cluster's circle is shown, the greater the growth expected in that cluster. The expected growth is based upon a long-range national industry and occupation forecast and may not reflect short-term and regional fluctuations.