

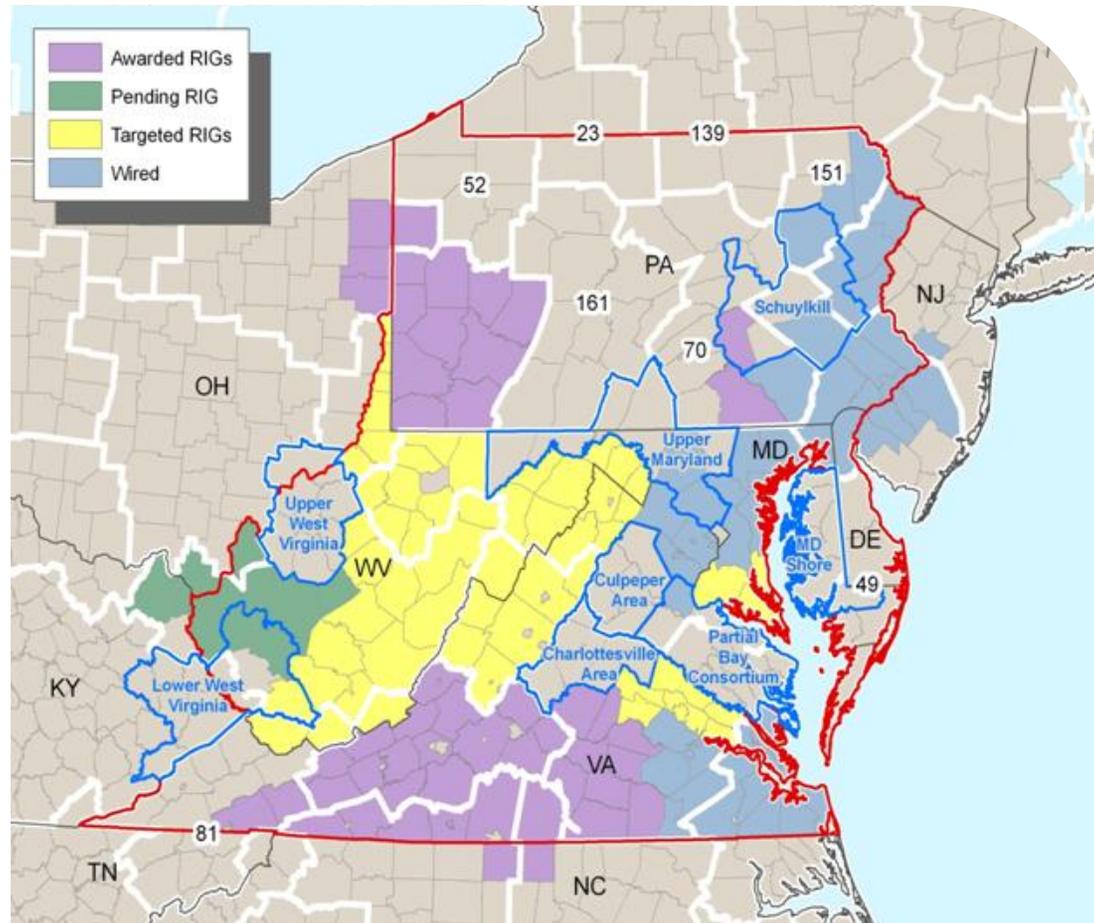


# Analysis of Regions Not Currently Involved in WIRED Grants or RIGs: Schuykill Area

October 2008

## Schuykill Area

Berks County, Pennsylvania  
Carbon County, Pennsylvania  
Dauphin County, Pennsylvania  
Lebanon County, Pennsylvania  
Lehigh County, Pennsylvania  
Luzerne County, Pennsylvania  
Schuylkill County, Pennsylvania





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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](http://www.chmuraecon.com). Software products include JOBSeq®, WIBeq™, and OnStage.

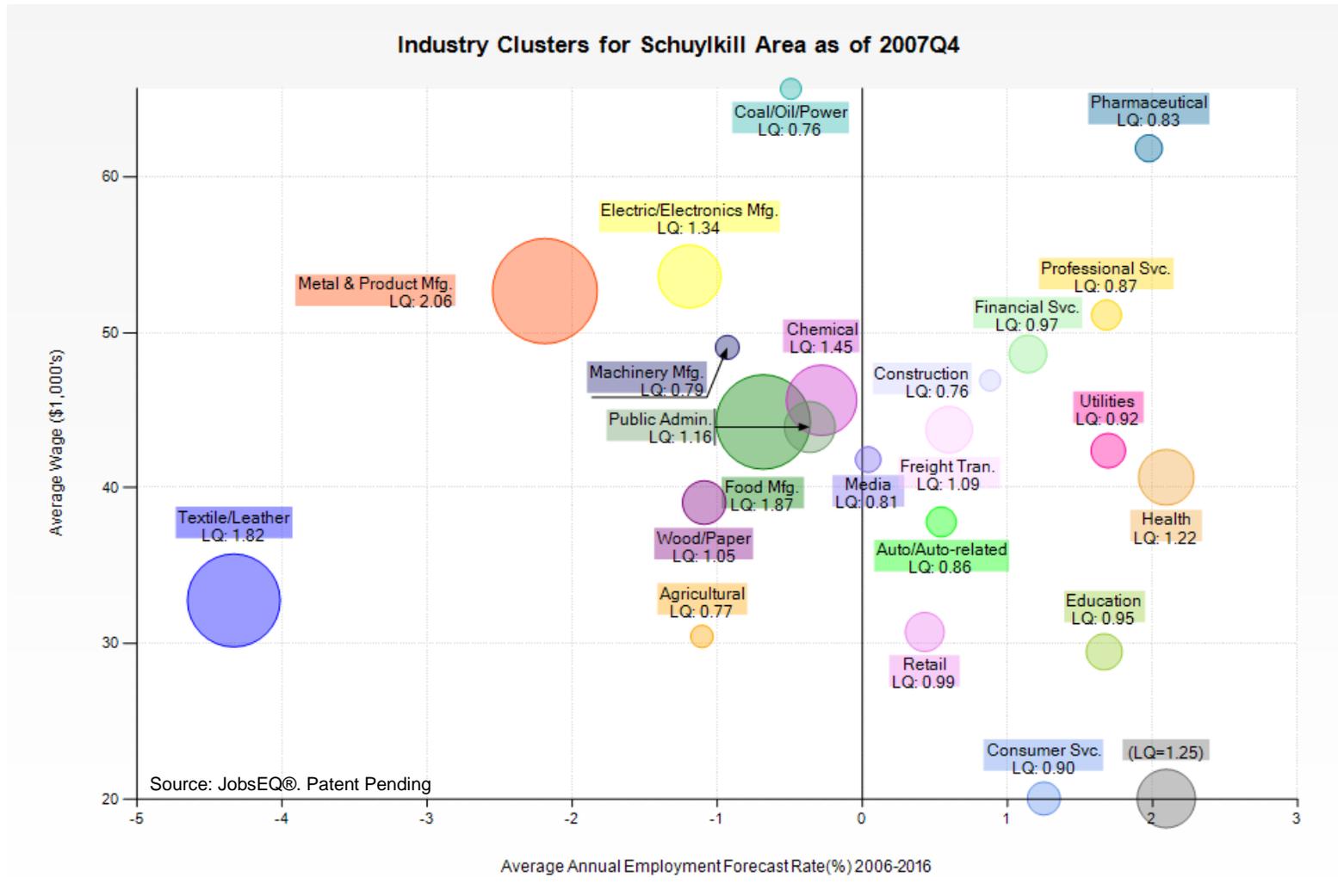
Chmura has headquarters in Richmond, Virginia and a branch office in Cleveland, Ohio. Chmura Economics & Analytics is committed to achieving 100% customer satisfaction in all project engagements. The Chmura philosophy is that when our customer succeeds, Chmura has been successful. To contact us, send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



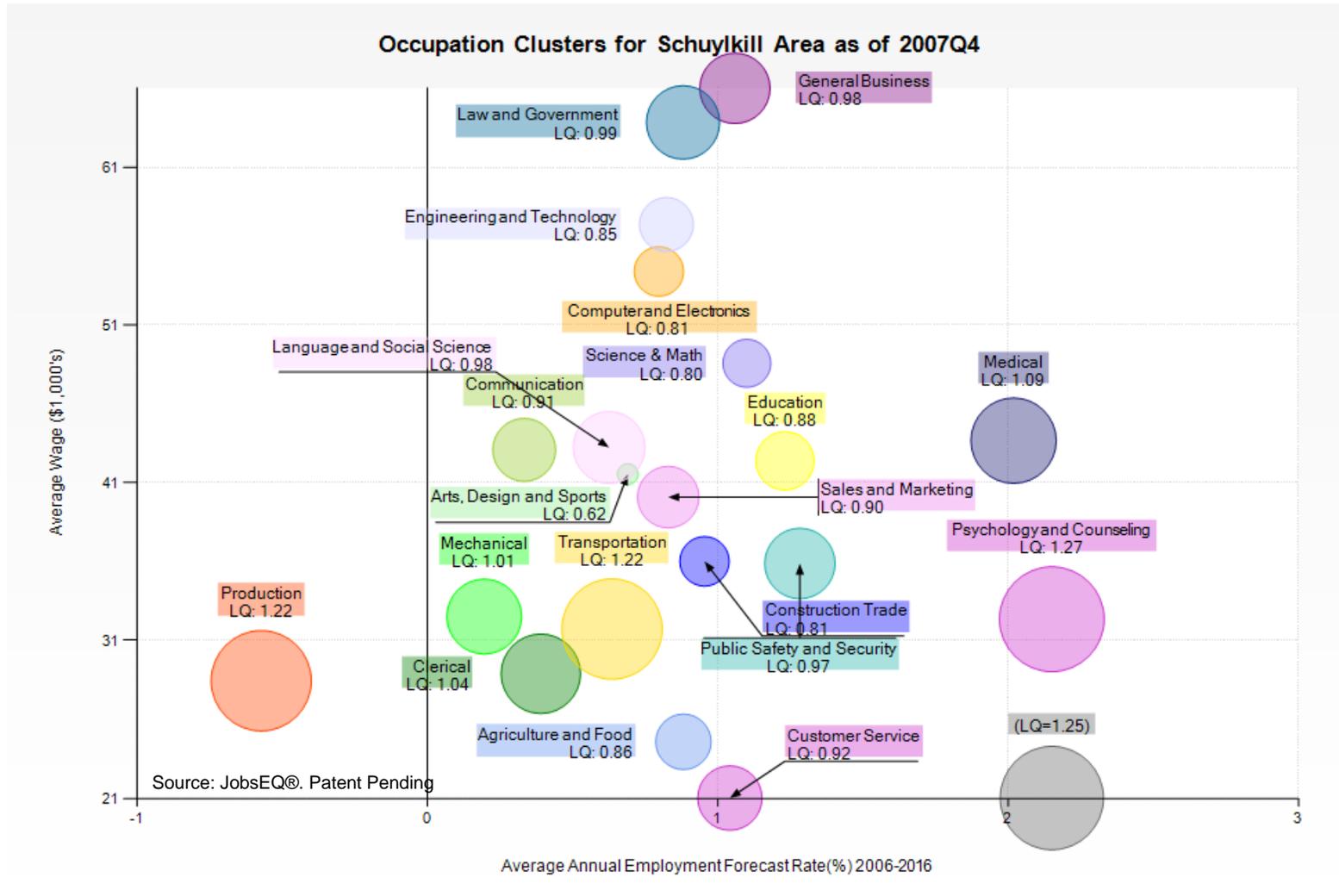
## Executive Summary

The Schuylkill Region in Pennsylvania is characterized by traditional manufacturing industries that are generally forecast to shed jobs. The largest industry clusters in the region are metals and product manufacturing, food manufacturing, textile/leather manufacturing, and chemical manufacturing—all are forecast to decrease employment over the next ten years. In contrast, growing clusters such as pharmaceuticals, professional services, and financial services have a much smaller presence in the region. In light of the expected employment shifts in the region, individuals with production and mechanical skills will likely require retraining for new jobs. Unfortunately, many of the occupations in the region that require less than a 2-year degree and are in demand pay average wages less than that of manufacturing.

# Industry and Occupation Clusters



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



## Employment by Major Sector

		Schuylkill Area Employment by Major Sector				Employment Change		
		Employment			Employment Change			
NAICS	Industry Description	2007	2005	2002	Annual Aver Wages 2007	Number	Annual Average	Annual Aver Change Since 2002
0	Total	791,864	772,840	754,638	\$ 38,732	19,024	1.2%	1.0%
11	Agriculture, Forestry, Fishing and Hunting	4,208	4,416	4,196	\$ 24,235	(208)	-2.4%	0.1%
21	Mining, Quarrying, and Oil and Gas Extraction	1,697	1,486	1,438	\$ 32,855	211	6.9%	3.4%
22	Utilities	4,859	5,733	8,212	\$ 76,781	(873)	-7.9%	-10.0%
23	Construction	33,436	32,428	31,916	\$ 45,876	1,009	1.5%	0.9%
31	Manufacturing	104,451	110,332	123,169	\$ 46,218	(5,881)	-2.7%	-3.2%
42	Wholesale Trade	34,044	33,542	31,011	\$ 49,194	503	0.7%	1.9%
44	Retail Trade	90,314	89,760	88,027	\$ 23,419	554	0.3%	0.5%
48	Transportation and Warehousing	43,270	37,841	36,447	\$ 38,607	5,429	6.9%	3.5%
51	Information	17,357	15,531	16,466	\$ 46,952	1,825	5.7%	1.1%
52	Finance and Insurance	34,000	35,043	34,907	\$ 47,800	(1,043)	-1.5%	-0.5%
53	Real Estate and Rental and Leasing	6,474	6,955	7,654	\$ 33,466	(482)	-3.5%	-3.3%
54	Professional, Scientific, and Technical Services	28,630	26,906	25,110	\$ 51,780	1,725	3.2%	2.7%
55	Management of Companies and Enterprises	18,190	14,958	10,096	\$ 105,683	3,231	10.3%	12.5%
56	Administrative and Support and Waste Management and Remediation Services	43,080	40,203	33,755	\$ 24,633	2,877	3.5%	5.0%
61	Educational Services	63,630	60,728	54,176	\$ 30,094	2,902	2.4%	3.3%
62	Health Care and Social Assistance	120,849	111,282	103,591	\$ 40,234	9,567	4.2%	3.1%
71	Arts, Entertainment, and Recreation	12,093	11,531	12,631	\$ 19,969	562	2.4%	-0.9%
72	Accommodation and Food Services	55,938	54,221	52,597	\$ 13,763	1,717	1.6%	1.2%
81	Other Services (except Public Administration)	24,968	26,004	24,493	\$ 25,548	(1,036)	-2.0%	0.4%
92	Public Administration	50,345	53,902	54,656	\$ 42,979	(3,557)	-3.4%	-1.6%

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

Schuylkill Area 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	63,630	60,728	54,176	\$ 30,094	2,902	2.4%	3.3%
722	Food Services and Drinking Places	48,045	46,710	45,300	\$ 12,933	1,336	1.4%	1.2%
622	Hospitals	41,246	37,071	35,606	\$ 42,397	4,175	5.5%	3.0%
561	Administrative and Support Services	41,086	38,299	31,931	\$ 24,262	2,787	3.6%	5.2%
621	Ambulatory Health Care Services	37,054	33,160	28,648	\$ 46,150	3,894	5.7%	5.3%
921	Executive, Legislative, and Other General Government Support	30,263	31,117	32,172	\$ 39,049	(855)	-1.4%	-1.2%
541	Professional, Scientific, and Technical Services	28,630	26,906	25,110	\$ 51,780	1,725	3.2%	2.7%
623	Nursing and Residential Care Facilities	24,380	25,043	24,494	\$ 29,819	(663)	-1.3%	-0.1%
238	Specialty Trade Contractors	21,951	20,777	21,074	\$ 44,107	1,174	2.8%	0.8%
423	Merchant Wholesalers, Durable Goods	19,083	18,019	16,629	\$ 50,923	1,064	2.9%	2.8%
445	Food and Beverage Stores	19,005	18,975	19,669	\$ 18,740	31	0.1%	-0.7%
551	Management of Companies and Enterprises	18,190	14,958	10,096	\$ 105,683	3,231	10.3%	12.5%
624	Social Assistance	18,169	16,008	14,844	\$ 37,598	2,161	6.5%	4.1%
524	Insurance Carriers and Related Activities	17,791	19,896	19,274	\$ 50,174	(2,105)	-5.4%	-1.6%
452	General Merchandise Stores	16,229	16,028	16,123	\$ 17,935	201	0.6%	0.1%
493	Warehousing and Storage	15,613	10,022	6,721	\$ 31,057	5,591	24.8%	18.4%
311	Food Manufacturing	15,272	16,391	16,564	\$ 43,340	(1,120)	-3.5%	-1.6%
522	Credit Intermediation and Related Activities	14,432	13,186	13,599	\$ 38,863	1,246	4.6%	1.2%
424	Merchant Wholesalers, Nondurable Goods	11,287	11,688	11,131	\$ 45,537	(401)	-1.7%	0.3%
441	Motor Vehicle and Parts Dealers	11,208	11,508	11,279	\$ 36,971	(300)	-1.3%	-0.1%

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

Schuylkill Area 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	
493	Warehousing and Storage	15,613	10,022	6,721	\$ 31,057	5,590.60	24.8%	18.4%
621	Ambulatory Health Care Services	37,054	33,160	28,648	\$ 46,150	3,894.28	5.7%	5.3%
551	Management of Companies and Enterprises	18,190	14,958	10,096	\$ 105,683	3,231.48	10.3%	12.5%
624	Social Assistance	18,169	16,008	14,844	\$ 37,598	2,160.74	6.5%	4.1%
722	Food Services and Drinking Places	48,045	46,710	45,300	\$ 12,933	1,335.53	1.4%	1.2%
522	Credit Intermediation and Related Activities	14,432	13,186	13,599	\$ 38,863	1,245.59	4.6%	1.2%
423	Merchant Wholesalers, Durable Goods	19,083	18,019	16,629	\$ 50,923	1,064.00	2.9%	2.8%
335	Electrical Equipment, Appliance, and Component Manufacturing	10,624	9,868	8,026	\$ 53,128	755.33	3.8%	5.8%
711	Performing Arts, Spectator Sports, and Related Industries	2,080	1,472	1,853	\$ 23,790	607.34	18.8%	2.3%
812	Personal and Laundry Services	7,726	7,148	7,146	\$ 22,720	578.25	4.0%	1.6%
448	Clothing and Clothing Accessories Stores	7,993	7,419	6,893	\$ 17,424	574.37	3.8%	3.0%
331	Primary Metal Manufacturing	8,623	8,146	10,287	\$ 59,346	476.58	2.9%	-3.5%
721	Accommodation	7,893	7,512	7,297	\$ 18,811	381.17	2.5%	1.6%
327	Nonmetallic Mineral Product Manufacturing	3,590	3,249	4,994	\$ 47,611	340.42	5.1%	-6.4%
454	Nonstore Retailers	3,422	3,104	2,833	\$ 37,034	317.75	5.0%	3.9%
922	Justice, Public Order, and Safety Activities	6,205	5,958	5,909	\$ 51,769	246.98	2.1%	1.0%
488	Support Activities for Transportation	2,183	1,960	2,195	\$ 29,015	222.88	5.5%	-0.1%
212	Mining (except Oil and Gas)	1,436	1,214	1,219	\$ 31,544	221.30	8.7%	3.3%
452	General Merchandise Stores	16,229	16,028	16,123	\$ 17,935	201.42	0.6%	0.1%
321	Wood Product Manufacturing	3,383	3,229	3,046	\$ 35,108	154.00	2.4%	2.1%

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.

## Schuylkill Area Top 20 Industries with Largest Employment Loss by 3-Digit NAICS

NAICS	Industry Description	Employment			Annual Aver Wages 2007	Employment Change		
		2007	2005	2002		Number	Annual Average	Annual Change Since 2002
325	Chemical Manufacturing	4,555	8,382	8,407	\$ 54,724	(3,827)	-26.3%	-11.5%
923	Administration of Human Resource Programs	3,726	6,701	6,350	\$ 51,811	(2,976)	-25.4%	-10.1%
524	Insurance Carriers and Related Activities	17,791	19,896	19,274	\$ 50,174	(2,105)	-5.4%	-1.6%
311	Food Manufacturing	15,272	16,391	16,564	\$ 43,340	(1,120)	-3.5%	-1.6%
813	Religious, Grantmaking, Civic, Professional, and Similar Organiza	9,876	10,938	9,868	\$ 23,559	(1,062)	-5.0%	0.0%
332	Fabricated Metal Product Manufacturing	10,969	11,854	11,849	\$ 43,337	(884)	-3.8%	-1.5%
221	Utilities	4,859	5,733	8,212	\$ 76,781	(873)	-7.9%	-10.0%
313	Textile Mills	1,478	2,350	3,103	\$ 34,264	(871)	-20.7%	-13.8%
921	Executive, Legislative, and Other General Government Support	30,263	31,117	32,172	\$ 39,049	(855)	-1.4%	-1.2%
814	Private Households	336	1,000	861	\$ 17,870	(664)	-42.0%	-17.2%
623	Nursing and Residential Care Facilities	24,380	25,043	24,494	\$ 29,819	(663)	-1.3%	-0.1%
484	Truck Transportation	11,038	11,468	10,644	\$ 43,391	(430)	-1.9%	0.7%
424	Merchant Wholesalers, Nondurable Goods	11,287	11,688	11,131	\$ 45,537	(401)	-1.7%	0.3%
312	Beverage and Tobacco Product Manufacturing	3,263	3,568	3,901	\$ 47,065	(304)	-4.4%	-3.5%
441	Motor Vehicle and Parts Dealers	11,208	11,508	11,279	\$ 36,971	(300)	-1.3%	-0.1%
532	Rental and Leasing Services	2,615	2,891	3,497	\$ 34,408	(276)	-4.9%	-5.6%
523	Securities, Commodity Contracts, and Other Financial Investmer	1,581	1,825	1,763	\$ 101,950	(244)	-6.9%	-2.2%
236	Construction of Buildings	7,690	7,922	7,476	\$ 43,919	(232)	-1.5%	0.6%
323	Printing and Related Support Activities	3,949	4,179	4,985	\$ 38,954	(229)	-2.8%	-4.6%
451	Sporting Goods, Hobby, Book, and Music Stores	3,851	4,066	3,257	\$ 16,677	(215)	-2.7%	3.4%

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

Schuylkill Area Top 20 Declining Occupations Based on Top 20 Declining Industries

Occupation Description	SOC	Employment			Annual Aver Wages 2007	Employment Change Since 2005		Annual Aver Change Since 2002
		2007	2005	2002		Number	Annual Average	
Chemical Equipment Operators and Tenders	51-9011	366	909	920	\$ 39,724	(542)	-36.5%	-16.8%
Truck Drivers, Heavy and Tractor-Trailer	53-3032	7,623	8,023	7,573	\$ 35,821	(400)	-2.5%	0.1%
Maintenance and Repair Workers, General	49-9042	2,349	2,717	2,768	\$ 33,172	(368)	-7.0%	-3.2%
Office Clerks, General	43-9061	3,976	4,342	4,317	\$ 24,261	(366)	-4.3%	-1.6%
Secretaries, Ex Legal, Medical, and Executive	43-6014	3,567	3,924	3,766	\$ 28,431	(356)	-4.6%	-1.1%
Customer Service Representatives	43-4051	3,009	3,340	3,441	\$ 31,058	(331)	-5.1%	-2.7%
General and Operations Mgrs	11-1021	3,505	3,833	3,786	\$ 94,989	(328)	-4.4%	-1.5%
Police and Sheriff's Patrol Officers	33-3051	2,806	3,123	3,181	\$ 46,322	(316)	-5.2%	-2.5%
Nursing Aides, Orderlies, and Attendants	31-1012	5,936	6,236	6,219	\$ 21,146	(300)	-2.4%	-0.9%
Laborers and Freight, Stock, and Material Movers, Hand	53-7062	3,319	3,607	3,537	\$ 24,109	(288)	-4.1%	-1.3%
Business Operations Specialists, All Other	13-1199	2,245	2,524	2,622	\$ 54,107	(279)	-5.7%	-3.1%
First-Line Supervisors/Mgrs of Production and Operating Workers	51-1011	1,561	1,837	1,949	\$ 48,732	(275)	-7.8%	-4.3%
Executive Secretaries and Administrative Assistants	43-6011	1,734	1,988	1,939	\$ 37,158	(254)	-6.6%	-2.2%
Claims Adjusters, Examiners, and Investigators	13-1031	1,669	1,897	1,889	\$ 47,641	(228)	-6.2%	-2.4%
First-Line Supervisors/Mgrs of Office and Administrative Support Workers	43-1011	2,053	2,274	2,288	\$ 47,661	(221)	-5.0%	-2.1%
Insurance Claims and Policy Processing Clerks	43-9041	1,701	1,921	1,891	\$ 30,650	(220)	-5.9%	-2.1%
Bookkeeping, Accounting, and Auditing Clerks	43-3031	2,296	2,496	2,469	\$ 29,998	(200)	-4.1%	-1.4%
Retail Salespersons	41-2031	4,535	4,735	4,396	\$ 29,846	(199)	-2.1%	0.6%
Personal and Home Care Aides	39-9021	1,745	1,941	1,761	\$ 18,457	(196)	-5.2%	-0.2%
Mgrs, All Other	11-9199	1,225	1,417	1,411	\$ 76,764	(192)	-7.0%	-2.8%

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.

## Schuykill Area Top 20 Declining Occupations Based on All Industries

Occupation Description	SOC	Employment			Annual Aver Wages 2007 Q4	Employment		Annual Aver Change Since 2002 Q4
		2007 Q4	2006 Q4	2002 Q4		Number	Percent	
Team Assemblers	51-2092	6,883	7,214	7,280	\$ 26,472	(331)	-4.6%	-1.1%
Meat, Poultry, and Fish Cutters and Trimmers	51-3022	984	1,132	901	\$ 20,260	(148)	-13.0%	1.8%
Sewing Machine Operators	51-6031	1,692	1,816	2,473	\$ 18,926	(124)	-6.8%	-7.3%
Telecommunications Line Installers and Repairers	49-9052	671	767	852	\$ 43,526	(96)	-12.5%	-4.7%
Construction Laborers	47-2061	4,235	4,329	4,063	\$ 29,262	(93)	-2.2%	0.8%
Managers, All Other	11-9199	3,789	3,878	3,730	\$ 77,123	(90)	-2.3%	0.3%
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	4,855	4,938	5,378	\$ 47,574	(84)	-1.7%	-2.0%
Electrical and Electronic Equipment Assemblers	51-2022	1,560	1,631	2,708	\$ 25,802	(70)	-4.3%	-10.4%
Slaughterers and Meat Packers	51-3023	384	449	334	\$ 21,220	(66)	-14.6%	2.8%
Tellers	43-3071	3,188	3,253	3,295	\$ 21,475	(65)	-2.0%	-0.7%
Loan Officers	13-2072	991	1,053	823	\$ 57,119	(61)	-5.8%	3.8%
Insurance Sales Agents	41-3021	2,221	2,279	2,211	\$ 54,591	(57)	-2.5%	0.1%
Securities, Commodities, and Financial Services Sales Agents	41-3031	1,030	1,086	993	\$ 74,425	(57)	-5.2%	0.7%
Carpenters	47-2031	4,454	4,511	4,346	\$ 38,071	(56)	-1.2%	0.5%
Security Guards	33-9032	4,710	4,765	4,243	\$ 22,183	(55)	-1.2%	2.1%
Inspectors, Testers, Sorters, Samplers, and Weighers	51-9061	3,316	3,370	3,811	\$ 31,456	(54)	-1.6%	-2.7%
Customer Service Representatives	43-4051	11,026	11,078	10,448	\$ 29,050	(52)	-0.5%	1.1%
Automotive Service Technicians and Mechanics	49-3023	4,774	4,826	4,917	\$ 34,749	(52)	-1.1%	-0.6%
Financial Managers	11-3031	4,310	4,361	4,064	\$ 87,975	(51)	-1.2%	1.2%
Welders, Cutters, Solderers, and Brazers	51-4121	2,187	2,234	2,110	\$ 31,044	(47)	-2.1%	0.7%

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

Schuylkill Area 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	
Registered Nurses	29-1111	18,520	17,825	15,613	\$ 54,013	694	3.9%	3.5%
Industrial Truck and Tractor Operators	53-7051	7,485	6,952	5,492	\$ 27,968	533	7.7%	6.4%
Laborers and Freight, Stock, and Material Movers, Hand	53-7062	14,545	14,122	12,407	\$ 23,137	423	3.0%	3.2%
Retail Salespersons	41-2031	23,770	23,492	23,241	\$ 22,983	278	1.2%	0.5%
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	37-2011	13,182	12,906	11,786	\$ 20,916	277	2.1%	2.3%
Elementary School Teachers, Except Special Education	25-2021	9,902	9,648	7,594	\$ 45,672	255	2.6%	5.5%
Cashiers	41-2011	22,388	22,156	21,661	\$ 17,483	232	1.0%	0.7%
Office Clerks, General	43-9061	17,031	16,812	15,529	\$ 23,919	218	1.3%	1.9%
Truck Drivers, Heavy and Tractor-Trailer	53-3032	12,863	12,647	12,158	\$ 34,945	216	1.7%	1.1%
Secondary School Teachers, Except Special and Vocational Education	25-2031	8,285	8,073	6,358	\$ 48,453	212	2.6%	5.4%
Stock Clerks and Order Fillers	43-5081	10,522	10,311	10,139	\$ 21,989	210	2.0%	0.7%
Combined Food Preparation and Serving Workers, Including Fast Food	35-3021	10,767	10,585	10,091	\$ 15,779	182	1.7%	1.3%
Medical Assistants	31-9092	2,677	2,503	2,139	\$ 25,411	175	7.0%	4.6%
Packers and Packagers, Hand	53-7064	7,503	7,331	7,001	\$ 19,645	172	2.3%	1.4%
Receptionists and Information Clerks	43-4171	6,941	6,783	6,084	\$ 22,903	158	2.3%	2.7%
Teacher Assistants	25-9041	6,163	6,020	4,896	\$ 20,207	143	2.4%	4.7%
Emergency Medical Technicians and Paramedics	29-2041	1,951	1,821	1,531	\$ 28,903	130	7.1%	5.0%
Licensed Practical and Licensed Vocational Nurses	29-2061	5,557	5,433	5,050	\$ 34,818	124	2.3%	1.9%
Medical Secretaries	43-6013	2,132	2,012	1,764	\$ 27,585	120	5.9%	3.9%
Nursing Aides, Orderlies, and Attendants	31-1012	9,919	9,802	9,505	\$ 21,759	117	1.2%	0.9%

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

Schuylkill Area 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	
Registered Nurses	29-1111	367	18,520	17,825	15,613	\$ 54,013
Elementary School Teachers, Except Special Education	25-2021	120	9,902	9,648	7,594	\$ 45,672
Executive Secretaries and Administrative Assistants	43-6011	82	7,964	7,964	7,339	\$ 36,362
Licensed Practical and Licensed Vocational Nurses	29-2061	75	5,557	5,433	5,050	\$ 34,818
Bookkeeping, Accounting, and Auditing Clerks	43-3031	74	9,064	9,050	8,376	\$ 29,649
Medical Assistants	31-9092	73	2,677	2,503	2,139	\$ 25,411
Accountants and Auditors	13-2011	60	4,879	4,861	4,456	\$ 55,743
Social and Human Service Assistants	21-1093	56	2,233	2,265	2,031	\$ 24,706
Business Operations Specialists, All Other	13-1199	54	5,278	5,314	5,247	\$ 55,728
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific	41-4012	45	8,548	8,475	7,861	\$ 52,953
Child, Family, and School Social Workers	21-1021	39	2,612	2,610	2,273	\$ 35,168
Teacher Assistants	25-9041	39	6,163	6,020	4,896	\$ 20,207
Preschool Teachers, Except Special Education	25-2011	38	2,073	2,015	1,685	\$ 23,358
Middle School Teachers, Except Special and Vocational Education	25-2022	35	3,529	3,437	2,704	\$ 46,537
Mental Health Counselors	21-1014	32	1,101	1,091	1,049	\$ 34,275
Secondary School Teachers, Except Special and Vocational Education	25-2031	31	8,285	8,073	6,358	\$ 48,453
Computer Systems Analysts	15-1051	31	2,377	2,332	2,179	\$ 67,901
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011	29	8,738	8,653	8,171	\$ 43,704
Computer Software Engineers, Applications	15-1031	29	1,153	1,112	972	\$ 75,211
Administrative Services Managers	40-6090	28	2,114	2,116	1,927	\$ 64,720

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.

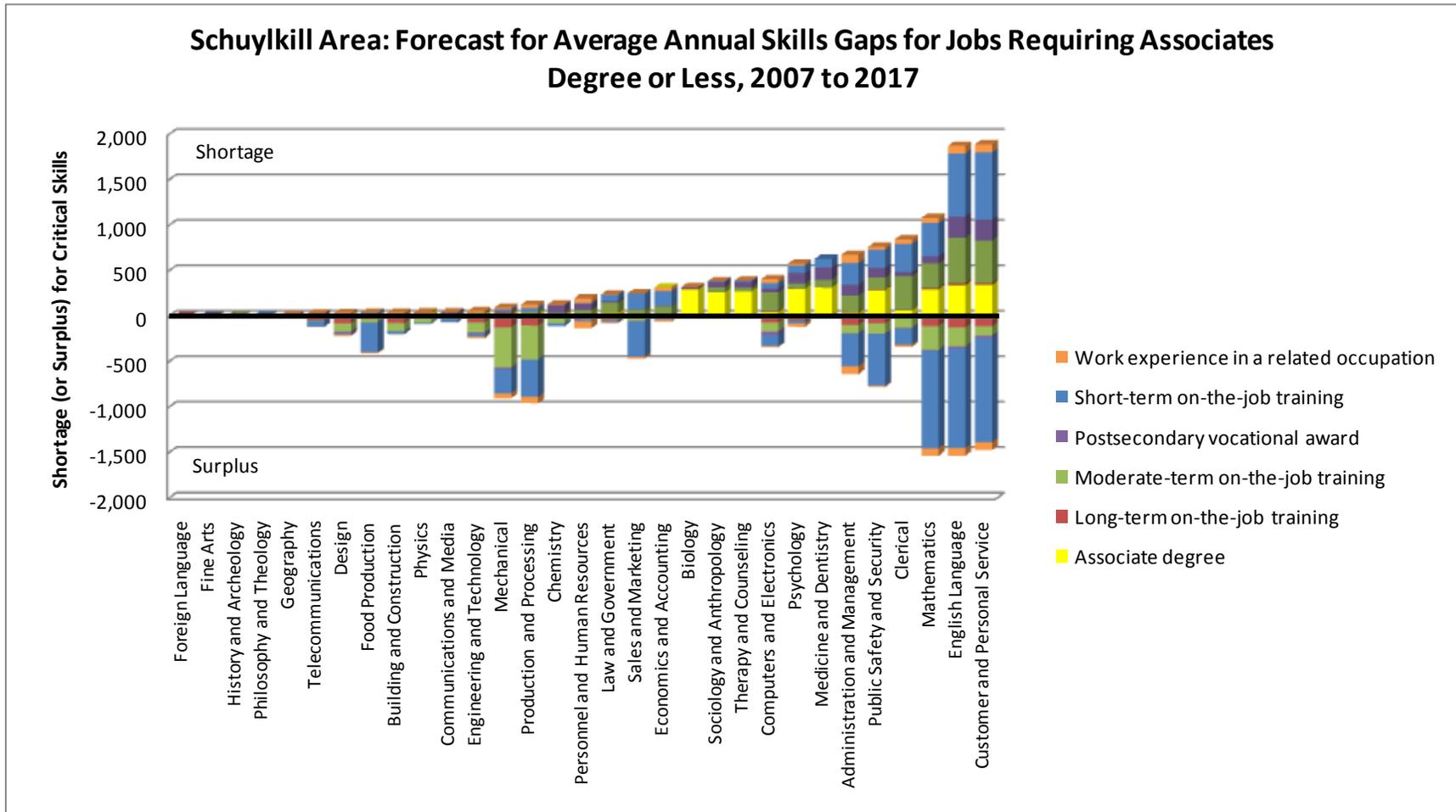
This table provides insight into the occupations that typically require a 2-year degree or greater that are expected to be in greatest demand.

## Schuylkill Area Gaps in Top 20 Occupations (Requiring Less than 2-Year Degree) Over Next 7 Years

SOC	Occupation Description	Annual Occupation Gaps	Employment			Annual Aver Wages 2007 Q4
			2007 Q4	2006 Q4	2002 Q4	
43-9061	Office Clerks, General	165	17,031	16,812	15,529	\$ 23,919
41-2031	Retail Salespersons	157	23,770	23,492	23,241	\$ 22,983
39-9021	Personal and Home Care Aides	144	3,345	3,351	3,124	\$ 17,821
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	132	13,182	12,906	11,786	\$ 20,916
31-1011	Home Health Aides	125	3,698	3,650	3,045	\$ 18,821
43-4051	Customer Service Representatives	120	11,026	11,078	10,448	\$ 29,050
43-4171	Receptionists and Information Clerks	74	6,941	6,783	6,084	\$ 22,903
33-9032	Security Guards	72	4,710	4,765	4,243	\$ 22,183
53-3032	Truck Drivers, Heavy and Tractor-Trailer	58	12,863	12,647	12,158	\$ 34,945
31-1012	Nursing Aides, Orderlies, and Attendants	55	9,919	9,802	9,505	\$ 21,759
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	42	10,767	10,585	10,091	\$ 15,779
37-2012	Maids and Housekeeping Cleaners	34	4,592	4,509	4,163	\$ 18,035
41-2021	Counter and Rental Clerks	33	2,570	2,586	2,812	\$ 22,097
53-3033	Truck Drivers, Light or Delivery Services	33	7,588	7,593	7,238	\$ 26,058
43-6013	Medical Secretaries	27	2,132	2,012	1,764	\$ 27,585
29-2052	Pharmacy Technicians	21	1,428	1,402	1,398	\$ 25,343
39-3091	Amusement and Recreation Attendants	20	1,063	1,102	1,127	\$ 16,852
37-3011	Landscaping and Groundskeeping Workers	20	4,084	4,024	3,781	\$ 21,900
31-9091	Dental Assistants	17	1,159	1,131	1,032	\$ 28,728
41-9011	Demonstrators and Product Promoters	16	609	589	532	\$ 26,162

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.