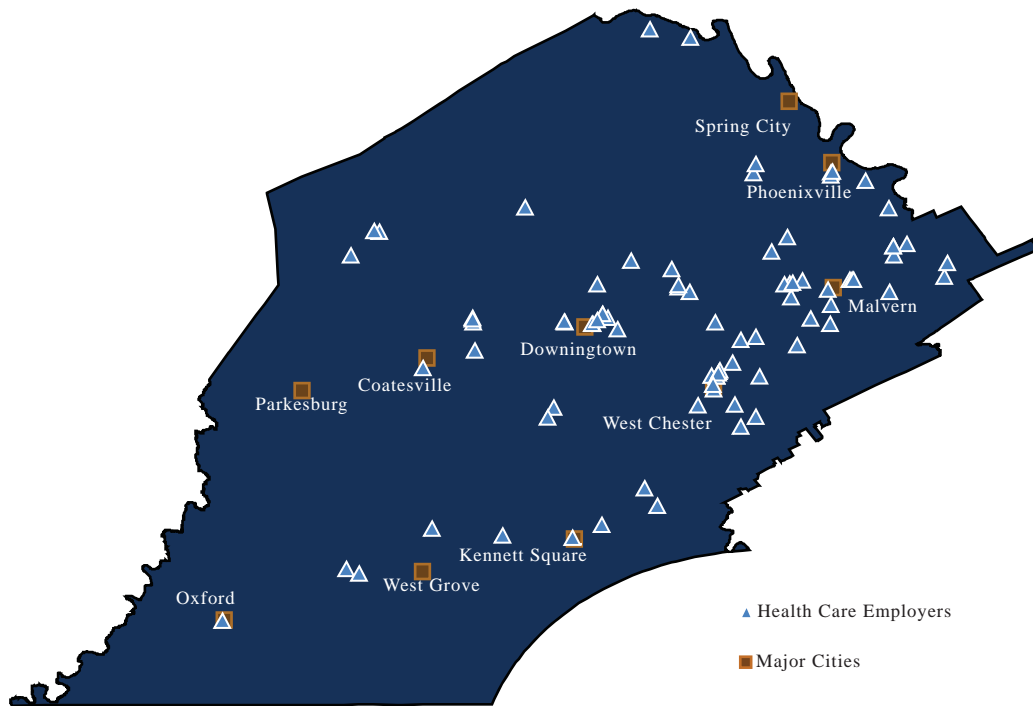




# Chester County Workforce Investment Area

## QUARTERLY SNAPSHOT



**CHESTER COUNTY**  
WORKFORCE INVESTMENT BOARD

*Advancing Chester County's Workforce*

July - September 2011



# Chester County Workforce Investment Area

## INDUSTRY CLUSTERS OVERVIEW

As shown in **Table 1**, the Chester County Workforce Investment Area (WIA) experienced over-the-year employment growth in the Agriculture & Food Production (AFP), Business & Financial Services (BFS), Education (ED) and Health Care (HC) industry clusters. BFS along with ED and HC account for nearly four out of every 10 people employed within the WIA. AFP, BFS, Bio-Medical (BM) and Information & Communication Services (ICS) all have a national location quotient (LQ) greater than the state’s national LQ (**Table 3**), and are the real backbone of the WIA’s economy.

**Table 1: Industry Cluster Statistics for Chester County WIA (3rd Quarter 2010)**

	AFP	AMDM	BC	BFS	BM	ED	ENGY	HC	ICS	LT	LWP
Area Employment	10,444	10,136	11,656	40,398	7,025	19,272	1,592	27,036	17,405	4,222	1,422
Percent Area Employment	4.48%	4.35%	5.00%	17.34%	3.02%	8.27%	0.68%	11.60%	7.47%	1.81%	0.61%
Employment Growth (Q3 2009 - Q3 2010)	271	-177	-163	30	-37	141	-1	547	-396	-22	-65
2009 Annual Average Wage (\$)	36,515	66,197	57,102	88,029	118,203	43,616	79,669	51,594	100,959	45,141	48,021
National Location Quotient (Q3 2010)	1.29	0.97	0.91	1.44	2.50	0.89	0.40	0.90	1.71	0.76	0.73

### Glossary for Tables 1 - 4

AFP	Agriculture & Food Production
AMDM	Advanced Materials & Diversified Manufacturing
BC	Building & Construction
BFS	Business & Financial Services
BM	Bio-Medical
ED	Education
ENGY	Energy
HC	Health Care
ICS	Information & Communication Services
LT	Logistics & Transportation
LWP	Lumber, Wood & Paper

LQ – Location Quotient: A measure of an industry’s concentration in an area relative to the rest of the nation. It compares an industry’s share of local employment with its share of national employment and assesses an industry’s competitiveness. If the location quotient is greater than 1.00, that industry exports the majority of its goods and services to another area and is considered competitive. If the location quotient is less than 1.00, it is considered a local cluster and the majority of goods and services are used in the local market.



## INDUSTRY CLUSTERS OVERVIEW

**Table 2: Industry Cluster Statistics for SEPA (3rd Quarter 2010)**

	AFP	AMDM	BC	BFS	BM	ED	ENGY	HC	ICS	LT	LWP
SEPA Employment	37,106	64,844	75,992	265,364	44,773	184,272	16,356	283,950	81,352	31,832	9,522
Percent SEPA Employment	2.10%	3.68%	4.31%	15.04%	2.54%	10.44%	0.93%	16.09%	4.61%	1.80%	0.54%
Employment Growth (Q3 2009 - Q3 2010)	-94	-1,514	-1,541	-2,216	-1,648	-21,395	-186	2,085	-2,692	-970	-315
2009 Annual Average Wage (\$)	44,369	62,189	50,757	78,323	107,765	48,520	83,946	53,484	55,910	45,456	58,468
National Location Quotient (Q3 2010)	0.60	0.82	0.78	1.25	2.11	1.12	0.54	1.25	1.05	0.75	0.65

To provide some perspective, these same cluster statistics can be found in **Table 2** for the Southeast Pennsylvania (SEPA) region, which consists of Bucks, Chester, Delaware, Montgomery and Philadelphia counties. Over the year, this region has experienced some significant decreases in employment within all of the clusters (with the exception of HC), however, much of this is consistent with statewide employment activity during the same time period (Table 3.) With the exception of Energy (ENGY), ED and HC, the Chester County WIA has an equal or greater national LQ than the SEPA region. This is rather significant to mention considering the SEPA region also includes Chester County employment. An interesting thing to note is that while the WIA employs more than one-quarter of the AFP workforce for the region, the average wage in the WIA is significantly lower than the SEPA average. It is the lowest-paying cluster within the WIA, and the only cluster in the WIA that does not pay more than the statewide annual average (**Table 3**).

**Table 3: Industry Cluster Statistics for the State (3rd Quarter 2010)**

	AFP	AMDM	BC	BFS	BM	ED	ENGY	HC	ICS	LT	LWP
Statewide Employment (in thousands)	149	278	296	652	82	587	89	821	206	153	56
2009 Annual Average Wage (\$)	41,304	52,267	50,757	64,822	88,599	42,649	70,244	48,573	72,387	41,988	43,977
National Location Quotient (Q3 2010)	0.81	1.12	0.95	0.99	1.27	1.03	0.97	1.19	0.86	1.18	1.20



# Chester County Workforce Investment Area

## HEALTH CARE CLUSTER

The HC cluster includes industries that provide for the health and well-being of Pennsylvania residents. Direct patient care forms the cornerstone of this cluster. Also included are industries that support direct patient care, such as ambulance services, health insurance carriers and public agencies that oversee health programs. Health care is a strong industry, even in a struggling economy, as it is more dependent on demographics than the ups and downs of the business cycle. It will typically thrive in urban areas, especially those that have a high percentage of their population old or young. Geographically the area may compete with similar services in neighboring Philadelphia or nearby Baltimore. If not an emergency, people may travel to these areas for services that they perceive to be better based on name recognition. Compared to the nation, the WIA has an LQ of 0.90.

**Table 4: Statistics for HC Cluster in Chester County WIA**

Employer Units (Q3 2010)	1,243
Number of Jobs (Q3 2010)	27,036
Percent of Total Jobs (Q3 2010)	11.60%
Average Annual Wage (2009)	\$51,594
Net Change in Job Volume (Q3 2009 - Q3 2010)	547
Net Percent Change in Job Volume (Q3 2009 - Q3 2010)	2.07%
Q3 2010 National Location Quotient (LQ)	0.90
Percent Change from Q3 2009 National LQ	0.84%

Figure 1

**Total HC Employment by County**

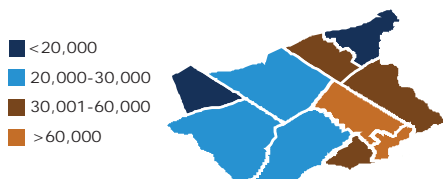
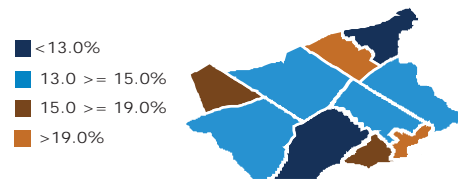


Figure 2

**HC Percent Employment by County**



Maps reflect data from 3rd Quarter 2010



# Chester County Workforce Investment Area

## HEALTH CARE CLUSTER

**Table 5: HC's Top 5 Industries in 3rd Quarter 2010**

By Employment		By Most Competitive LQ	
1	General medical and surgical hospitals	1	Continuing care retirement communities
2	Offices of physicians, except mental health	2	Kidney dialysis centers
3	Continuing care retirement communities	3	Other hospitals
4	Nursing care facilities	4	Druggists' goods merchant wholesalers
5	Residential mental retardation facilities	5	Residential mental retardation facilities

In addition to looking at the change in employment, shift/share analysis helps evaluate the significance of that change by removing predictable factors. Shift/Share looks at the National Industry Share (NS), Local Industry Mix (IM) and Net Change (NC) to derive the area's Competitive Component (CC) in employment. **Figure 3** depicts the shift/share analysis of the HC industry cluster. The formula to derive the Competitive Component is:

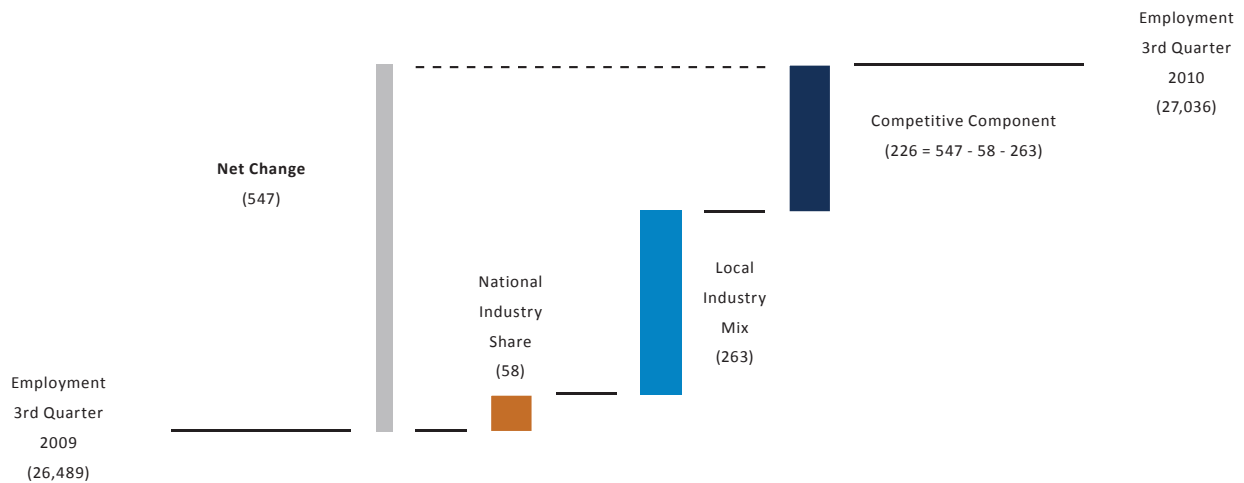
$$CC = NC - NS - IM$$

NC is the change in employment. (3rd Quarter 2009 to 3rd Quarter 2010)

NS is the predicted change in employment over the time period based on the national employment for **all industries**.

IM is the predicted change in employment over the time period based on the national employment in the **cluster**.

**Figure 3: National Shift/Share Analysis of HC in Chester County WIA**





## Chester County Workforce Investment Area

### HEALTH CARE CLUSTER

In this example, we can see that the overall national economy was up slightly from 3rd Quarter 2009 to 3rd Quarter 2010, and all other things being equal, the cluster would have gained 58 jobs if it followed the national average. At the same time HC in the nation grew moderately, and would have accounted for an increase of 263 jobs. So, while the area gained 547 jobs, the region had a sizeable CC that actually accounted for an increase of

**Table 6: WIA Employment of 2011 Statewide High Priority Occupations in HC**

Statewide HC High Priority Occupations		Chester County WIA Employment			
SOC Code	SOC Title	Estimated 2008	Projected 2018	Percent Change	Annual Openings
13-1031	Claims Adjusters, Examiners & Investigators	470	430	-8.51%	12
21-1011	Substance Abuse & Behavioral Disorder Counselors	640	790	23.43%	28
21-1014	Mental Health Counselors	610	700	14.75%	21
21-1021	Child, Family & School Social Workers	390	400	2.56%	9
21-1022	Medical & Public Health Social Workers	280	310	10.71%	9
21-1023	Mental Health & Substance Abuse Social Workers	140	170	21.42%	6
25-1072	Nursing Instructors & Teachers, Postsecondary	90	110	22.22%	4
29-1051	Pharmacists	460	560	21.73%	18
29-1062	Family & General Practitioners	250	250	0.00%	5
29-1111	Registered Nurses	4,040	4,690	16.08%	132
29-1122	Occupational Therapists	170	200	17.64%	6
29-1123	Physical Therapists	480	580	20.83%	16
29-1126	Respiratory Therapists	130	150	15.38%	4
29-2011	Medical & Clinical Laboratory Technologists	230	250	8.69%	6
29-2012	Medical & Clinical Laboratory Technicians	290	320	10.34%	8
29-2021	Dental Hygienists	390	450	15.38%	13
29-2031	Cardiovascular Technologists & Technicians	80	90	12.50%	2
29-2034	Radiologic Technologists & Technicians	260	270	3.84%	6
29-2041	Emergency Medical Technicians & Paramedics	520	550	5.76%	9
29-2052	Pharmacy Technicians	660	880	33.33%	42
29-2055	Surgical Technologists	50	60	20.00%	3
29-2061	Licensed Practical & Licensed Vocational Nurses	870	940	8.04%	31
29-2071	Medical Records & Health Information Technicians	190	190	0.00%	1
31-1011	Home Health Aides	2,270	2,860	25.99%	79
31-1012	Nursing Aides, Orderlies & Attendants	2,510	2,880	14.74%	59
31-2011	Occupational Therapist Assistants	60	70	16.66%	2
31-2021	Physical Therapist Assistants	130	170	30.76%	5
31-9091	Dental Assistants	450	520	15.55%	14
31-9094	Medical Transcriptionists	80	70	-12.50%	1
31-9099	Phlebotomists	150	160	6.66%	3
43-3021	Billing & Posting Clerks & Machine Operators	1,040	970	-6.73%	13
43-6013	Medical Secretaries	610	640	4.91%	13
43-9061	Office Clerks	5,900	6,040	2.37%	122
51-9081	Dental Laboratory Technicians	240	220	-8.33%	4
51-9082	Medical Appliance Technicians	10	10	0.00%	0



## Chester County Workforce Investment Area

### HEALTH CARE CLUSTER

226 jobs. This analysis cannot, however, explain why the area is more competitive, as numerous factors could be the causation of the regional advantage; geography, infrastructure, individual employers, tax policies, educational institutions, etc. This is also only a snapshot between two time periods and not a trend analysis, so the CC may fluctuate greatly when evaluating it over different time periods.

The 2011 statewide High Priority Occupations (HPOs) within the HC cluster are shown on the previous page in **Table 6**. These 35 occupations are considered to be in demand by employers, have higher skill needs and likely provide family-sustaining wages. The employment data listed for the occupations are for all industries, including HC, in the Chester County WIA. In this area, nearly all of the statewide HC HPOs are expected to experience employment growth through 2018 and combined they will account for 706 annual openings.

**Table 7** lists the top HC occupations by employment in Pennsylvania. Six of the occupations listed appear in the HPO list in **Table 6**. The 10 occupations account for approximately 44 percent of all employment in the HC cluster statewide. With a statewide 2009 annual average wage of \$48,573, the HC cluster has the fifth lowest average annual wage out of the 11 targeted industry clusters. Four of the occupations listed below pay more than the current family-sustaining wage in PA (\$29,574).

**Table 7: Top 10 HC Occupations by Employment in PA**

SOC Code	SOC Title	2009 Cluster Employment	2009 Occupational Wage
29-1111	Registered Nurses	118,696	\$63,719
31-1012	Nursing Aides, Orderlies & Attendants	64,725	\$25,870
29-2061	Licensed Practical & Licensed Vocational Nurses	32,144	\$40,945
31-1011	Home Health Aides	39,262	\$22,799
43-9061	Office Clerks	22,817	\$29,653
43-4171	Receptionists & Information Clerks	21,790	\$25,706
31-9092	Medical Assistants	20,885	\$28,729
43-6013	Medical Secretaries	18,663	\$30,085
43-6014	Secretaries	14,065	\$29,527
37-2012	Maids & Housekeeping Cleaners	12,487	\$22,067

Center for Workforce Information & Analysis

[www.paworkstats.state.pa.us](http://www.paworkstats.state.pa.us)