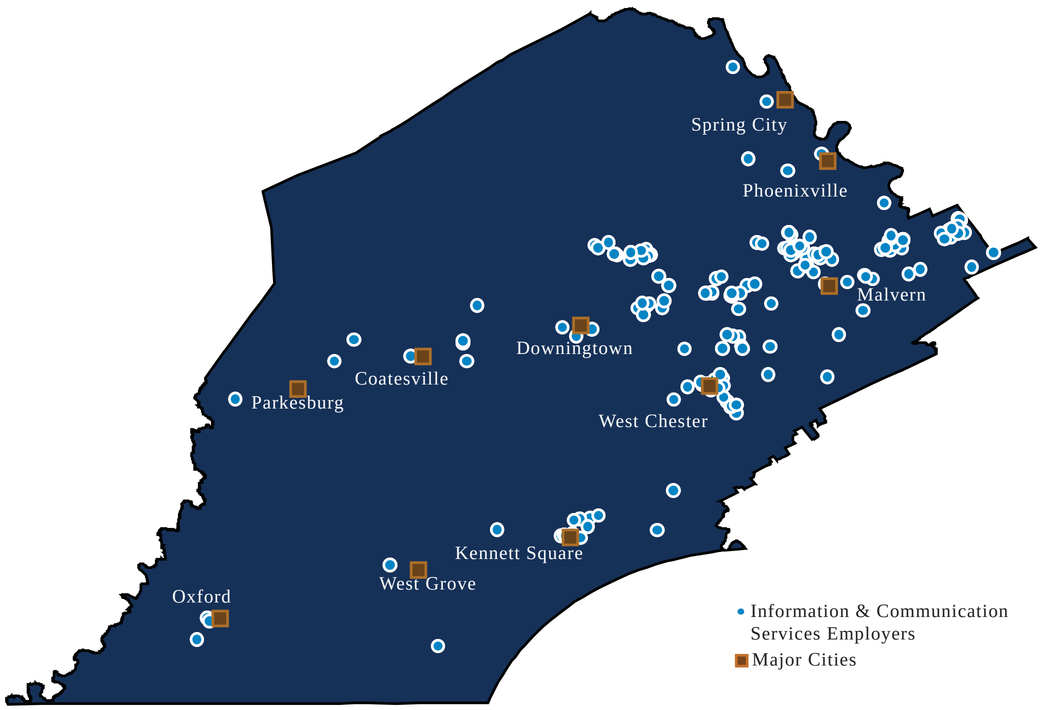
Chester County Workforce Investment Area

QUARTERLY SNAPSHOT



CHESTER COUNTY
WORKFORCE INVESTMENT BOARD

Advancing Chester County's Workforce

April - June 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 Education (ED) and Health Care (HC) industry clusters. These clusters pay an average wage greater than the state. Business & Financial Services (BFS), along with ED and HC account for nearly four out of every 10 people employed within the WIA. Agriculture & Food Production (AFP), Bio-Medical (BM), Information & Communication Services (ICS) and BFS 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 (1st Quarter 2010)

	AFP	AMDM	BC	BFS	BM	ED	ENGY	HC	ICS	LT	LWP
Area Employment	10,201	10,085	10,387	39,376	7,097	24,598	1,566	26,839	17,465	4,077	1,422
Percent Area Employment	4.42	4.37	4.50	17.05	3.07	10.65	0.68	11.62	7.56	1.77	0.62
Employment Growth (Q1 2009 - Q1 2010)	13	-748	-1044	-1007	-48	585	-101	687	-640	-211	-112
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 (Q1 2010)	1.36	0.97	0.89	1.41	2.53	0.96	0.40	0.90	1.73	0.75	0.74

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 and 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 (1st Quarter 2010)

	AFP	AMDM	BC	BFS	BM	ED	ENGY	HC	ICS	LT	LWP
Employment	36,341	64,086	68,671	260,182	45,394	213,654	16,334	281,564	81,554	31,603	9,401
Percent WIA Employment	2.08	3.67	3.94	14.91	2.60	12.25	0.94	16.14	4.67	1.81	0.54
Employment Growth (Q1 2009 - Q1 2010)	-467	-4,602	-8,826	-8,842	-1,804	793	-553	351	-3,955	-1,958	-683
2009 Annual Average Wage ($)	44,369	62,189	61,286	78,323	107,765	48,520	83,946	53,484	85,910	45,456	58,468
National Location Quotient (Q1 2010)	0.64	0.82	0.77	1.23	2.15	1.10	0.56	1.25	1.07	0.77	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 many of the clusters, however, much of this is consistent with statewide employment activity during the same time period (Table 3.) With the exception of Energy (ENGY), Logistics and Transportation (LT), 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 state annual average (**Table 3**).

Table 3: Industry Cluster Statistics for the State (1st Quarter 2010)

	AFP	AMDM	BC	BFS	BM	ED	ENGY	HC	ICS	LT	LWP
Statewide Employment (in thousands)	144	268	255	644	81	611	89	285	199	147	54
2009 Annual Average Wage ($)	41,304	52,267	50,757	64,822	88,599	42,649	70,244	48,573	72,487	41,988	43,977
National Location Quotient (Q1 2010)	0.83	1.12	0.94	1.00	1.25	1.03	0.99	1.19	0.85	1.17	1.21

Information & Communication Services Cluster

The ICS cluster includes industries engaged in the production and dissemination of information, such as newspapers, television and motion pictures. Information support industries, like computer systems design and internet service providers, are a growing part of the cluster. Typically a small percentage of area employment, Chester County WIA has a strong presence with 7.6 percent of local employment in the cluster. This concentration is the highest in the state among all 22 WIAs (LQ of 1.73). In fact, 24 percent of Pennsylvania's ICS cluster employment is located in Chester and Montgomery counties. With an average annual wage of $100,959 in 2009, this is a considerable strength for the area.

Table 4: Statistics for ICS Cluster in Chester County WIA

Employer Units (Q1 2010)	1,143
Number of Jobs (Q1 2010)	17,465
Percent of Total Jobs (Q1 2010)	7.56%
Average Annual Wage (2009)	$100,959
Net Change in Job Volume (Q1 2009 - Q1 2010)	-640
Net Percent Change in Job Volume (Q1 2009 - Q1 2010)	--3.50%
Q1 2010 National Location Quotient (LQ)	1.73
Percent Change from Q1 2009 National LQ	0.12%

Figure 1

Total ICS Employment by County

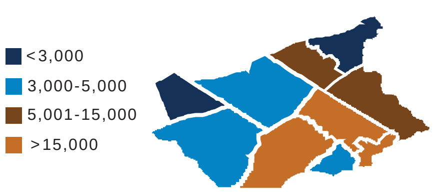
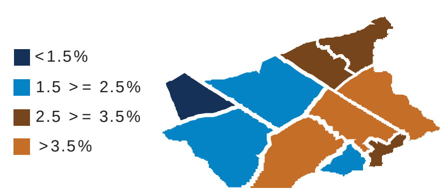


Figure 2

ICS Percent Employment by County



Maps reflect data from 1st Quarter 2010

Information & Communication Services Cluster

Table 5: ICS's Top 5 Industries in 1st Quarter 2010

By Employment		By Most Competitive LQ	
1	Custom computer programming services	1	Other computer related services
2	Computer systems design services	2	Custom computer programming services
3	Engineering services	3	Computer systems design services
4	Other computer related services	4	Industrial design services
5	Wired telecommunications carriers	5	Software publishers

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 ENGY industry cluster. The formula to derive the Competitive Component is:

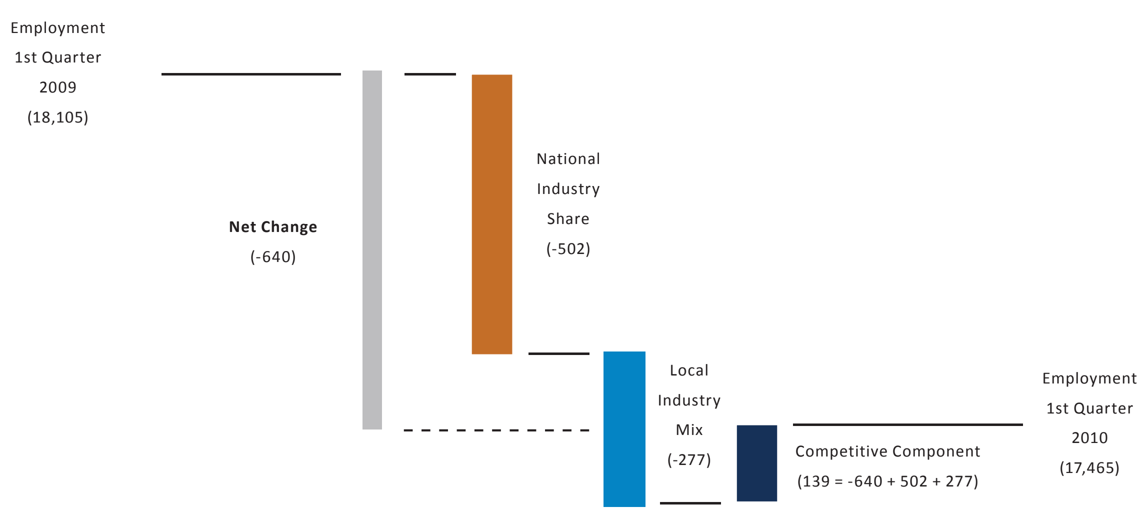
$$CC = NC - NS - IM$$

NC is the change in employment. (1st Quarter 2009 to 1st 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 ENGY in Chester County



Information & Communication Services Cluster

In this example, we can see that the overall national economy did not do well from 1st Quarter 2009 to 1st Quarter 2010, and all other things being equal, the cluster would have lost 502 jobs if it followed the national average. At the same time ICS in the nation also struggled, and would have accounted for an additional decrease of 277 jobs. So, while the area lost 640 jobs, the region had a CC that actually accounted for an increase of 139. 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.

Table 6: WIA Employment of 2010 Statewide High Priority Occupations in ICS

Statewide ICS High Priority Occupations		Chester County WIA Employment			
SOC Code	SOC Title	Estimated 2008	Projected 2018	Percent Change	Annual Openings
15-1021	Computer Programmers	2,440	1,880	-22.95	51
15-1031	Computer Software Engineers, Applications	1,580	1,840	16.46	50
15-1032	Computer Software Engineers, Systems Software	1,000	1,080	8.00	23
15-1041	Computer Support Specialists	2,780	2,560	-7.91	86
15-1051	Computer Systems Analysts	2,110	2,260	7.10	72
15-1071	Network & Computer Systems Administrators	1,020	1,090	6.86	30
15-1081	Network Systems & Data Communications Analysts	470	640	36.17	27
17-2051	Civil Engineers	740	750	1.35	21
17-2081	Environmental Engineers	220	250	13.63	9
17-3011	Architectural & Civil Drafters	290	250	-13.79	8
27-1024	Graphic Designers	380	370	-2.63	10
41-3011	Advertising Sales Agents	330	340	3.03	6
41-4011	Sales Representatives, Scientific & Technical	1,710	1,650	-3.50	38
43-3031	Bookkeeping, Accounting & Auditing Clerks	3,510	3,550	1.13	59
43-4051	Customer Service Representatives	5,130	5,700	11.11	200
49-2022	Telecommunications Equipment Installers & Repairers	270	300	11.11	10
49-9052	Telecommunications Line Installers & Repairers	500	470	-6.00	13

Information & Communication Services Cluster

The 2010 statewide High Priority Occupations (HPOs) within the ICS cluster are shown on the previous page in **Table 6**. These 17 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 ICS, in Chester County WIA. In this area, a vast majority of these statewide ICS HPOs are expected to experience employment growth through 2018 and combined they will account for 713 annual openings.

Table 7 lists the top ICS occupations by employment in Pennsylvania. Nine of the occupations listed appear in the HPO list in Table 6. The 10 occupations make up approximately 36 percent of all employment in the ICS cluster statewide. With a statewide 2009 annual average wage of $72,487, the ICS cluster occupational wages are typically higher than occupations in other clusters. All 10 of the occupations listed below pay above the family-sustaining wage in PA ($29,680).

Table 7: Top Ten ICS Occupations by Employment in PA

SOC Code	SOC Title	2009 Cluster Employment	2009 Occupational Wage
15-1021	Computer Programmers	10,628	$85,344
43-4051	Customer Service Representatives	10,364	$40,235
15-1051	Computer Systems Analysts	8,250	$85,244
17-2051	Civil Engineers	7,197	$76,758
15-1041	Computer Support Specialists	6,468	$42,917
49-9052	Telecommunications Line Installers & Repairers	6,390	$53,908
43-9061	Office Clerks, General	6,370	$30,291
15-1031	Computer Software Engineers, Applications	5,353	$83,820
15-1032	Computer Software Engineers, Systems Software	4,962	$92,210
41-3011	Advertising Sales Agents	4,710	$49,650