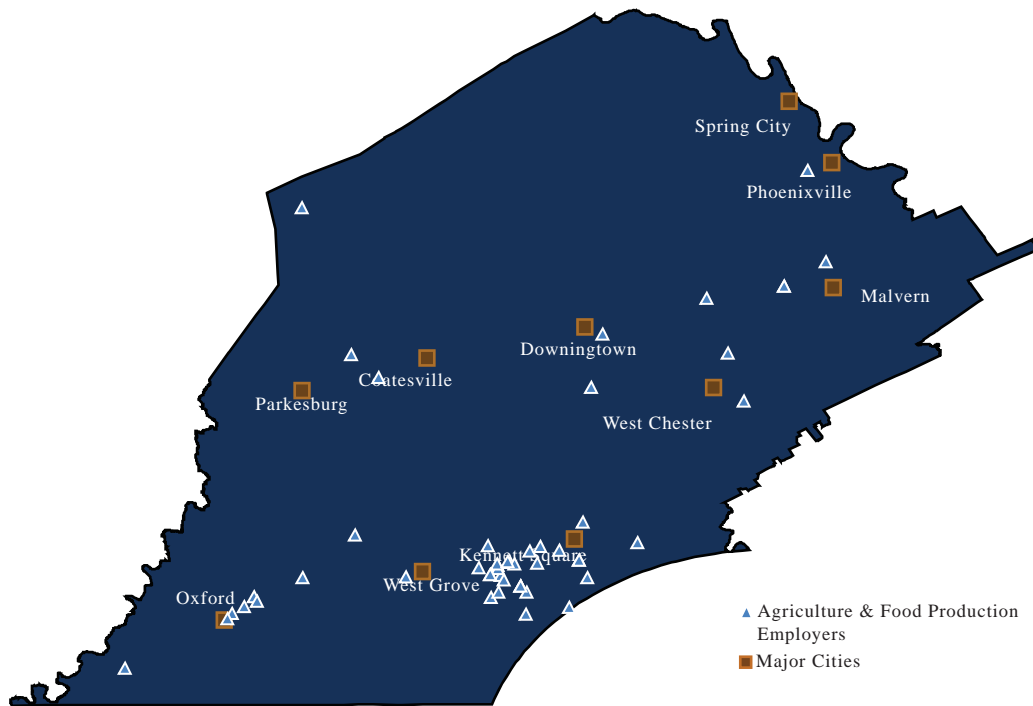




Chester County Workforce Investment Area

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 Agriculture & Food Production (AFP), Education (ED) and Health Care (HC) industry clusters. Business & Financial Services (BFS), along with ED and HC account for nearly four out of every 10 people employed within the WIA. 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 (2nd Quarter 2010)

	AFP	AMDM	BC	BFS	BM	ED	ENGY	HC	ICS	LT	LWP
Area Employment	10,411	10,104	11,407	40,070	7,042	24,406	1,599	26,977	17,477	4,173	1,442
Percent Area Employment	4.41	4.28	4.83	16.97	2.98	10.34	0.68	11.43	7.40	1.77	0.61
Employment Growth (Q2 2009 - Q2 2010)	197	-225	-444	-777	-273	592	-27	714	-497	-203	-62
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 (Q2 2010)	1.28	0.97	0.91	1.42	2.50	0.96	0.41	0.84	1.72	0.76	0.67

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.



Chester County Workforce Investment Area

INDUSTRY CLUSTERS OVERVIEW

Table 2: Industry Cluster Statistics for SEPA (2nd Quarter 2010)

	AFP	AMDM	BC	BFS	BM	ED	ENGY	HC	ICS	LT	LWP
SEPA Employment	36,891	64,348	74,099	265,325	45,188	213,578	16,530	283,377	81,458	31,501	9,561
Percent SEPA Employment	2.06	3.60	4.15	14.85	2.53	11.95	0.92	15.86	4.56	7.16	0.54
Employment Growth (Q2 2009 - Q2 2010)	-214	-1,950	-4,448	-4,095	-1,585	3,307	-102	1,573	-2,871	-1,227	-282
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 (Q2 2010)	0.61	0.81	0.78	1.24	2.12	1.11	0.56	1.25	1.06	0.76	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), 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 (2nd Quarter 2010)

	AFP	AMDM	BC	BFS	BM	ED	ENGY	HC	ICS	LT	LWP
Statewide Employment (in thousands)	148	271	288	657	81	613	93	829	201	150	55
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 (Q2 2010)	0.80	1.11	0.98	1.00	1.23	1.03	1.01	1.18	0.84	1.17	1.21



Chester County Workforce Investment Area

AGRICULTURE & FOOD PRODUCTION CLUSTER

The AFP cluster begins with the growing of food crops, including grains and livestock, and ends with the wholesale distribution of these products. The cluster also includes support industries, such as refrigerated warehousing and fertilizer manufacturing, as well as public agencies that oversee agricultural programs. Employment typically is focused East of the Appalachians in the state, and Chester County WIA has a strong presence with 4.41 percent of local employment in the cluster. This concentration is above-average for the state as well as other counties in the SEPA region. AFP is dominated by Mushroom production which accounts for nearly one-half of the cluster employment within the WIA, and accounts for more than one-third of total employment within the industry nationally.

Table 4: Statistics for AFP Cluster in Chester County WIA

Employer Units (Q2 2010)	442
Number of Jobs (Q2 2010)	10,411
Percent of Total Jobs (Q2 2010)	4.41%
Average Annual Wage (2009)	\$36,515
Net Change in Job Volume (Q2 2009 - Q2 2010)	197
Net Percent Change in Job Volume (Q2 2009 - Q2 2010)	1.90%
Q2 2010 National Location Quotient (LQ)	1.31
Percent Change from Q2 2009 National LQ	2.42%

Figure 1

Total AFP Employment by County

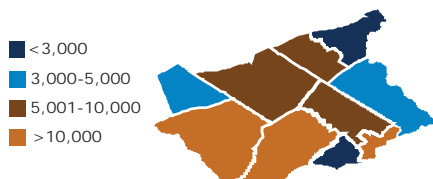
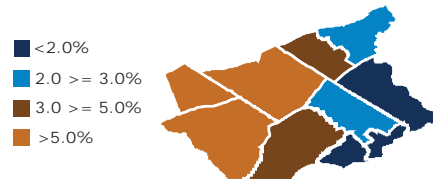


Figure 2

AFP Percent Employment by County



Maps reflect data from 2nd Quarter 2010



Chester County Workforce Investment Area

AGRICULTURE & FOOD PRODUCTION CLUSTER

Table 5: AFP's Top 5 Industries in 2nd Quarter 2010

By Employment		By Most Competitive LQ	
1	Mushroom production	1	Mushroom production
2	Veterinary services	2	Fertilizer, mixing only, manufacturing
3	Fruit and vegetable merchant wholesalers	3	Soil preparation, planting, and cultivating
4	Commercial bakeries	4	Other snack food manufacturing
5	Other snack food manufacturing	5	Fruit and vegetable merchant wholesalers

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

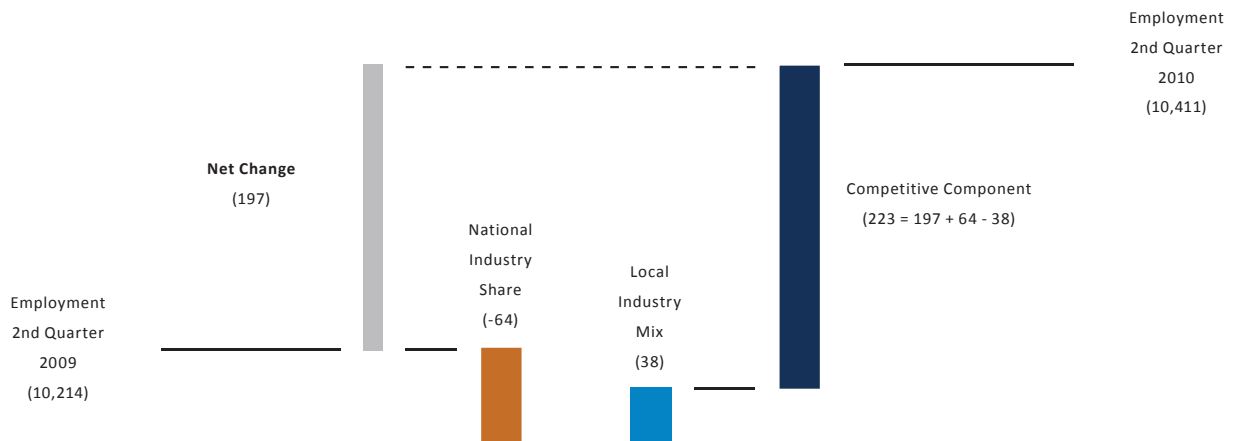
$$CC = NC - NS - IM$$

NC is the change in employment. (2nd Quarter 2009 to 2nd 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 AFP in Chester County





Chester County Workforce Investment Area

AGRICULTURE & FOOD PRODUCTION CLUSTER

In this example, we can see that the overall national economy was down slightly from 2nd Quarter 2009 to 2nd Quarter 2010, and all other things being equal, the cluster would have lost 64 jobs if it followed the national average. At the same time AFP in the nation grew slightly, and would have accounted for an increase of 38 jobs. So, while the area gained 197 jobs, the region had a sizeable CC that actually accounted for an increase of 223 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.

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

Statewide AFP High Priority Occupations		Chester County WIA Employment			
SOC Code	SOC Title	Estimated 2008	Projected 2018	Percent Change	Annual Openings
11-9011	Farm & Agricultural Managers	1,080	1,190	10.18%	19
29-1131	Veterinarians, Large Animals	260	350	34.61%	13
29-2056	Veterinary Technologists & Technicians	330	440	33.33%	21
31-9096	Veterinary Assistants	210	230	9.52%	5
41-4012	Sales Representatives	4,420	4,280	-3.16%	98
43-4051	Customer Service Representatives	5,130	5,700	11.11%	200
43-5071	Shipping, Receiving and Traffic Workers	1,150	1,110	-3.47%	28
45-1011	Farm & Forestry Worker Supervisors	150	160	6.66%	4
49-9041	Industrial Machinery Mechanics	460	490	6.52%	11
51-1011	Supervisors - Production & Operating Workers	1,070	1,010	-5.60%	18
51-3011	Bakers	360	380	5.55%	10
51-3092	Food Batchmakers	150	170	13.33%	6
51-9111	Packaging & Filling Machine Operators/Tenders	900	920	2.22%	19
53-3031	Driver/Sales Workers	190	180	-5.26%	3
53-3032	Truck Drivers, Heavy & Tractor-Trailer	3,350	3,580	6.86%	83
53-3033	Truck Drivers, Light or Delivery Services	1,700	1,650	-2.94%	30
53-7051	Industrial Truck & Tractor Operators	580	510	-12.06%	15



Chester County Workforce Investment Area

AGRICULTURE & FOOD PRODUCTION CLUSTER

The 2011 statewide High Priority Occupations (HPOs) within the AFP 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 AFP, in the Chester County WIA. In this area, most of the statewide AFP HPOs are expected to experience employment growth through 2018 and combined they will account for 598 annual openings.

Table 7 lists the top AFP occupations by employment in Pennsylvania. Six 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 AFP cluster statewide. With a statewide 2009 annual average wage of \$41,304, the AFP cluster has the lowest average annual wage out of the 11 targeted industry clusters. Half of the occupations listed below pay above the current family-sustaining wage in PA (\$29,574).

Table 7: Top 10 AFP Occupations by Employment in PA

SOC Code	SOC Title	2009 Cluster Employment	2009 Occupational Wage
53-7062	Laborers & Freight, Stock & Material Movers	8,060	\$29,054
51-9111	Packaging & Filling Machine Operators/Tenders	6,981	\$32,615
53-3032	Truck Drivers, Heavy & Tractor-Trailer	6,678	\$42,242
41-4012	Sales Representatives	6,631	\$55,584
53-7064	Packers & Packers, Hand	5,222	\$26,865
51-3092	Food Batchmakers	5,001	\$29,476
53-7051	Industrial Truck & Tractor Operators	4,508	\$33,113
53-3031	Driver/Sales Workers	4,261	\$32,479
51-9198	Helpers - Production Workers	3,582	\$28,487
43-5081	Stock Clerks & Order Fillers	3,072	\$28,429

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