



Allegheny County Industry Targeting



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Introduction

If economic return is to play a greater role in guiding economic development investment decisions, then examining objective data on the recent performance of different local industries should become part of the decision process. This section provides a demonstration of how measures such as employment growth and location quotients can be used to compare performance across existing County industries.

Sector Growth and Decline

Employment in Allegheny County fell by about 25,000 jobs from 2001 to 2004, a drop of about 4%, based on data from the Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) program.

This overall loss masked gains in the North American Industry Classification System (NAICS) industrial sectors of corporate management, accommodation and food services, educational services, health care and social assistance, finance and insurance, and real estate/rentals). Corporate management grew the fastest, while the utilities, manufacturing, and transportation/warehousing sectors lost jobs at the fastest rates.¹

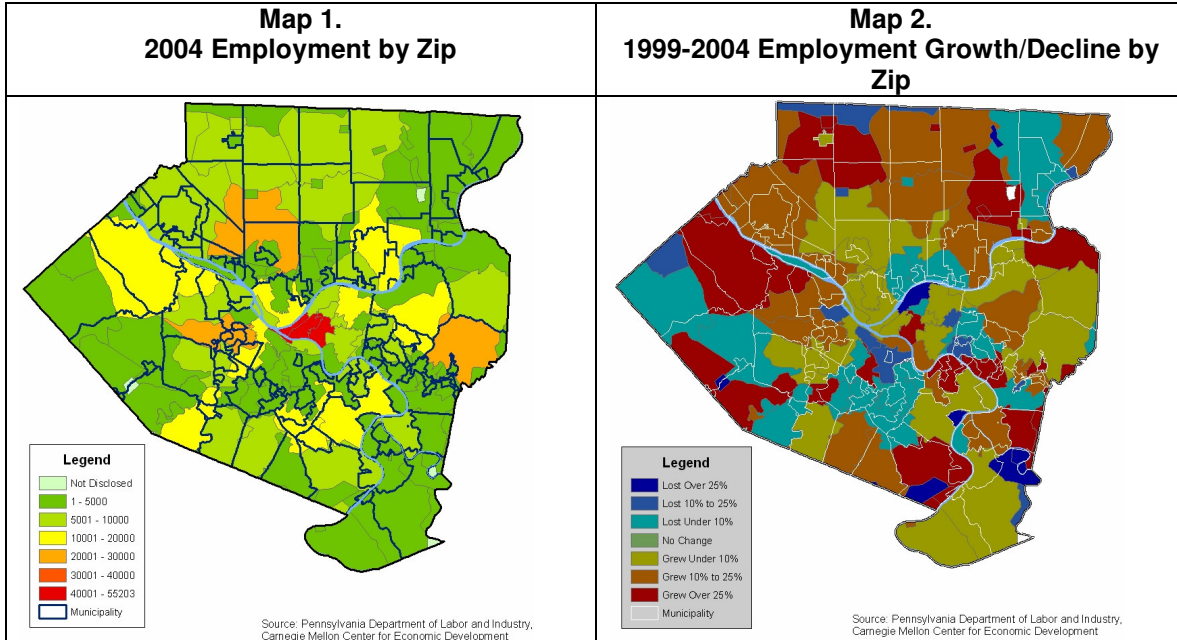
Fig 1. Growth, Rate, and Employment by Sector

<i>Industry Sector</i>	<i>Growth 2001-2004</i>	<i>Rate</i>	<i>Employment 2004</i>
Management of Companies and Enterprises	3,600	31%	15,100
Accommodation and Food Services	2,500	5%	53,700
Educational Services	1,600	3%	61,100
Health Care and Social Assistance	1,500	1%	111,400
Finance and Insurance	800	2%	44,400
Real Estate, Rental, Leasing	300	3%	11,500
Agriculture, Forestry, Fishing, Hunting	0	0%	200
Unknown/Unclassified	ND	ND	ND
Arts, Entertainment, and Recreation	-100	-1%	10,900
Mining	ND	ND	ND
Public Administration	-500	-2%	24,600
Other Services (Except Public Administration)	-600	-2%	26,900
Administrative Support and Waste Management	-700	-2%	40,300
Wholesale Trade	-1,600	-6%	25,400
Retail Trade	-1,900	-2%	80,200
Utilities	-2,100	-34%	4,000
Information	-2,400	-12%	17,700
Construction	-4,100	-12%	30,500
Professional, Scientific, and Technical Services	-4,600	-9%	48,500
Transportation and Warehousing	-6,300	-16%	34,000
Manufacturing	-11,000	-20%	44,500

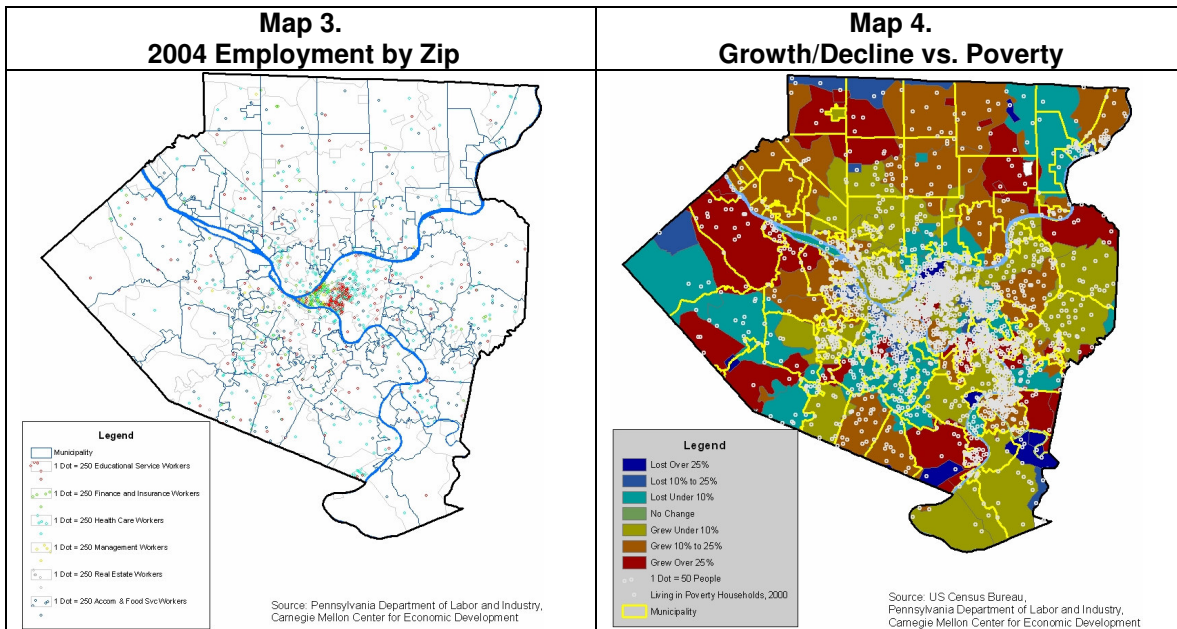
¹ The numbers in the table are based on average annual quarterly employment (AQE). Growth is the difference between 2004 and 2001 AQE. Numbers are rounded to the nearest hundred under the employment column. The mining and unknown/unclassified sectors are not suppressed (marked as ND for non-disclosable) due to QCEW non-disclosure rules intended to prevent the disclosure of the employment at an individual firm. Note: the dataset used for this analysis differs from that used in the section entitled “Economic Trends in Allegheny County” else where in this report. See footnote 12 for a discussion of this.

Growth by Location

Patterns of employment and growth also have spatial implications. Map 1 below shows that most establishment based (where workers work) employment remains concentrated in the downtown zip codes, with other concentrated areas around retail centers; municipality boundaries are also shown in dark blue.



Map 2 shows the rate of employment growth or decline by zip code (from 1999 to 2004). Although the number of “red zips” (grew over 25%) is encouraging, many of these areas still contained less than 5,000 jobs as of 2004.²



² At the time of this writing we could not determine the zip code that most airport employment is attached to.

Map 3 shows the approximate location of workers by establishment in the growing sectors of the county: education, finance, health care, real estate, accommodation and food service, and management/corporate headquarters. While all employment shown is in growing sectors, not every location is necessarily growing. But certainly some growing industries appear clustered in the downtown areas. Map 4 compares growing and declining zip codes to the approximate location of persons in households in poverty. Areas in which growth is occurring in the presence of low or high poverty, or where employment is declining in the presence of poverty should attract our attention for different reasons.³

Industry Sub-Sector Comparison

The aggregate sector figures in Fig. 1 only tell part of the story of how the county economy changed from 2001 to 2004. To better understand how industries performed and compare, CED examined the 100 or so detailed *industry sub-sectors* that fall under the industry sectors above. We assigned these sub-sectors into four categories or *quadrants* by growth and specialization as represented by location quotient (LQ).⁴ Sub-sectors with LQs greater than 1 were deemed to be “more specialized,” while industry groups with LQs less than or equal to one were deemed to be “less specialized”. These four categories have different implications as follows.

- **Growing, More Specialized Industries** – Sub-sectors with higher location quotients and increasing employment are important to the local economy, as they include key industries with growth potential.
- **Growing, Less Specialized Industries** – These industries are also growing but less specialized. Industries with location quotients below 1, but increasing employment can be important growth generators in the local economy in the future. The future growth potential of these industries should be investigated. Strategies to

³ Comparing and contrasting the prevalence of poverty is an important means to addressing equity issues in balance with pursuing economic gain.

⁴ Location quotients compare the share of local employment in an industry or cluster to the share of national employment in that industry or cluster.

$\text{Location Quotient} = \frac{(\text{Regional Cluster Employment} / \text{Total Regional Employment})}{(\text{National Cluster Employment} / \text{Total National Employment})}$
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A location quotient of 1 indicates the local share of employment is equal to the national share. A location quotient of less than 1 indicates the local area is less specialized than the nation in the industry or cluster, and a value greater than 1 indicates the local area has a higher concentration of employment. A high LQ can indicate competitive advantages that allow an industry to be an exporter or base industry for a local economy.

assist emerging industries with promising prospects should also be explored.

- **Declining, More Specialized Industries** – Industries with location quotients above 1 and declining employment growth can be targets for policy action designed to strengthen important components of the local economy. This decline may prompt an examination of the potential of these collective industries, and future prospects for their workers.
- **Declining, Less Specialized Industries** – Industries with lower location quotients and sub-par employment growth include some of the least promising targets for economic development.

Location Quotient	High	Important industries that may require attention	Important growth industries
	Low	Industries of lesser promise to the economy	Potential emerging industries
		Low	High

Employment Growth

The descriptions above will accurately describe some but by no means all the firms and industries that fall under the sub-sectors assigned to each quadrant. Not every industry falling into the declining, low LQ quadrant should be considered of “lesser promise to the economy” for example, and not every growing, high LQ quadrant represents a clear economic investment target. The quadrants do provide an important starting point for determining which industries need help and how to help them, however. The tables below show the sub-sectors falling under each quadrant. For comparison, each sub-sector is also described by employment, employment growth from 2001 to 2004, growth rate, dollar per job⁵, and approximate LQ⁶.

⁵ Dollar per job is a rough measure of how well paying the industry group is. It is calculated by dividing total payroll for an industry by the average number of jobs. Caution must be used in interpreting this figure – it can vary significantly by industrial subcategory, and can be subject to large outliers such as a highly paid person (the classic example is Bill Gates) or a high paying occupation within the industry.

Fig 2. Growing, More Specialized

NAICS	Industry Group	Employment	Growth	Rate	\$ Per Job	LQ
551	Management of Companies and Enterprises	15,100	3,600	31%	\$93,900	>1.5
711	Performing Arts, Spectator Sports, and Related Industries	2,700	100	3%	\$82,800	>1
425	Wholesale Electronic Markets and Agents and Brokers	4,400	300	7%	\$58,100	>1
515	Broadcasting (except Internet)	2,100	300	18%	\$58,000	>1
533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	300	100	49%	\$54,000	>1.5
524	Insurance Carriers and Related Activities	16,800	600	4%	\$53,700	>1
621	Ambulatory Health Care Services	32,700	<50	0%	\$52,500	>1
522	Credit Intermediation and Related Activities	22,200	500	2%	\$51,000	>1
611	Educational Services	61,100	1,600	3%	\$41,900	>1
531	Real Estate	7,800	<50	0%	\$37,500	>1
532	Rental and Leasing Services	3,500	300	8%	\$35,800	>1
451	Sporting Goods, Hobby, Book, and Music Stores	4,200	100	2%	\$32,300	>1
485	Transit and Ground Passenger Transportation	6,700	300	5%	\$31,100	>1.5
623	Nursing and Residential Care Facilities	19,200	1,800	10%	\$24,600	>1
624	Social Assistance	13,800	300	2%	\$22,500	>1
812	Personal and Laundry Services	9,800	100	1%	\$19,600	>1
448	Clothing and Clothing Accessories Stores	9,200	1,200	15%	\$18,400	>1
722	Food Services and Drinking Places	48,600	2,600	6%	\$12,100	>1

This quadrant particular interest because it may contain industries in a position to act as “driver industries” for the county – driving the economy through export growth. Strategies for these industries should focus on creating and maintaining an environment where firms can thrive.

The list certainly contains some industries that are probably *not* viable economic drivers for the county, i.e. are not growing due to competitive advantages or increased demand. Some are “person serving” industries that may be growing in response to population growth in the demographic they serve. Some lower paying industries may be growing due the addition of dislocated or displaced workers from better paying industries through economic restructuring from the ongoing trends in the global economy, and national economic recession in particular.⁷ Examining the industries by dollar per job can be helpful in assessing their promise. For example industries that fall below 30K in this measure seem less capable of driving the economy. These industries fall below the bold line in Figure 2.

⁷ Aside from thinking carefully about why industries are growing, the real reason why their specialization (LQ) is high should also be considered. Although a high LQ can indicate that competitive advantages are present, high employment LQs can also result when an industry in an area employs a higher than typical number of workers (compared to national staffing patterns) to produce the same level of output. If true the LQ may not describe an advantage, but instead an inefficient utilization of labor.

Fig 3. Growing, Less Specialized Industries

NAICS	Industry Group	Employment	Growth	Rate	\$ Per Job	LQ
924	Administration of Environmental Quality Programs	400	100	30%	ND	<.5
111	Crop Production	200	<50	2%	NA	<.5
213	Support Activities for Mining	300	100	21%	\$70,600	<1
926	Administration of Economic Programs	1,600	500	43%	\$63,400	<.5
922	Justice, Public Order, and Safety Activities	2,200	100	6%	\$59,100	<.5
923	Administration of Human Resource Programs	1,000	<50	3%	\$57,400	<.5
525	Funds, Trusts, and Other Financial Vehicles	400	100	36%	\$51,300	<1
424	Merchant Wholesalers, Nondurable Goods	6,400	600	10%	\$49,500	<1
321	Wood Product Manufacturing	400	ND	ND	\$38,900	<.5
322	Paper Manufacturing	600	<50	8%	\$36,000	<1
441	Motor Vehicle and Parts Dealers	8,900	500	6%	\$34,700	<1
444	Building Material and Garden Equipment and Supplies Dealers	5,300	500	9%	\$30,300	<.5

Some of these industries may be on their way to being more specialized, driver industries and bear investigation. Other industries may be growing for the reasons described previously.

Fig 4. Declining, More Specialized Industries

NAICS	Industry Group	Employment	Growth	Rate	\$ Per Job	LQ
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	4,700	-400	-8%	\$119,400	>1
331	Primary Metal Manufacturing	5,800	-1,000	-15%	\$65,500	>1.5
324	Petroleum and Coal Products Manufacturing	1,600	-500	-22%	\$64,600	>1.5
541	Professional, Scientific, and Technical Services	48,500	-4,600	-9%	\$63,400	>1
518	Internet Service Providers, Web Search Portals, and Data Processing Services	2,800	-800	-23%	\$62,400	>1
517	Telecommunications	7,000	-1,300	-16%	\$62,300	>1
327	Nonmetallic Mineral Product Manufacturing	3,000	-700	-20%	\$55,700	>1
491	Postal Service	6,900	-700	-10%	\$52,400	>1.5
492	Couriers and Messengers	3,800	-300	-7%	\$49,500	>1
925	Administration of Housing Programs, Urban Planning, and Community Development	1,000	-100	-10%	\$43,300	>1.5
622	Hospitals	45,700	-700	-1%	\$41,900	>1.5
921	Executive, Legislative, and Other General Government Support	17,400	-1,000	-6%	\$41,400	>1
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	9,900	-300	-3%	\$26,100	>1
446	Health and Personal Care Stores	6,100	-600	-9%	\$25,000	>1
712	Museums, Historical Sites, and Similar Institutions	1,400	-100	-5%	\$24,600	>1
445	Food and Beverage Stores	18,600	-200	-1%	\$21,700	>1
519	Other Information Services	1,000	-200	-17%	\$19,900	>1
453	Miscellaneous Store Retailers	5,300	-100	-2%	\$17,700	>1

Unfortunately this list contains several industries traditionally thought of as keys to Pittsburgh's economy. Thankfully not all of them are declining at the same rate, and many are large enough to sustain a long period of decline at current rates. Some of these industries are known to be in transition due to economic restructuring, and may benefit from assistance moving forward. Again, particular attention might be given to those sub-sectors with dollar per job figures above \$30,000.

This table also reveals that while healthcare sector grew overall from 2001 through 2004, the growth originated from residential care and doctor's offices, not hospitals.

Fig 5. Declining, Less Specialized Industries

NAICS	Industry Group	Employment	Growth	Rate	\$ Per Job	LQ
212	Mining (except Oil and Gas)	400	-100	-22%	ND	<.5
814	Private Households	NA	NA	NA	NA	NA
516	Internet Publishing and Broadcasting	0	-100	-72%	\$84,100	<.5
211	Oil and Gas Extraction	400	-100	-27%	\$83,900	<1
486	Pipeline Transportation	100	> -50	-1%	\$73,600	<.5
325	Chemical Manufacturing	3,900	-1,900	-33%	\$70,400	<1
221	Utilities	4,000	-2,100	-34%	\$66,100	<1
336	Transportation Equipment Manufacturing	1,900	-1,300	-40%	\$65,900	<.5
334	Computer and Electronic Product Manufacturing	4,100	-900	-18%	\$60,100	<1
423	Merchant Wholesalers, Durable Goods	14,600	-2,400	-14%	\$58,400	<1
511	Publishing Industries (except Internet)	3,700	-300	-7%	\$55,500	<1
333	Machinery Manufacturing	3,500	-1,100	-25%	\$55,300	<1
237	Heavy and Civil Engineering Construction	4,000	-700	-15%	\$54,200	<1
339	Miscellaneous Manufacturing	3,300	-200	-6%	\$52,100	<1
928	National Security and International Affairs	1,000	-100	-10%	\$51,500	<.5
335	Electrical Equipment, Appliance, and Component Manufacturing	1,300	-200	-15%	\$47,300	<1
562	Waste Management and Remediation Services	1,400	-400	-23%	\$47,000	<1
236	Construction of Buildings	8,000	-600	-7%	\$45,100	<1
488	Support Activities for Transportation	2,100	-200	-10%	\$44,200	1
332	Fabricated Metal Product Manufacturing	5,200	-1,000	-16%	\$43,700	<1
312	Beverage and Tobacco Product Manufacturing	500	-100	-14%	\$41,100	<1
238	Specialty Trade Contractors	18,500	-2,800	-13%	\$40,800	<1
484	Truck Transportation	4,400	-300	-6%	\$39,500	<.5
323	Printing and Related Support Activities	3,100	-700	-17%	\$38,700	<1
493	Warehousing and Storage	1,300	> -50	-3%	\$37,100	<.5
326	Plastics and Rubber Products Manufacturing	1,100	-500	-33%	\$36,800	<.5
454	Nonstore Retailers	2,100	-400	-17%	\$36,000	<1
999	Unclassified/Unknown	ND	ND	ND	\$35,700	ND
313	Textile Mills	200	> -50	-4%	\$34,500	<.5
337	Furniture and Related Product Manufacturing	700	-300	-30%	\$32,600	<.5
311	Food Manufacturing	3,600	-200	-6%	\$32,200	<.5
811	Repair and Maintenance	5,700	-300	-5%	\$30,000	<1
314	Textile Product Mills	300	> -50	-12%	\$28,200	<.5
512	Motion Picture and Sound Recording Industries	1,100	> -50	0%	\$28,000	<1
442	Furniture and Home Furnishings Stores	2,700	-200	-7%	\$27,600	<1
561	Administrative and Support Services	38,900	-200	-1%	\$24,800	<1
443	Electronics and Appliance Stores	2,400	-600	-20%	\$24,200	<1
721	Accommodation	5,100	-100	-2%	\$22,100	<1
452	General Merchandise Stores	12,400	-1,900	-13%	\$17,200	<1
713	Amusement, Gambling, and Recreation Industries	6,800	-100	-2%	\$16,000	<1
447	Gasoline Stations	3,000	-100	-2%	\$15,400	<1

While there are certainly some low priority industries on this list, others entries are troubling to see. Some may bounce back with a strong economic recovery, business retention services, or other targeted policy actions designed to improve

the business environment in which they operate. Otherwise, planners may want to focus attention on industries in other quadrants first.

Due to rules intended to prevent accidental disclosure of firm employment information for the following industries are not available. Most of these industry groups make up a relatively small portion of the economy, with the exception of air transportation.^{8,9}

Figure 6. Suppressed Industry Groups

NAICS	Industry Groups
521	Monetary Authorities - Central Bank
112	Animal Production
113	Forestry and Logging
114	Fishing, Hunting and Trapping
115	Support Activities for Agriculture and Forestry
487	Scenic and Sightseeing Transportation
483	Water Transportation
482	Rail Transportation
481	Air Transportation
316	Leather and Allied Product Manufacturing
315	Apparel Manufacturing

On Chemical Manufacturing

The numbers may encourage planners to look “beyond the numbers” with industries currently under consideration for targeting. To use chemical manufacturing as an example, although this industry certainly pays very well (and has experienced growing wages nationally), county employment has fallen off (also consistent with national trends), and the county no longer can be said to “specialize” in this industry based on our criteria. The decline in employment may be due to a number of factors. Already capital intensive, this industry is experiencing increasing productivity, allowing it to produce more with less labor.¹⁰ Some production may be relocating overseas (another industry trend in certain segments), or this could be a normal reaction to the business cycle. The real answer should be investigated and considered in light of other factors. If productivity is the culprit, then (depending on the process used) while expansions or relocations may not result in significant numbers of jobs, the fact that chemical production usually has a significant multiplier effect (because of the large number

⁸ Further, Rail Transportation employment is not covered under QCEW/ES-202 data.

⁹ The BLS website provides estimated QCEW employment for Air Transportation based on private employment only (a subset of the data we used). Although data for 2001 and 2002 for this figure was also non-disclosable, figures for 2003 (9,447), 2004 (8,451), and a preliminary figure for 2005 (5,353) underscore what newspaper headlines have already told us, that air transportation continued to decline during the period.

¹⁰ American Chemistry Council:
http://www.americanchemistry.com/s_acc/sec_directory.asp?CID=378&DID=1262.

of goods and services required for production), the decline in jobs need not be a “showstopper” for investment. Nevertheless the drop should be a signal to look closer at current prospects.¹¹

Caveats

Aside from numerous limitations associated with the QCEW data¹², several caveats must be kept in mind when reading the results.

- **Aggregation** – Although more detailed than industry sectors, the three digit industry sub-sectors listed in the tables above are still aggregated. Two industries within the same sub-sector can have very different levels of growth and specialization, for example. Even a single, particularly large firm can dominate the numbers for an entire sub-sector. The main point is that growth and specialization may not be the same across all firms and industries, and further investigation may be necessary to find the better performers in each sub-sector.
- **Regional Context** – Our regional economy does not stop at the county border. Despite their relatively small size in the county industries such as mining and machinery manufacturing play an important role to in the regional economy of southwestern Pennsylvania overall. Before eliminating any industry that performs well in terms of dollar per job or specialization, planners may also want to consider how the industry compares on a regional basis (across the seven to nine county area, for example). Should the County choose to take a “cluster approach” to industry targeting, it will be crucial for the geographical scope of such clusters to be on a regional, rather than county basis. Industry clusters do not stop at the County borders.
- **Trend Extrapolation** – This analysis used employment growth from 2001 to 2004 to assign industries to quadrants. This approach

¹¹ Industry literature suggests that chemical manufacturing margins have come under increased cost pressure from suppliers (crude oil, natural gas), and (for consumer products) buyers. This is worth considering in estimating business tax proceeds.

¹² QCEW/ES-202 data measures employment via quarterly unemployment insurance contribution reports filed with state employment security agencies. Although the U.S. Bureau of Labor Statistics estimates that the QCEW program covers 97% of non-farm payroll jobs, QCEW does not cover all forms of employment. Known outages include military personnel, elected state and local officials, private K-12 schools, certain religious organizations, post-secondary student on campus employment, domestic (butlers, maids, gardeners, etc.), railroad, and contract farm worker employment. Also excluded are sole proprietorships, partnerships, and other forms of self-employment not falling under wage and salaried employment. Because of these outages, the numbers in this section should be considered a subset of the figures on county employment in the section “Allegheny County Economic Trends” elsewhere in this document. The latter section uses data from the Bureau of Economic Analysis which includes QCEW data, but also supplements this data with estimates of many types of the uncovered employment described above. Despite this, ES-202 data was selected for this analysis since it allows a more detailed look at industrial employment, and because none of the kinds of employment not covered by ES-202 seems particularly promising for targeting purposes.

assumes past growth and decline will continue. It goes without saying that the employment trend for each industry may not continue moving forward. Growing industries may sputter, and declining industries may rebound. Predicting the future based on past trends can be dangerous, but is often the best we can do with dry government data. Thankfully, the reliability of the results can be improved when what the dry data predicts is validated through discussions with local employers.

- **New Industries** – Some of the most promising avenues for economic growth are in emerging industries so new that they have yet to be given their own categories under the NAICS system. These industries must be identified and assessed through other means.
- **Constraints** – The numbers do not reveal to what extent the attraction, expansion, or retention of any industry may be inhibited due to resource, infrastructure, workforce, or other constraints. The sample matrices¹³ on the next two pages can serve as a guide for assessing the “fit” between community assets and industry infrastructure needs.

Integrating Economic Development with Workforce Development

In today’s rapidly evolving global economy, regions cannot ignore the implications of workforce and the workforce development system in the context of economic development. This topic deserves special mention.

In the race to lure businesses to their communities, developers and public officials often overlook the question of the quantity and quality of available the labor supply. A typical scenario goes like this: a large retail box locates near a community with high disposable income, but discovers that the area is short on workers willing to work for entry level retail wages, there is no established public transit line connecting the new business to communities with such workers, and even if there were, the site has inadequate sidewalks to assure safe passage from the bus stop to the job. The problem is not limited to lower wage retail developments however.

The more skills a firm requires, the more value it will likely add to the local industrial base, and the more revenue it will generate for a region. Yet the more skills a firm requires, the greater the challenge of securing a qualified workforce becomes. Every major economic development project should include an estimated staffing level and occupational matrix, with “firm critical” occupations identified, along with a corresponding recruitment plan for each. Developers and officials should help employers connect with local universities, CareerLink, workforce investment boards, community colleges/technical schools, career and

¹³ These matrices are from the CED’s [Cluster Based Community Development Strategies](#) guidebook.

technical schools, community based and faith based organizations, staffing/temp agencies and other job training/job placement providers near the worksite where appropriate; while employers with large numbers of jobs requiring technical skills should be encouraged to partner with nearby school districts to provide content or activities for career development curriculum.

For firms unable to pay irresistible wages and benefits, building a workforce pipeline can take a lot more effort than building a water line. It often requires a trial and error process in which an employer or workforce broker tests (and often rejects) partnerships with several institutions and programs using different approaches before finding a good fit. Planners, developers, and public officials can smooth this process for new employers by helping them engage relevant training providers and workforce intermediaries early in the process so that no unpleasant “workforce surprises” occur when the firm opens for business (if not sooner). Just economic development can reveal problems associated with physical infrastructure that require solutions before projects move forward, planners should also view workforce problems that arise as an opportunity to work with stakeholders to strengthen their communities workforce and career development infrastructure.

Analyzing Industry Compatibility with a Community

Industry: _____

	Industry Demand	Regional Assets	Local Assets	Analysis
Transportation Infrastructure				
Road				
Water				
Air				
Rail				
Public Transit				
Other				
Telecommunications Infrastructure				
Bandwidth				
Type of Service				
Cost				
Reliability				
Other				
Building				
Internal Wiring				
Size (total Square Feet)				
Layout				
Materials				
Floorplates				
Ceiling heights				
Column Widths				
Number of Floors				
Transportation Access				
HVAC				
Specialized facilities				
Cost (Per Square Foot)				
Truck/Rail/Air/Port facilities				
Ownership/Lease				
Other				
Site				
Environmental Issues				
Water				
Sewer				
Electric				
Gas				
Site (Cont.)				

	Industry Demand	Regional Assets	Local Assets	Analysis
Zoning/Permitting				
Cost				
Other				
Labor Force				
Occupations (residents)				
Critical occupations (cluster)				
Skills				
Education Levels				
Colleges/Universities/training providers				
Cost				
Other				
Miscellaneous				
Suppliers				
Customers				
Business Services				
R&D Facilities				
Taxes and Incentives				
Nature of firms (age, size, etc.)				
Quality of Life				
Other				

Next Steps and Recommendations

This analysis is intended to inform the discussion concerning the county’s economic development priorities. Although it contains useful information, because of the limitations described above, QCEW data should not be relied upon alone to make such important decisions. On the other hand, planners rely should not rely solely on anecdotal “local wisdom” to identify investment targets without considering these numbers.

CED recommends that the county engage in a wholistic decision process to ensure its final decisions on economic development priorities take into account all relevant factors within a reasonable amount of effort. CED has developed such an approach through its **Cluster Based Community Strategies** guidebook. Additional steps that might be undertaken under such an approach include the following.

- Taking a sharper picture of how industries compare by repeating the quadrant analysis at the four or six NAICS digit level of detail, within permissible disclosure rules. The results would more clearly separate the wheat from the chaff and help identify targets for business expansion and retention services.
- Conducting a supply chain analysis to identify desired business supplier and customer industries for growing firms in order to identify business attraction targets.

- Supplementing the numbers with targeted interviews of relevant local employers to validate trends in growth and decline, and to confirm employer needs for business services (retention, expansion), and suppliers and customers. Interviews on the relative fit of community assets vs. industry needs should also be conducted with officials in relevant public services, real estate professionals, training providers (including post-secondary institutions) and university faculty/staff in industry relevant fields.

Objective data on employment and information taken directly from employers can be used to validate each other. When such validated information is combined with good knowledge of the constraints imposed by existing infrastructure, natural resources, and workforce supply, what can and should be done in terms of business retention, expansion, and attraction will become much clearer.