

## Economy and Employment Profile

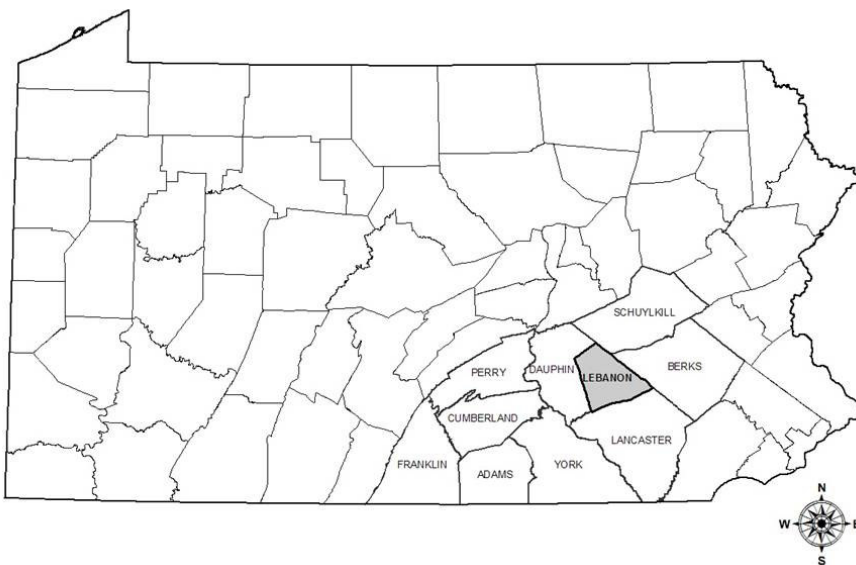
This profile provides a detailed assessment of Lebanon County's economic structure and performance, as well as its labor force. The profile begins with an overview of the economy and a description of the technical terms used throughout the text. It then analyzes available data for the following topics and provides a basis for strategic planning for a healthy and sustainable economy:

- Economic Performance
- Industrial Structure
- A Closer Look at Manufacturing
- Retention, Expansion, and New Business in Lebanon County
- Lebanon County Top Employers
- A Closer Look at the Agriculture Sector
- Workforce Characterization and Trends
- Employment by Place of Residence
- Resident Employment by Industry
- Commuting Patterns
- Educational Attainment
- Relationships to Infrastructure Conditions
- Other Conditions

### Overview

Lebanon County's economy has evolved from one based primarily on agricultural pursuits to a diverse mixture of agricultural, industrial, and service enterprises. Agriculture is still very important to the county, as shown by land use and sales figures. The iron and steel industries also played a formative role in Lebanon County's economy. Early furnaces and forges took advantage of locally available natural resources to produce pig iron, agricultural tools, early machinery, and ultimately finished steel products. The American steel industry, led by Bethlehem Steel Corporation, was a focus of the county's economy from the 1910s through the 1960s. Stiff competition from overseas steel markets led to the decline of the American steel industry in the 1970s and resulted in the closure of several regional employers. Over the past 30 years, the county's economy has been in a state of transition and diversification. Today, manufacturing, retail trade and a variety of service industries are the leading employers in Lebanon County. The utilities, health care and social assistance industries also capture a significant percentage of total employment.

The City of Lebanon has traditionally been the population and economic center of the Lebanon Valley. However, in recent years, both population and jobs have migrated to the surrounding townships and in some cases, out of the county. Yet the city is still an integral part of the county's economy. It remained the top commuter destination for county residents in 2000. And organizations such as Lebanon 2000 and the Community of Lebanon Association are working to sustain the city's prominence within Lebanon County.



Lebanon County is part of a much broader regional economy that includes Adams, Berks, Cumberland, Dauphin, Franklin, Lancaster, Perry, Schuylkill, and York Counties. Its location in the Keystone State allows businesses in the county to take advantage of the northeastern and mid-Atlantic markets for raw materials and finished goods. The Lebanon Valley Economic Development Corporation (LVEDC) estimates that approximately 45% of the U.S. population, 60% of the Canadian population, and 45% of U.S. manufacturers are within 500 miles of Lebanon County. In addition to excellent highway access via Interstates 81, 78, and 76, the Norfolk Southern Harrisburg Line bisects the

county and provides area businesses with access to rail freight services. Harrisburg International Airport, located in adjacent Dauphin County, provides nearby air freight and passenger transport for local enterprises.

### Description of Terms

The following terms are used throughout this profile. Additional definitions can be found in the glossary.

#### Earnings

Earnings is defined as the algebraic sum of wage or salary income and net income from self-employment. Earnings represent the amount of income received regularly before deductions for personal income taxes, Social Security, bond purchases, union dues, Medicare deductions, etc.

#### Employed

Employed includes all civilians 16 years old and over who were either (1) "at work" -- those who did any work at all during the reference week as paid employees, worked in their own business or profession, worked on their own farm, or worked 15 hours or more as unpaid workers on a family farm or in a family business; or (2) were "with a job but not at work" -- those who did not work during the reference week but had jobs or businesses from which they were temporarily absent due to illness, bad weather, industrial dispute, vacation, or other personal reasons. Excluded from the employed are people whose only activity consisted of work around the house or unpaid volunteer work for religious, charitable, and similar organizations; also excluded are people on active duty in the United States Armed Forces. The reference week is the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed. This week may not be the same for all respondents.

#### Labor force

The labor force includes all people classified in the civilian labor force, plus members of the U.S. Armed Forces (people on active duty with the United States Army, Air Force, Navy, Marine Corps, or Coast Guard). The Civilian Labor Force consists of people classified as employed or unemployed.

#### Resident employment by Industry and Occupation

Resident employment refers to a person's employment characteristics, as reported by responses to long-form questionnaire items, which were asked of a sample of the population 15 years old and over. Industry relates to the kind of business conducted by a person's employing organization; occupation describes the kind of work a person does on the job.

#### Unemployed

All civilians 16 years old and over are classified as unemployed if they (1) were neither "at work" nor "with a job but not at work" during the reference week, and (2) were actively looking for work during the last 4 weeks, and (3) were available to accept a job. Also included as unemployed are civilians who did not work at all during the reference week, were waiting to be called back to a job from which they had been laid off, and were available for work except for temporary illness.

Source: US Census Bureau

### Economic Performance

The structure and performance of Lebanon County's economy are evaluated primarily using available public data on employment figures and employee earnings.<sup>1</sup> This section examines the employment in terms of "place of work"; that is, workers employed in Lebanon County regardless of residency. These data thus reflect the local industry performance and employment opportunities available in Lebanon County. The south central Pennsylvania region referenced in this section comprises Adams, Cumberland, Dauphin, Franklin, Lancaster, Lebanon, Perry, and York Counties.

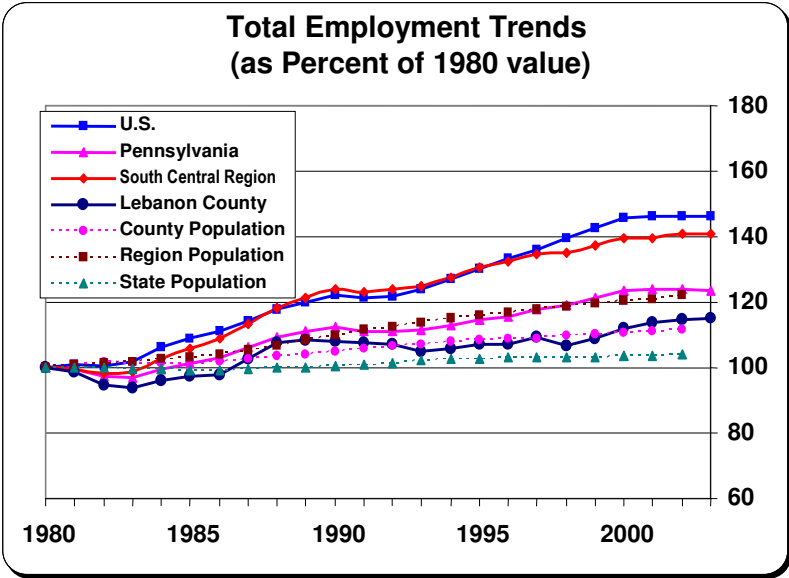
A look at data on total employment trends reveals modest growth rates for Lebanon County, in stark contrast to the growth trends for the nation overall and the south central Pennsylvania region.

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<sup>1</sup> Employment data come from three sources: 1) The Center for Workforce Information and Analysis within the state Department of Labor and Industry and 2) the U.S. Bureau of Labor Statistics. Both provide data on employment covered under unemployment insurance programs. The following categories are excluded from these data: federal employment, interstate railroads, self-employed, and household workers. These data include approximately 95% of all employment. 3) The U.S. Bureau of Economic Analysis begins with this data and adds estimates for the missing classes of employment (listed above), as well as provides earnings statistics for all of these categories. Employment data from the U.S. BEA, however, are only available at a more aggregated industry sectoring scheme. All of these employment data are for both full-time and part-time employment.

- The recession of the early 1980s hit Lebanon County the hardest of the four surveyed geographies (Figure 3-1). Lebanon County’s total employment in 2003 was only 15% higher than in 1980, in contrast to 40% growth in jobs for the region overall. In relation to overall population growth, Lebanon County’s population and employment growth have tracked closely, while employment growth in the region overall has well outpaced its population growth.
- Lebanon County is well within the mainstream of Pennsylvania counties in terms of total employment growth from 1990 to 2001 (Figure 3-2). Among counties in the south central region, Lebanon County lagged behind double-digit growth in Adams, Cumberland, Lancaster, and Perry Counties.
- Lebanon County’s modest employment growth, for the most recent period for which data are available, 2001 to 2003, places it in a relatively favorable light, in contrast to widespread declines in employment across the state (Figure 3-3).
- Since 1980, employment growth in the county occurred exclusively in the private sector, and in fact, employment in the government sector has declined (Figures 3-4 and 3-5). The relative rankings of trends by the various geographies are the same: national, followed by regional, state, and county, for both private and government sectors. The region as a whole has kept closer pace with national trends than with Pennsylvania.

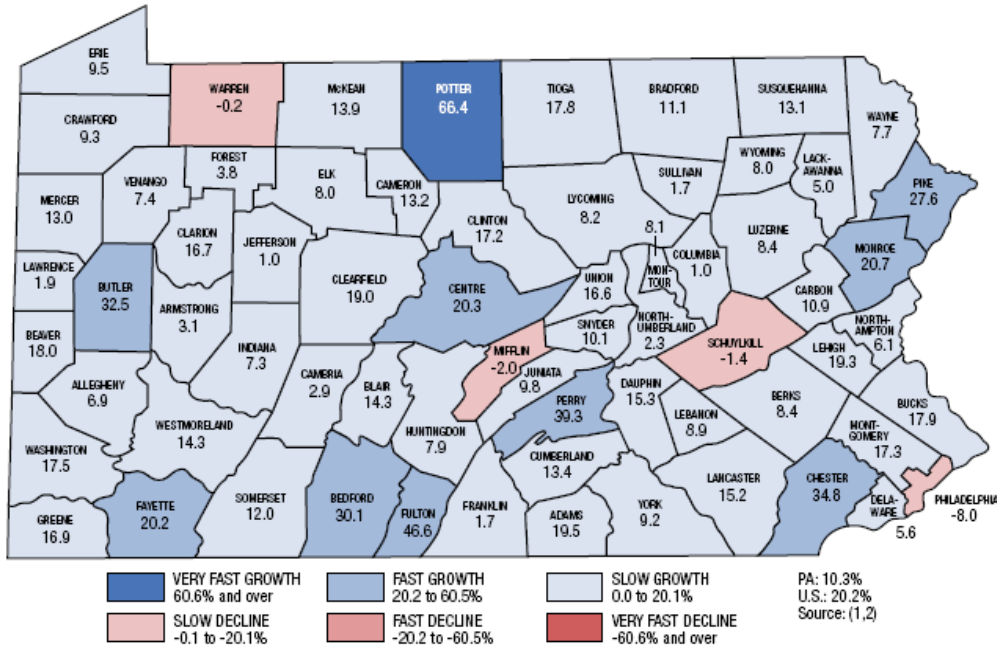
Figure 3-1 Total Employment Trends



Source: US Bureau of Economic Analysis

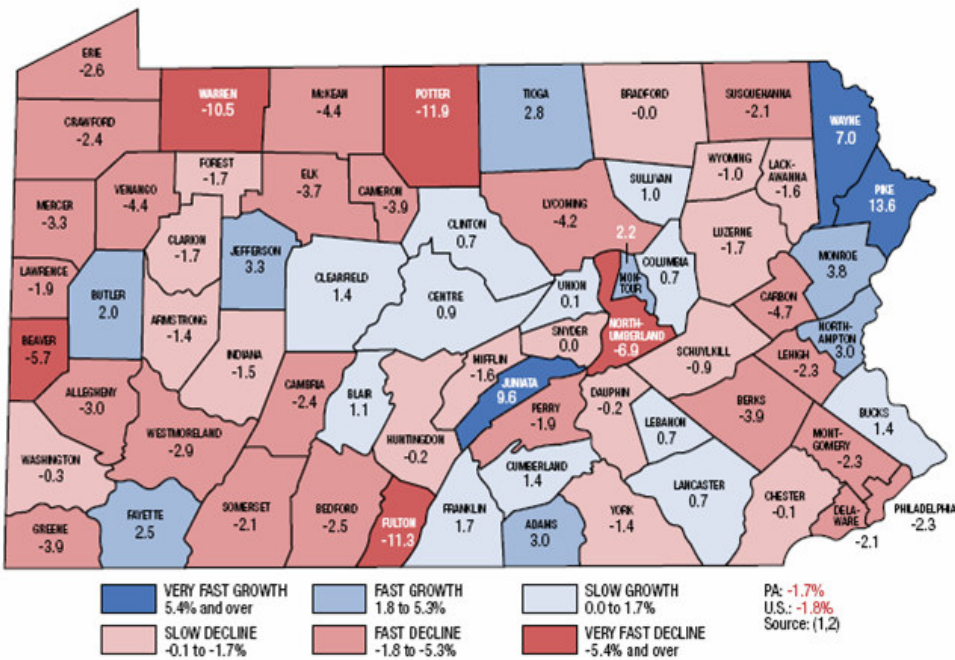
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Figure 3-2 Percent Change in Total Employment, 1990–2001



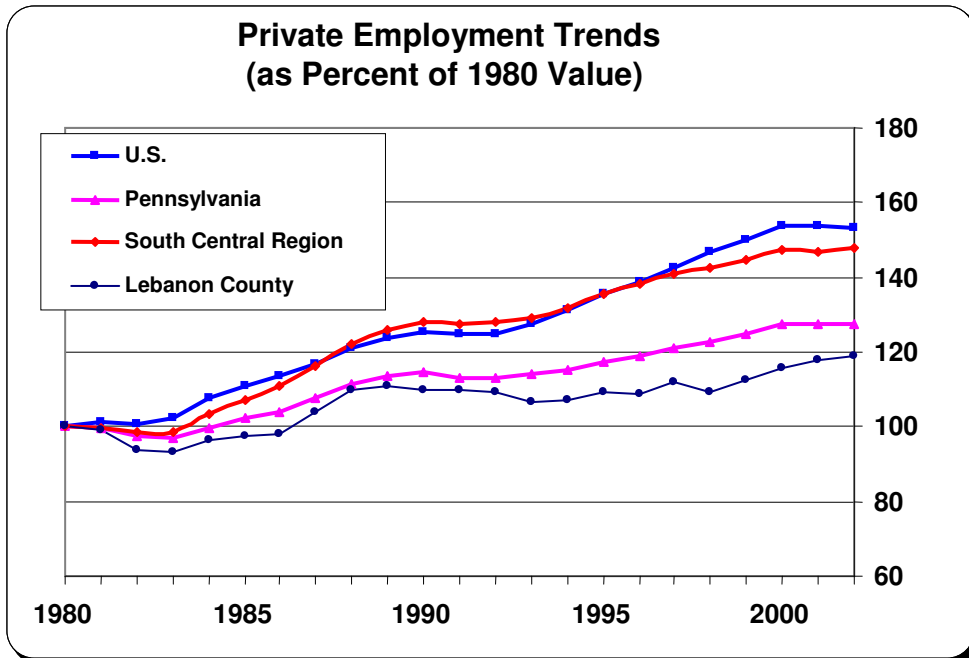
Source: Road to 2005, Center for Economic and Community Development, Penn State University, 2005.

Figure 3-3 Percent Change in Total Employment, 2001–2003



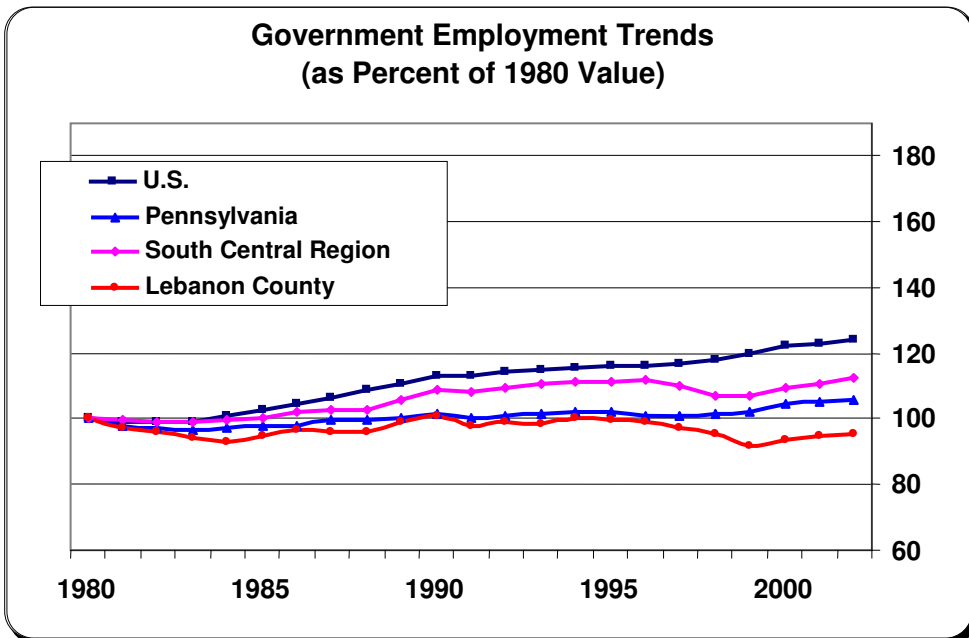
Source: Road to 2005, Center for Economic and Community Development, Penn State University, 2005.

Figure 3-4 Private Employment Trends



Source: US Bureau of Economic Analysis

Figure 3- 5 Government Employment Trends



Source: Bureau of Economic Analysis

## Industrial Structure

The examination of Lebanon County's industrial structure begins with a snapshot look at employment and earnings in broadly defined sectors within the county. This assessment includes comparative figures for the region, the state, and the nation. A review of trends in manufacturing employment follows. The section concludes with a close-up view of more narrowly defined industrial categories that have special prominence in Lebanon County's economy. Readers interested in a better understanding of the makeup of these sectors are referred to Appendix A, which lists the industry categories in the North American Industrial Classification System (NAICS).

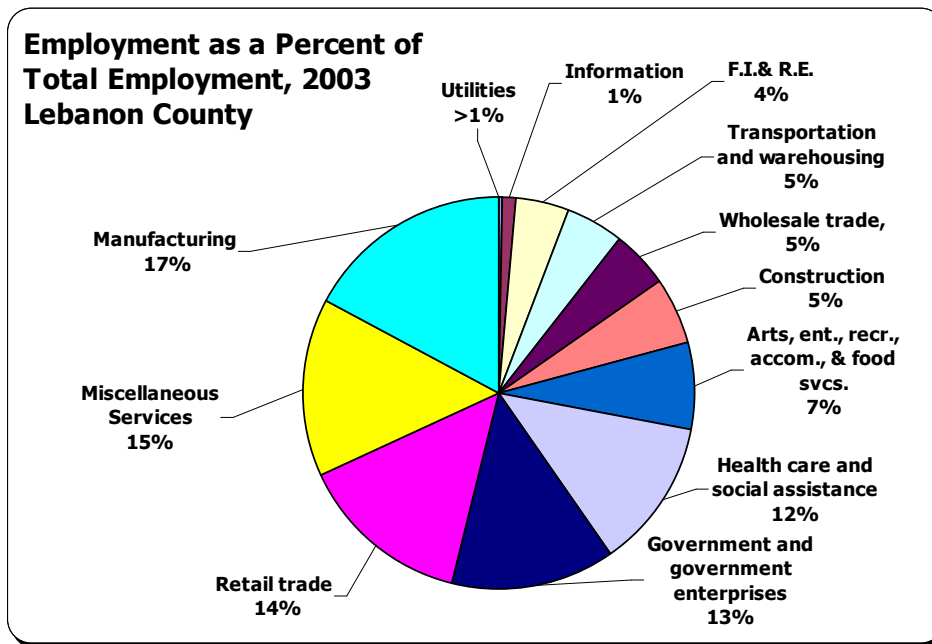
## Employment and Earnings

Figures 3-6 and 3-7 depict the composition of Lebanon County's economy based on employment and earnings, respectively, based upon data available from the U.S. Bureau of Economic Analysis.

According to the Bureau of Economic Analysis, the following industries each comprised over 10% of total employment in the county in 2003 (Figure 3-6). This indicates a relatively diverse economy within the county.

- Manufacturing (17%)
- Miscellaneous Services other than health care and social assistance (15%)
- Retail trade (14%)
- Government and government enterprises (13%)
- Health care and social assistance (12%)

**Figure 3-6 Employment as a Percent of Total Employment**



Source: US Bureau of Economic Analysis, REIS, Series CA25

Miscellaneous Services: services other than health and social assistance; includes education

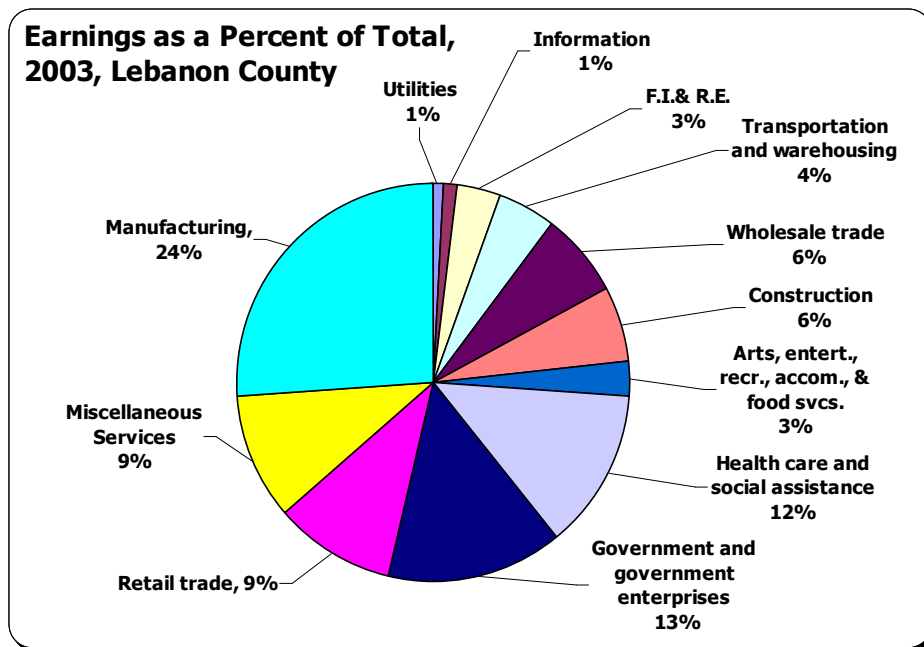
F.I.&R.E.: Finance, Insurance, Real Estate and Rental and Leasing

Arts, ent., recr., accom., & food svcs.: Arts, Entertainment, Recreation, Accommodations, & Food Services

The sheer number of jobs is only part of the picture. Some industries play a larger role in the economy by injecting more labor income, due to a higher rate of earnings per job. This higher earnings rate results from a combination of higher wages and higher average hours worked per job. Note that the employment figures do not distinguish between full- and part-time employments.

- When measured by earnings proportions, manufacturing takes on an even greater prominence, accounting for nearly one-fourth of all earnings in the county in 2003 (Figure 3-7). Not surprisingly, the retail trade and miscellaneous services (services other than health care and social assistance) decline in prominence when the measure changes from jobs to earnings due to higher proportions of part-time jobs and lower wages.

**Figure 3-7 Earnings as a Percent of Total Earnings**



Source: US Bureau of Economic Analysis, REIS, Series CA25.

Miscellaneous Services: services other than health and social assistance; includes education

F.I.&R.E: Finance, Insurance, Real Estate and Rental and Leasing

Arts, ent., recr., accom., & food svcs.: Arts, Entertainment, Recreation, Accommodations, & Food Services

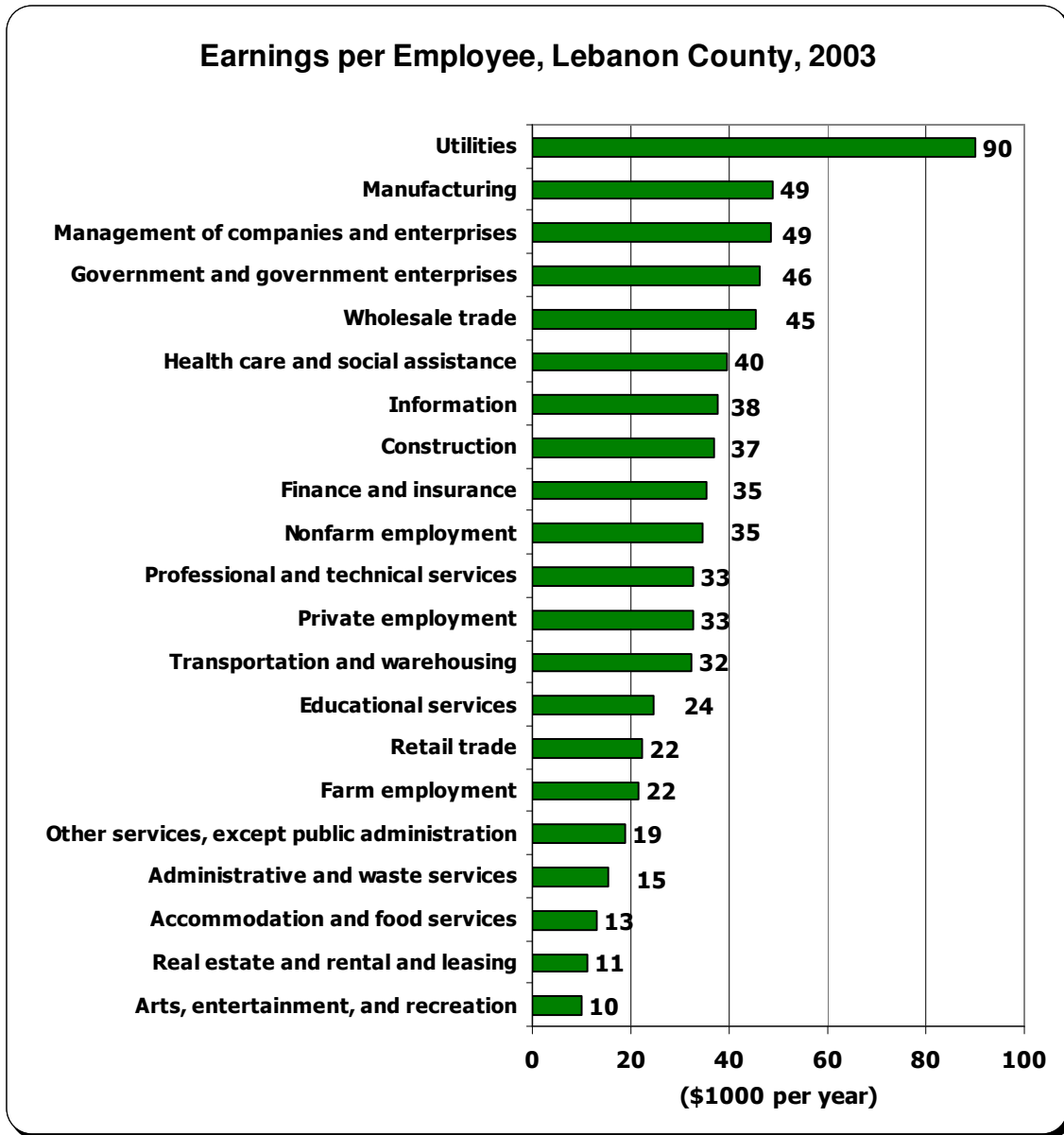
Figure 3-8 illustrates the differences between the previous two pie charts through earnings per employee comparisons.

- Top industries in terms of earnings per employee are utilities, manufacturing, wholesale trade, management, and government. Again, the prevalence of part-time work limits the use of this data to make hourly wage comparisons.

Figures 3-9 and 3-10 allow a comparison of non-farm industrial composition across geographies.

- With few exceptions, the economic compositions of the U.S., Pennsylvania, the south central region and Lebanon County are quite similar.
- Manufacturing, miscellaneous services, government, retail trade, health care and social assistance are the top sectors when measuring by proportion of total employment.
- The transportation and warehousing sector is more prominent in both Lebanon County and the region than at the state and national levels. On the other hand, the financial, insurance and real estate sector (FI&RE) is considerably less prominent in the county than at any of the other geographic levels.

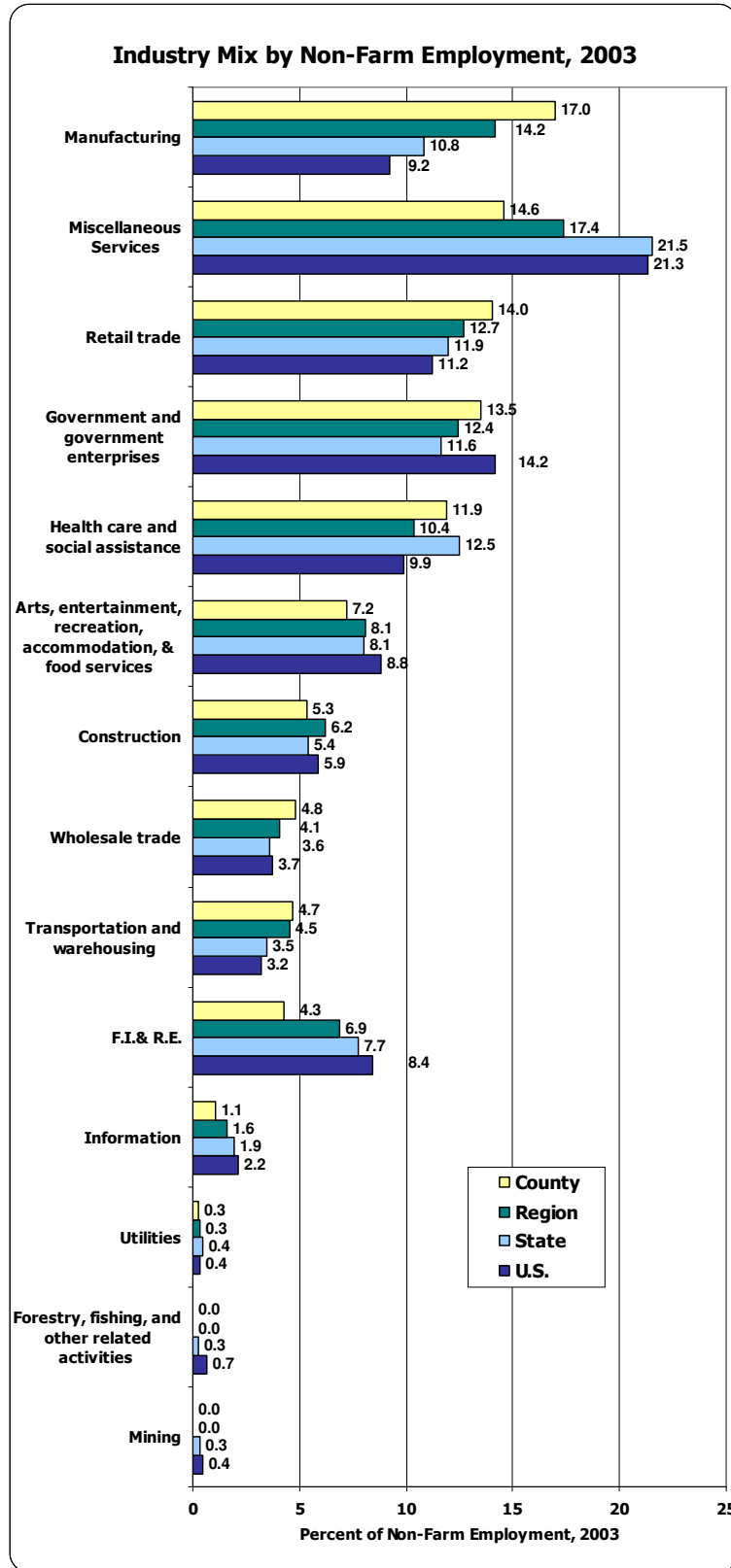
Figure 3-8 Earnings per Employee



Source: US Bureau of Economic Analysis, REIS

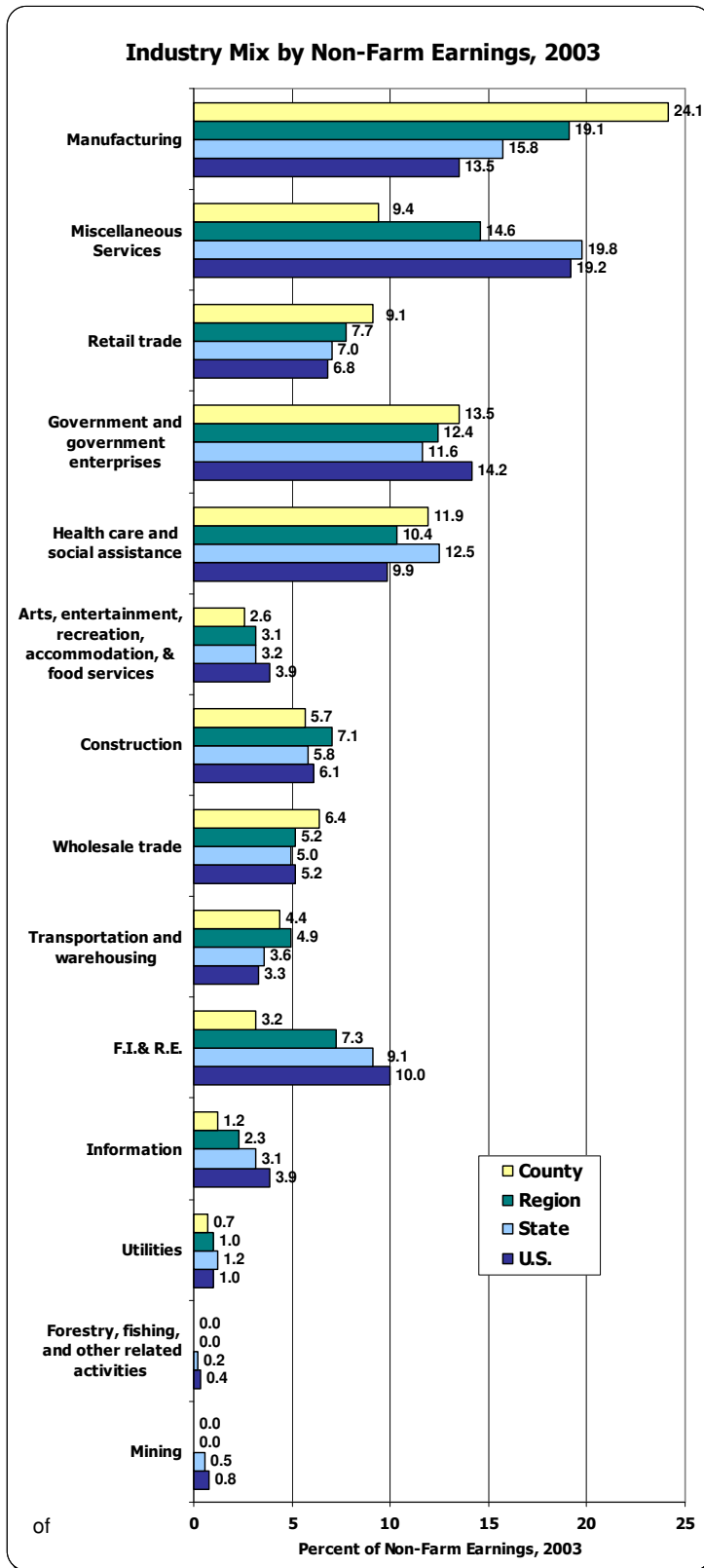


Figure 3-9 Industry Mix by Non-Farm Employment



Source: Bureau of Economic Analysis

Figure 3-10 Industry Mix by Non-Farm Earnings



Source: Bureau of Economic Analysis

### Earnings for Agriculture

Data for the forestry, fishing, and other related activities category and the mining category figures are not available at the regional and county levels due to disclosure policies and the fact that farming data is not included. Therefore, data from the 2002 Census of Agriculture provides some insight into the employment aspects of agriculture in Lebanon County.

- In 2002, there were 1,104 farms operating in Lebanon County, with a total market value of production of over \$191,000,000. This places Lebanon County fifth among Pennsylvania counties.
- The average value of production per farm was \$173,101 and the average net cash farm income from operations in 2002 was \$45,649.
- Lebanon County ranks among the top five counties in Pennsylvania in the following agricultural production categories:
  - Value of livestock, poultry, and their products (3<sup>rd</sup>)
  - Value of sales by the following commodity groups:
    - Tobacco (5<sup>th</sup>)
    - Poultry and eggs (3<sup>rd</sup>)
    - Cattle and calves (5<sup>th</sup>)
    - Milk and other dairy products from cows (4<sup>th</sup>)
    - Hogs and pigs (2<sup>nd</sup>)
    - Aquaculture (5<sup>th</sup>)
  - Number of top livestock inventory items
    - Broilers and other meat-type chickens (3<sup>rd</sup>)
    - Layers 20 weeks old and older (3<sup>rd</sup>)
    - Turkeys (4<sup>th</sup>)
    - Hogs and pigs (2<sup>nd</sup>)
    - Cattle and calves (5<sup>th</sup>)
- According to the Center for Workforce Information and Analysis, annual average wages for farming, fishing, and forestry occupations was \$24,297 in 2003.

### **A Closer Look at Manufacturing**

- Despite the closing of several large manufacturing companies in Lebanon County, manufacturing still plays a disproportionately large role in the county's economy.
- Pennsylvania and the south central region are very mixed with respect to the proportion of total employment in the manufacturing sector (Figure 3-11). Lebanon County is among the upper tier counties in the region as well as the state, and not as highly dependent on manufacturing as some other counties, such as Fulton (31.5%), Snyder (31.4%), and Juniata (31.3%).<sup>2</sup>
- Manufacturing employment demonstrated a slight decline in the county from 1980 to 2000 (Figure 3-12).<sup>3</sup> The decline was even more notable for the region overall and contrasts with an increase of over 20% in manufacturing jobs nationally.
- Non-manufacturing employment increased by over 40% in the county and by nearly 80% in the region (Figure 3-13).
- These manufacturing trends will likely continue with increased economic globalization.

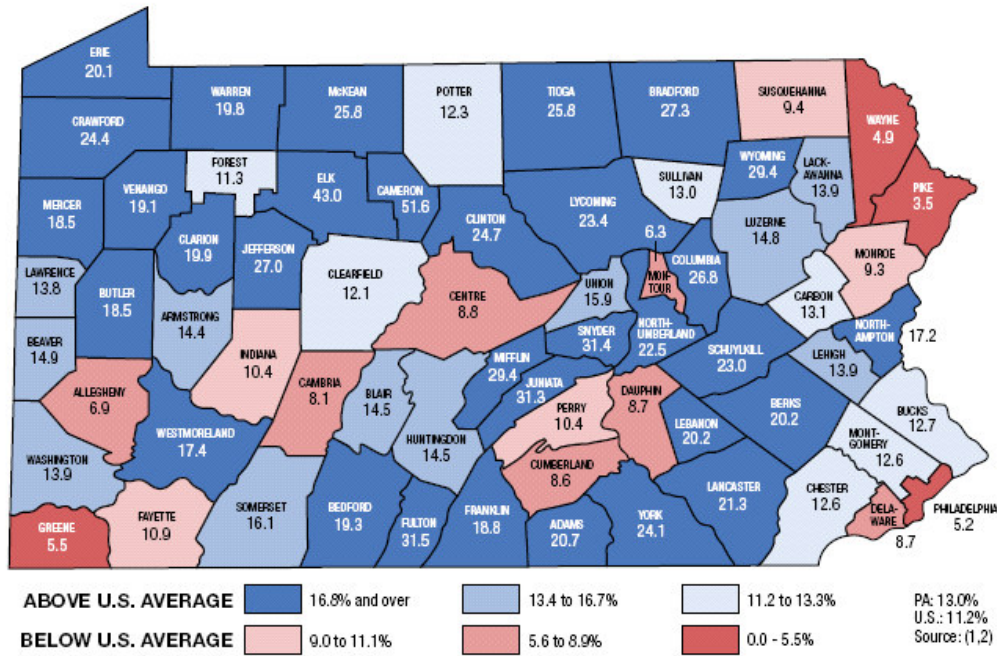
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<sup>2</sup> The percentages in each of the state maps are from the Bureau of Labor Statistics data, which excludes some public sector employment as well as a very limited amount of private sector employment that is not covered under the state unemployment insurance program. While somewhat different from other data presented in this profile, it is nonetheless useful for geographic comparisons.

<sup>3</sup> A change in the industry classification system in 2001 makes it impossible to make reliable comparisons of data collected under the two systems.

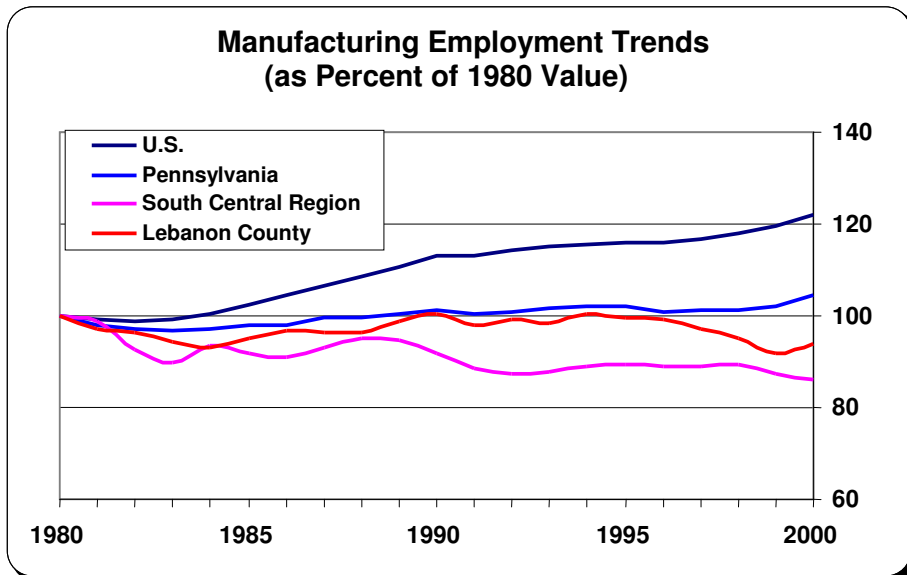
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Figure 3-11 Percent of County Employment in Manufacturing, June 2003



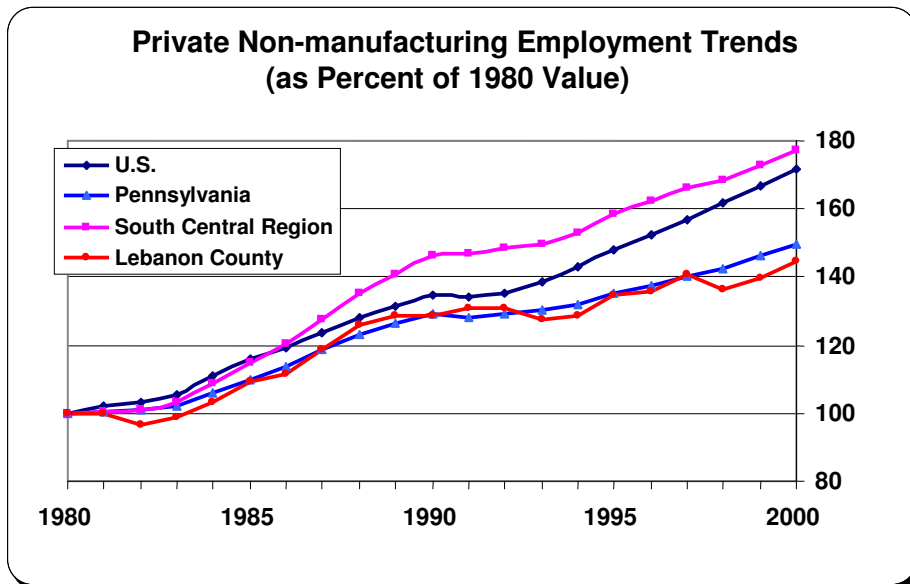
Source: Road to 2005, Center for Economic and Community Development, Penn State University, 2005.

Figure 3-12 Manufacturing Employment Trends, 1980–2000



Source: Bureau of Economic Analysis

Figure 3-13 Non-Manufacturing Employment Trends, 1980–2000



Source: Bureau of Economic Analysis

#### Detailed Sector Analysis of Economic Industries

The remaining analysis of the county's economy examines industries more closely at the "three-digit" level of the NAICS (North American Industrial Classification System).<sup>4</sup> The data are from the Bureau of Labor Statistics, and therefore exclude some public sector employment, as well as some industries not participating in the state unemployment insurance program.

Figure 3-14 depicts the percentage of total employment in each three-digit industry group for each industry with greater than one percent of total county employment and reveals a number of industries in which the county is not typical of the region overall.

- Food service jobs are prominent in both the county and regional private markets.
- Food manufacturing is also prominent in Lebanon County, with nearly 6% of employment (over 2,000 jobs) in the year 2003, followed closely by nursing and residential care facilities (5.2%). These figures were notably higher than the region.
- Among the manufacturing subsectors, fabricated metals and wood products manufacturing are notable, each with over 2% of employees in the county in 2003.

The following sectors are underrepresented in the county compared to the region: professional and technical services, administrative and support services, and specialty trade contractors. On the other hand, the county offers more employment than the region in wood products manufacturing, food manufacturing, nursing and residential care facilities, truck transportation, general merchandise stores, electronic markets and agents and brokers, among others.

While the data in Figure 3-14 are interesting, they more effectively characterize the county's economic strengths when placed in the context of earnings. Figure 3-15 illustrates this comparison in terms of location quotients. The location quotient allows a comparison of Lebanon County's economy to the United States economy by calculating the ratio of the category's percentage of employment in Lebanon County to its percentage of employment in the United States. Industries with a location quotient greater than one are more highly represented in the county than they are in the nation. A location quotient well over one suggests that the county "specializes" in that industry. Traditionally, a location quotient over one indicates that the industry is likely one in which the specified geography exports product outside its borders, providing a source of income coming *into* the region.

<sup>4</sup> More information on the NAICS can be found at the U.S. Department of Labor, Bureau of Labor Statistics website, <http://www.bls.gov/bls/naics.htm>.

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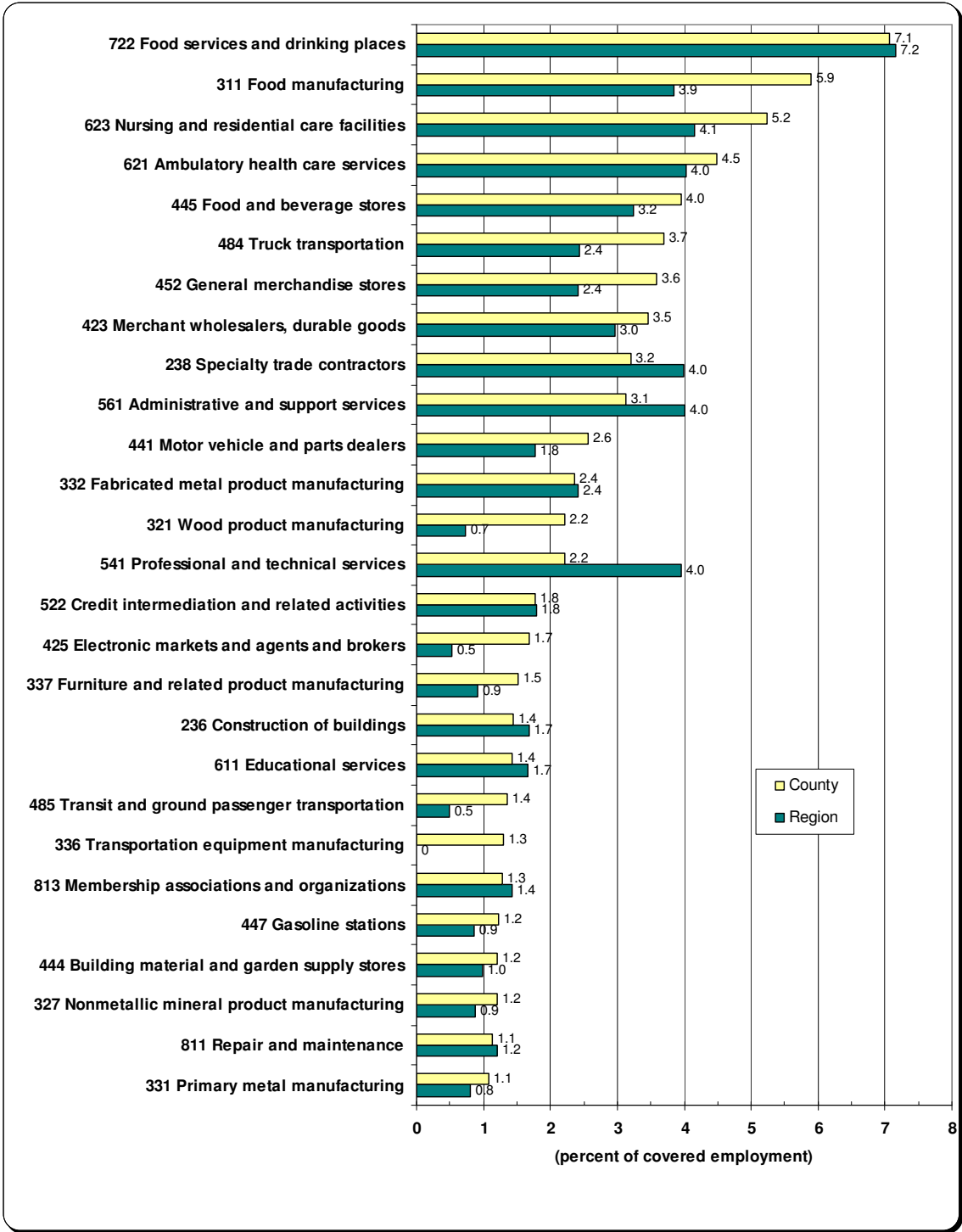
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- Based on location quotients, the top two industries in the county are wood product manufacturing and food manufacturing, both with a percentage of total employment that is over four times higher than in the nation. Weaber Inc., Farmer's Pride/Bell Evans, ASK Foods, and others contribute these economic specialties.
- The county also shows specialization in a number of other manufacturing sectors, including furniture and related products, nonmetallic mineral products, primary metals, and apparel. High location quotients in manufacturing sectors are not surprising, as manufacturing typically exports its products.

Note that an industry may comprise a minor percentage of the county's economy yet still have a high location quotient. That is, the location quotient measures specialization, not prominence in the economy. Industries that are especially important to the county economy—that are high in both employment and location quotient—include:

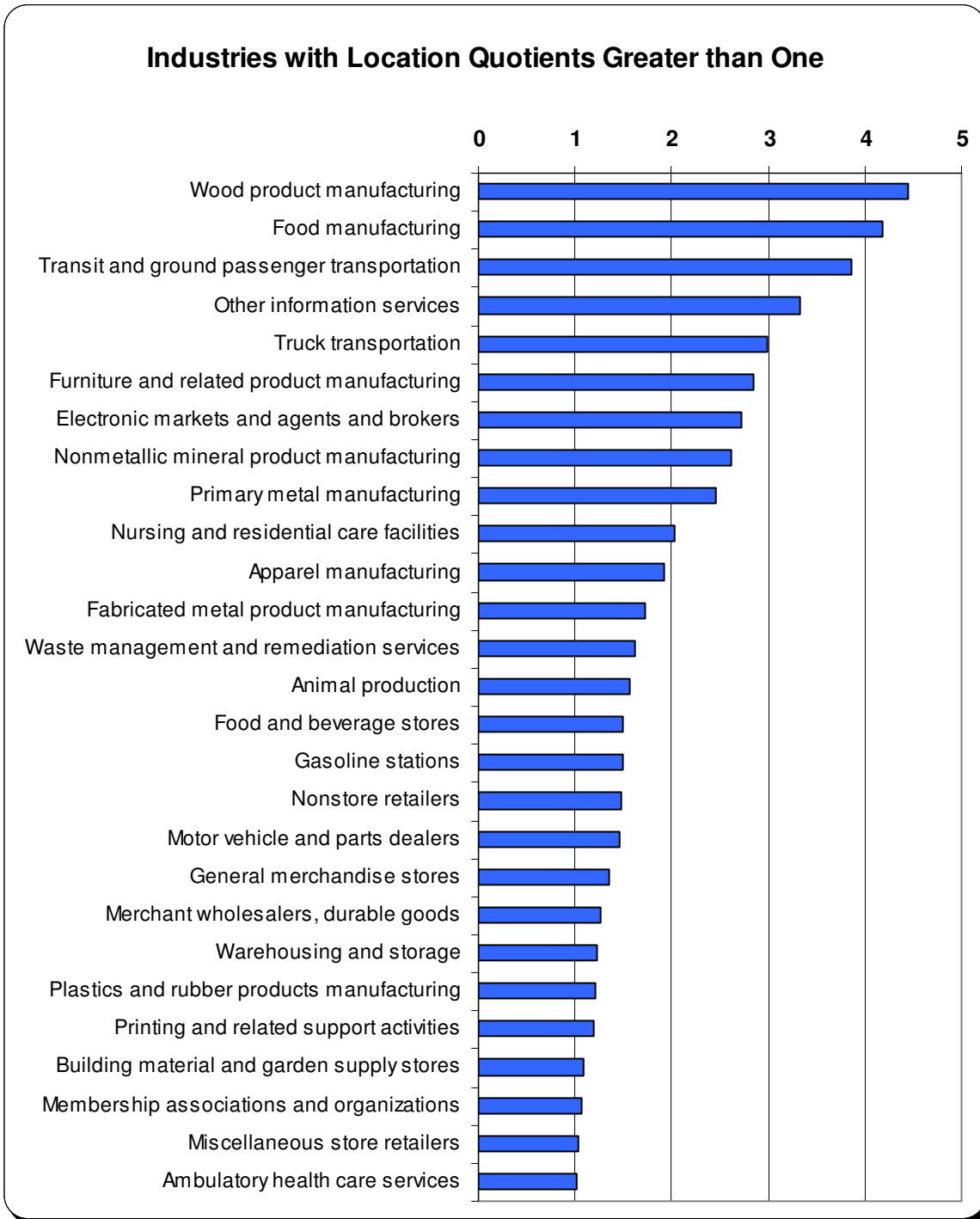
- Food manufacturing, likely resulting from the strong agricultural presence in the region, coupled with its strategic location to the consumer markets of the middle Atlantic region.
- Truck transportation, reflecting Lebanon County's strategic location for goods movement and availability of land for logistics facilities such as warehouses and break-bulk facilities.
- Nursing and residential care facilities, partially attributable to the presence of the regional Veterans Administration hospital, one of the top ten county employers.

Figure 3-14 Top Industries in Lebanon County and the Region by 3-Digit NAICS code, 2003



Source: US Bureau of Labor and Statistics, Location Quotient Calculator  
 Note: Includes only employment covered under state unemployment insurance laws.

**Figure 3-15 Industries in Lebanon County with Location Quotient Greater than One**



Source: US Bureau of Labor and Statistics, Location Quotient Calculator  
 Note: Includes only employment covered under state unemployment insurance laws.



Table 3-1 presents location quotients for Lebanon County along with its five neighboring counties and Cumberland County. It allows an evaluation of how Lebanon County compares to its neighbors in the each of the subsectors listed above, helping to indicate whether the county has a distinctive specialty or is part of a regional specialization. .

**Table 3-1 Location Quotients, Select Regional Counties, 2004**

| NAICS | Industry                                    | Lebanon | Berks | Lancaster | Dauphin | York | Cumb. | Schuyl. |
|-------|---|---------|-------|-----------|---------|------|-------|---------|
| 311   | Food manufacturing                          | 4.6     | 1.9   | 3.1       | 2.7     | 2.4  | 1.1   | 1.5     |
| 623   | Nursing and residential care facilities     | 2.0     | 1.3   | 1.9       | 1.2     | 1.4  | 1.3   | 1.7     |
| 484   | Truck transportation                        | 2.8     | 1.2   | 1.1       | 1.2     | 1.4  | 4.8   | 1.6     |
| 332   | Fabricated metal product manufacturing      | 1.8     | 1.4   | 2.6       | 0.8     | 2.4  | 0.5   | 1.7     |
| 321   | Wood product manufacturing                  | 4.4     | 0.6   | 1.9       | 0.3     | 0.9  | 0.2   | 5.7     |
| 425   | Electronic markets and agents and brokers   | 2.8     | 0.6   | 0.7       | 1.0     | 0.5  | 0.9   | 0.4     |
| 337   | Furniture and related product manufacturing | 3.2     | 1.0   | 3.0       | 0.2     | 2.0  | 0.1   | ND      |
| 325   | Chemical manufacturing                      | 2.1     | 0.9   | 0.8       | ND      | 0.4  | 0.0   | 1.5     |
| 485   | Transit and ground passenger transportation | 3.8     | 1.6   | 1.3       | 0.7     | 1.7  | 0.9   | 1.9     |
| 447   | Gasoline stations                           | 1.6     | 1.0   | 0.8       | 0.8     | 1.1  | 1.1   | 1.6     |
| 327   | Nonmetallic mineral product manufacturing   | 2.5     | 1.2   | 1.3       | 0.7     | 2.3  | 1.7   | 1.2     |
| 493   | Warehousing and storage                     | 1.8     | 1.1   | 3.2       | 2.0     | 1.5  | 9.4   | 6.2     |
| 331   | Primary metal manufacturing                 | 2.0     | 7.1   | 3.0       | 1.3     | 2.1  | 0.7   | 7.4     |
| 562   | Waste management and remediation services   | 1.8     | 1.4   | 0.7       | 0.4     | 0.9  | 0.8   | 0.9     |
| 315   | Apparel manufacturing                       | 1.9     | 1.8   | 2.0       | ND      | 2.2  | ND    | 11.9    |
| 112   | Animal production                           | 1.7     | 1.2   | 3.7       | 0.3     | 0.3  | 0.6   | 1.8     |
| 519   | Other information services                  | 3.0     | ND    | 2.1       | ND      | 2.0  | 2.9   | 3.0     |

Source: U.S. Bureau of Labor Statistics, 2006.

Note: ND = No Data

**Growing and Declining Industries**

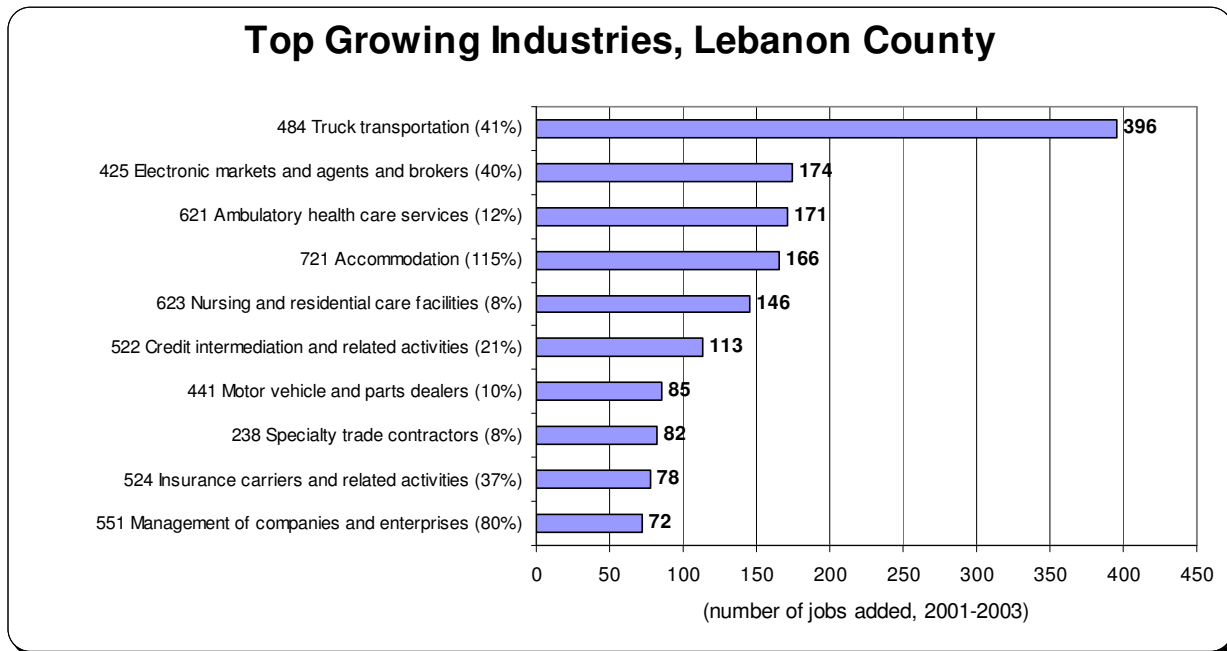
An examination of the county’s industrial structure concludes with a look at industries that are notable in terms of gains or losses in jobs in recent years, 2001-2003. Figure 3-16 depicts the recent top-growing private industries, measured in terms of the increase in number of employees.

- Truck transportation tops the list of recent top-growing private industries, adding nearly 400 jobs, an increase of 41% in just two years. Electronic markets and agents and brokers, represented by Internet, system networking, and web hosting service providers such as Comcast, Evenlink, Pipeline Communications, and Kingdom Computers, ranked second, adding fewer total jobs (174) to its employment but growing at a similar rate.
- The increases in truck transportation and in electronic markets and agents and brokers are particularly notable because these are industries important to the county’s economy in terms of having a high location quotient. That is, the county is both specializing and increasing in these industries.
- The growth in these industries is especially good news, considering the relatively high average wages of jobs in these industries.

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- The growth in accommodations is impressive in absolute numbers and on a percentage basis; employment in this industry more than doubled in the past two years. On the other hand, its wages are among the lowest of industries for which wage data are available.
- Management of companies and enterprises added only 72 jobs from 2001-2003, but this was a notable 80% increase in total employment in this sector.

**Figure 3-16 Top Growing Industries in Lebanon County, 2001–2003**



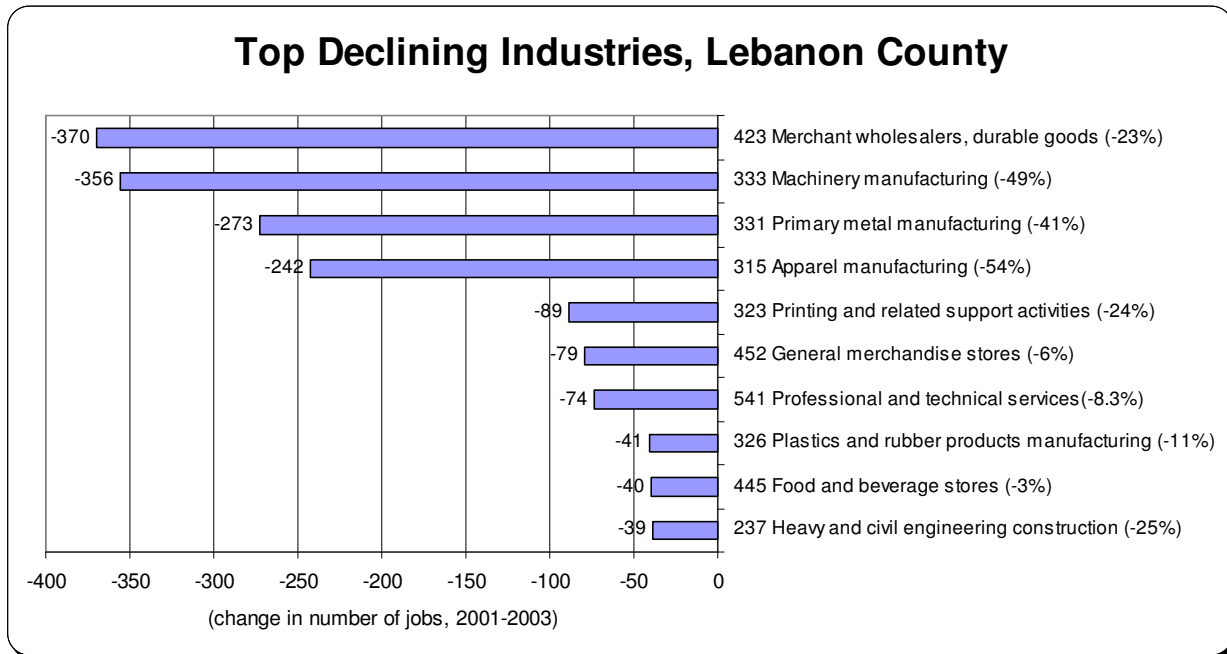
*Source: U.S. Bureau of Labor Statistics, Location Quotient Calculator*

*Note: Includes only employment covered under state unemployment insurance laws.*

A look at declining industries illustrates where the county may have some cause for concern. (See Figure 3-17).

- The largest absolute decline was in durable goods wholesalers. These businesses lost nearly 1 in 4 jobs.
- Large absolute declines (more than 240 jobs) and the three largest percentage declines (41% to 54% declines) were in three manufacturing sectors: apparel, machinery, and primary metals. Together, the county lost nearly 900 jobs in these three manufacturing industries in the two-year period. Apparel and primary metals are important to the county's export base in that they have high location quotients (Figure 3-15). On the other hand, none of these three industries individually contributes a substantial proportion of total county employment.

Figure 3-17 Top Declining Industries in Lebanon County, 2001–2003



Source: U.S. Bureau of Labor Statistics, Location Quotient Calculator

Note: Includes only employment covered under state unemployment insurance laws.

Table 3-1 summarizes the top industries by location quotient, employment growth trends, and wages.

- Truck Transportation is a star performer in terms of its high rank across categories: good wages, a substantial proportion of total employment, and phenomenal employment growth in recent years. The county’s prime location in terms of the interstate highway and rail transportation networks make it poised for continued high growth in this industry.
- The other high wage industries, namely wood products and primary metals manufacturing, are important employers in terms of number of employees and wages, but have seen a decrease in employment in recent years.

Table 3-2 Wage and Growth Comparisons of Top Industries in Lebanon County, 2003

| Industrial Classification (NAICS Code)          | Location Quotient | % of Total Employment | Average Weekly Wage, 2 <sup>nd</sup> Quarter 2004 |      | Employment Change 2001–2003 |       |
|---|-------------------|-----------------------|---|------|-----------------------------|-------|
|   |                   |                       | \$  | Rank | #                           | %     |
| 321 Wood Products Mfg.                          | 4.4               | 2.2                   | \$708   | 10   | -9                          | -1.1  |
| 311 Food Mfg.                                   | 4.2               | 5.9                   | \$523   | 30   | 26                          | 1.2   |
| 485 Transit and Ground Passenger Transportation | 3.9               | 1.4                   | \$263   | 54   | 9                           | 1.8   |
| 484 Truck Transportation                        | 3                 | 3.7                   | \$674   | 14   | 396                         | 41.0  |
| 337 Furniture and Related Mfg.                  | 2.9               | 1.5                   | \$548   | 26   | 28                          | 5.3   |
| 425 Electronics Markets and Agents              | 2.7               | 1.7                   | \$614   | 20   | 174                         | 39.1  |
| 327 Non-metallic Minerals Mfg.                  | 2.6               | 1.2                   | \$611   | 21   | -29                         | -6.1  |
| 331 Primary Metals Mfg.                         | 2.5               | 1.1                   | \$623   | 19   | -273                        | -40.6 |
| 623 Nursing and Residential Care                | 2                 | 5.2                   | \$442   | 38   | 146                         | 8.2   |
| 332 Fabricated Metals Manufacturing             | 1.7               | 2.4                   | \$772   | 8    | -31                         | -3.4  |

Source: US Bureau of Labor and Statistics' Pennsylvania Center for Workforce Information and Analysis

### Occupational Wages and Family Sustainability

Average occupational wages in the Lebanon Metropolitan Statistical Area (MSA), the smallest level available, are significantly lower than for the Harrisburg-Carlisle MSA, the Commonwealth as a whole, and the U.S. According to the Bureau of Labor Statistics, the average hourly wage across all occupations in the county was \$15.75. This is approximately 87% of both the Harrisburg-Carlisle MSA and Pennsylvania's averages of \$18.20 and \$18.07, respectively and 83% of the U.S. average. As shown in Table 3-3, there are only seven occupational categories in the Lebanon MSA that have average wages that exceed those of the Harrisburg-Carlisle MSA, and only five that exceed the Pennsylvania and U.S. averages. Management occupations command the highest average wage in the Lebanon MSA - \$31.99; however, this is less than averages wages for Harrisburg-Carlisle (\$40.20), Pennsylvania (\$41.81), and the U.S. (\$44.20). Food preparation and Serving Related Occupations have the lowest average wage, \$8.62, which is comparable to each of the comparison geographies.

**Table 3-3 Comparison of Average Hourly Wages for Lebanon MSA - May 2006**

| Occupation                                     | Average Hourly Wages Reported May 2006 |                         |                |                | Lebanon MSA Wages as a % of |              |              |
|--|--|-------------------------|----------------|----------------|-----------------------------|--------------|--------------|
|  | Lebanon MSA                            | Harrisburg-Carlisle MSA | PA             | US             | Harrisburg-Carlisle MSA     | PA           | US           |
| <b>Total All Occupations</b>                   | <b>\$15.75</b>                         | <b>\$18.20</b>          | <b>\$18.07</b> | <b>\$18.84</b> | <b>86.5%</b>                | <b>87.2%</b> | <b>83.6%</b> |
| Management                                     | \$31.99                                | \$40.20                 | \$41.81        | \$44.20        | 79.6%                       | 76.5%        | 72.4%        |
| Business and Financial Operations              | \$23.64                                | \$26.46                 | \$27.55        | \$28.85        | 89.3%                       | 85.8%        | 81.9%        |
| Computer and Mathematical                      | \$25.20                                | \$30.07                 | \$30.85        | \$33.29        | 83.8%                       | 81.7%        | 75.7%        |
| Architecture and Engineering                   | \$26.00                                | \$28.09                 | \$30.50        | \$31.82        | 92.6%                       | 85.2%        | 81.7%        |
| Life, Physical, and Social Science             | \$26.36                                | \$26.01                 | \$26.90        | \$28.68        | 101.3%                      | 98.0%        | 91.9%        |
| Community and Social Services                  | \$18.86                                | \$18.03                 | \$17.04        | \$18.75        | 104.6%                      | 110.7%       | 100.6%       |
| Legal  | \$22.53                                | \$34.23                 | \$36.13        | \$41.04        | 65.8%                       | 62.4%        | 54.9%        |
| Education, Training, and Library               | \$21.97                                | \$22.61                 | \$22.96        | \$21.79        | 97.2%                       | 95.7%        | 100.8%       |
| Arts, Design, Entertainment, Sports, and Media | \$15.70                                | \$20.07                 | \$19.22        | \$22.17        | 78.2%                       | 81.7%        | 70.8%        |
| Healthcare Practitioner and Technical          | \$27.06                                | \$27.41                 | \$28.18        | \$29.82        | 98.7%                       | 96.0%        | 90.7%        |
| Healthcare Support                             | \$11.85                                | \$11.77                 | \$11.58        | \$11.83        | 100.7%                      | 102.3%       | 100.2%       |
| Protective Service Occupation                  | \$18.50                                | \$17.81                 | \$17.55        | \$17.81        | 103.9%                      | 105.4%       | 103.9%       |
| Food Preparation and Serving Related           | \$8.62                                 | \$8.62                  | \$8.56         | \$8.86         | 100.0%                      | 100.7%       | 97.3%        |
| Building and Grounds Cleaning and Maintenance  | \$10.42                                | \$10.67                 | \$10.98        | \$10.86        | 97.7%                       | 94.9%        | 95.9%        |
| Personal Care and Service                      | \$9.26                                 | \$10.86                 | \$10.32        | \$11.02        | 85.3%                       | 89.7%        | 84.0%        |
| Sales and Related                              | \$14.57                                | \$16.36                 | \$16.15        | \$16.52        | 89.1%                       | 90.2%        | 88.2%        |
| Office and Administrative Support              | \$13.10                                | \$14.56                 | \$14.02        | \$14.60        | 90.0%                       | 93.4%        | 89.7%        |
| Farming, Fishing, and Forestry                 | \$14.98                                | \$14.27                 | \$11.79        | \$10.49        | 105.0%                      | 127.1%       | 142.8%       |
| Construction and Extraction                    | \$18.17                                | \$18.12                 | \$19.65        | \$18.89        | 100.3%                      | 92.5%        | 96.2%        |
| Installation, Maintenance, and Repair          | \$17.41                                | \$18.77                 | \$18.36        | \$18.78        | 92.8%                       | 94.8%        | 92.7%        |
| Production                                     | \$14.26                                | \$15.79                 | \$15.21        | \$14.65        | 90.3%                       | 93.8%        | 97.3%        |
| Transportation and Material Moving             | \$12.44                                | \$14.05                 | \$13.95        | \$14.16        | 88.5%                       | 89.2%        | 87.9%        |

Source: Bureau of Labor Statistics; Occupational Employment Statistics, 2006

The 2006 Self Sufficiency Standard for PA<sup>5</sup> report helps put occupational wage data into the context of family sustaining wages. The report is completed annually for PathwaysPA, an organization that helps low income women, teen, children, and families achieve economic independence and family well-being. Self-sufficiency wages, the wages required to meet basic needs without public assistance or private help, are established by identifying real costs for each of Pennsylvania’s 67 counties and linking them to 70 different family configurations. Included in the calculation are the following costs: housing, child care, food, transportation, health care, miscellaneous expenses, and taxes. Also included in the calculations are Earned Income Tax Credits, Child Care Tax Credit, and the Child Tax Credit. According to the report, a family of five living in Lebanon County with one working adult, one stay-at-home adult, and three children (infant, preschooler, school age) would need an annual income of \$45,265 or an hourly wage of \$21.43.

Table 3-4 compares the Self Sufficiency Wages for each of the counties in the region for two different family types. As shown, Lebanon families need less than Berks, Cumberland, Dauphin, and Lancaster families for both family types, and more than Adams, Franklin and York families. Perry County families with two working adults need more than Lebanon County families; however, families with one working adult in Perry County actually need less than Lebanon County families. While this data reflects lower costs of living in the county, when compared to occupational wages in the county, there are only eight occupational categories in Lebanon County that provide sustainable wages for a family of five with one working adult: management; business and financial operations; computer and math; architecture and engineering; life, physical, and social science; legal; education, training, and library; and healthcare practitioner and technical occupations. These occupations are among the targeted clusters discussed in the next section. With both parents working and only two children, there are only two occupational categories that do not pay enough for that family to be self sufficient: food preparation and serving related, and personal care and service.

**Table 3-4 Comparison of Self Sufficiency Wages**

| County            | Self Sufficiency Wages for  |                  |  |                  |
|-------------------|---|------------------|--|------------------|
|                   | Family with Two Working Adults w/ 2 Children (preschooler and school age) |                  | Family with One Working Adult and One Stay-at-Home Adult w/ 3 Children (infant, preschooler, and school age) |                  |
|                   | Annual  | Hourly per Adult | Annual   | Hourly per Adult |
| <b>Adams</b>      | \$38,029  | \$9.00           | \$42,401   | \$20.08          |
| <b>Berks</b>      | \$42,113  | \$9.97           | \$47,679   | \$22.58          |
| <b>Cumberland</b> | \$45,457  | \$10.76          | \$50,496   | \$23.91          |
| <b>Dauphin</b>    | \$43,704  | \$10.35          | \$48,552   | \$22.99          |
| <b>Franklin</b>   | \$34,838  | \$8.25           | \$38,758   | \$18.35          |
| <b>Lancaster</b>  | \$42,885  | \$10.15          | \$47,325   | \$22.41          |
| <b>Lebanon</b>    | \$39,855  | \$9.44           | \$45,265   | \$21.43          |
| <b>Perry</b>      | \$39,989  | \$9.47           | \$43,442   | \$20.51          |
| <b>York</b>       | \$31,500  | \$7.34           | \$39,593   | \$18.75          |

Source: The Self Sufficiency Standard for PA, May 2006

### **Potential Target Industry Clusters for Lebanon County**

The identification of industries that would make the best targets for support and recruitment efforts in Lebanon County began with a brief review of existing industry and industry cluster lists identified in several recent statewide studies, which are summarized below. In addition, several regional and local studies were reviewed, including Berks County’s Initiative for a Competitive Greater Reading and the Lancaster County Blue Ribbon Commission on Agriculture. Additional information from this profile, particularly information provided by the Lebanon Valley Economic Development Corporation has also been used. The results of the analyses are summarized and grouped according to the nine “targeted industry clusters and sub-

<sup>5</sup> “The Self Sufficiency Standard for PA”, Diana Pearce, May, 2006.

clusters” identified by the Department of Labor and Industry. A summary table of recommended clusters for Lebanon County can be found on page 31.

### Precedent Studies for Target Industry Analysis

#### **1. Pennsylvania Department of Labor and Industry: Targeted Industry Clusters**

The Department of Labor and Industry’s Targeted Industry Clusters report (2004) identifies nine major cluster groupings for which the Department intends to focus its workforce development efforts. The study defines an industry cluster as “a group of industries that are closely linked by common product markets, labor pools, similar technologies, supplier chains, and/or other economic ties” (p.2). The clusters were selected as ones in which Pennsylvania has both a competitive advantage and the potential for long term economic and employment growth. The nine target clusters, along with sub-clusters of significance, are listed below.

- Life Sciences – Bio-medical and Health Care Sub-Clusters
- Business and Financial Services
- Education
- Advanced Materials and Diversified Manufacturing – Chemicals, Rubber and Plastics, Electronics, Metals and Metal Fabrication, Printing, and Vehicle and Vehicle Equipment Sub-clusters
- Building and Construction
- Agriculture and Food Production – Food Processing Sub-Cluster
- Information and Communication Services
- Logistics and Transportation
- Lumber, Wood and Paper

#### **2. Pennsylvania Department of Community and Economic Development, et al.: Manufacturing Pennsylvania’s Future**

The Department of Community and Economic Development, the Industrial Resources Centers of Pennsylvania, and the Team PA Foundation commissioned a study of the state’s manufacturing industries in 2004. *Manufacturing Pennsylvania’s Future: Regional Strategies that Build from Current Strengths and Address Competitive Challenges*, prepared by Deloitte Consulting in 2004, consisted of a detailed examination of the state’s manufacturing industries. It uses a statistical analysis to identify “driver” industries and groups industry clusters by these drivers. The study also includes research on the market position of the driver industries and their distinctive needs, as well as an evaluation of the functioning and performance of the Industrial Resource Centers, including the Manufacturers Technology Center (MANTEC), which serves small and mid-sized manufacturers in south central Pennsylvania.

The study identified fourteen industries as “drivers” in MANTEC’s service region of south central Pennsylvania, listed from highest to lowest regional sales output. Those industries with high sales (productivity) and a relatively high output location quotient were classified as “drivers” and are listed below.

- Pharmaceuticals
- Printing
- Sugar and Confectionary Products
- Plastics
- Agriculture, Construction and Mining Machines
- Architectural and Structural Metals
- Bakeries and Pasta
- Other Electrical Equipment and Components
- Paper
- HVAC and Refrigeration Equipment
- Beverages
- Electric Lighting Equipment
- Other Food
- Fruit and Vegetable Preserving and Specialty Foods

#### **3. Center for Rural Pennsylvania: Rural Pennsylvania in the New Economy**

A 2001 study sponsored by the Center for Rural Pennsylvania examined the causes of economic growth in Pennsylvania’s rural areas and translated the findings to policy recommendations and an identification of industries that offer growth potential for rural areas of Pennsylvania. The industries listed below are ones in which employment grew faster in comparative rural areas of the US than nationally, and faster nationally than in rural Pennsylvania. Only four of the industries listed are typical “export” industries, namely miscellaneous manufacturing, accommodations, food and kindred products, and insurance carriers. However, growth in the other predominantly local serving industries may still help rural economies by

filling unmet local demand and thereby reducing spending leakages out of the area. The report cautions that the industries should be seen as a starting point for further investigation, not as targets.

- Amusement and Recreation
- Business Services
- Holding and Other Investment Offices
- Specialty Construction Trades
- Home Furniture, Furnishings, and Equipment Stores
- Heavy Construction (other than building)
- Automotive Dealers and Service Stations
- Miscellaneous Manufacturing Industries
- Accommodations
- Food and Kindred Projects
- Insurance Carriers

**4. Pennsylvania Department of Community and Economic Development: The Global Competitiveness Initiative**

The Department of Community and Economic Development commissioned an extensive study of the competitive position of Pennsylvania and its eleven economic regions in terms of their ability to attract industry in eleven selected subsectors. The orientation of the study is toward large investments of global capital for which the Governor’s Action Team should be prepared to make the most effective marketing and recruitment efforts. As such, the study may exclude some subsectors that are nonetheless an important component of the region’s economic future, particularly homegrown industries, regional market serving industries, and industries that tend to have relatively modest scale capital investments. Lebanon County falls into two of the study regions: Harrisburg (“south central”) and Lancaster-Reading. The findings for the regions in the subsectors are summarized in Table 3-5. Each subsector is assigned to an upper, mid, or lower competitiveness tier, based on the study region’s score in for qualitative location factors (general business environment, workforce skill and availability, presence of industry cluster, flexibility of labor and relations, infrastructure, availability of real estate and quality if life) and costs (labor, real estate, utilities, and taxes), when compared to other locations in the U.S. and abroad,. In some subsectors, overseas locations were not examined because the facilities in the subsector were only considering a North American location. If the study teamed deemed the region non-competitive for a subsector, the competitiveness ranking is replaced with a dashed line.

**Table 3-5 Global Competitiveness Initiative Subsector Study Results**

| Cluster                            | Subsector                   | Competitiveness (Tier) |       |                   |       |
|------------------------------------|-----------------------------|------------------------|-------|-------------------|-------|
|                                    |                             | Harrisburg             |       | Lancaster-Reading |       |
|                                    |                             | Quality                | Cost  | Quality           | Cost  |
|                                    | Bio-Pharmaceutical Mfg.     | Lower                  | MID   | Lower             | MID   |
| Life Science                       | Biotechnology Research      | Lower                  | UPPER | Lower             | UPPER |
|                                    | Medical Equipment & Devices | MID                    | MID   | --                | --    |
|                                    | Next Generation Electronics | Lower                  | UPPER | Lower             | UPPER |
| High Technology                    | Alternative Energy          | --                     | --    | MID               | MID   |
|                                    | Powdered Metals             | Lower                  | MID   | --                | --    |
| Advanced Manufacturing & Materials | Agro-food Processing        | UPPER                  | Lower | UPPER             | MID   |
|                                    | Pre-fabricated Housing      | --                     | --    | UPPER             | MID   |
|                                    | Creative Industries         | --                     | --    | --                | --    |
| Business Services                  | Regional Headquarters       | Lower                  | UPPER | --                | --    |
|                                    | Financial Services          | Lower                  | UPPER | --                | --    |

*Source: Pennsylvania Department of Community and Economic Development, 2006, “Pennsylvania, A World Class Economy”, a Global Competitiveness Initiative Presentation prepared for the Lebanon County Planning Department, June 5, 2006.*

A second study phase, currently underway, includes an evaluation of the state's and region's competitive positions in the following additional eleven subsectors:

- Wind generator components
- Wind turbine rotors
- Solar energy panels
- Waste coal-fired power
- Biofuel manufacturing
- Advanced medical devices
- Financial services/back office operations
- Tooling and metal fabrication
- Fine chemicals
- Engineering and defense
- Printing and publishing

### 5. The “Smart Market”

The South central Pennsylvania Smart Market is a cooperative regional branding initiative meant to market the region as an attractive location to site a business. The Smart Market website states that the region has world class resources to serve the following business clusters:

- Advanced Materials and Diversified Manufacturing
- Business and Financial Services
- Plastics
- Food Processing and Agribusiness
- Printing
- Logistics
- Biotechnology and Life Sciences
- Technology Solutions and Support
- Information and Communication Technology

### 6. Lebanon Valley Economic Development Corporation (LVEDC) - Target Industries for Business Attraction

In 2006, the LVEDC established a list of industries and clusters to target in the near to medium term in its business marketing efforts. The following industries and clusters were selected as those for which the Lebanon Valley has a comparative advantage:

- Agriculture and Food Products
- Pharmaceuticals
- Construction Materials
- Metal Products
- Plastic Products
- Paint and Ink

### Cluster and Sub-cluster Analysis and Recommendations

The following discussion is a more detailed examination of each of the clusters and sub-clusters listed in the Department of Labor and Industry's target cluster report. Each cluster is evaluated and ends with conclusions regarding its suitability as an economic development target for Lebanon County. The summary table of recommendations is found on page 31.

#### **Advanced Materials and Diversified Manufacturing Cluster**

This cluster includes nearly all durable goods manufacturing, as well as several non-durable goods industries. The Department of Labor and Industry does not include food products, lumber and wood products, wooden furniture, and pharmaceuticals in this cluster. Despite statewide employment declines in this cluster, it is nonetheless critical to the health of state and county economies due to its high wages and the fact that sales of its products serve as an export base, bringing money from outside into the state and local economies. This cluster will be examined in terms of four specific sub-clusters.

**1. The chemicals, rubber, and plastics sub-cluster** includes manufacturers of a wide variety of products, including petrochemicals, plastic plumbing fixtures, and tires. Manufacturing Pennsylvania's Future (MPF) identified plastics as a “driver” industry for south central Pennsylvania. The study found the industry to be one of the largest in the region, with a recent period of strong growth, and one in which the region is reasonably well specialized. The NAICS category 326, “plastics and rubber products,” is modestly represented in Lebanon County, with nearly one percent of total year 2004 employment, a location quotient of 1.2, and a nine percent decline in number of jobs since 2001, which is similar to the ten percent decline nationally. The best local prospects for new plastics industry recruitment might be in plastics for packaging food products, or plastics used in pharmaceutical packaging or other life sciences applications. The paint industry, which is also within this sub-cluster, now has a presence in the county due to the new Valspar facility, which may serve as a foundation on which to recruit manufacturers of similar and related products.



The plastics sub-cluster is recommended for inclusion as a target industry on the basis of it having already been selected by both the county and regional economic developers. Plastics bottling and packaging is especially promising for the region. The Deloitte study identified packaging and bottling as one of the few growing plastics segments. In addition, there is potential for downstream tie-in to the flourishing regional food production cluster and pharmaceutical industry. Plastics tend toward the high volume/low value product line, meaning transportation costs can be a significant component of product cost. This factor can give the region a competitive advantage in its ability to save on transportation costs. Another factor in favor of targeting plastics is that wages per employee are well above average. Any initiatives designed to target plastics will likely benefit other industries in the sub-cluster, such as paint and ink.

**2. The electronics sub-cluster** includes electronic components, electronic instruments, household appliances, electric motors, electric lighting equipment, semi-conductors, and fiber optic cables. Statewide average annual wages were highest in this sub-cluster among all other advanced materials and diversified manufacturing sub-clusters. Employment in the manufacture of electrical and electronic equipment was the fastest growing “high technology” industry in rural Pennsylvania during the 1990s, adding nearly 5,000 rural jobs for a growth rate of 48 percent. (Shields and Vivanco 2004, p. 9)

The electronics sub-cluster has had a strong presence in the south central Pennsylvania region, as the home of AMP, Inc., now Tyco Electronics. The Tyco facility in northern Lebanon County is one of the top county employers; however, the county’s employment in this sub-cluster is nearly exclusively dependent on this single employer.

The electronics sub-cluster includes many industries that are struggling with competition from low-cost foreign producers. The county is not especially well established within this sub-cluster nor does it have distinct comparative advantages for this sub-cluster. At the present time it does not appear worthwhile for the county to expend great resources in developing or diversifying this sub-cluster. However, it is nonetheless prudent to offer continued support to existing firms in this sub-cluster.

**3. The metals and metal fabrication sub-cluster** includes manufacturers of raw metals, as well as metal products such as hardware and plumbing fixtures. Primary metals production remains somewhat prominent in Lebanon County despite the departure of Bethlehem Steel and Alcoa. There are a number of foundries and casting operations in the county. With nearly one percent of total private employment in primary metals production, the county has a location quotient of 2.0 in primary metals. The neighboring counties of Berks, Schuylkill, and to a lesser extent, Lancaster are even more specialized in primary metals production. The region is less specialized in fabricated metals based on location quotients; however, they constitute a much higher percentage of total private employment. In addition, the subsector has seen some employment growth (four percent) from 2001 to 2004.

The Manufacturing Pennsylvania’s Future study found that south central Pennsylvania specializes in the architectural and structural metals segment of this cluster. Firms in architectural and structural metals are especially well-represented in Lancaster and York Counties. With the exception of the presence of Butler Manufacturing in Annville (prefabricated metal buildings), the segment is not as notable in Lebanon County. The Manufacturing Pennsylvania’s Future study also noted that much of the market for architectural and structural metals involves highly specialized, custom-made products, which affords relatively high profit margins and provides some protection against low cost foreign imports. On the other hand, the architectural and structural metals industry suffers regionally from relatively low output per worker rates and recent declines in output.

A very strong local and regional presence, county wages that are well above average, and the fact that the sub-sector achieved growth locally despite substantial declines nationally, all argue for the inclusion of fabricated metals as a target subsector. The case for primary metals is less compelling, as such products tend to be more commodity products, for which competition focuses on cost. The fabricated metals subsector’s close ties with construction are an advantage and a disadvantage. Market proximity is regarded as a distinct advantage in construction, although construction is subject to fluctuations in the overall economic health of the country.

**4. The printing sub-cluster** includes printing and related support activities, as well as manufacturers of printing machinery and equipment. Among neighboring counties, Lancaster, York, and Cumberland Counties specialize strongly in printing and related support activities, with 2004 location quotients of 4.8, 3.3, and 2.2, respectively. Printing is less stellar in Lebanon County, accounting for 0.7 percent of total private employment, with a location quotient of 1.1, and a net loss of 117 jobs (a 32 percent decline) over the period 2001-2004. The Manufacturing

Pennsylvania's Future report finds that the printing industry has been in decline regionally since 1998, and suffers from low labor productivity. The industry makes the list of regional drivers, chiefly because it is so prominent, with the second highest regional output among the driver industries (Deloitte Consulting 2004).

An overall negative assessment of the conditions for the printing industry, combined with a significant local decline in employment and the absence of a particularly attractive average wage lead to the conclusion that the printing sub-cluster/industry is not suitable for targeting for expansion and attraction.

**5. The vehicles and vehicle equipment sub-cluster** includes manufacturers of vehicles, as well as vehicle components, such as truck bodies and electrical equipment. Lebanon County is not specialized in this sub-cluster; its location quotient for the NAICS subsector "transportation equipment manufacturing" is 0.62, while it accounts for one percent of total private employment. Moreover, the county experienced a net loss of 103 jobs (a 21 percent decline) in this sub-sector.

This sub-cluster makes none of the above lists for the region, indicating that the region does not already have a presence in any of the industries in the sub-cluster. This fact, in turn, means that the region does not have a basis upon which to build the cluster, as well as suggesting that the region lacks any particular comparative advantages for hosting industries in this sub-cluster. Accordingly, the sub-cluster is not recommended for targeting.

### **Agriculture and Food Production cluster**

The **Agriculture and Food Production cluster** covers a wide range of activities from growing food and raising livestock to the wholesale and retail distribution of the food products. The cluster includes agriculture, food processing, and food distribution support industries such as fertilizer manufacturing and refrigerated warehousing. Pennsylvania ranks second among states in the dollar value of agricultural products sold for human consumption. Agriculture and agribusiness (defined for this plan as businesses supplying inputs and services to farms) remain a vital component of Lebanon County's economy. Unlike many other traditional farming regions, Lebanon County continues to retain a critical mass of farms that can support a fairly vibrant local agribusiness sector.

The food processing sub-cluster includes the industries that process raw agricultural products into human and animal food as well as manufacturers of food product machinery. The south central Pennsylvania region is ideally situated for food processing industries, being located at the source of much of the necessary raw materials, and very accessible to tens of millions of consumers. These advantages are reflected in the very strong presence of food production in Lebanon County and its neighbors. York, Dauphin, Lancaster, and Lebanon Counties have location quotients greater than two, and Lebanon County tops the list with a location quotient of 4.6. In Lebanon County, food production is the second largest private employer among three-digit NAICS industrial categories, with 6.3 percent of total private employment in 2004. Moreover, employment in the food production category increased by eleven percent (232 jobs) over the period 2001-2004.

Food production is a "safe" industry in the sense that it is among the industries most cushioned from global competition and from economic downturns. Unfortunately, wages in food processing have been relatively low compared to other manufacturing sector wages, and there is no lack of domestic competition in many product segments.

The agriculture and food production cluster, encompassing all aspects of producing food from supplying farms to delivering product to the consumer, is strongly represented in the region and has excellent prospects for continued strength. The region's excellent access to consumer markets is a competitive advantage that is not expected to erode. Despite the overall modest wages in most of this cluster, its industries are currently an essential component of the county's and the region's economic foundation, and are expected to remain so. Agriculture, agribusiness, food processing, and plastic packaging (identified previously) are all worthy industries for targeting county economic development efforts.

### **Lumber, Wood, and Paper Cluster**

The **lumber, wood, and paper cluster** includes the complete "supply chain" from timber: from logging, through sawmills, to the production of furniture, paper, and converted paper products. The NAICS subsectors "Wood Products (321)" and "Furniture and Related Products" (337) are both very prominent in Lebanon County, with a combined total of nearly four percent of total private employment, and very high location quotients for each subsector. Employment in furniture making has actually increased in the period 2001-2004, despite declines nationally. Average compensation per employee in wood products is very good, at \$721 per week in 2004. Average compensation in furniture making is not as high (\$610), but is above the county average of \$555.

Wood product manufacturing is also a substantial employer in Schuylkill County, with nearly three percent of total private employment. Lebanon County has a higher percentage of its employment in this sub-sector; however, Lancaster and York each have far more employees in the subsector.

Paper manufacturing is not significant in Lebanon County; however, York and Schuylkill Counties have high location quotients and substantial employment in paper manufacture.

Lebanon County is in a very good position for the continued vitality of several industries in the lumber, wood, and paper cluster. Weaber's sawmill is a major employer at the heart of the wood products subsector. Local timber supplies, access to markets booming in construction activity, and a heritage of craftsmanship in woodworking all contribute to the strength of this sector. The cluster also makes an attractive cluster for industry targeting in that, like agriculture and food products, it is an established cluster, with various industries in the supply chain already interconnected; economic developers do not need to "invent" the cluster. Efforts to nurture this target would include supporting existing businesses in process improvements, worker skills training, product innovations, new market penetration, and facility expansions. New company recruitment would be a much lower priority.

### **Life Sciences Cluster**

**1. The bio-medical sub-cluster** includes industries involved in the development and use of technology to enhance health, such as research laboratories, pharmaceutical manufacturing, surgical and medical equipment manufacturing, and imaging centers. To a large extent, industries in this sub-cluster employ advanced technology or serve as a foundation for enhanced medical services.

The pharmaceutical industry is one in which Lebanon County is already well-positioned. Pharmaceutical production, particularly at the Bayer plant, makes up the lion's share of the employment in the "chemicals" subsector. In other words, Lebanon County has a specialty in this industry (with higher percentage of employment than the national average). The industry is a significant employer in terms of numbers employed and employment has grown over the period 2001-2004. In addition, the industry is the highest paying among the manufacturing industries in the county.

Lebanon County is fairly well situated for the bio-medical sub-cluster as it is reasonably close to the mid-Atlantic hub of activity of this sub-cluster, namely Philadelphia and surrounding counties in southeastern Pennsylvania.

The bio-medical sub-cluster is very attractive due to its domestic growth prospects and high output per worker rate. A typical facility makes only modest demands on local infrastructure (transportation, water and wastewater), is relatively benign in terms of environmental impact, and offers outstanding employee compensation. As such, the cluster is prized by nearly all economic developers across the country. Nevertheless, Lebanon County and the region in general are in a strong position to compete for industries in this cluster, particularly pharmaceuticals. Therefore, this sub-cluster, and pharmaceutical producers in particular, make very good targets for the county and region.

The Tuck Business Park in North Cornwall Township has developed into a "cluster" of medical facilities – good paying jobs and great medical treatment opportunities for Lebanon County and Central Pennsylvania residents. Recent rezoning will facilitate southward expansion of this use, augmenting the growing health care network for an aging population.

**2. The health care sub-cluster** includes industries that provide direct patient health care services, as well as industries that support direct patient care such as retail drug stores and health insurance carriers. This sub-cluster has seen very strong growth across Pennsylvania, and is a major source of employment growth in the state's rural areas. (Shields and Vivanco, 2004, p.6). Thanks to the presence of the Good Samaritan Hospital, the Veterans Administration Medical Center, Philhaven, and other facilities, this sub-cluster is highly represented in Lebanon County. The economic subsector "health care and social assistance," which largely corresponds with the health care sub-cluster, employed over 16 percent of the county's private employees in 2004, substantially higher than its neighboring counties and the national average of 13 percent.

While the health care sub-cluster is strongly represented in the county, it is primarily composed of local-serving industries and as such does not offer promise for economic development targeting. However, the strong presence of the health care sub-cluster is good for the county in that it is a major employer, it keeps health care spending in the

county, and the services offered locally are valued by county residents. For these reasons, businesses within this sub-cluster do merit the continued support of state and local governments.

### **Building and Construction Cluster**

**The building and construction cluster** includes industries directly involved in the construction of buildings, roads, and other structures, as well as manufacturers of HVAC equipment and building materials such as cement, flat glass, and fabricated structural metals. (Fabricated structural metals are included for this County Economic Development Plan under the Fabricated Metals sub-cluster, and wood building materials are included under “Lumber, Wood, and Paper”.) The construction services industries are not well-represented in Lebanon County, with location quotients ranging from 0.3 (heavy and civil engineering construction) to 0.9 (construction of buildings). Other counties in the region also tend to be relatively weak in the construction services industries.

While the construction trades are lightly represented in terms of local employment, local markets are strong for their services, including major construction planned at Fort Indiantown Gap. The issue for local economic developers in supporting construction trades is providing a workforce suitably trained in construction skills and even language skills for Lebanon County’s rapidly expanding Hispanic workforce. Lebanon County is in a strong logistical position for supplying construction materials to mid-Atlantic and northeast markets, having good access, quality natural resources, and the region’s legacy of metals production. The region has some advantages over overseas suppliers of construction materials due to its better accessibility to the consumers.

### **Business and Financial Services Cluster**

**The business and financial services cluster** includes banking and credit institutions, insurance carriers and brokers, personal and professional business services, advertising and marketing agencies, employment agents, and various other business support services. Currently, this cluster is concentrated in the major metropolitan centers of Pittsburgh and Philadelphia. This cluster offers many of the employment opportunities that are believed to attract the young, educated, and motivated workforce; therefore, its vitality is one of special interest in countering the “brain drain” of young educated Pennsylvanians.

The Center for Rural Pennsylvania study found potentially untapped growth opportunity for the “business services” categories, which nearly doubled in employment nationally and in rural areas of comparison states, but grew by 50 percent in rural Pennsylvania. It also found growth potential in the category “holding and other investment offices,” which grew by nearly 75 percent in comparison rural areas, nearly 30 percent nationally, but only 19 percent in rural Pennsylvania.

The good news for Lebanon County is that it is situated very close to a major hub for this cluster, which stretches from Lancaster County eastward into Philadelphia and its suburbs. The bad news is that many of the industries in this cluster are very poorly represented in the County. Lebanon County lags most of its neighboring counties in the percentage of its employment in credit intermediation; insurance carriers; real estate, rental and leasing; professional and technical services; management of companies; and administrative and support services. The fact that new, Class-A office space does not exist in the county, but is abundant in its neighbors to the east, south, and west, is testament to the very weak presence of this cluster in Lebanon County.

### **Information and Communication Cluster**

**The information and communication cluster** includes a variety of industries involved with the production and dissemination of information, from publishing to internet service providers. The cluster also includes manufacturers of communications equipment, wired and wireless telecommunications carriers, and consulting in technical fields such as engineering and computer systems design. While the cluster may not appear significant when viewed in terms of employment, the average wage is quite high, at \$56,700 in 2002. The technical design and consulting services sub-clusters have added the most jobs in this cluster in recent years. Employment in the cluster is concentrated in Allegheny County, southeastern Pennsylvania, and Lebanon County’s south central neighbors of Dauphin, Cumberland, and Lancaster counties.

The absence of vibrant, predominantly “white collar”, business and financial services and information and communications clusters is a pronounced gap in the county’s economic diversification, and may also be partly to blame for the much bemoaned “brain drain” of many of the county’s educated young people. The county’s complete economic development, along with other aspects of local quality of life, such as revitalization of downtowns, depends on the further development of this cluster. Economic developers are somewhat limited in their capacity to attract and retain businesses in this cluster. Businesses are typically local service providers, and thus require adequate local markets. Location assets focus on amenities of the site and its immediate surroundings and, especially for small firms, the location preferences of the owners.

### Education Cluster

The **education cluster** encompasses elementary schools through colleges, technical schools, museums and historic sites, and support services such as school bus transportation and child day care services. Educational institutions are not especially highly represented in Lebanon County. Lebanon Valley College (LVC) and the Lebanon campus of Harrisburg Area Community College (HACC) are the major postsecondary institutions in the county.

Similar to business and financial services, the health of the educational services cluster is an element in other aspects of local quality of life. Also, the educational services cluster is a foundation that can support other business retention, expansion, and recruitment efforts. As such, educational services enterprises merit the continued support of state and local governments, as well as their private sector partners.

### The Logistics and Transportation Cluster

The **logistics and transportation cluster** includes industries involved in the storage, transportation, and distribution of goods. Pennsylvania is in an excellent position for this cluster as its transportation network, comprising water ports, major rail lines, and interstate highways, links the vast middle Atlantic and northeast markets to the rest of the nation. Statewide, the general warehousing and storage industry completely dominate this cluster, with the largest job volumes, as well as job growth. However, wages in this industry are among the lowest in the cluster, and are below the average wage for the state. In Lebanon County, trucking dominates this cluster, and is one of the county's major employers. It also has a relatively high location quotient and strong growth over the period 2001 to 2004. The warehousing industry experienced far stronger growth on a percentage basis, but remains less well represented in the county than trucking. Trucking, warehousing, and storage, are very strong industries throughout the region, especially in Cumberland County, where over eleven percent of private employees worked in these industries in 2004.

South central Pennsylvania is perfectly situated for distribution operations, being less than a day's drive from most major northeast markets. Accordingly, logistics firms have located in the region even without recruitment efforts by economic development organizations. Warehousing and distribution operations tend to become controversial when their growth becomes very rapid, as evidenced by response of many of the communities around Carlisle in Cumberland County. At first the tax base and employment is welcomed, and then growing numbers of local residents become concerned with the large tracts of land used, the perceived traffic generated, and the low availability of family supporting jobs. At current levels of development, the logistics and transportation cluster is a good source of tax revenue growth and entry level jobs (warehousing). However, with very low unemployment levels, what the county's labor force needs is more middle- to upper-income jobs. Combined with the fact that logistics operations are already highly attracted to the county based purely on unassisted market forces, there is no compelling reason to add industries in the logistics cluster to the list of industries to target for expansion and attraction efforts.

The table below summarizes the recommendations regarding the targeting of support and recruitment for the listed industrial clusters and sub-clusters. "Primary Target" indicates that the county should actively target the cluster/sub-cluster. "Secondary Target" indicates that the cluster is already developed within the county; however, funding or workforce development support may be appropriate to further enhance the success of the cluster/sub-cluster. "Non-Target" indicates that the cluster is either inappropriate for the county given the current workforce or other key factor *or* that the cluster is of sufficient strength that there is no need for governmental support or assistance to sustain the industry.

**Table 3-6 Recommended Target Industries for Lebanon County**

| Cluster/sub-cluster                              | 2002 Average Annual Wages        | Recommendation   |
|--|----------------------------------|------------------|
| Life Sciences                                    | \$39,366                         |                  |
| <i>Bio-Medical</i>                               | \$64,657                         | Primary Target   |
| <i>Health Care</i>                               | \$36,763                         | Secondary Target |
| Business and Financial Services                  | \$42,845                         | Primary Target   |
| Education  | \$35,121                         | Secondary Target |
| Advanced Materials and Diversified Manufacturing | \$43,061                         |                  |
| <i>Chemicals, Rubber and Plastics</i>            | \$46,643                         | Primary Target   |
| <i>Electronics</i>                               | \$50,792                         | Secondary Target |
| <i>Metals and Metal Fabrication</i>              | \$41,060                         | Primary Target   |
| <i>Printing</i>                                  | \$37,196                         | Non-Target       |
| <i>Vehicle and Vehicle Equipment</i>             | \$48,267                         | Non-Target       |
| Building and Construction                        | \$40,927                         | Secondary Target |
| Agriculture and Food Production                  | \$26,308                         |                  |
| <i>Food Processing</i>                           | \$36,106                         | Primary Target   |
| Information and Communication Services           | \$56,742                         | Primary Target   |
| Logistics and Transportation                     | \$36,588                         | Non-Target       |
| Lumber Wood and Paper                            | \$34,317                         | Secondary Target |
|  | Average across targeted clusters | \$39,836         |
|  | Average over all industries      | \$35,791         |

## **Retention, Expansion, and New Business in Lebanon County**

Economic success in recent years has been measured by the retention and expansions of existing businesses, resulting in job stability and growth. Additional success has been achieved by locating new businesses on previously developed industrial properties or planned business and industrial parks. These achievements have occurred as a result of strong community development policy at the county and local level, supported in part by state funding.

**APR Supply** – This Lebanon-based regional distributor of plumbing and heating supplies purchased the 270,000 sf former New World Pasta complex on North 8<sup>th</sup> Street in Lebanon. The site allowed them to expand and provides room for additional growth.

**College Hill Poultry** – After its purchase by Premium Protein Products, this Fredericksburg-based processor of organic chickens decided to remain at its location and refurbish its facility, with assistance provided through efforts of the Governor’s Action Team and the Lebanon Valley Economic Development Corporation

**Schott Pharmaceutical** – This maker of glass vials for pharmaceuticals represents the largest tenant to date in the LVEDC’s Lebanon Valley Business Park. The company opened with 155 employees in 2003, with plans to grow to approximately 275 employees.

**Supreme Mid-Atlantic** – This truck-body fabricator located in Jonestown is one of the county’s largest employers. It purchased the adjacent former Sterling Lebanon Packaging Building in 2004 to allow for expansion of its operations with minimal disruption.

**Valspar Corporation** – This company is constructing a 222,000 square foot latex paint manufacturing and distribution facility in the North Lebanon Business Park in North Lebanon Township. The company plans to employ 120 workers at this facility.

**East Lehman Street Industrial Park** – This site was previously home to the Lebanon Steel Foundry. After the foundry closed, the site had a number of environmental clean-up issues. Since 1997, many of the original buildings have been removed, making land available for new buildings. Four original buildings remain and have been renovated. The East Lehman Street Industrial Park is also a Keystone Opportunity Zone and, as such, is exempt from state taxes until 2013. The Park is currently home to I. Auman Machine Company and a metal fabricating shop.

**The Alcoa Property** – The departure of Alcoa from its South Lebanon Township facility in 2002 had a heavy economic impact on the county. The LVEDC has been working to find new tenants for the property. The 122-acre site, with an 800,000 square foot structure, is adjacent to the Lebanon Valley Business Park. High Concrete is the first tenant to locate to the site and occupies approximately one fourth of the facility.

**The Aspens Business Park and Incubator Building** – This brownfield site located in the northwest corner of Lebanon is a Keystone Opportunity Zone. In addition to the tax advantages offered by the KOZ status, the site will be home to an incubator building aimed at supporting start-up technology-oriented business.

**I-81 Lickdale Exit** – This area is quickly becoming a hub of warehousing and distribution facilities. Spurred by easy access to Interstates 81 and 78, as well as the development of the NorthPort Business Park, a number of new businesses have located here, including Tyco, Swift Trucking, and Ingram Micro.

**North Londonderry Township** – New facilities for Hershey Foods and General Mills have recently been constructed in the southwestern section of the township, which may lead to additional spin-off opportunities to service these facilities.

## Lebanon County Top Employers

**Table 3-7 Top Employers located in Lebanon County and Eastern Dauphin County**

| Employer                                       | Industrial Classification (NAICS Code) | Location            | Full Time Employees | Part Time Employees |
|--|--|---------------------|---------------------|---------------------|
| Department of Military and Veterans Affairs    | National Security (928)                | Fort Indiantown Gap | 1,200               | 0                   |
| Lebanon County                                 | Public Administration (921)            | Lebanon             | 950                 | 0                   |
| Veterans Administration Medical Center         | Health Care (622)                      | Lebanon             | 910                 | 40                  |
| Good Samaritan Hospital                        | Health Care (622)                      | Lebanon             | 784                 | 363                 |
| Tyco Electronics                               | Electronics Manufacturing (334)        | Jonestown           | 700                 | 0                   |
| Farmer's Pride, Inc./ Bell & Evans             | Food Manufacturing (311)               | Fredericksburg      | 700                 | 0                   |
| Weaber, Inc.                                   | Wood Product Manufacturing (321)       | Lebanon             | 600                 | 0                   |
| Philhaven                                      | Health Care (622)                      | Mt. Gretna          | 552                 | 239                 |
| Cornwall-Lebanon School District               | Education (611)                        | Lebanon             | 490                 | 164                 |
| Bayer Consumer Care                            | Pharmaceutical Manufacturing (325)     | Myerstown           | 480                 | 3                   |
| Lebanon School District                        | Education (611)                        | Lebanon             | 449                 | 31                  |
| Wal-Mart #2073                                 | Retail (452)                           | Lebanon             | 363                 | 73                  |
| Supreme Mid-Atlantic Corporation               | Truck Body Manufacturing (336)         | Jonestown           | 300                 | 13                  |
| Pennfield Farms                                | Food Manufacturing (311)               | Fredericksburg      | 300                 | 0                   |
| <b>Hershey Area Employers (Dauphin County)</b> |  |                     |                     |                     |
| Hershey Medical Center <sup>1</sup>            | Health Care                            | Hershey             | 6,059               | N/A                 |
| Hershey Foods Corporation                      | Food Manufacturing                     | Hershey             | 2,500               | 0                   |
| Hershey Entertainment & Resorts                | Recreation and Accommodations          | Hershey             | 1,189               | 3,191               |
| H.B. Reese Candy Co.                           | Food Manufacturing                     | Hershey             | 1,000               | 0                   |
| Milton Hershey School                          | Education                              | Hershey             | 877                 | 749                 |

Source: Lebanon Valley Chamber of Commerce, 2005 Membership Directory

<sup>1</sup> Hershey Medical Center/Penn State College of Medicine, Fast Facts 2004. Employment data were not available by full time and part time employees.



## The County's Largest Employer: Fort Indiantown Gap<sup>6</sup>

### *History*

Fort Indiantown Gap was first established by the state in 1931, as the primary training base for the Pennsylvania National Guard. It is also home of the Pennsylvania [Department of Military & Veterans Affairs](#) (DMVA), which oversees both the Army and Air National Guard and the state's programs for serving the needs of Pennsylvania's 1.3 million veterans. Since 1940, most of its 19,000+ acres have been leased to the federal government for military training purposes. Its mission expanded in recent years to include all active and reserve components, as well as selected civilian customers. In October 1998, pursuant to the recommendations of the BRAC Commission, the U.S. Army garrison at the Gap closed, and responsibility for day-to-day management of the post was transferred to the Pennsylvania National Guard.

### *Mission*

The primary mission of Fort Indiantown Gap is military training for the active and reserve components of all the services. Civilian organizations with compatible interests and training needs are also accommodated whenever possible. On average, more than 100,000 individual students and trainees rotate through the installation every year.

### *Employment*

Some 1,300 state and federal civilians; military technicians; members of the Active Guard and Reserve program; active-duty soldiers; and employees of contractors and non-DMVA tenants full-time at Fort Indiantown Gap. This total makes Fort Indiantown Gap the largest employer in Lebanon County. Its annual economic impact exceeds \$100 million.

### *Military facilities at Fort Indiantown Gap*

- State headquarters of the Pennsylvania Army and Air National Guard
- 35 separate Army and Air Guard units, with a total of 3,500 drilling members
- 140 maneuver areas, firing ranges and bivouac sites
- [166th Regiment \(Combat Arms\)](#), a regional training academy with state-of-the-art distance learning capability
- [Eastern Army National Guard Aviation Training Site](#), the only reserve component training center for utility and medium-lift helicopters
- Muir Army Airfield, second busiest helicopter base in the world
- Air-to-Ground Bomb Range for active and reserve fighter pilots from all the services
- 3rd Weapons of Mass Destruction Civil Support Team, one of 10 Guard units in the nation dedicated to assisting civilian responders in the event of a terrorist attack
- [Northeast Counterdrug Training Center](#), one of three in the nation providing no-cost support to civilian drug enforcement agencies and drug demand professionals
- 756th Ordnance Company (EOD), an active Army "bomb squad" providing emergency coverage across the state
- Regional Equipment Operators Training Site, a unique Air Guard "schoolhouse" serving construction engineers across the total Air Force
- ["Lightning Force" Academy](#), another unique school for Air Force and Air Guard specialists in fiber optics and network installation
- Medical Company Training Site, one of two in the National Guard for combat lifesaving and other critical medical skills

### *Other organizations on post*

- State offices of [AMVETS](#) and [Marine Corps League](#)
- [Civil Air Patrol](#) - Pennsylvania Wing
- [Pennsylvania State Police](#)
- Valley Foods, Inc., food service distributor for the entire Pennsylvania Army National Guard
- [MountainTop Technologies](#), concessionaire operating the Gap's distance learning facility
- The [All Army Sports Program](#), a competitive athletic program for soldier athletes
- [Pennsylvania National Guard Associations](#)

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<sup>6</sup> Fort Indiantown Gap, a National Guard Training Center, <http://www.dmva.state.pa.us/ftig/site/default.asp>.

## Immediately adjacent

- Indiantown Gap National Cemetery (operated by the U.S. Department of Veterans Affairs) and the Pennsylvania Veterans Memorial.

## Recreational opportunities and customer services

- Hunting and fishing on post (including special access for the disabled)
- Community Club
- Blue Mountain Sports Arena
- Swimming pool (outdoor)
- Post Exchange, gas station, convenience store, military clothing store
- Scouting trips, youth camps, civic tours
- Major public events (Armed Forces Day celebration, Battle of the Bulge re-enactment)
- Pennsylvania National Guard Military Museum

## Environmental Stewardship

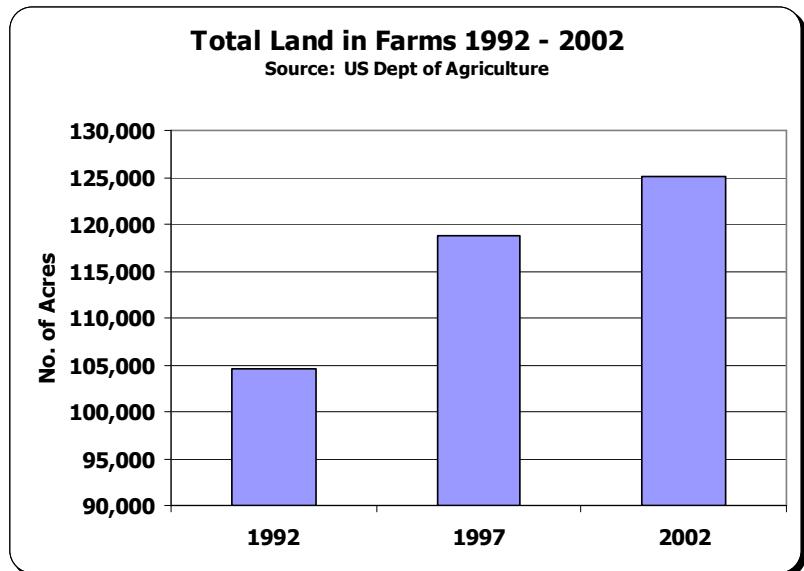
Working in close concert with regulatory agencies, conservation groups and scientific consultants, Fort Indiantown Gap maintains a strong commitment to protect and preserve the environment. For example, 158 acres of training land have been set aside as research habitat for a rare species of butterfly. Stream banks and wetlands on post are being restored in cooperation with the Chesapeake Bay Foundation and [The Nature Conservancy](#) and Fort Indiantown Gap is now developing a comprehensive Environmental Impact Statement to guide plans for future expansion of training areas and infrastructure.

## A Closer Look at the Agriculture Sector

Agriculture continues to thrive as an important component of the county's economy. Results from the 1992, 1997, and 2002 Censuses of Agriculture were examined to identify notable features and patterns in the county's agricultural sector.

- Approximately 54%, or 125,000 acres, of Lebanon County's land area was being farmed in 2002.
- Since 1992, due to subdivisions, the number of farms and the acreage in farms has increased; the acreage has been increasing more slowly, resulting in a declining average acreage per farm. Regional and state data for 1997 and 2002 display similar trends.
- The greatest increase, for all geographic areas, has been in the number of farms between 10 and 49 acres. The county had 359 farms in this size range in 2002, compared to 214 in 1992. In contrast, the number of farms with 500 or more acres was 17 in 2002, down from 22 in 1992.
- In Lebanon County, the total value of agricultural products sold increased by 45% in the ten-year period ending in 2002, while the value per farm increased by 17%.
- While the data are reported in current dollars, the prices of agricultural products have been flat (i.e. crops) or decreasing (i.e. livestock and animal products). Thus, these sales increases reflect very impressive increases in volumes sold.
- The biggest gains occurred between the 1992 and 1997 censuses. Since 1997, the total value of products sold increased 12% in Lebanon County, and the sales per farm actually decreased by 10%. The trends at the regional and state levels are similar in kind, but different in degree. That is, the increase in sales was more moderate (6%), and, combined with the decreasing average farm size, resulted in a decrease in the value of products sold per farm in this most recent five-year period.

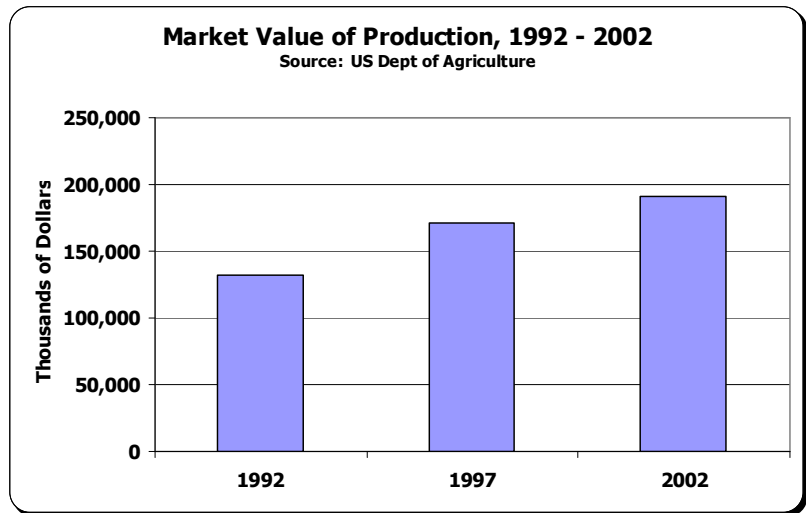
Figure 3-18 Land in Farms in Lebanon County



The most striking feature of the agricultural statistics is the prominence and growth in livestock production, particularly hog farming.

- The value of livestock, poultry and their products (e.g., milk and eggs) represents more than nine out of every ten dollars in agricultural product sales in Lebanon County. This proportion has been virtually constant in the county over the 10-year period ending in 2002.
- Livestock farming is important in much of the rest of the south central Pennsylvania region, and comprised 84% of the value of agricultural products sold in the region in 2002. At the state level livestock is not quite as dominant, accounting for just over two thirds (69%) of the value of agricultural products sold.
- When measured by number of farms, cattle dominate livestock farms in the county, with 519 of the county's 1,104 farms having sold cattle or calves in 2002. In contrast, 131 farms sold hogs or pigs in 2002. When measured by number of animals sold, and growth in number sold, hog and pig farms clearly dominate, with over a half million sold in 2002, compared to over 31 thousand cattle and calves. Moreover, the number of hogs and pigs sold increased three-fold from 1992 to 2002.

**Figure 3-19 Market Value of Farm Production in Lebanon County**



The Economic Contribution of Forestry to Pennsylvania report published by the Penn State School of Forest Resources estimated that agricultural processing adds \$81 million to the local economy, thus illustrating that the importance of livestock and poultry production to the county's economy extends beyond the farms. This same report estimates that the annual economic contribution of the agricultural production sector to Lebanon County is approximately \$24.5 million dollars.

**Workforce Characterization and Trends**

The characteristics of the workforce are among the factors that influence a company's decision to locate a new facility or expand operations. In the past, the cost of labor, i.e., the hourly wage, was the primary labor-related consideration. Today, those responsible for making corporate site selection decisions are also looking very closely at the skills, productivity, work ethic, and size of the prospective labor force, as well as quality of schools, recreational amenities, cultural and entertainment activities offered by a community or region.

This section profiles Lebanon County's workforce. It is intended to help county officials, the LVEDC, the Chamber of Commerce, and Community of Lebanon Association (CLA) assess the desirability of the county as a place to do business and also to plan strategically for the future. It will also provide the LVEDC and the Chamber with the statistical data that companies typically request as they proceed through the site selection process.

Civilian Labor Force, Employment, and Unemployment

Table 3-3 compares the change in the size of the labor force in Lebanon County between 1990 and 2000 with the surrounding counties. It does not distinguish between the civilian labor force and those in the armed forces because less than one-half of one percent of the labor force in each county reported being in the armed forces.

- The regional labor force increased by 77,086 or 7.2% (Figure 3-20).
- Each county experienced an increase in the total number of residents in the labor force, except Schuylkill County. Lebanon County's labor force increased by 3,125 workers or 5.3% between 1990 and 2000. Lancaster and York Counties had the largest numerical increases, with an additional 20,824 and 18,932 new workers, respectively. Adams County experienced the greatest percentage increase in the labor force at 15.5%.
- As a percentage of the total 16 year+ population, the labor force is decreasing for each county except Perry and Berks Counties, which may reflect a larger number of retirees living in each county.

**Table 3-8 Change in Size of Labor Force**

| Municipality          | Total Residents 16 Years and Over |               | Residents 16 Years and Over in the Labor Force |             |               |             |
|-----------------------|-----------------------------------|---------------|--|-------------|---------------|-------------|
|                       | 1990                              | 2000          | 1990   |             | 2000          |             |
|                       |                                   |               | #  | % of total  | #             | % of total  |
| Pennsylvania          | 9,392,816                         | 9,693,040     | 5,797,937                                      | 61.7        | 6,000,512     | 61.9        |
| <b>Lebanon County</b> | <b>89,179</b>                     | <b>95,090</b> | <b>59,342</b>                                  | <b>66.5</b> | <b>62,467</b> | <b>65.7</b> |
| Adams County          | 60,850                            | 71,242        | 41,834   | 68.7        | 48,299        | 67.8        |
| Berks County          | 266,721                           | 291,683       | 174,416  | 65.4        | 190,703       | 65.4        |
| Cumberland County     | 157,450                           | 172,209       | 105,784  | 67.2        | 111,105       | 64.5        |
| Dauphin County        | 188,054                           | 197,683       | 126,583  | 67.3        | 128,945       | 65.2        |
| Franklin County       | 95,008                            | 101,768       | 62,590   | 65.9        | 65,289        | 64.2        |
| Lancaster County      | 321,751                           | 358,317       | 222,379  | 69.1        | 243,203       | 67.9        |
| Perry County          | 31,353                            | 33,808        | 20,958   | 66.8        | 22,607        | 66.9        |
| Schuylkill County     | 122,962                           | 122,842       | 68,567   | 55.8        | 67,989        | 55.3        |
| York County           | 266,104                           | 298,226       | 184,564  | 69.4        | 203,496       | 68.2        |

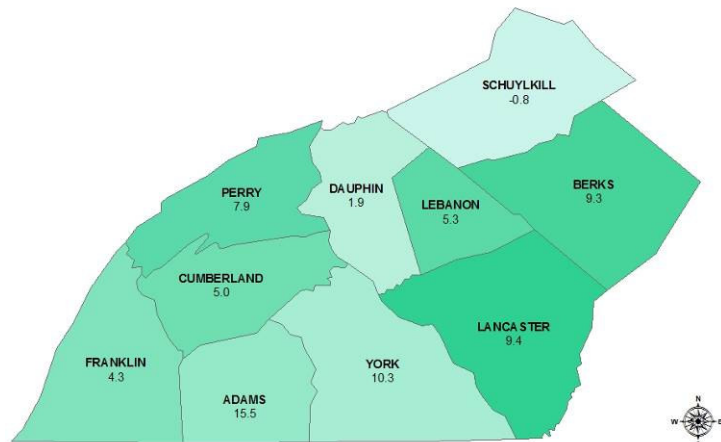
Source: US Census Bureau

The unemployment rate for Lebanon County has decreased significantly since 1990. However, after reaching a low of 2.7% in 2000, it has started to increase again. In comparison to the rest of the counties in the south central region, Lebanon County had the second lowest unemployment rate in 2003 and has been consistently below the regional average.

- As shown in Figure 3-21, unemployment figures for each of the south central Pennsylvania counties have followed a similar trend between 1990 and 2003. Unemployment rates peaked in the early 1990s, followed by a general decline through 2000, at which point they began to ascend. Recent trends indicate that unemployment rates are once again declining.
- Overall, unemployment rates have ranged from a low of approximately 2.5% in Cumberland County in 2000 to a high of just over 6% in Perry County in 1991. Since 1995, only York County has seen a rate in excess of 5%, indicating that the regional economy seems to have stabilized.

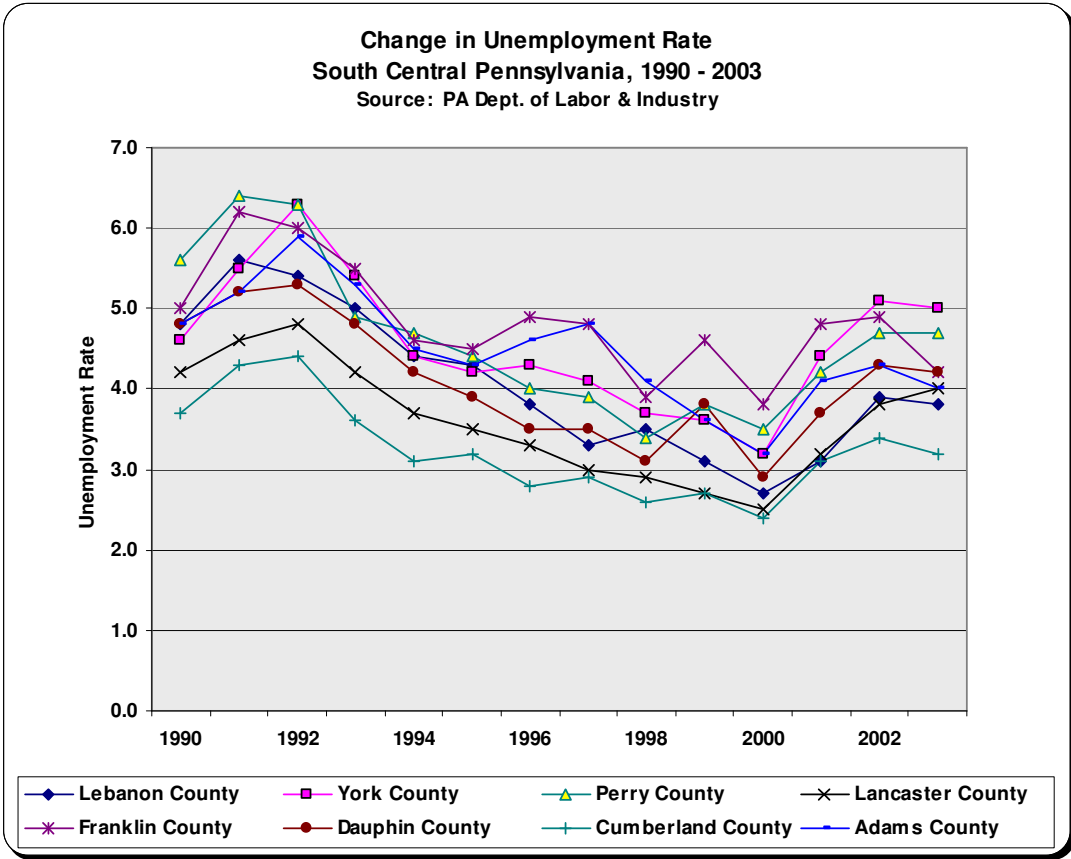
**Figure 3-20 Percent Change in Labor Force**

Percent Change in the Labor Force, 1990-2000



Source: US Census Bureau, 2000

Figure 3-22 Change in Unemployment Rates, 1990–2003



**Employment by Place of Residence**

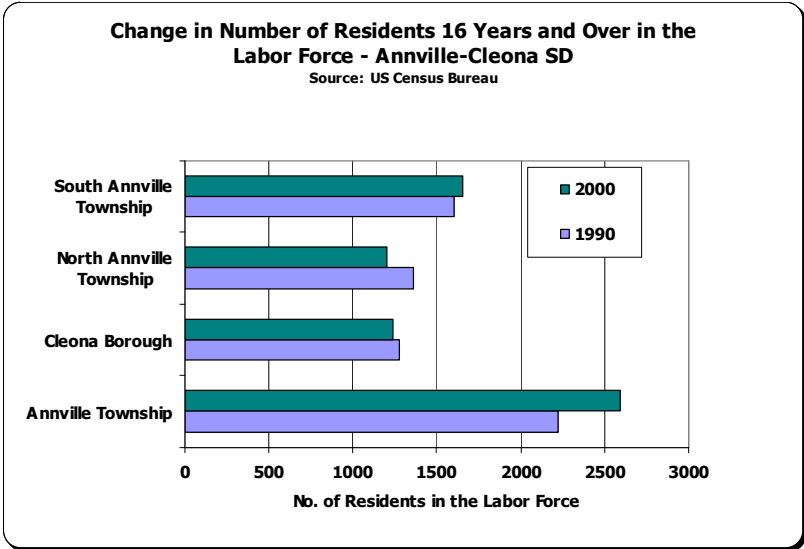
A review of employment data at both the county and municipal level is included to determine if any significant spatial patterns can help the county prioritize or redirect its economic development resources. The data compares labor force, industry, and occupation statistics from the Census Bureau for 1990 and 2000. Most of the information is organized by and presented at the school district level.

Labor Force Data by School District

**Annville–Cleona School District**

- Overall, the school district experienced a net increase in the labor force of 3.4% or 218 people. Growth in Annville and South Annville Townships has offset declines in the other two municipalities.
- This growth is in contrast to a 1% decrease in population during the same period.
- Annville–Cleona ranks 4<sup>th</sup> among the county’s school districts with regard to increases in the labor force.
- Annville Township has seen the greatest increase in the workforce, 16.6% or 369 people. This increase is primarily due to the expansion of Lebanon Valley College.

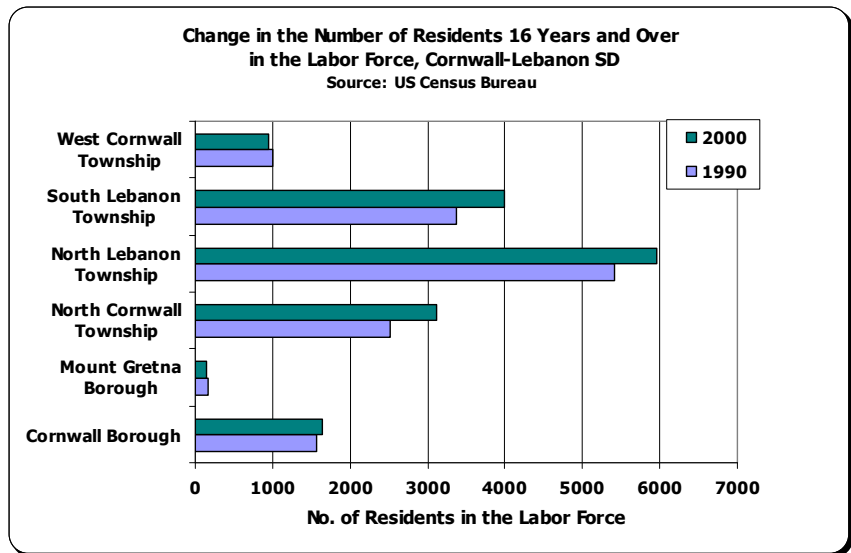
Figure 3-23 Change in Labor Force, Annville–Cleona SD



## Cornwall–Lebanon School District

- Cornwall–Lebanon experienced the greatest numerical (1,817) and percentage (13.1%) increase in their workforce, as well as in overall population.
- South Lebanon Township experienced the greatest numerical increase in the district, 634 new workers.
- North Cornwall Township experienced the greatest percentage increase, 23.7%, in the district and the third largest in the county.
- West Cornwall Township and Mount Gretna Borough each experienced a decrease in the workforce: 5.4% and 7.7% respectively.

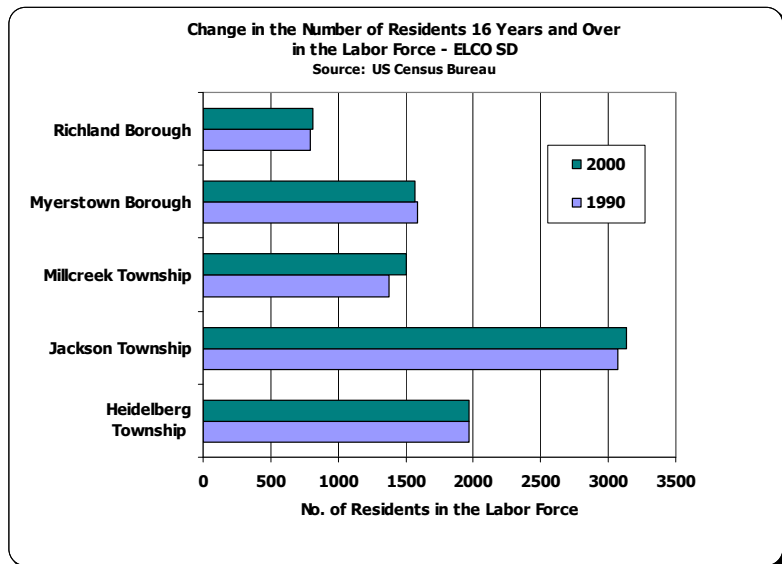
**Figure 3-24 Change in Labor Force, Cornwall-Lebanon SD**



## ELCO School District

- ELCO ranked 5<sup>th</sup> among the school districts in labor force growth at 2.2% or 195 new workers.
- Population growth in the district was approximately 5% during the same period.
- Millcreek Township experienced the greatest growth in the school district, 9.6% or 132 new workers.
- Heidelberg Township is the only municipality in the entire county that experienced *no change* in the size of the resident workforce.

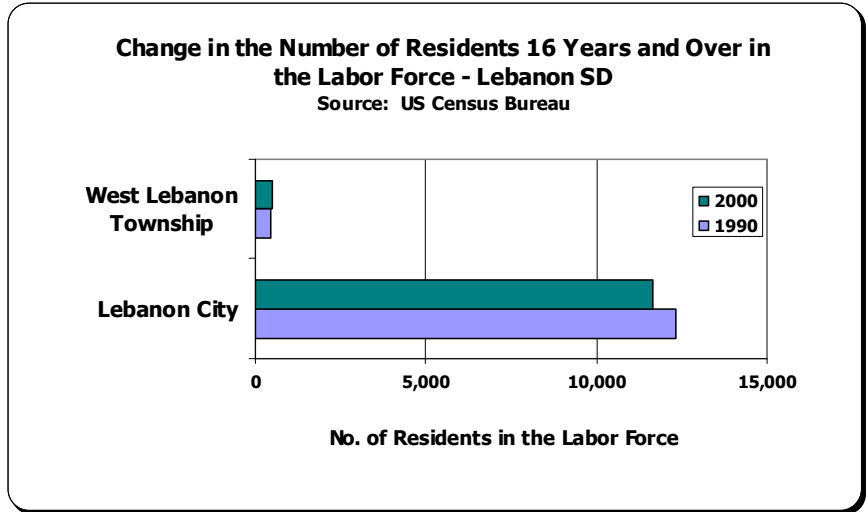
**Figure 3-25 Change in Labor Force, ELCO SD**



**Lebanon School District**

- The Lebanon School District experienced the greatest numerical decrease in labor force in the county, 699 fewer workers or 5.5%.
- The Lebanon School District’s total population declined by approximately 1% or 375 people between 1990 and 2000.
- From a percentage standpoint, the 5.5% decrease in Lebanon City’s labor force ranked fourth among the county’s municipalities.

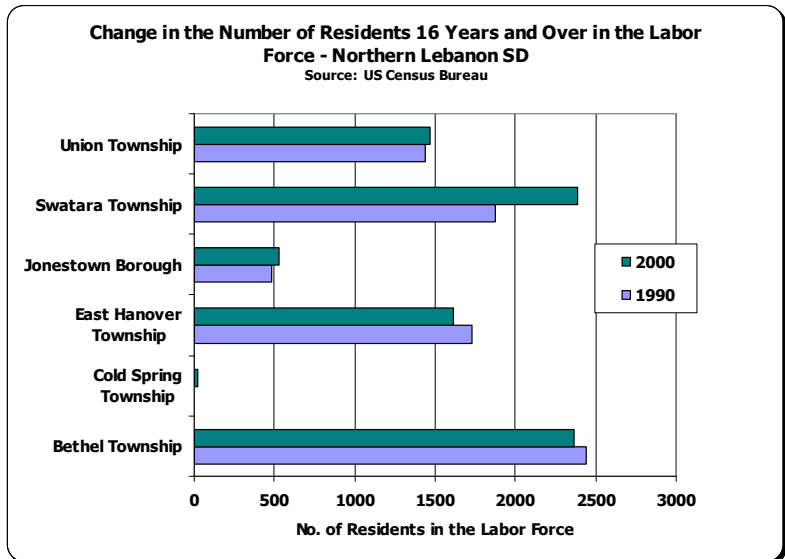
**Figure 3-26 Change in Labor Force, Lebanon SD**



**Northern Lebanon School District**

- Northern Lebanon ranks 3<sup>rd</sup> among the school districts in growth in the labor force.
- Four of the district’s six municipalities experienced increases in the labor force.
- Swatara Township’s labor force grew by 27.5% or 516 workers between 1990 and 2000. This is the highest percentage increase in the county, but only the 5<sup>th</sup> highest with regard to number of workers.

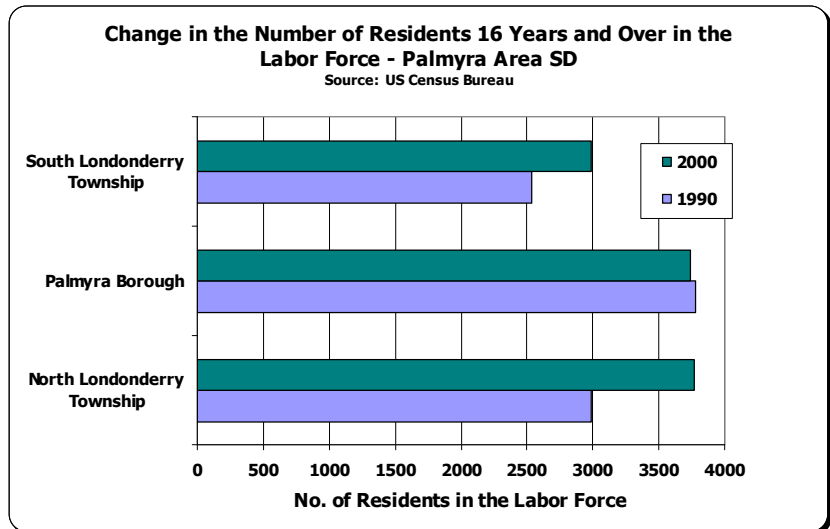
**Figure 3-27 Change in Labor Force, Northern Lebanon SD**



## Palmyra Area School District

- The Palmyra Area School District had the second fastest growing labor force in Lebanon County with 1,184 new workers.
- However, the district ranks first in population growth at 13%.
- Growth in North and South Londonderry Townships more than compensated for the workforce loss in Palmyra Borough.
- North Londonderry Township experienced the largest increase in the county numerically, 778 new workers. However, its percentage increase (26%) was second to Swatara Township (27.5%).

Figure 3-28 Change in Labor Force, Palmyra Area SD



## Resident Employment by Industry

There are thirteen broad industrial categories of resident employment reported by the 2000 Census.

- Agriculture, Forestry, Fishing, Hunting and Mining
- Construction
- Manufacturing
- Wholesale Trade
- Retail Trade
- Transportation and Warehousing, and Utilities
- Information Industries
- Finance, Insurance, Real Estate, and Rental and Leasing (FIRE)
- Professional, Scientific, Management, Administrative, and Waste Management
- Educational, Health and Social Services
- Arts, Entertainment, Recreation, Accommodation, and Food Services
- Other Services (except public administration)
- Public Administration



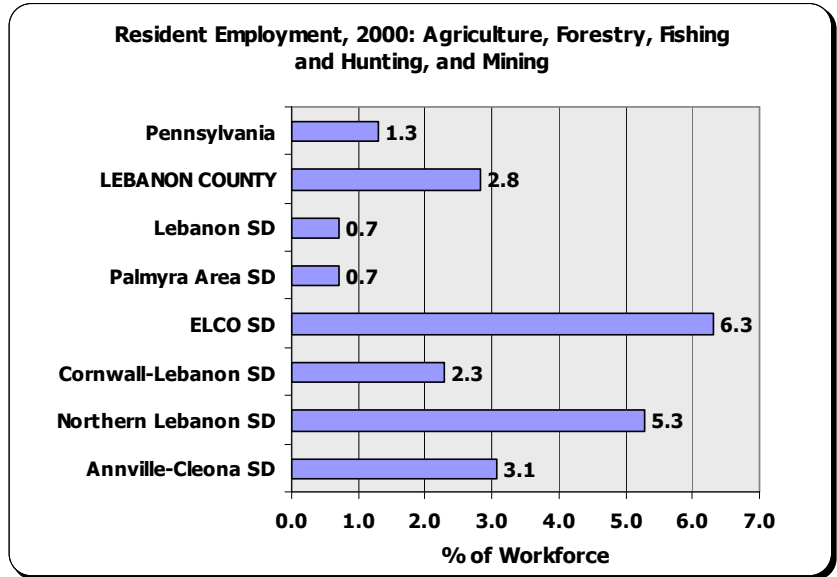
The data reflect industry statistics from the 2000 Census at the county, school district, and regional levels. Comparison with the 1990 data is not reliable because the classification system used in 2000 differs from the one used in 1990.



Agriculture, Forestry, Fishing, Hunting, and Mining

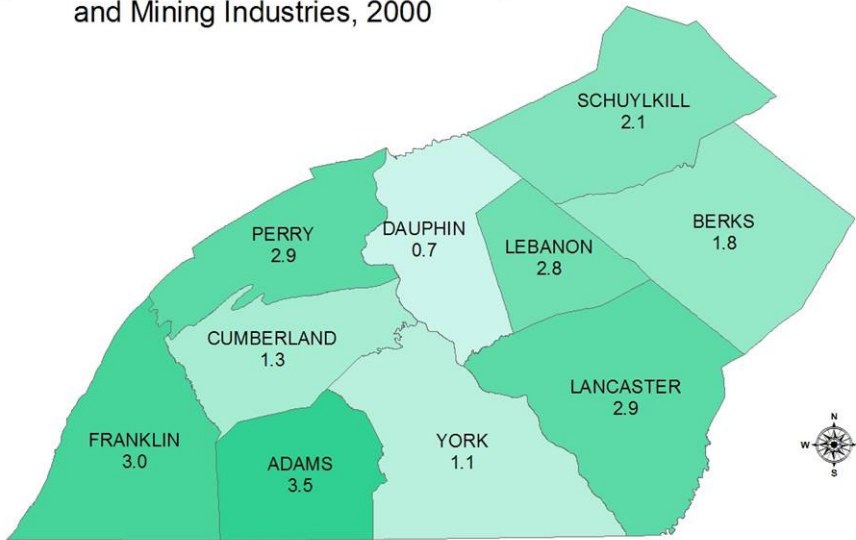
- Lebanon County’s percentage of the resident workforce in the agriculture, forestry, fishing, hunting and mining industries (2.8%) is more than double that for Pennsylvania (1.3%).
- Within the county, the ELCO and Northern Lebanon School Districts had the highest percentage of workers in these industries, with 6.3 and 5.3%, respectively. Lebanon and Palmyra had the lowest percentages.
- At the regional level, Adams, Franklin, Lancaster, and Perry Counties had similar percentages of their resident workforce employed in these industries as shown in Figure 3-29.

**Figure 3-29 Resident Employment: Agriculture, Forestry, Fishing, Hunting and Mining Industries**



**Figure 3-30 Comparison by County, 2000**

Percentage of Workforce Employed in the Agriculture, Forestry, Fishing and Hunting, and Mining Industries, 2000



Source: US Census Bureau, 2000

## Construction Industries

- Lebanon County had a slightly higher percentage of the workforce in construction industries (6.5%) than the Commonwealth (6.0%).
- Percentages of resident workers in construction in the ELCO, Northern Lebanon, and the Palmyra Area School Districts exceeded both the county and the state percentages.
- Regionally, Adams and Perry Counties had the highest percentages of residents employed in construction industries with 8.0 and 8.8%, respectively. Dauphin County had the lowest (5.1%).

Figure 3-31 Resident Employment: Construction Industries

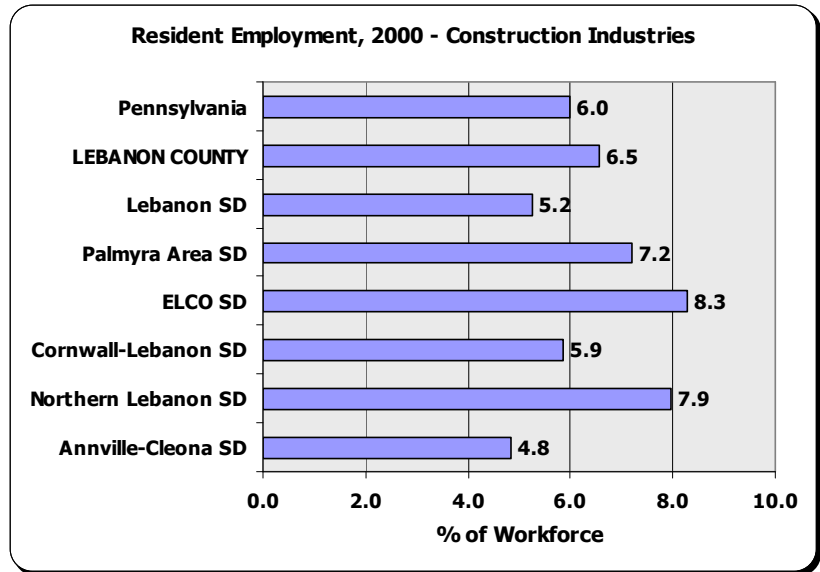
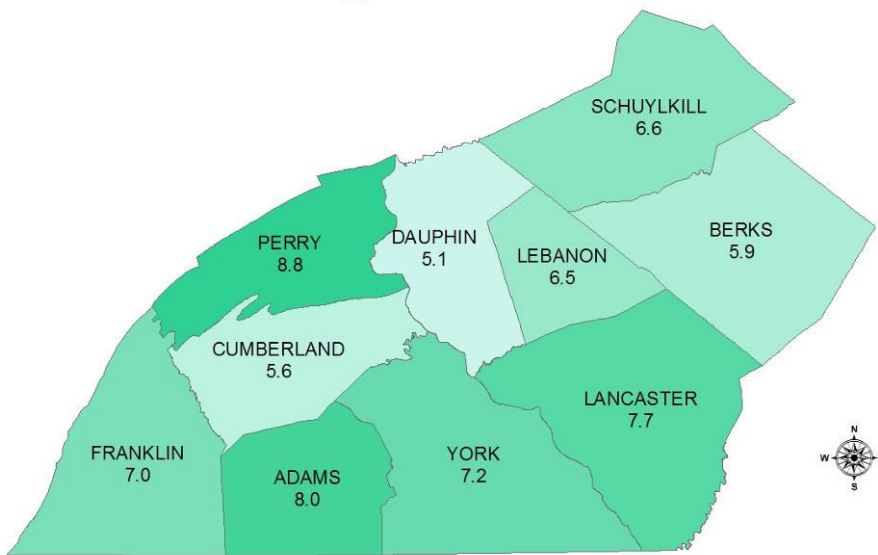


Figure 3-32 Comparison by County, 2000

## Percentage of Workforce Employed in the Construction Industry, 2000



Source: US Census Bureau, 2000

Manufacturing Industries

- Lebanon County had a greater percentage of the workforce in manufacturing than Pennsylvania, at 21.9% and 16.0%, respectively.
- The Lebanon School District had the highest percentage of the workforce employed in manufacturing industries – over 26%. Each of the school districts had higher percentages of residents employed in manufacturing than the state.
- Cumberland, Dauphin, and Perry Counties had a significantly smaller percentage of the resident workforce employed in manufacturing industries.

Figure 3-33 Resident Employment: Manufacturing Industries

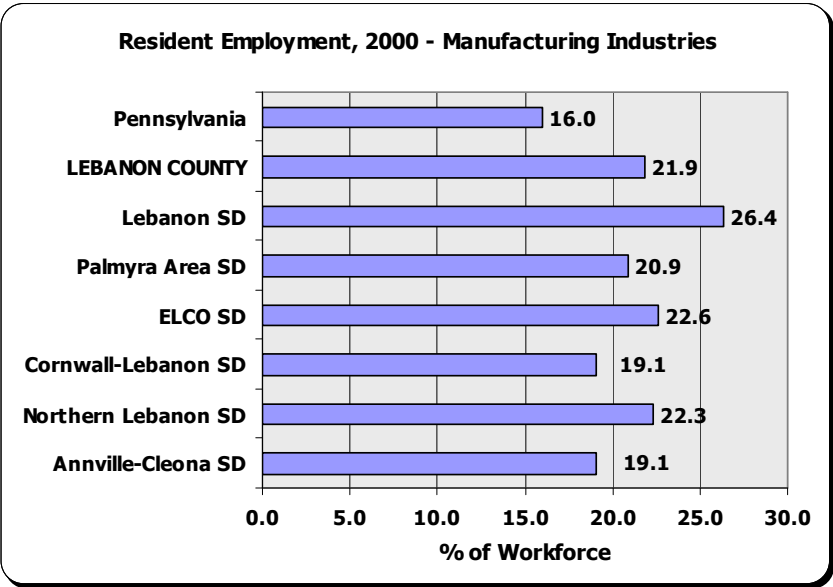
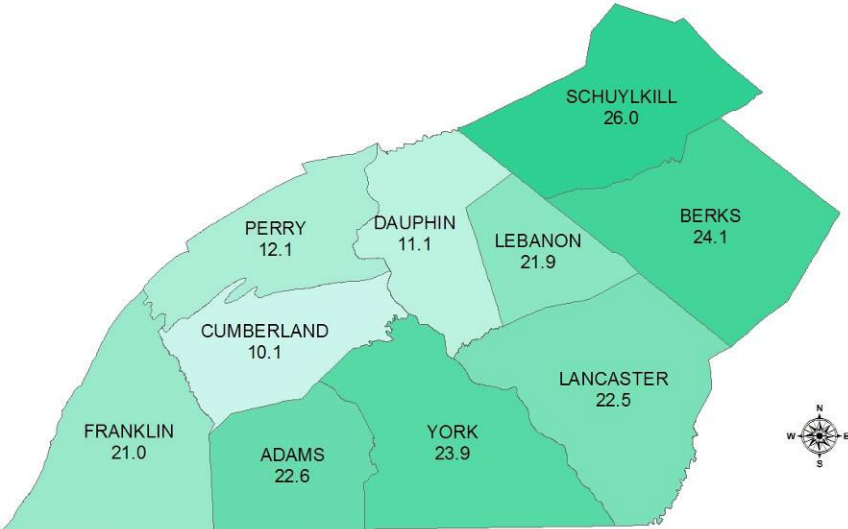


Figure 3-34 Comparison by County, 2000

Percentage of Workforce Employed in the Manufacturing Industry, 2000

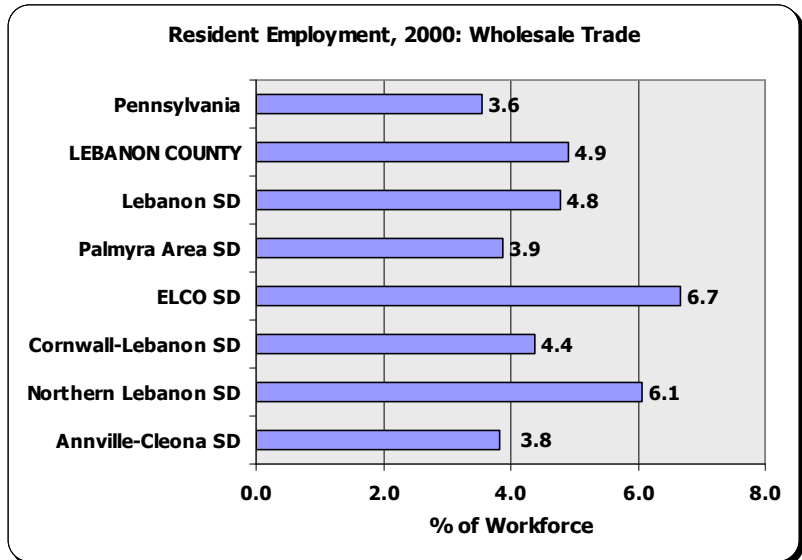


Source: US Census Bureau, 2000

## Wholesale Trade Industries

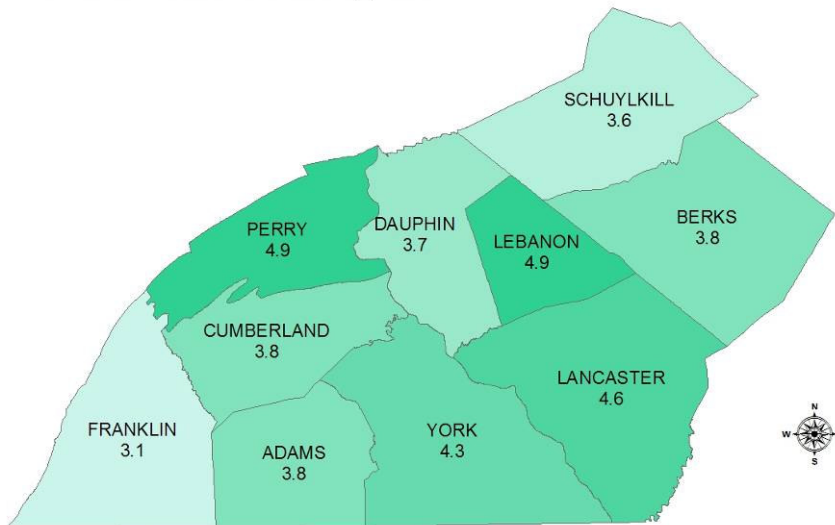
- The percentage of workers in Lebanon County employed in wholesale trade related industries (4.9%) exceeded the state rate of 3.6%. This is likely due to the presence of several large wholesaling companies within the county, including ASK Foods and other food wholesalers.
- As with manufacturing industries, each school district had a higher percentage of residents employed in wholesale industries than the state average.
- The ELCO and Northern Lebanon School Districts each had over 6% of the resident workforce employed in wholesale industries.
- Lebanon and Perry Counties each had 4.9% of the workforce employed in these industries. Franklin County had the smallest percentage at 3.1%.

**Figure 3-35 Resident Employment: Wholesale Trade**



**Figure 3-36 Comparison by County, 2000**

Percentage of Workforce Employed in the Wholesale Trade Industry, 2000



Source: US Census Bureau, 2000

Retail Trade Industries

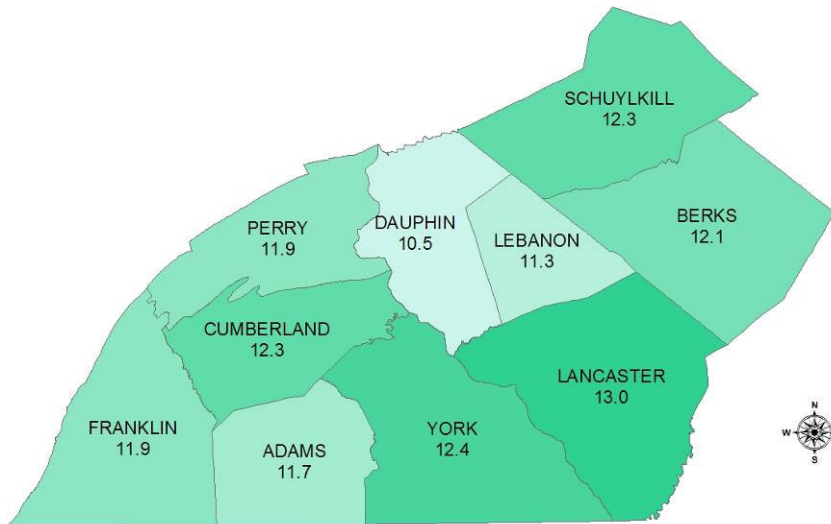
- The percentage of county workers employed in retail industries (11.3%) is very similar to the state (12.1%).
- Within the county, only the ELCO School District exceeded the state average and only Palmyra Area School district had less than 10% of the resident workforce employed in retail industries.
- The percentage of residents employed in the retail trade is also comparable to the surrounding counties, which had a range of 10.5% to 13% of the resident workforce employed in retail trade industries.

**Figure 3-37 Resident Employment: Retail Trade Industries**



**Figure 3-38 Comparison by County, 2000**

Percentage of Workforce Employed in the Retail Trade Industry, 2000

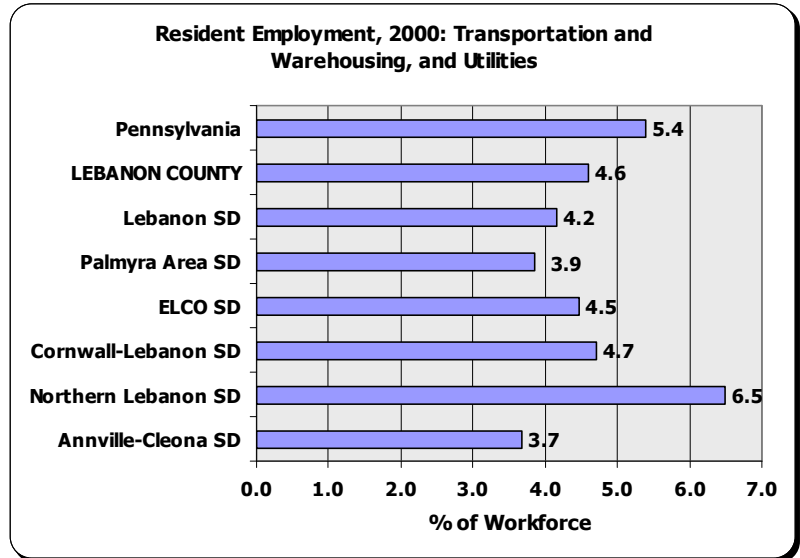


Source: US Census Bureau, 2000

## Transportation and Warehousing, and Utilities

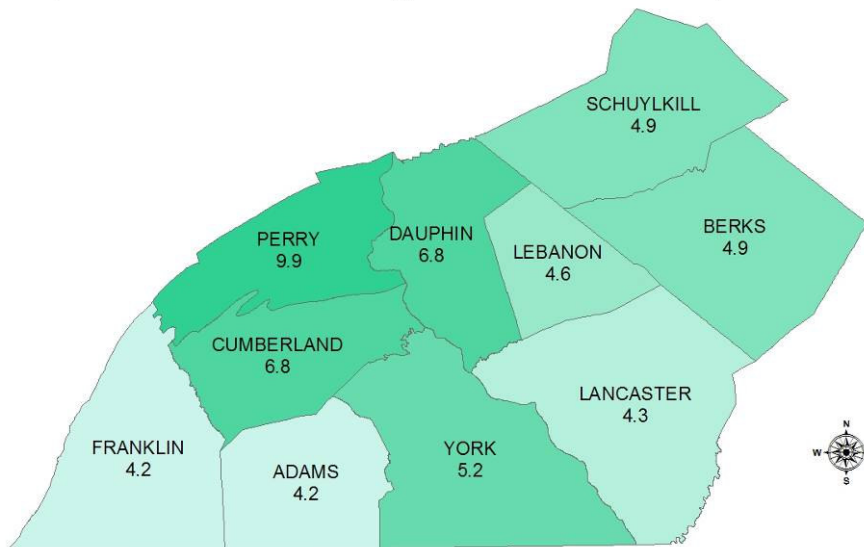
- The county's percentage of the workforce employed in transportation and warehousing and the utilities industries (4.6%) is slightly lower than for the state (5.4%).
- Within the county, each of the school districts had similar percentages with the exception of Northern Lebanon, which had over 6% of residents employed in these industries. This is likely due to the presence of Swift Trucking and other wholesale shippers located along major highway corridors.
- At the regional level, transportation and warehousing and utilities are concentrated in Cumberland, Dauphin and Perry Counties. Perry County had the highest percentage of workers in these industries (9.9%).

**Figure 3-39 Resident Employment: Transportation and Warehousing, and Utilities Industries**



**Figure 3-40 Comparison by County, 2000**

Percentage of Workforce Employed in the Transportation and Warehousing, and Utilities Industries, 2000



Source: US Census Bureau, 2000

Information Industries

- Information industries employed the smallest percentage of the county’s workforce (1.7%)—significantly less than the state (2.6%).
- The Lebanon and Palmyra Area School Districts had percentages most comparable to the state. Northern Lebanon had less than one percent of the workforce employed in these industries.
- Cumberland and Dauphin Counties had the highest percentages in the region (2.8% each).

Figure 3-41 Resident Employment: Information Industries

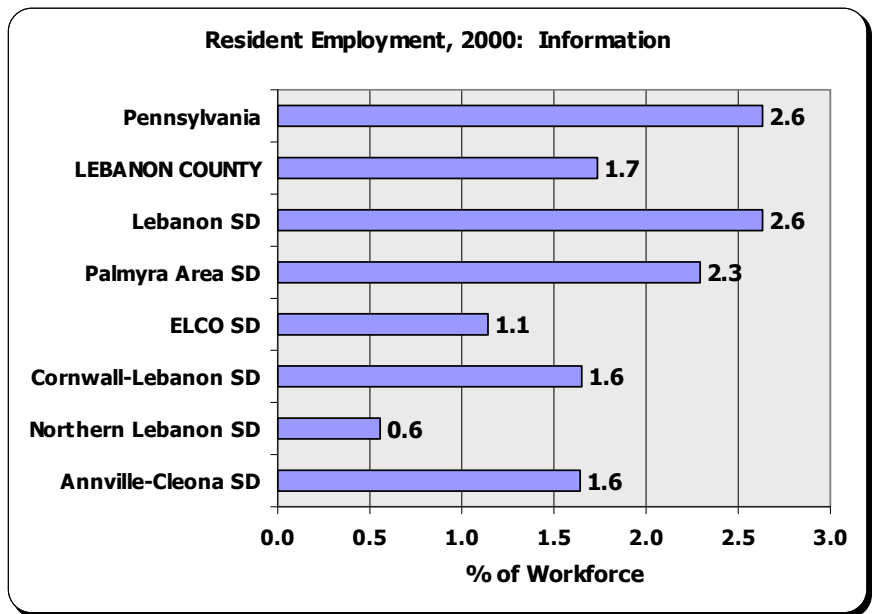
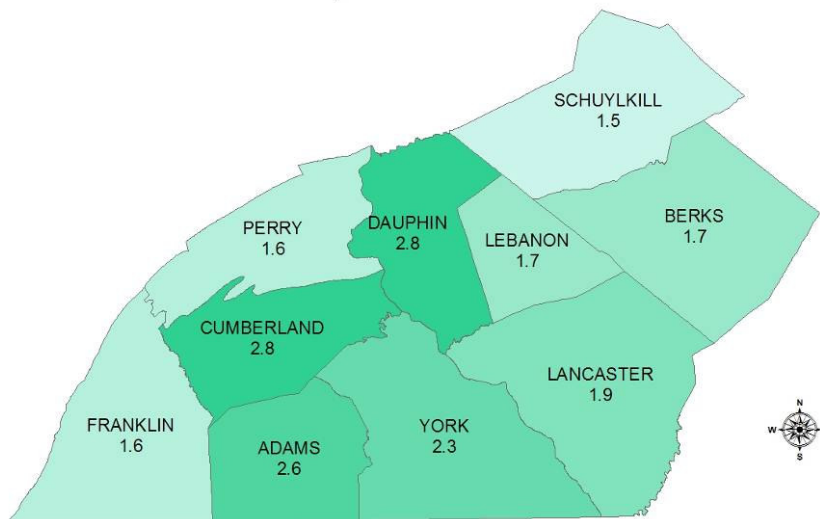


Figure 3-42 Comparison by County, 2000

Percentage of Workforce Employed in the Information Industries, 2000



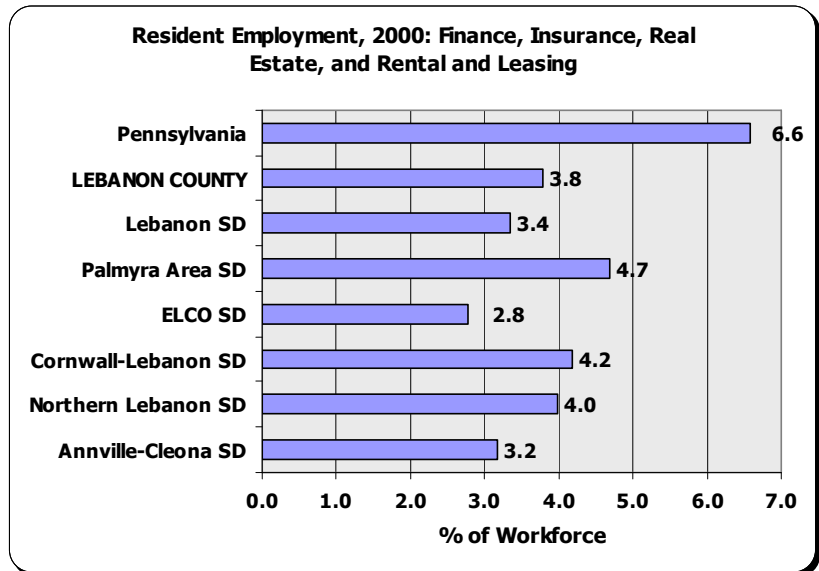
Source: US Census Bureau, 2000

# Economy and Employment Profile

## Finance, Insurance, Real Estate, and Rental and Leasing (FIRE) Industries

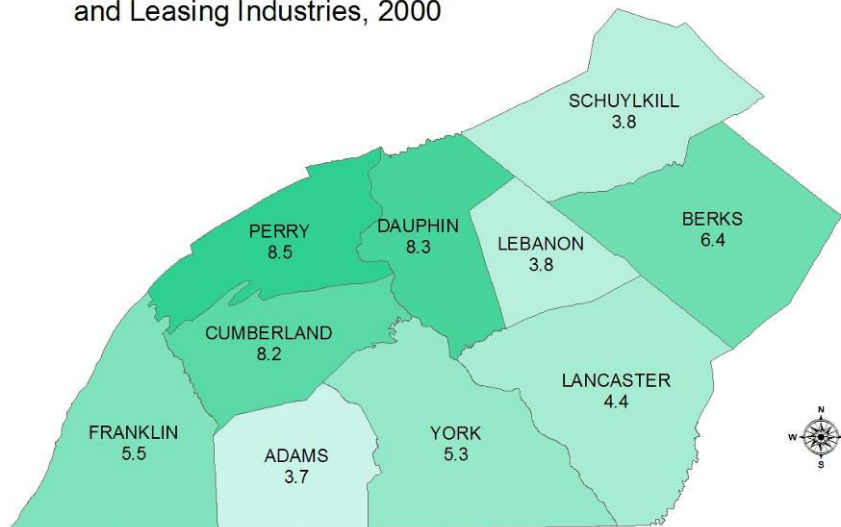
- Lebanon County had a substantially smaller percentage of the resident workforce employed in the FIRE industries (3.8%) than the Commonwealth (6.6%).
- The Cornwall-Lebanon and Palmyra Area School Districts had the highest percentages of the resident workforce employed in the FIRE industries within the county, yet were still significantly below the state level.
- At the regional level, Lebanon County ranks low (3.8%); only Adams County had a smaller percentage of the workforce employed in these industries (3.7%), while Cumberland, Dauphin and Perry Counties had significantly higher percentages employed (each over 8%).

**Figure 3-43 Resident Employment: Finance, Insurance, Real Estate, and Rental Leasing Industries**



**Figure 3-44 Comparison by County, 2000**

Percentage of Workforce Employed in the Finance, Insurance, Real Estate and Rental and Leasing Industries, 2000



Source: US Census Bureau, 2000



Professional, Scientific, Management, Administrative, and Waste Management Services Industries

- As with the FIRE industries, Lebanon County had a smaller percentage of the resident workforce employed in the Professional, Scientific, Management, Administrative, and Waste Management Services industries (5.6%) than found at the state level (8.5%).
- Among the county’s school districts, Cornwall-Lebanon and Palmyra Area ranked first and second with 6.7% and 6.6%, respectively.
- At 5.6%, Lebanon County ranked in the middle range for employment in professional, scientific, management, administrative, and waste management services. Dauphin County topped the list with 8.0%.

Figure 3-45 Resident Employment: Professional, Scientific, Management, Administrative, and Waste Management Services Industries

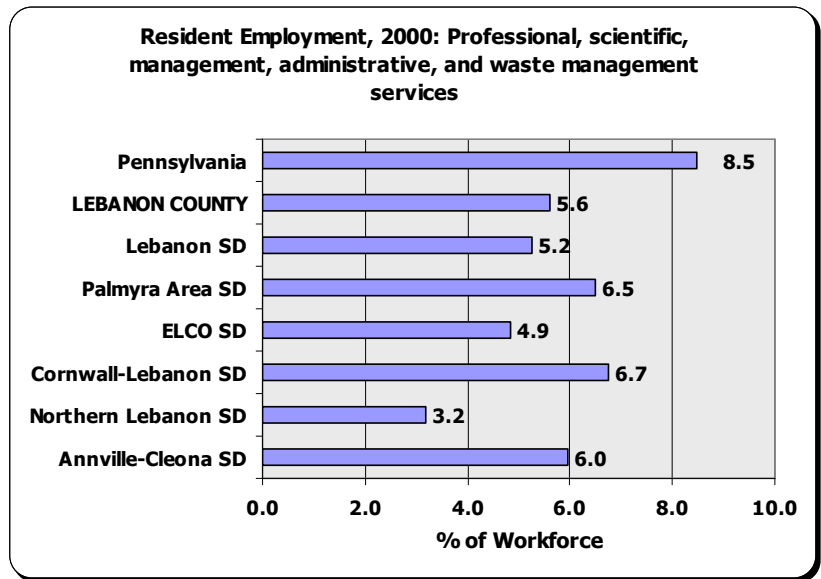
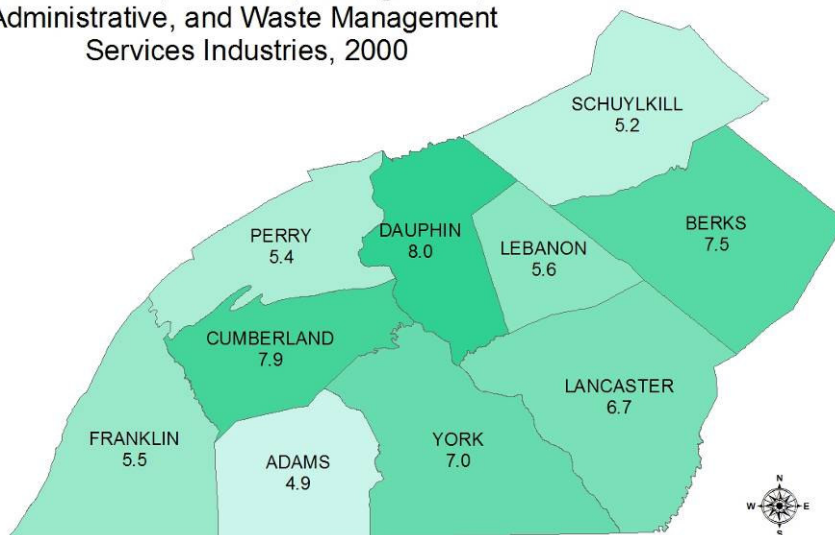


Figure 3-46 Comparison by County, 2000

Percentage of Workforce Employed in the Professional, Scientific, Management, Administrative, and Waste Management Services Industries, 2000

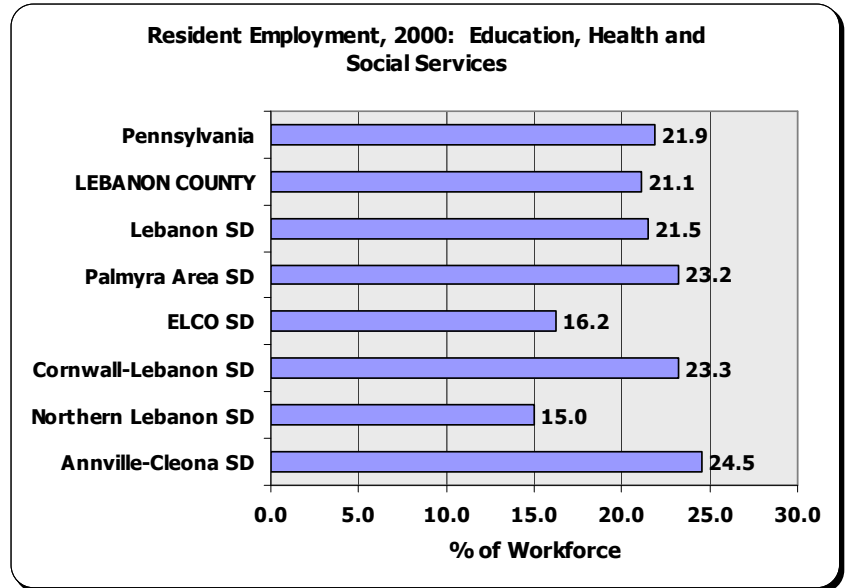


Source: US Census Bureau, 2000

## Education, Health and Social Services Industries

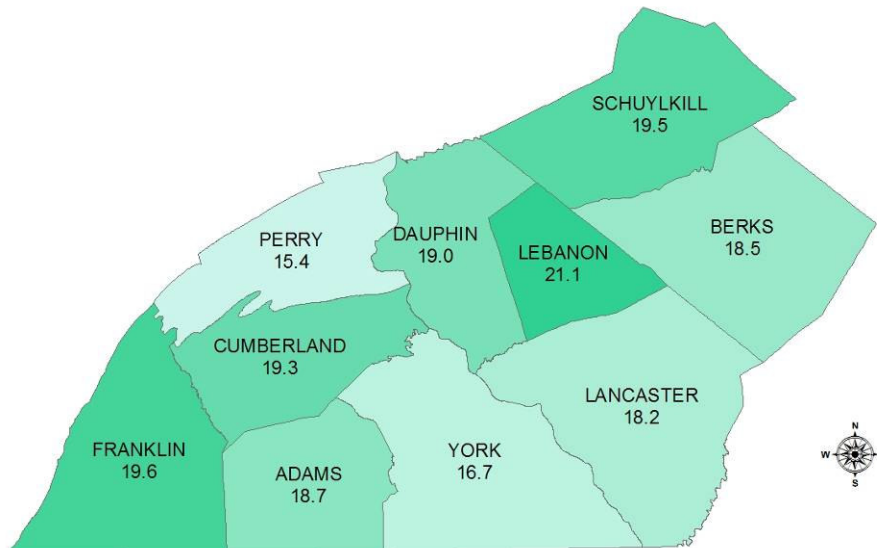
- Lebanon County is comparable to the state with regard to the percentage of the workforce employed in these industries, 21.1% and 21.9% respectively.
- Three of the school districts' percentages exceed the state rate: Cornwall-Lebanon, Palmyra Area, and Annville-Cleona.
- Among the surrounding counties, Lebanon County ranks first in the percentage of residents employed in the education, health and social services industries. Most of the surrounding counties have similar percentages, although Perry and York Counties lag somewhat at 16.4% and 16.7% respectively.

**Figure 3-47 Resident Employment: Education, Health and Social Services Industries**



**Figure 3-48 Comparison by County, 2000**

Percentage of Workforce Employed in the Educational, Health and Social Services Industries, 2000

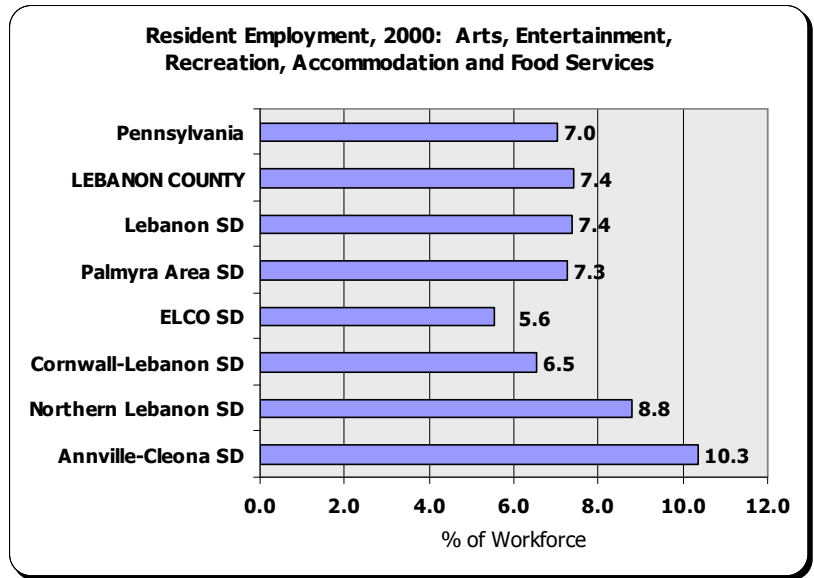


Source: US Census Bureau, 2000

Arts, Entertainment, Recreation, Accommodation, and Food Services Industries

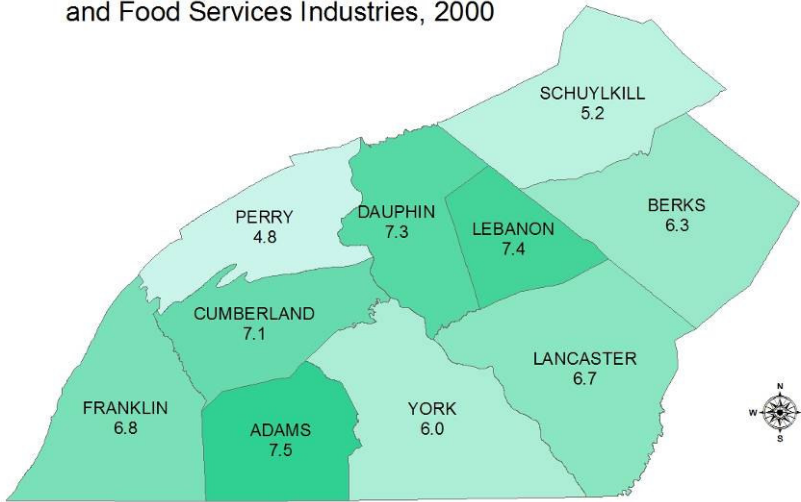
- Lebanon County had a slightly higher percentage of workers in the arts, entertainment, recreation, accommodation, and food service industries (7.4%) compared to the Commonwealth (7.0%).
- Adams and Lebanon Counties are leaders in these industries. Lebanon County's lead may be due in large part to the Hershey Entertainment and Resorts complex located in Dauphin County, which employs almost 1,200 full-time and 3,200 part-time workers.
- Within the county, the Annville-Cleona School District surpasses the state and county with just over 10% of residents working in these industries.
- As shown previously in Figure 3-8, these industries pay relatively low wages.

**Figure 3-49 Resident Employment: Arts, Entertainment, Recreation, Accommodation, and Food Services Industries**



**Figure 3-50 Comparison by County, 2000**

Percentage of Workforce Employed in the Arts, Entertainment, Recreation, Accommodation, and Food Services Industries, 2000

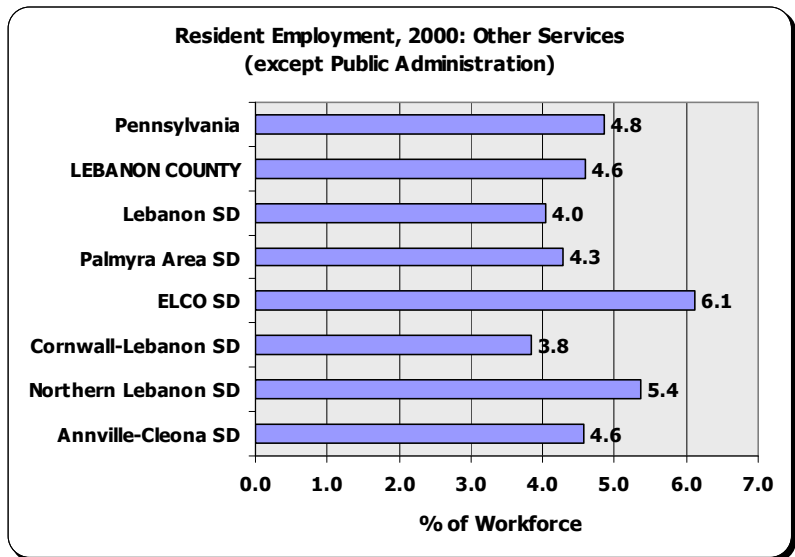


Source: US Census Bureau, 2000

## Other Services (Except Public Administration)

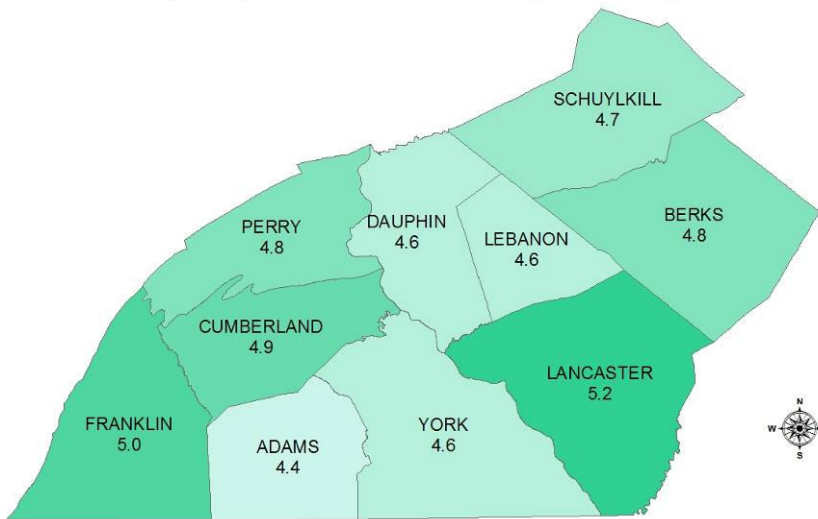
- Lebanon County is similar to the Commonwealth with regard to the percentage of residents employed in other services, 4.6% and 4.8%, respectively.
- Within the county, the ELCO School District stands out with over 6% of the workforce employed in these industries in 2000.
- The range for the surrounding counties is very narrow—Adams County at the low end with 4.4% and Lancaster County at the high end with 5.2%.

**Figure 3-51 Resident Employment: Other Services Industries**



**Figure 3-52 Comparison by County, 2000**

Percentage of Workforce Employed in the Other Services (except Public Administration) Industries, 2000

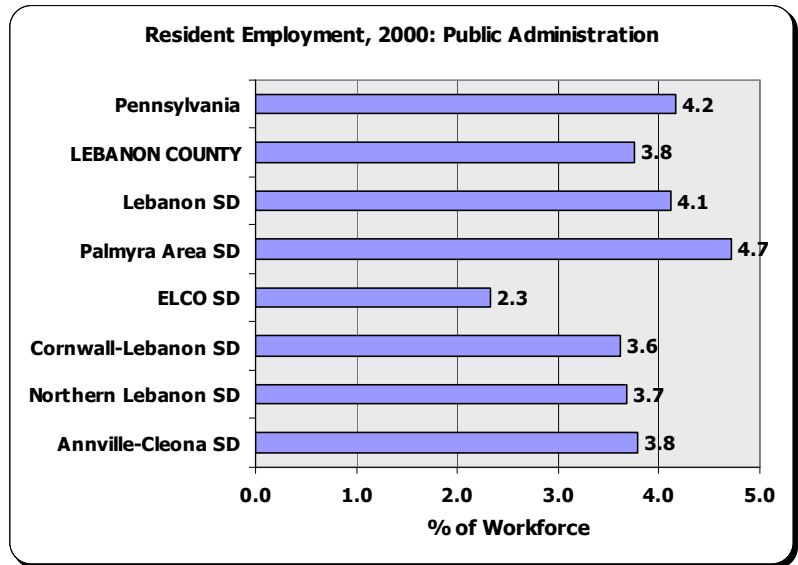


Source: US Census Bureau, 2000

Public Administration

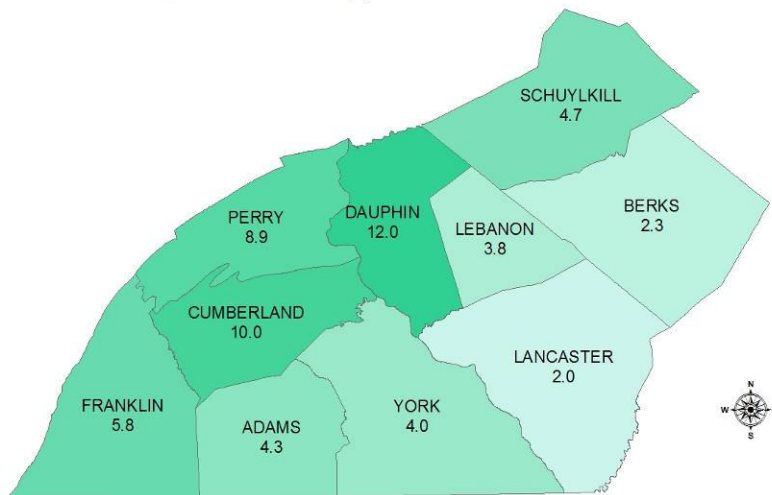
- Lebanon County had a slightly smaller percentage of the workforce employed in public administration industries (3.8%) than Pennsylvania (4.2%).
- The Lebanon and Palmyra Area School Districts had the highest percentages of the workforce employed in public administration. This is likely due to the City’s position as the county seat, and Palmyra’s proximity to Harrisburg.
- Cumberland and Dauphin Counties had the highest percentages employed in this category, with 10.0% and 12.0% respectively. Again, proximity to Harrisburg, the state capitol, is the likely rationale.

**Figure 3-53 Resident Employment: Public Administration Industries**



**Figure 3-54 Comparison by County, 2000**

Percentage of Workforce Employed in the Public Administration Industry, 2000



Source: US Census Bureau, 2000

### **Employment by Occupation**

This section examines the types of jobs, or occupations, that residents have within the industries reviewed in the previous section. The Census Bureau divides occupations into six major categories:

- Management, professional, and related occupations
- Service occupations
- Sales and office occupations
- Farming, fishing, and forestry occupations
- Construction, extraction, and maintenance occupations
- Production, transportation, and material moving occupations

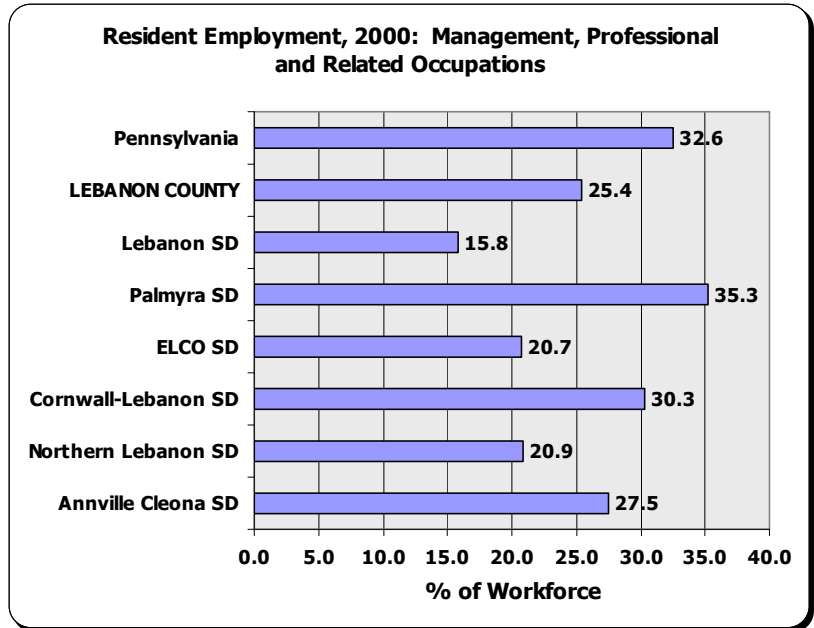
As with the industrial data, the occupations classification system used for the 1990 Census is not the same as the one used for 2000; therefore, only 2000 data is analyzed and presented at the county, school district, and regional levels.

Management, Professional and Related Occupations

Lebanon County had a significantly smaller percentage of residents employed in management, professional and related occupations (25.4%) relative to the state (32.6%).

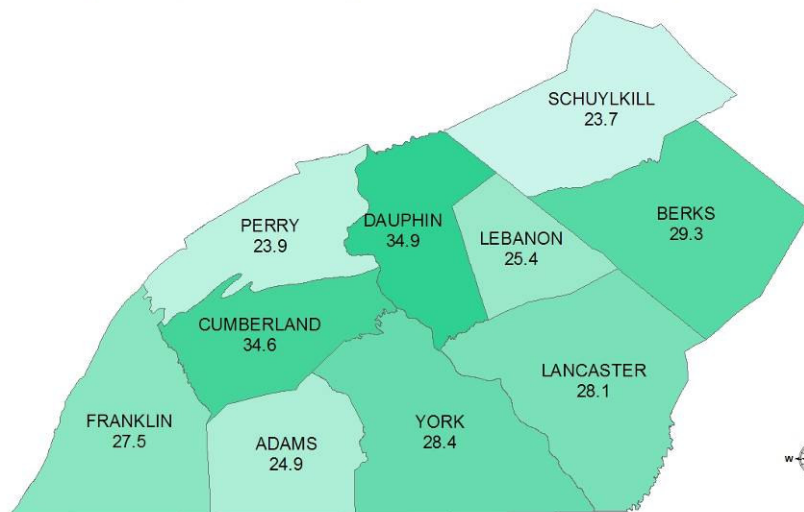
- The Palmyra Area School District exceeded both the state and county percentages, with almost 35% of residents employed in these occupations. Lebanon School District had the smallest percentage (15.8%).
- Regionally, the percentage of Lebanon County residents employed in these types of occupations (25.4%) is relatively low. Dauphin County has the highest percentage (34.9%), and Schuylkill County the lowest (23.7%).

**Figure 3-55 Management, Professional and Related Occupations**



**Figure 3-56 Comparison by County, 2000**

Percentage of Workforce Employed in Management, Professional, and Related Occupations, 2000



Source: US Census Bureau, 2000

## Service Occupations

- The percentage of Lebanon County residents employed in service occupations (16.0%) was slightly higher than the state (14.8%).
- The Lebanon and Annville–Cleona School Districts surpasses the county with 20% and 18.4%, respectively, of residents employed in these occupations.
- Lebanon County also had the highest percentage of the labor force (16%) employed in these occupations relative to the surrounding counties. Franklin County ranked second with just over 15% and York County was last with 12.5%.

Figure 3-57 Service Occupations

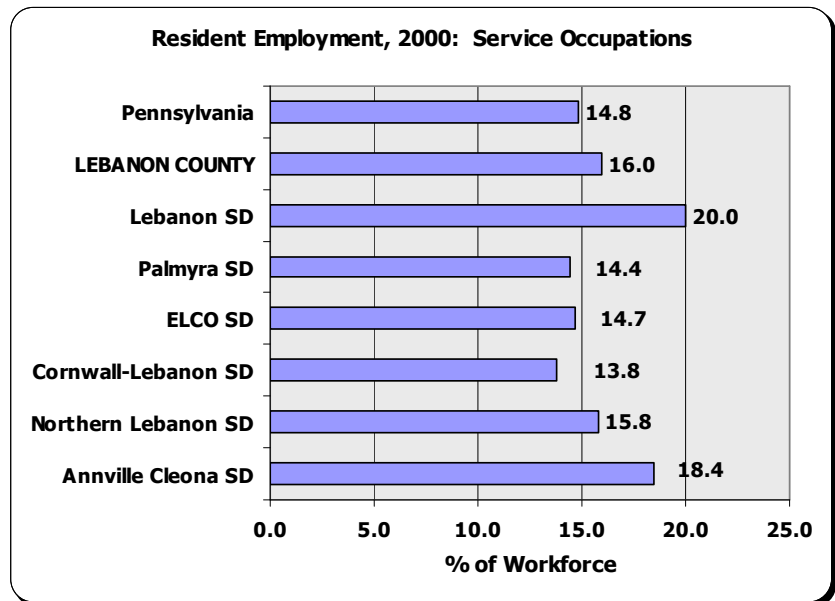
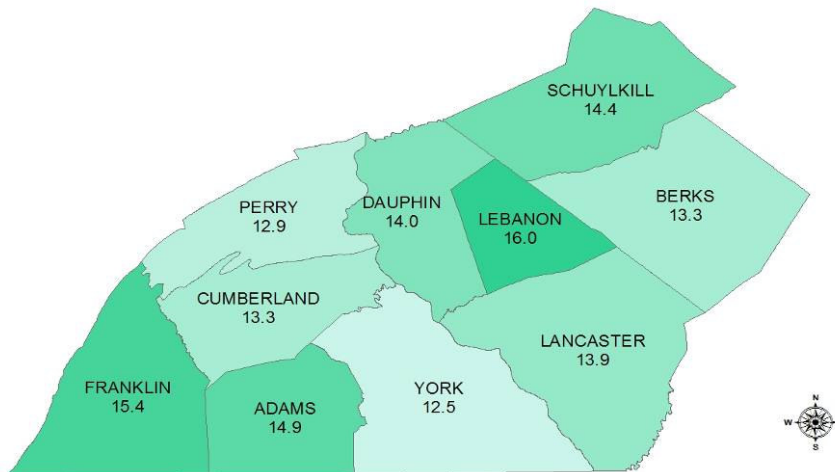


Figure 3-58 Comparison by County

Percentage of Workforce Employed in Service Occupations, 2000



Source: US Census Bureau, 2000



Sales and Office Occupations

- Lebanon County had a smaller percentage of residents employed in sales and office occupations (23.9%) compared to Pennsylvania (27.0%).
- Within the county, the Cornwall–Lebanon and the Palmyra Area School Districts ranked first and second with 24.9% and 24.3% respectively.
- Relative to surrounding counties, Lebanon County has fewer resident workers employed in sales and office occupations. The capitol region, comprised of Cumberland, Dauphin and Perry Counties, had much higher percentages of workers in sales and office occupations.

Figure 3-59 Sales and Office Occupations

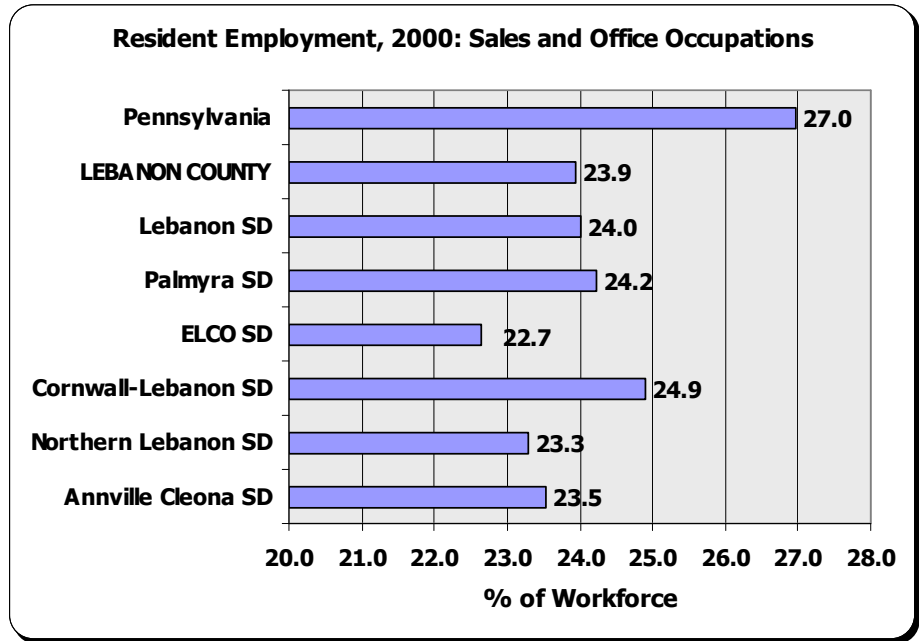
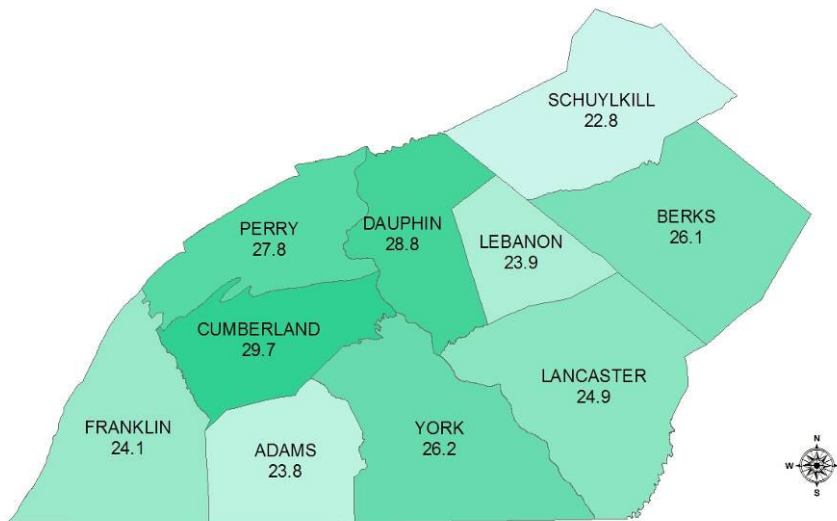


Figure 3-60 Comparison by County, 2000

Percentage of Workforce Employed in Sales and Office Occupations, 2000

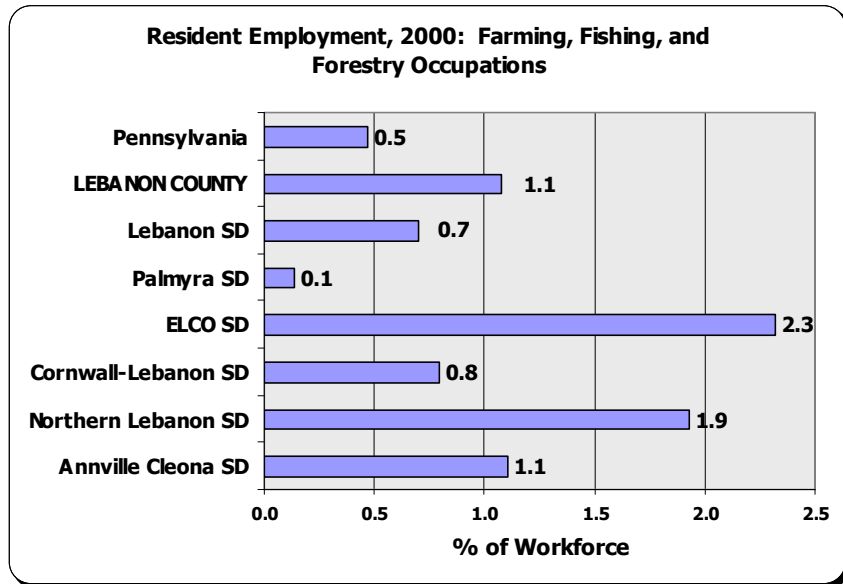


Source: US Census Bureau, 2000

## Farming, Fishing, and Forestry Occupations

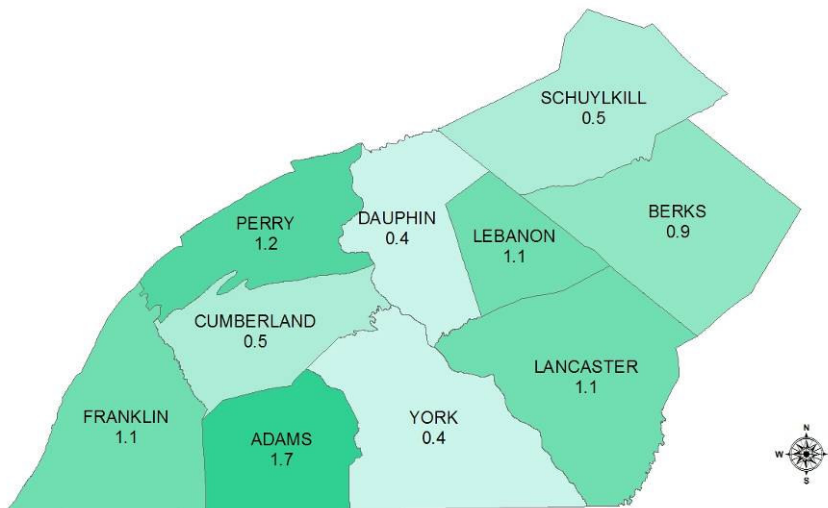
- The percentage of Lebanon County workers employed in farming, fishing and forestry (1.1%) is more than double that of the state (0.5%). The relatively high percentage is supported by the quality farmland located in the county, the proximity to markets in the central Pennsylvania and mid-Atlantic regions, and the accessibility of the transportation network to reach those markets.
- Within Lebanon County, the ELCO and Northern Lebanon School Districts had the highest percentages of residents employed in these occupations, 2.3% and 1.9%, respectively.
- Among the surrounding counties, Adams and Perry Counties had the highest percentages of the resident workforce employed in these occupations (1.7% and 1.2%, respectively). Lebanon, Lancaster, and Franklin Counties each had 1.1%.

**Figure 3-61 Farming, Fishing, and Forestry Occupations**



**Figure 3-62 Comparison by County, 2000**

Percentage of Workforce Employed in Farming, Fishing, and Forestry Occupations, 2000



Source: US Census Bureau, 2000

Construction, Extraction, and Maintenance Occupations

- Lebanon County (10.4%) exceeded the state (8.9%) in the percentage of residents employed in construction, extraction, and maintenance occupations. Employment strength in these occupations is supported by strong regional growth and development, as well as valuable subsurface geology.
- Within Lebanon County, the ELCO and Northern Lebanon School Districts had the highest percentages (approximately 13% each).
- The County ranks fourth among the surrounding counties, exceeded by Adams, Perry, and Schuylkill Counties. Lebanon County is most similar to Franklin County, which had 10.3% of the resident workforce employed in these industries.

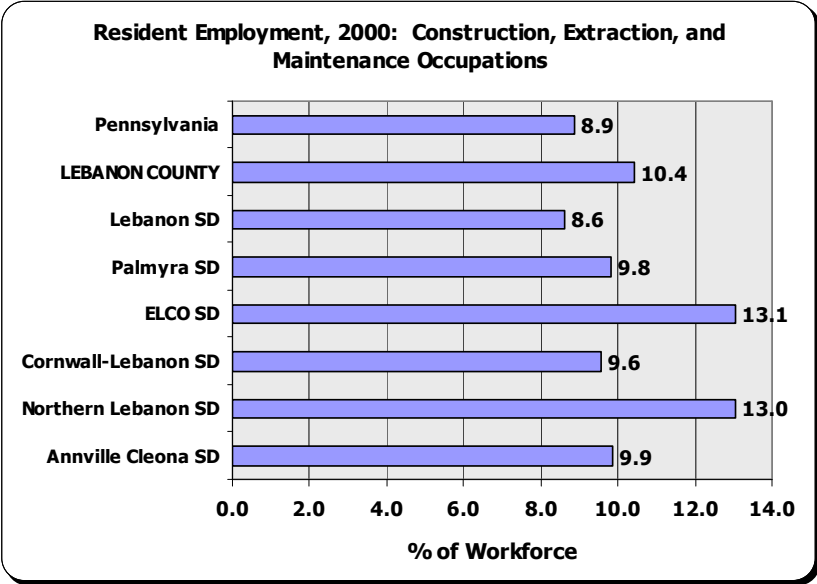
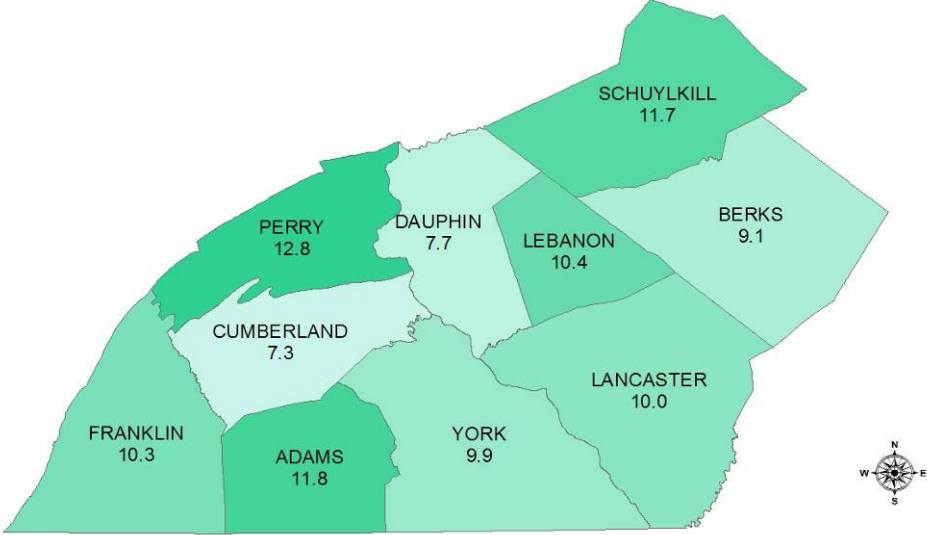


Figure 3-64 Comparison by County, 2000

Percentage of Workforce Employed in Construction, Extraction, and Maintenance Occupations, 2000



Source: US Census Bureau, 2000

## Production, Transportation, and Material Moving Occupations

- Lebanon County has a significantly larger percentage of the resident workforce (23.2%) employed in production, transportation and material moving occupations than Pennsylvania (16.3%).
- Among the school districts, the Lebanon School District had the highest percentage (30.9%); the Palmyra Area School District has the lowest (16.1%).
- Lebanon County ranks second only to Schuylkill County (26.9%) among the surrounding counties. Adams County follows closely with 23% of residents employed in these types of occupations.

Figure 3-65 Production, Transportation, and Material Moving Occupations

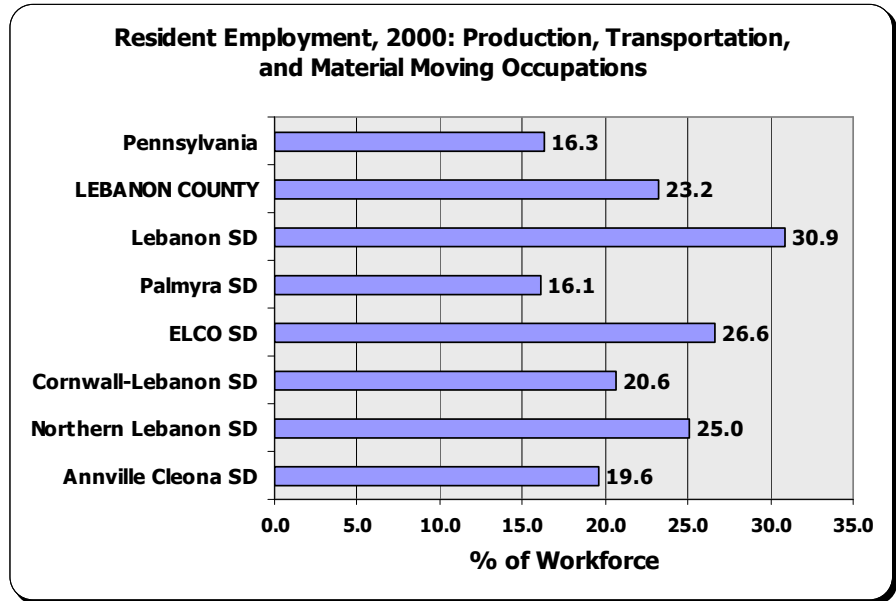
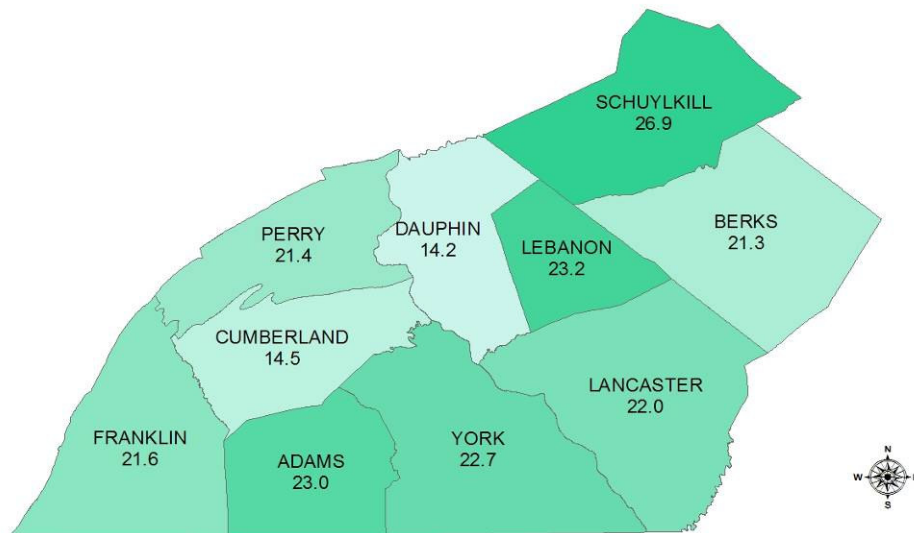


Figure 3-66 Comparison by County, 2000

Percentage of Workforce Employed in Production, Transportation, and Material Moving Occupations, 2000



Source: US Census Bureau, 2000

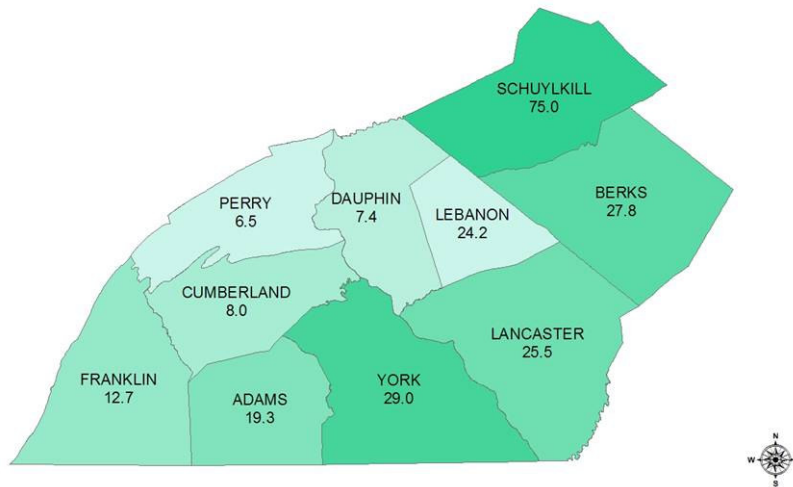
## Commuting Patterns

A review of the commuting patterns of the county’s workforce helps to further define Lebanon County’s economic position in terms of employment distribution. By comparing 1990 and 2000 data, changes in the location of the county’s and the region’s employment centers are revealed. This section begins with a comparison at the county level and then reviews commuter patterns at the school district level.

### Place of Work by County 1990–2000

- The percentage of Lebanon County residents traveling outside the county for employment increased between 1990 and 2000 by 24.2%.
- The increase in residents traveling outside their home county is a regional trend, as evidenced by the fact that each of the surrounding counties also experienced increases in the number of residents traveling outside their borders to work in 2000.
- Schuylkill County experienced the greatest percentage and numerical increase at 75% and 11,900 residents, respectively.

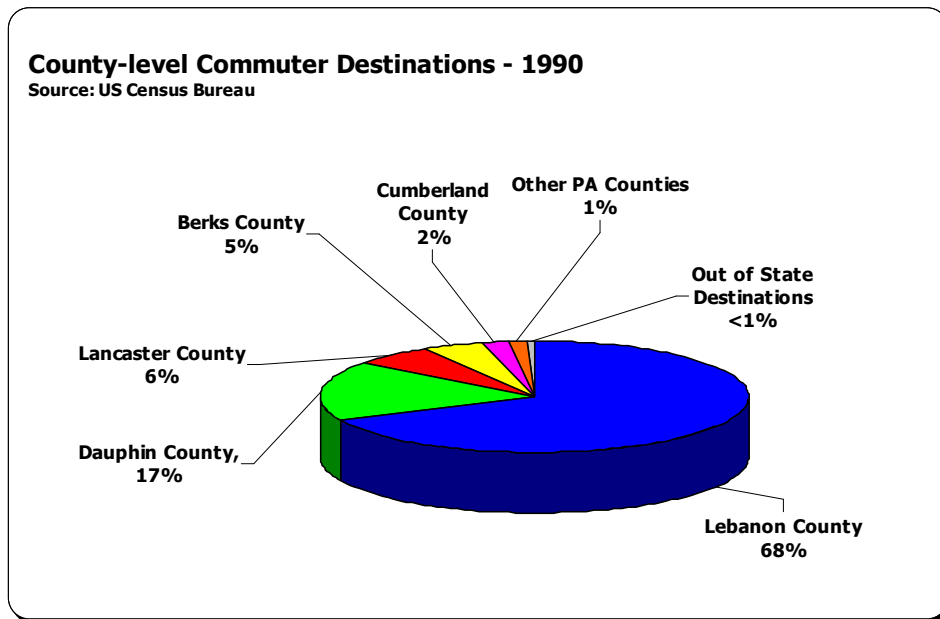
**Figure 3-67 Percent Increase in Number of Residents Working Outside County of Residence, 1990-2000**



Source: US Census Bureau, 2000

- York County ranked second in percentage increase at 29%, which may reflect the influence of the Baltimore, MD job center. Berks County ranked second numerically – 7,722 residents, which may be due to the job markets in Philadelphia and Allentown.
- Census data for 2000 also indicates that 80% of the people who work in Lebanon County also live there. Approximately 5% are traveling from Dauphin County and an additional 8% are traveling from Berks and Dauphin Counties (4% each). Other top counties of origin include Schuylkill (3%), Cumberland (1%), and York (1%).
- Figures 3-67 and 3-68 compare the top county-level destinations for Lebanon County’s resident workforce in 1990 and 2000. As shown, Lebanon County had fewer residents working within their borders in 2000 than in 1990, with only 63% traveling to destinations within the county in 2000 versus 68% in 1990.
- The percentage of residents traveling to Dauphin County increased from 17% in 1990 to 22% in 2000. There was no change in the percentage of residents traveling to Berks, Cumberland, and Lancaster Counties.
- Other Pennsylvania counties that topped the list of destinations in 2000 include York County (0.4%), Schuylkill County (0.3%), and Montgomery County (0.2%). Out of state locations included New York and Washington, D.C.

**Figure 3-68 County Level Commuter Destinations, 1990**



**Figure 3-69 County Level Commuter Destinations, 2000**

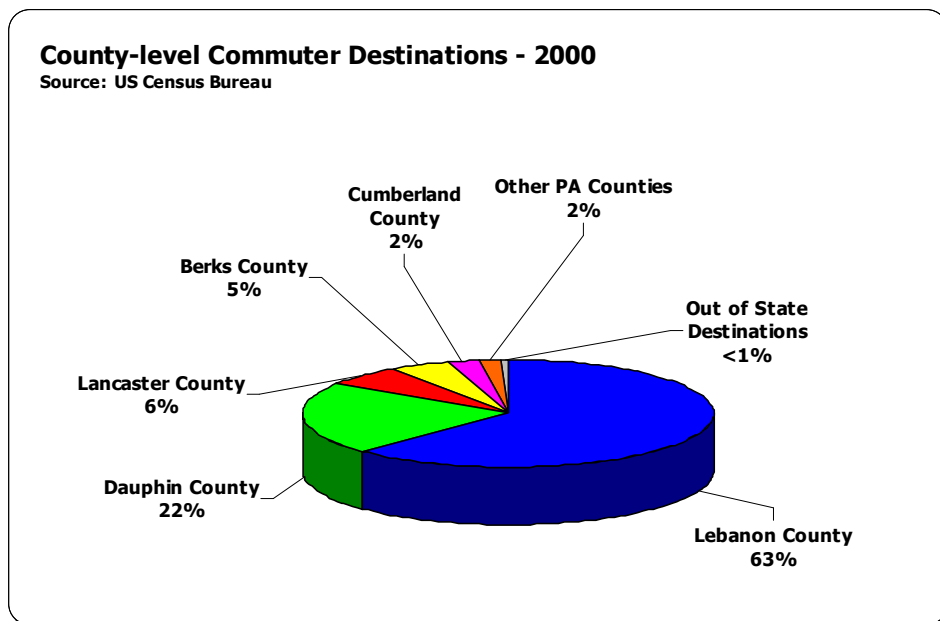
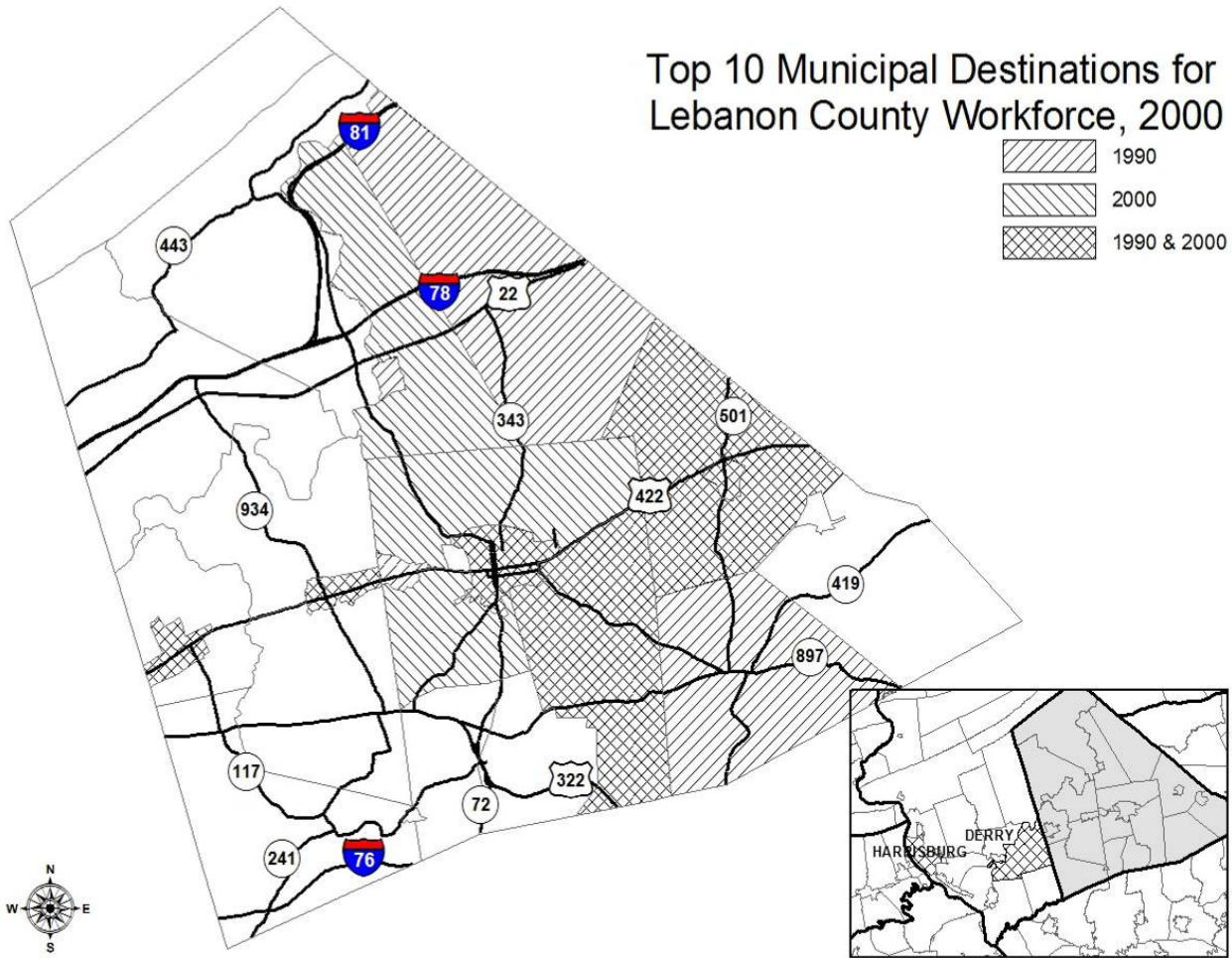


Table 3-9 Top Commuter Destinations, Lebanon County

| 1990 Top Commuter Destinations   | Commuters     |             | 2000 Top Commuter Destinations   | Commuters     |             |
|----------------------------------|---------------|-------------|----------------------------------|---------------|-------------|
|                                  | #             | percent     |                                  | #             | percent     |
| Lebanon City                     | 14,953        | 27.6        | Lebanon City                     | 9,689         | 16.5        |
| South Lebanon Township           | 6,016         | 11.1        | Derry Township                   | 6,858         | 11.7        |
| Derry Township                   | 5,897         | 10.9        | South Lebanon Township           | 3,593         | 6.1         |
| Annville Township                | 3,407         | 6.3         | North Cornwall Township          | 2,625         | 4.5         |
| Palmyra Borough                  | 2,781         | 5.1         | North Lebanon Township           | 2,401         | 4.1         |
| Myerstown Borough                | 1,935         | 3.6         | Annville Township                | 2,190         | 3.7         |
| Jackson Township                 | 1,582         | 2.9         | Palmyra Borough                  | 1,906         | 3.2         |
| City of Harrisburg               | 1,351         | 2.5         | Jackson Township                 | 1,819         | 3.1         |
| Bethel Township, Lebanon         | 1,303         | 2.4         | Myerstown Borough                | 1,690         | 2.9         |
| Jonestown Borough                | 915           | 1.7         | City of Harrisburg               | 1,669         | 2.8         |
| <b>Total traveling to top 10</b> | <b>40,140</b> | <b>74.1</b> | <b>Total traveling to top 10</b> | <b>34,440</b> | <b>58.6</b> |

- Of the top ten destinations in 1990, eight were among the top ten in 2000 (Table 3-4 and Figure 3-69). Bethel Township and Jonestown Borough dropped out, while North Cornwall and North Lebanon Townships moved onto the list.
- The City of Lebanon remains the top destination for Lebanon County commuters. However, the number of commuters traveling to the City dropped by 5,264 or 35.2% from 1990 to 2000.
- The total number of commuters traveling to the top 10 employment destinations declined by 5,700 or 14.2%, reflecting a decentralization of employment across the county.

Figure 3-70 Top Municipal Destinations



Source: US Census Bureau

### Place of Work by School District

Because over 60% of Lebanon County’s commuters are traveling to destinations within Lebanon County, a closer look at internal commuter patterns offers a greater understanding of the locations of employment centers. Using the school districts as the point of origin, top commuter destinations for each are analyzed. The data is also referenced within the transportation plan to identify changes in commuter routes.

- As with the county, many of the top municipal destinations for each school district’s resident workforce in 1990 remained the same in 2000. However, the percentage of residents traveling to those destinations has decreased. What becomes evident is more Lebanon County commuters are traveling throughout the region for employment, which in turn highlights the interconnected nature of the regional economy.



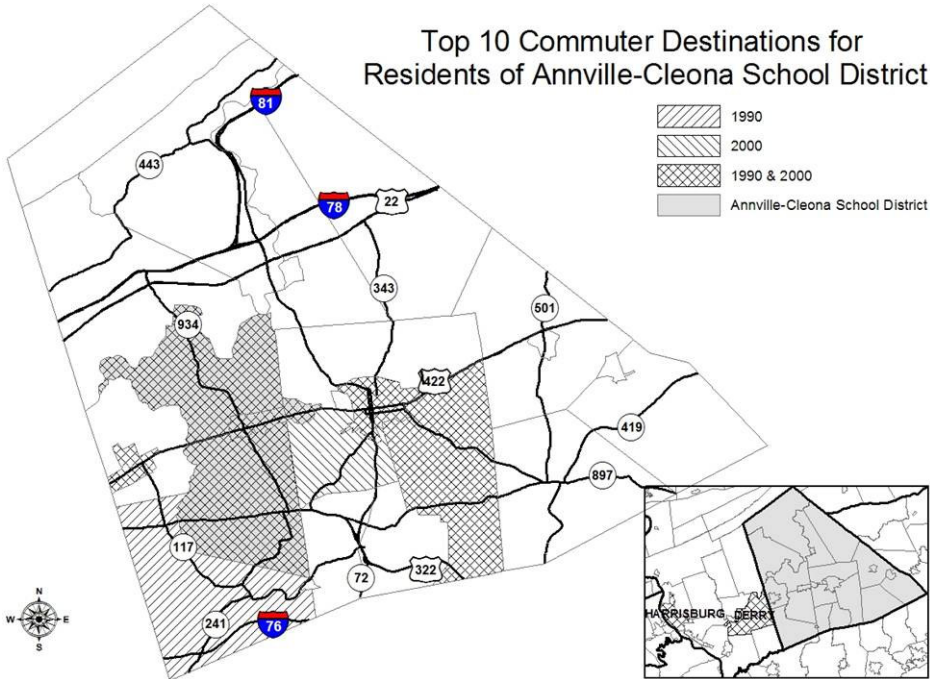
The Annville-Cleona School District

Table 3-10 Top Commuter Destinations, Annville-Cleona School District

| 1990 Top Commuter Destinations   | Commuters    |             | 2000 Top Commuter Destinations   | Commuters    |             |
|----------------------------------|--------------|-------------|----------------------------------|--------------|-------------|
|                                  | #            | percent     |                                  | #            | percent     |
| City of Lebanon                  | 1,192        | 19.3        | Derry Township, Dauphin Co.      | 1,016        | 16.4        |
| Annville Township                | 1,113        | 18.0        | Annville Township                | 909          | 14.7        |
| Derry Township, Dauphin Co.      | 878          | 14.2        | City of Lebanon                  | 634          | 10.2        |
| South Lebanon Township           | 546          | 8.8         | South Annville Township          | 268          | 4.3         |
| Palmyra Borough                  | 500          | 8.1         | Cleona Borough                   | 224          | 3.6         |
| Cleona Borough                   | 253          | 4.1         | Palmyra Borough                  | 206          | 3.3         |
| City of Harrisburg, Dauphin Co.  | 208          | 3.4         | City of Harrisburg, Dauphin Co.  | 187          | 3.0         |
| North Annville Township          | 103          | 1.7         | North Cornwall Township          | 161          | 2.6         |
| South Annville Township          | 85           | 1.4         | North Annville Township          | 152          | 2.5         |
| South Londonderry Township       | 60           | 1.0         | South Lebanon Township           | 144          | 2.3         |
| <b>Total traveling to top 10</b> | <b>4,938</b> | <b>80.0</b> | <b>Total traveling to top 10</b> | <b>3,901</b> | <b>63.0</b> |

- In 1990, 80% of commuters living in the Annville-Cleona School District traveled to the top ten destinations. By 2000, the percentage had decreased to 63%.
- The top three destinations in 1990 were also the top three in 2000; however, their relative importance changed. Derry Township moved to the top position, while the City moved to third. Annville Township retained second place, but with a smaller percentage of total commuters.

Figure 3-71 Top Municipal Destinations



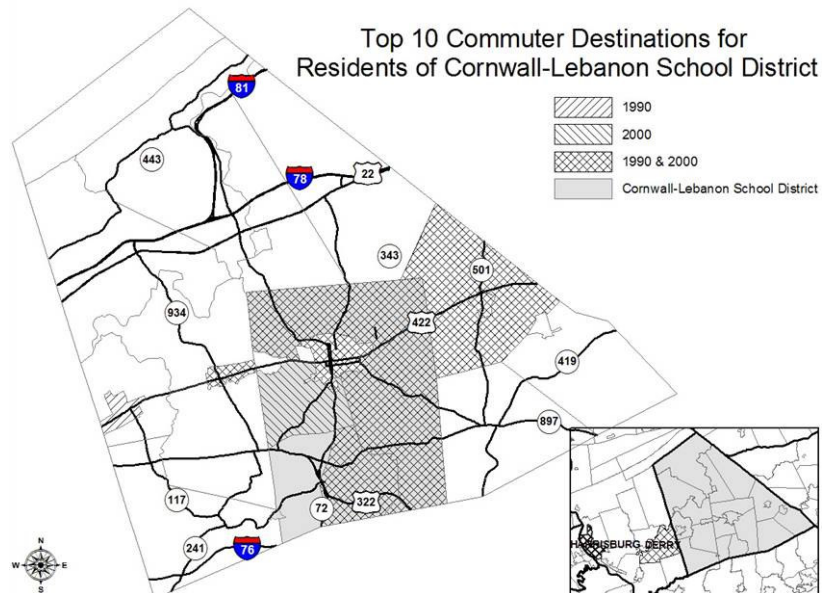
## Cornwall-Lebanon School District

**Table 3-11 Top Commuter Destinations, Cornwall-Lebanon School District**

| 1990 Top Commuter Destinations       | Commuters    |             | 2000 Top Commuter Destinations       | Commuters    |             |
|--------------------------------------|--------------|-------------|--------------------------------------|--------------|-------------|
|                                      | #            | % of total  |                                      | #            | % of total  |
| City of Lebanon                      | 4,790        | 35.9        | City of Lebanon                      | 3,355        | 22.3        |
| South Lebanon Township               | 2,353        | 17.6        | South Lebanon Township               | 1,578        | 10.5        |
| Derry Township, Dauphin Co.          | 874          | 6.6         | Derry Township, Dauphin Co.          | 1,304        | 8.7         |
| Annville Township                    | 508          | 3.8         | North Lebanon Township               | 1,085        | 7.2         |
| Myerstown Borough                    | 305          | 2.3         | North Cornwall Township              | 1,062        | 7.1         |
| City of Harrisburg, Dauphin Co.      | 255          | 1.9         | Myerstown Borough                    | 380          | 2.5         |
| Palmyra Borough                      | 225          | 1.7         | Annville Township                    | 362          | 2.4         |
| Jackson Township                     | 191          | 1.4         | City of Harrisburg, Dauphin Co.      | 194          | 1.3         |
| North Lebanon Township               | 173          | 1.3         | Jackson Township                     | 192          | 1.3         |
| Cornwall Borough                     | 141          | 1.1         | Cornwall Borough                     | 174          | 1.2         |
| <b>Residents traveling to top 10</b> | <b>9,815</b> | <b>74.0</b> | <b>Residents traveling to top 10</b> | <b>9,686</b> | <b>64.7</b> |

- The top three destinations of resident commuters in the Cornwall-Lebanon School District in 1990 were the same in 2000; however, only Derry Township increased its share of the total, from 6.6% to 8.7%.
- Palmyra Borough is the only 1990 top destination that was not among those in 2000. It dropped to 14<sup>th</sup> in 2000, capturing less than one-half of one percent of commuters from the school district.
- As with each of the other districts, the top ten destinations in 2000 account for a smaller percentage of resident commuters, approximately 9% less. The remaining commuters are traveling primarily to locations in Lancaster and Berks Counties, as well as to other locations within Lebanon County.

**Figure 3-72 Top Municipal Destinations**



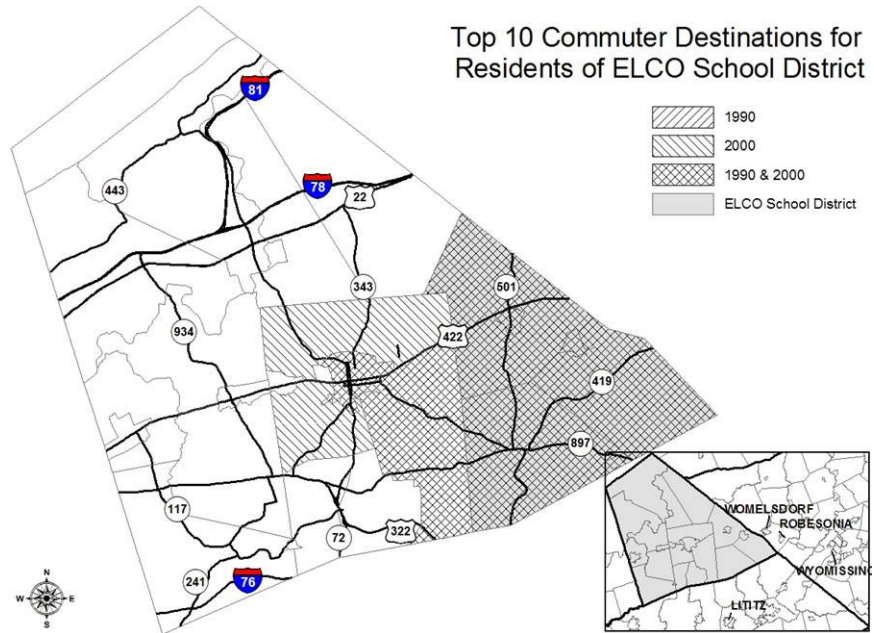
ELCO School District

Table 3-12 Top Commuter Destinations, ELCO School District

| 1990 Top Commuter Destinations       | Commuters    |             | 2000 Top Commuter Destinations       | Commuters    |             |
|--------------------------------------|--------------|-------------|--------------------------------------|--------------|-------------|
|                                      | #            | % of total  |                                      | #            | % of total  |
| Myerstown Borough                    | 1,297        |             | Jackson Township                     | 1,205        | 14.1        |
| City of Lebanon                      | 1,118        | 13.5        | Myerstown Borough                    | 868          | 10.1        |
| Jackson Township                     | 1,051        | 12.6        | City of Lebanon                      | 849          | 9.9         |
| South Lebanon Township               | 471          | 5.7         | Heidelberg Township                  | 570          | 6.7         |
| Heidelberg Township                  | 452          | 5.4         | South Lebanon Township               | 362          | 4.2         |
| Millcreek Township                   | 412          | 5.0         | Richland Borough                     | 305          | 3.6         |
| Richland Borough                     | 383          | 4.6         | Millcreek Township                   | 302          | 3.5         |
| Robesonia Borough, Berks Co.         | 254          | 3.1         | Wyomissing Borough, Berks Co.        | 184          | 2.2         |
| Lititz Borough, Lancaster Co.        | 172          | 2.1         | North Lebanon Township               | 180          | 2.1         |
| Womelsdorf Borough, Berks Co.        | 138          | 1.7         | North Cornwall Township              | 155          | 1.8         |
| <b>Residents traveling to top 10</b> | <b>5,748</b> | <b>69.2</b> | <b>Residents traveling to top 10</b> | <b>4,980</b> | <b>58.2</b> |

- Myerstown Borough, the City of Lebanon, and Jackson Township were among the top three destinations for ELCO resident commuters in both 1990 and 2000; however, Jackson Township moved from third to first in 2000.
- The total share of commuters from the ELCO School District captured by the top ten destinations decreased by 11% between 1990 and 2000.
- Although the relative position of the top seven destinations changed slightly between 1990 and 2000, the remaining three changed significantly. The 1990 destinations dropped from the top ten lists and were replaced by Wyomissing Borough, North Lebanon Township, and North Cornwall Township.

Figure 3-73 Top Municipal Destinations



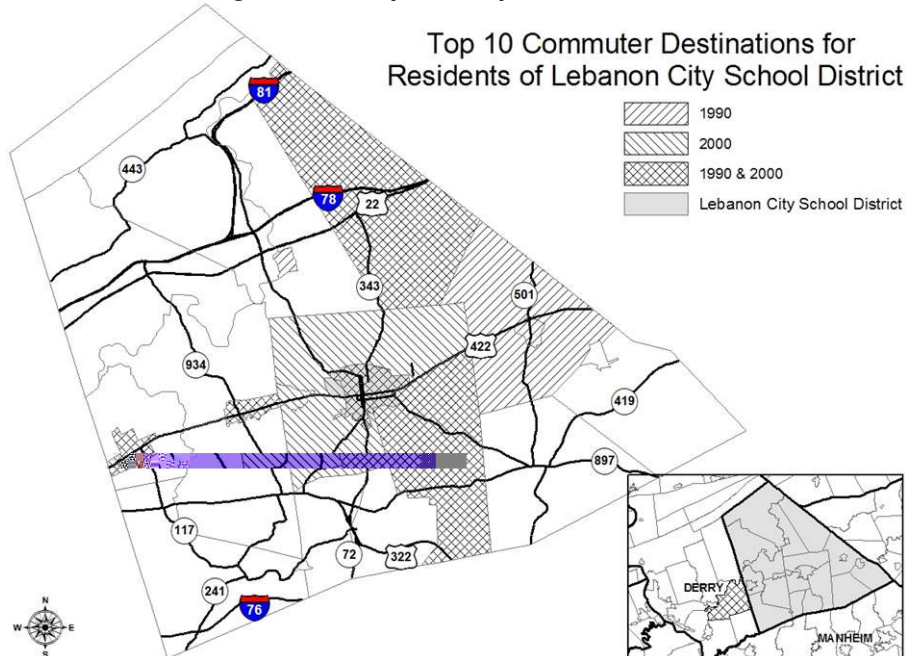
## Lebanon School District

**Table 3-13 Top Commuter Destinations, Lebanon School District**

| 1990 Top Commuter Destinations       | Commuters    |             | 2000 Top Commuter Destinations       | Commuters    |             |
|--------------------------------------|--------------|-------------|--------------------------------------|--------------|-------------|
|                                      | #            | % of total  |                                      | #            | % of total  |
| City of Lebanon                      | 5,935        | 49.5        | City of Lebanon                      | 3,494        | 31.1        |
| South Lebanon Township               | 1,707        | 14.2        | South Lebanon Township               | 1,043        | 9.3         |
| Derry Township, Dauphin Co.          | 523          | 4.4         | North Cornwall Township              | 783          | 7.0         |
| Annville Township                    | 412          | 3.4         | North Lebanon Township               | 695          | 6.2         |
| Bethel Township                      | 293          | 2.4         | Derry Township, Dauphin Co.          | 651          | 5.8         |
| Palmyra Borough                      | 221          | 1.8         | Bethel Township                      | 440          | 3.9         |
| Myerstown Borough                    | 178          | 1.5         | Annville Township                    | 237          | 2.1         |
| Jackson Township                     | 163          | 1.4         | Palmyra Borough                      | 203          | 1.8         |
| Jonestown Borough                    | 146          | 1.2         | West Lebanon Township                | 203          | 1.8         |
| Manheim Borough                      | 145          | 1.2         | Cleona Borough                       | 199          | 1.8         |
| <b>Residents traveling to top 10</b> | <b>9,723</b> | <b>81.1</b> | <b>Residents traveling to top 10</b> | <b>7,948</b> | <b>70.8</b> |

- The City of Lebanon remained the top destination for commuters living in the Lebanon School District in 2000. However, by 2000 only one third of the district’s commuters traveled to businesses located in the city, versus almost half in 1990.
- Derry Township dropped from third to fifth place, yet still captured a greater number and percentage of the districts’ resident commuters in 2000 than in 1990. This drop was due largely to the emergence of North Cornwall and North Lebanon Townships as top destinations in 2000.
- Annville and Bethel Townships fell in rank in 2000. They also switched places - Bethel Township captured an additional 1.5% of the school district’s residents in 2000.
- Four of the top 10 destinations in 1990 did not make the list in 2000: Jackson Township and Myerstown, Jonestown, and Manheim Boroughs. They were replaced by Cleona Borough and North Cornwall, North Lebanon, and West Lebanon Townships.

**Figure 3-74 Top Municipal Destinations**



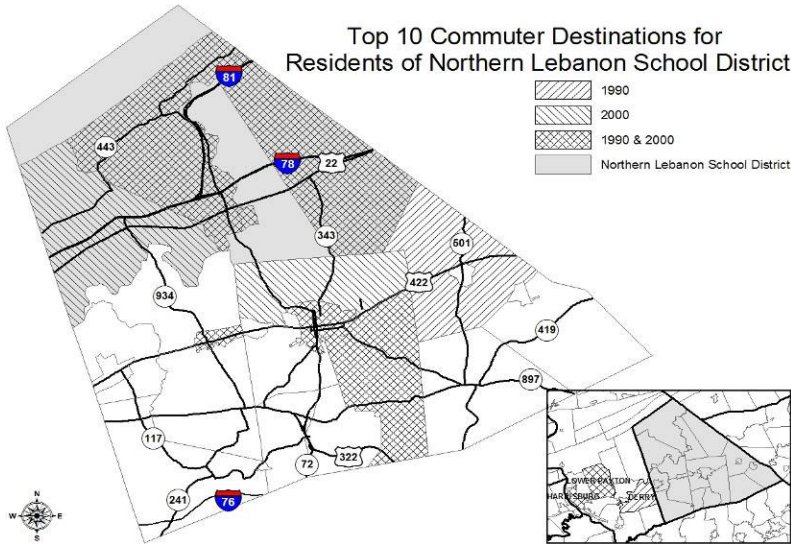
Northern Lebanon School District

Table 3-14 Top Commuter Destinations, Northern Lebanon School District

| 1990 Top Commuter Destinations       | Commuters    |             | 2000 Top Commuter Destinations       | Commuters    |             |
|--------------------------------------|--------------|-------------|--------------------------------------|--------------|-------------|
|                                      | #            | % of total  |                                      | #            | % of total  |
| City of Lebanon                      | 1,260        | 16.6        | City of Lebanon                      | 945          | 11.8        |
| Annville Township                    | 879          | 11.6        | Derry Township, Dauphin Co.          | 769          | 9.6         |
| Bethel Township                      | 786          | 10.4        | Bethel Township                      | 679          | 8.5         |
| Derry Township, Dauphin Co.          | 547          | 7.2         | Jonestown Borough                    | 407          | 5.1         |
| Jonestown Borough                    | 545          | 7.2         | City of Harrisburg, Dauphin Co.      | 353          | 4.4         |
| South Lebanon Township               | 519          | 6.9         | North Lebanon Township               | 320          | 4.0         |
| City of Harrisburg, Dauphin Co.      | 232          | 3.1         | Annville Township                    | 314          | 3.9         |
| Jackson Township                     | 105          | 1.4         | East Hanover Township                | 255          | 3.2         |
| Union Township                       | 94           | 1.2         | Union Township                       | 218          | 2.7         |
| Lower Paxton Township                | 90           | 1.2         | South Lebanon Township               | 196          | 2.5         |
| <b>Residents traveling to top 10</b> | <b>5,057</b> | <b>66.8</b> | <b>Residents traveling to top 10</b> | <b>4,456</b> | <b>55.8</b> |

- Two of the 1990 top ten destinations for commuters living in the Northern Lebanon School District were not among the 2000 top ten – Lower Paxton Township and Jackson Township; they were replaced by North Lebanon and East Hanover Townships.
- Of the eight that were among the top ten in both 1990 and 2000, only three experienced an increase in the number of commuters traveling to work there: Derry Township, the City of Harrisburg, and Union Township.
- The top ten destinations for residents of the Northern Lebanon School District in 1990 captured almost 67% of commuters. By 2000, only about 56% were traveling to these locations. The remaining 44% travel to destinations as far away as Pittsburgh and Washington, DC, as well as to businesses in Cumberland, Franklin, and Schuylkill Counties.

Figure 3-75 Top Municipal Destinations



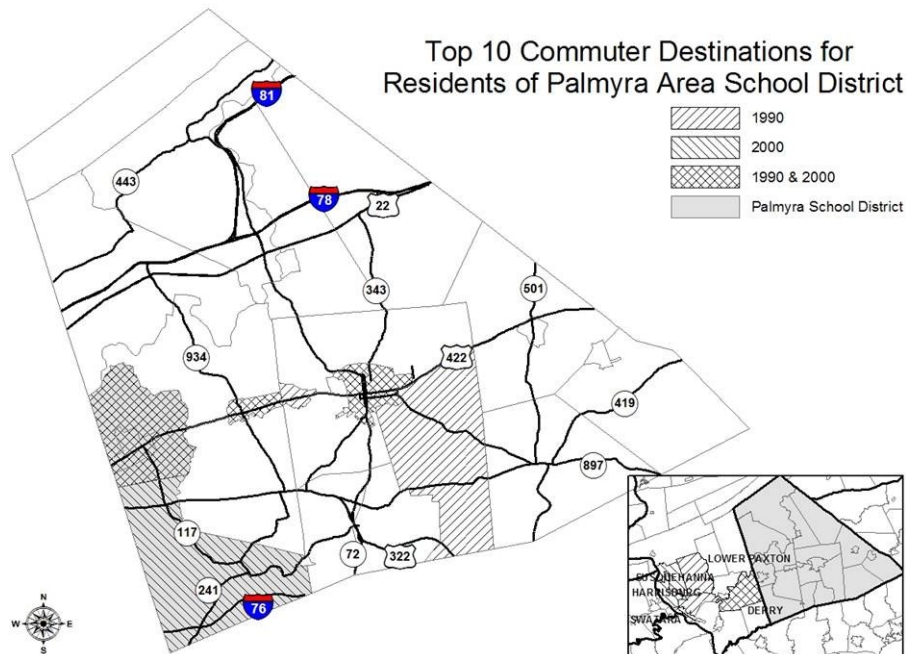
## Palmyra Area School District

**Table 3-15 Top Commuter Destinations, Palmyra Area School District**

| 1990 Top Commuter Destinations       | Commuters    |             | 2000 Top Commuter Destinations       | Commuters    |             |
|--------------------------------------|--------------|-------------|--------------------------------------|--------------|-------------|
|                                      | #            | % of total  |                                      | #            | % of total  |
| Derry Township, Dauphin Co.          | 2,956        | 33.2        | Derry Township, Dauphin Co.          | 2,955        | 30.1        |
| Palmyra Borough                      | 1,569        | 17.6        | Palmyra Borough                      | 1,005        | 10.2        |
| City of Lebanon                      | 486          | 5.5         | City of Harrisburg, Dauphin Co.      | 647          | 6.6         |
| City of Harrisburg, Dauphin Co.      | 456          | 5.1         | North Londonderry Township           | 483          | 4.9         |
| Annville Township                    | 365          | 4.1         | Lower Paxton Township                | 429          | 4.4         |
| North Londonderry Township           | 331          | 3.7         | City of Lebanon                      | 412          | 4.2         |
| South Lebanon Township               | 258          | 2.9         | Annville Township                    | 281          | 2.9         |
| Susquehanna Township                 | 258          | 2.9         | Susquehanna Township                 | 262          | 2.7         |
| Swatara Township                     | 199          | 2.2         | South Londonderry Township           | 266          | 2.7         |
| Cleona Borough                       | 62           | 0.7         | Swatara Township, Dauphin Co.        | 196          | 2.0         |
| <b>Residents traveling to top 10</b> | <b>6,940</b> | <b>78.0</b> | <b>Residents traveling to top 10</b> | <b>6,936</b> | <b>70.6</b> |

- Derry Township and Palmyra Borough retained their positions as the top two destinations of commuters residing in the Palmyra Area School District. However, they also experienced a decline in the percentage of residents captured.
- The City of Lebanon fell from third to sixth place, while the City of Harrisburg moved into third. Cleona Borough fell out of the top ten, while Lower Paxton Township moved in.
- Half of the top ten destinations for Palmyra Area School District commuters in 2000 were located outside of Lebanon County. This is unique among the county's school districts.

**Figure 3-76 Top Municipal Destinations**

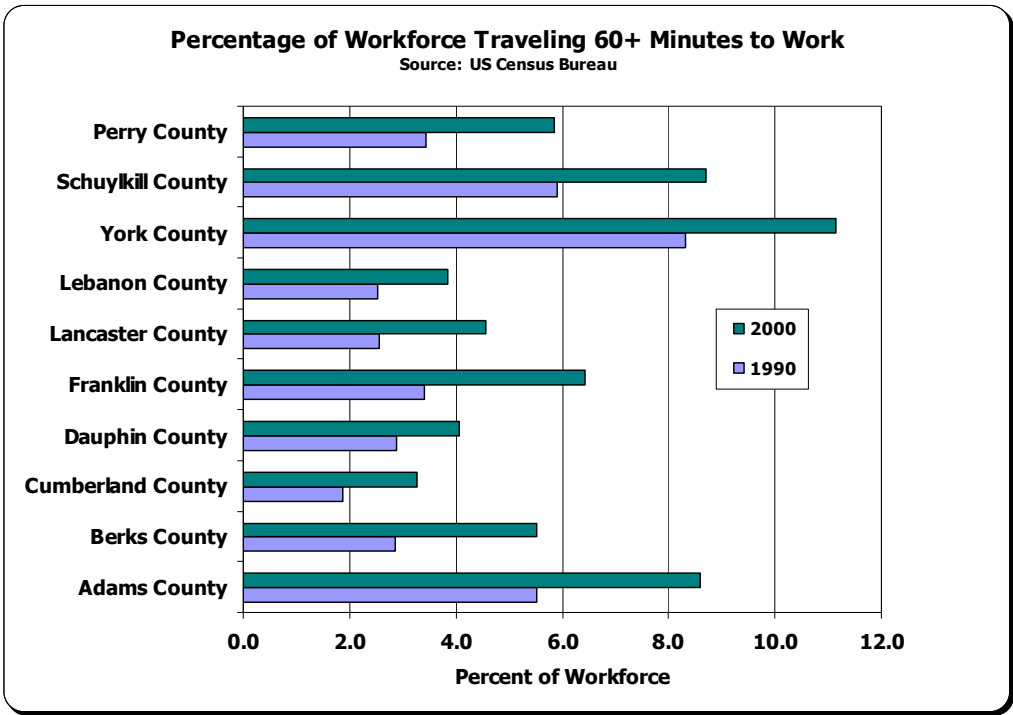


Travel Time to Work

Travel time to work can indicate distance to work and level of congestion. The following illustrates the trends in travel time for Lebanon County residents from 1990 to 2000. The data is also referenced in the transportation plan.

- Almost 70% of Lebanon County’s workforce traveled less than thirty minutes to their place of employment in 2000; approximately 5% less than in 1990.
- This is comparable to other counties in the region where between 65% and 76% of the resident workforce traveled less than 30 minutes. These regional figures also represent a decrease relative to 1990 figures.
- York County is the exception; less than 40% of the workforce less than 30 minutes to get to work.
- The number of residents traveling more than 60 minutes to work has increased dramatically in Lebanon County and surrounding counties. This is consistent with the commuter destination data, which shows that between 1990 and 2000 more residents were willing to live farther from their place of work.

Figure 3-77 Change in Percent of Residents Traveling 60+ Minutes to Work



Travel time to work by municipality

- Only seven of the county’s municipalities had more residents traveling less than 15 minutes to work in 2000 relative to 1990: Cleona Borough (1.4%), North Annville Township (6.4%), Jonestown Borough, (7.2%), Swatara Township (6.8%), South Lebanon Township (8.6%), North and South Londonderry Townships (27.5 and 19.3% respectively).
- Eleven of the county’s municipalities experienced a decrease in the number of residents traveling 15 to 29 minutes to work between 1990 and 2000.
- The remaining fifteen municipalities experienced increases ranging from one half of one percent (West Cornwall Township) to 36.1% (North Cornwall Township).
- All but four municipalities—North and South Annville Townships, East Hanover Township, and West Lebanon Township—had more residents traveling 30 to 59 minutes to work in 2000 than in 1990. Swatara Township experienced the greatest increase (193%), followed by North Cornwall Township (87.2%) and North Londonderry Township (79.2%).

## Economy and Employment Profile

- The most significant percentage increases occurred in the “60 to 89 minutes” and “90 minutes or more” categories. These increases ranged from just over 4% in the City of Lebanon to 1900% in Cornwall Borough. In the “90 minutes or more” category, increases ranged from approximately 6% in North Annville Township to 700% in East Hanover Township. While the actual numbers are relatively small, the trend towards longer commute times is evident.

### Educational Attainment (Decennial Census)

According to a 1991 report regarding the practice of economic development,<sup>7</sup> “the increasing incorporation of technology in virtually every type of job...calls for better reading and mathematical skills and a generally higher level of employee competence.” This section analyzes trends in the educational attainment levels of Lebanon County’s 25 years and older population as reported by the Census Bureau for 1990 and 2000. See Background Study #1, Demographic Profile, for additional details regarding educational attainment, including statistics for some college and advanced degrees, as well as school district and municipal level data.

Approximately half of the county’s 25 year and older population (46.6%) have a high school diploma or GED, while an additional 16.6% have had some college classes. This indicates a good labor pool for manufacturing and similar enterprises that do not require a college degree; however, it may be a limiting factor to attracting new businesses that need employees with scientific, professional, and managerial level skills.

- Adams, Franklin, and Perry Counties are comparable to Lebanon County, with approximately 50% of the 25 year and over population attaining at least a high school diploma.
- The ELCO School District has the lowest percentage of the 25+ population that have at least a high school diploma: 70.9%. The Palmyra Area has the highest, 87%. These figures correlate strongly with the resident employment data, particularly with regard to occupations.
- The percentage of residents in Lebanon County over 25 years with a college degree increased from 11.8% to 15.4% between 1990 and 2000. This is comparable to increases in Perry (15.8%) and Franklin (15.7%) Counties, and slightly higher than the increase in Schuylkill County (12.8%). However, it is significantly lower than in Cumberland (26.6%) and Dauphin (23.9%) Counties.
- Among the county’s school districts, Lebanon School District has the smallest percentage (8.5%) of college graduates, while the Palmyra Area SD had the highest percentage (24.5%). Palmyra Area SD also experienced the greatest increase in the percentage of residents with college degrees between 1990 and 2000 – a 6.6% increase..

### Workforce Education and Training Resources

#### Secondary Education

- There are six public and one private high school in Lebanon County. According to the Department of Education’s 2001-02 School Report Cards, between 59% and 71% of the graduating seniors were planning to attend post secondary degree granting institutions. This is well below the state average of 77%.
- Between 17% and 33% of high school seniors planned to obtain jobs, and between 1% and 10% expected to join the military.
- Less than 6.5% of graduates planned to attend a non-degree granting post-secondary institution, with the exception of those at the Northern Lebanon Senior High School, where almost 16% plan to attend such institutions.

#### Post Secondary Education and Other Workforce Development Opportunities

- **Harrisburg Area Community College** is the primary provider of workforce development and continuing education in Lebanon County. Specific programs are developed in cooperation with community representatives for helping businesses and public agencies incorporate new technologies or systems-management procedures, improving employee well being, upgrading skills of existing employees, and providing entry-level training for new employees. HACC’s Lebanon campus offers computer skills training, professional development, certification, and community education classes. Additional information can be found at their website, [www.hacc.edu](http://www.hacc.edu).

<sup>7</sup> American Economic Development Council Education Foundation, “Practicing Economic Development”, 1991.



- **Lebanon Valley College** ([www.lvc.edu](http://www.lvc.edu)) was founded in Annville in 1866. The College has 1,530 full-time undergraduate students, 235 part-time undergraduates, 141 graduate students and 100 full-time faculty. U.S. News & World Report's 16th annual "America's Best Colleges" issue and guidebook has ranked LVC among the top tier of colleges and universities in the category of "Best Universities Master's in the North". The college offers Bachelor of Arts, Bachelor of Music, Bachelor of Science, Associate of Arts, Associate of Science, Master of Business Administration, Master of Music Education, Master of Science Education, Doctorate of Physical Therapy programs.
- **Lebanon County Career and Technology Center** ([www.lcctc.k12.pa.us](http://www.lcctc.k12.pa.us)) is a state-of-the-art technical training facility housing 27 programs that provides high school and adult students with skills, knowledge and understanding necessary to attain employment, advance in careers, pursue post-secondary education and enrich their lives. Students work with the latest in technology and have unsurpassed opportunities for career advancement. From college articulation agreements and cooperative education to real world experiences, students receive the training needed for a successful future.
- **Quality Employment Services and Training, Inc. (QUEST)** ([www.paquest.com](http://www.paquest.com)) – provides vocational rehabilitation services targeted to people with disabilities over the age of 17. Services include vocational evaluation, personal and work adjustment training, industrial training, job placement, the Mobile Janitorial Work Program, and the Student Transition and Employment Program (STEP).
- **Lebanon Adult Education Center** – provides free training programs for adults interested in acquiring or improving reading, writing, and math skills as preparation for the GED Exam, higher education and employment. English as a second language classes, as well as a Family Literacy program in cooperation with Lebanon School District and the Lebanon Head Start Program, are also available. These programs are primarily designed for adults 16 years and older (not enrolled in public school) seeking to further their education. The Center is part of the Lancaster-Lebanon Intermediate Unit 13.
- **Lancaster-Lebanon Intermediate Unit 13** ([www.iu13.k12.pa.us](http://www.iu13.k12.pa.us)) – The Exceptional Children Services Division of the Intermediate Unit 13 serves as a partner to local school districts in meeting the special educational needs of children in the 22 school districts in Lancaster and Lebanon Counties. The IU responds to the requests of the districts to develop and deliver needed programs and services.
- **Pennsylvania Careerlink System** ([www.pacareerlink.state.pa.us](http://www.pacareerlink.state.pa.us)) – provides one-stop access to employment, education and training resources to job seekers, employers and other interested individuals. Resources are available online or at local Pennsylvania Careerlink offices. Two local offices are located in Lebanon County: PA Careerlink Lebanon County at 243 Schneider Drive, Lebanon and Central Jubilee Ministries, at 235 South 12th Street, Lebanon. When available, Careerlink can rent office space for incubating small business start-ups. Recent activities of PA CareerLink include:
  - Placement of over 4,000 individuals in jobs
  - Finalization of the eight-county CareerLink System to include the development of the new Capital Region CareerLink in Harrisburg and the formation of the "SEC Fypon Center" to address specific needs of Latino dislocated workers
- **South Central Workforce Investment Board (WIB) and the Southcentral Employment Corporation (SEC)** (<http://www.pasec.org>) - provide career development services in Adams, Dauphin, Cumberland, Perry, York, Franklin, Lebanon and Juniata (SEC only) Counties. SEC is a direct deliverer of core, intensive, and training services through the Pennsylvania Careerlink System. The WIB and SEC are federally and state funded, and services are provided at no charge to customers. 2005 activities of the WIB and SEC included:
  - SEC's meeting or exceeding all performance measures for workforce goals including entered employment, job retention, earnings gain and job placement representing successful service to thousands of area employers and job seekers.
  - Applying for and receiving grants over \$1.2 M to train over 1,000 incumbent workers in selected industry clusters.
  - Applying for and receiving \$540,000 in state funds to support the 4 Industry Consortiums.
  - Applying and receiving a grant for \$425,000 for tuition assistance for dislocated workers at a local educational institution.
  - Creation of four (4) public-private Industry Consortiums consisting of over 100 Companies in the Construction, Logistics/Transportation, Health Care and Manufacturing to address regional workforce concerns and skill gaps.
  - Creation of an "Early Warning Network" Office at the WIB/SEC offices for South Central Pennsylvania to help firms that are experiencing financial difficulties and to access needed capital.

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- Retraining of over 240 dislocated workers who lost their jobs because of imports utilizing over \$2M in Trade Act Funds and Rapid Responses to over 20 company dislocations.
- Excellent relations between SEC and the WIB that culminated in an agreement between the "Local Elected Officials" and the WIB for the WIB to act as SEC's fiscal agent and SEC's realization of over \$300,000 in cost savings.
- *The Manufacturers Association of South Central Pennsylvania (MASCPA)* is an association of more than 350 manufacturers which, among other functions, offers worker training programs. The food manufacturers consortium of MASCPA offers an extensive set of training courses in food production

### Labor Force Intangibles

- Business Retention and Expansion Calling Program (formerly the Business Calling Program) – This program is sponsored by the TeamPA Foundation and is administered locally by the Lebanon Valley Economic Development Corporation (LVEDC). The statewide program intends to provide economic development agencies with a better understanding of the concerns and issues of existing businesses.

LVEDC has conducted over 300 interviews since 2001. The results of these interviews have allowed the LVEDC to be more responsive to the business community. Recent success stories presented earlier in the chapter are due in part to the information obtained through the interview process. According to the director of the Lebanon Valley Economic Development Corporation, there are some common reasons that companies have (or have not) located in the county. These include the following, as well as quality of life offerings—schools, recreation, culture and entertainment.

- Access to markets
- Transportation logistics (i.e. rail, interstate highways, etc.)
- Access to workforce, including trained workers
- Utilities with capacity (sewage, water, electric, gas, etc.)
- Business climate
- Access to research and training, and
- Financing and incentives

### **Relationships to Infrastructure Conditions**

The county's ability to sustain and expand its economy is related not only to market and workforce trends but also to the availability of land and physical infrastructure (roads, water, sewer, waste disposal and telecommunications networks). While more detailed inventories of land use and infrastructure are provided in other profiles, the relationships of these elements to the county's economy and employment are outlined here. [This section may be revised upon the development of other profiles.]

### Land Markets

Land availability is critical for business retention and new business development. Existing businesses need land for expansion and new businesses, whether initial start-ups or relocating businesses, need land for new facilities. The location of available land in relation to other infrastructure conditions is equally if not more important.

Lebanon County is amply supplied with industrial sites, including seven Keystone Opportunity Zone (KOZ) sites, all of which are in the City of Lebanon. The KOZ Program gives an exceptional assortment of tax benefits, including the suppression of city, school and county real estate taxes, earned income/net profits taxes, and personal income taxes, among many others, until 2013. Some KOZ sites are owned and/or marketed by the Lebanon Valley Economic Development Corporation, while others are privately owned and marketed. Some of the notable LVEDC business parks are described below.

**Lebanon Valley Business Park.** This Park is located just south of the City in South Lebanon Township and is owned by the LVEDC. Approximately 110 acres are available for new development, with large lot expansion opportunities on an additional 120 acres. It is a designated State Select Site, which means that it has been certified as having the necessary infrastructure for immediate site construction. A Tax Increment Financing District (TIFD) has also been created to allow infrastructure extensions to occur.

**Table 3-16 KOZ Sites in Lebanon, PA**

| KOZ Site  | Size and Land Use/Zoning                          | Features  |
|---|---|---|
| Aspens Business Park                              | 49-acre light manufacturing site                  | Close to rail service; ideal for smaller users; proposed site for a Technology Incubator Facility |
| Colonial Theater Property                         | .27 acre commercial business site                 | This site is currently being developed, and space may soon be available for commercial lease      |
| East Lehman Street (Former Lebanon Steel Foundry) | 17 acres light manufacturing site; four buildings | Two buildings occupied; two available   |
| Fourth Street Complex                             | 9 acres; four buildings                           | Suitable for most heavy industry  |
| Lincoln Fifth Corporation                         | 43-acre heavy manufacturing sites                 | Rail service  |
| Jonestown Road                                    | 74.5 acre light manufacturing site                | Infrastructure improvements needed  |
| Seventh & Mifflin Streets                         | 1.07-acre   |   |

Source: Lebanon valley Economic Development Corporation

**North Lebanon Business Park.** This 180-acre business park just west of the City in North Lebanon Township is served by all infrastructure, including natural gas, electric, telecommunications and public water and sewer. The availability of Class I rail service to this site makes it very attractive for certain types of enterprises. Another distinct advantage of the site is that the land is very level.

**Flightpath Business Park.** This 68-acre commercial-industrial Park is located in South Londonderry Township, near Campbelltown on State Route 117. The Park is already home to a number of businesses, and has public water and sewer, electric, and telecommunications.

**NorthPort Industrial Park** – This 132 acre mixed use industrial park is located adjacent to I-81 just north of the I-81/I-78 interchange. With an emphasis on warehousing and distribution, tenants include Ingram Micro, Lebanon Valley Farmers Bank and Voight Schweitzer.

A current (May 2005) listing from the LVEDC business site locator identifies sixteen different parks and sites zoned manufacturing or industrial, with a total land area of more than 900 acres. Land prices are comparatively low for the region. For example, land in the Lebanon Valley Business Park is approximately \$42,500 per acre, compared to up to \$100,000 per acre elsewhere in the south central Pennsylvania region.

Transportation

The role of the transportation network is to move people, materials, and products. While the network has traditionally focused on roadways, railways, and air transport, the network also includes bicycle and pedestrian modes of travel. Each of these modes has potential for moving people (employees and clients) and goods more efficiently.

Businesses tend to favor road and rail-based modes for the sheer volumes of materials they can transport. Results from the business calling program indicate that roads are often too narrow and in poor condition; and intersections frequently have inadequate turning radii. Route 72 through the City of Lebanon was noted as a major choke point for thru-travel. On the positive side, two primary rail hubs – the Enola and Rutherford Yards – are close at hand in the City of Harrisburg and East Pennsboro Township.

Based on the location of KOZ sites, businesses might consider the availability of pedestrian employees, thus reducing the need for expansive parking lots. Additionally, the County of Lebanon Transit (COLT) operates over 14 bus routes that serve most of the county.

Water and Sewer Utilities

Water and sewer infrastructure are important, especially to businesses involved in processing and refining materials into finished goods. The availability, cost, and adequacy/capacity (i.e. size of the service pipes/treatment facilities) of these utilities relative to other locations can be an important factor to expanding or relocating business operation. See the Community Facilities Profile for further information on water and sewer systems.

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### Waste management

Much like water and sewer, waste disposal is important to processing and production operations. The types of waste facilities, distance to waste facilities, capacities of those facilities, and relative cost of waste disposal frequently influence a business's site selection.

### Telecommunications

Telecommunications is perhaps the newest element of basic operating infrastructure. A company's ability to market its products and services across town and around the world is increasingly important to regional and global competitiveness. Statewide broadband service by 2015 has been legislated in Pennsylvania but not all areas are served today.

### Quality of Life

Beyond the basic needs of the business itself, there are a variety of other variables that influence the decision to expand or relocate. Many are related to the quality of life an area has to offer the company's employees. Amenities such as shopping, dining, recreational facilities, and health care options can often tip the scales in favor of a region, with all other things being equal. Lebanon County has much to offer in this regard. The reader is referred to the Open Space, Greenways, and Recreation Profile (Background Study #5) and Community Facilities Profile (Background Study # 7) for greater details regarding these amenities.

## **Other Conditions**

### Business Tax Structure and Tax Burden

Taxes can be a factor in a company's site location decision. Among counties in the region, and in comparison to Pennsylvania's large urbanized regions, the county's taxes are reasonably attractive. However, state level business taxes (including worker compensation rates) can be a disadvantage compared to other states.<sup>8</sup>

### Public and Quasi-Public Support Programs and Partners

#### *Multi-purpose Economic Development and Business Assistance Organizations*

The ***Lebanon Valley Economic Development Corporation (LVEDC)*** is a not for profit organization that has been promoting economic development in the county for over 20 years. LVEDC helps businesses access financing options including various public supported loan programs, job training funding, and other grant and loan assistance. LVEDC maintains a database of available sites and buildings that can be accessed online, and also offers personal assistance in locating the right site for a prospective business. LVEDC also owns and has developed two business parks: the Lebanon Valley Business Park and the Lebanon Rails Business Park. LVEDC provides some technical assistance to county businesses, particularly in the areas of exporting and securing permits and other regulatory approvals. LVEDC also serves as an information clearinghouse to connect county business to one or more of the many other technical assistance providers.

The ***Lebanon Valley Chamber of Commerce*** is the primary business membership organization in the county. The Chamber of Commerce undertakes a variety of activities in support of economic development. ALERT, a Lebanon Economic Resource Team, is a sort of rapid-response team to link companies that are considering closing to available services to help them be able to stay in business in the County. A number of other activities and committees promote education, leadership development, networking, and advocacy.

***REDDI***, Regional Economic Development District Initiatives of south-central Pennsylvania, is one of eight Economic Development Districts (EDD) in the Commonwealth of Pennsylvania. REDDI targets both urban and rural economic development projects with a concentration on distressed communities. The REDDI region consists of the following counties: Adams, Berks, Cumberland, Dauphin, Franklin, Lancaster, Lebanon, and York. REDDI's approach to achieving economic development is to use collaboration, facilitation, and building of alliances among key stakeholders of District. REDDI is preparing a Comprehensive Economic Development Strategy (CEDS) for the region, pursuant to a federal Economic Development Administration requirement. Under federal law, consistency with a CEDS is a prerequisite for all applications for federal funding for public works and economic adjustment projects.

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<sup>8</sup> Ralph Rhode, First Energy Corporation, May 2005

**Ben Franklin Technology Partners** is a statewide network that fosters innovation to stimulate Pennsylvania's economic growth and prosperity. With a focus on the entrepreneur as the ultimate engine of growth, BFTP delivers crucial resources for technology-driven enterprises in sectors such as information technology, life sciences, communications, advanced manufacturing, advanced materials and environmental technology. BFTP invests risk capital in emerging technology-based enterprises and established businesses; provides hands-on technical and business expertise to spur enterprise growth and accelerate commercialization activities; and delivers customized solutions that draw on an extensive network of public and private resources, including universities, federal laboratories and research institutions.

The BFTP Challenge Investment Program supports Pennsylvania's entrepreneurs and their companies. About 65% of BFTP's annual budget goes into funding companies focused on developing innovative products or processes. Much of the remainder of BFTP's technology enterprise support occurs via funding the efforts of other organizations and institutions, such as "Centers of Excellence" at research organizations, funding to support other organizations' development of business incubators, and funding to support the establishment of workforce training consortia.

The *Pennsylvania Department of Community and Economic Development* administers a variety of financing and other economic development programs. An up to date inventory of the business assistance programs available through DCED can be found at [www.NewPA.com](http://www.NewPA.com). Some of the DCED economic development efforts, such as in depth studies, are funded with the assistance of the *TeamPA Foundation*, a public-private membership organization that channels donations to support economic development in the state.

#### *Organizations Specializing in Financing*

The *Innovation Partnership* is a consortium of economic development and business assistance organizations located throughout the Commonwealth of Pennsylvania. Its goal is to help early stage technology companies secure federal funding opportunities. Its special interest is biotechnology, nanotechnology, advanced manufacturing and communications technology businesses that show early signs of commercial success.

The *Life Sciences Greenhouse of Central Pennsylvania (LSGPA)* is a private, non-profit corporation created under the Tobacco Settlement Act of 2001. The organization supports new and expanding commercial entities in central Pennsylvania through direct investment and delivery of business development services. The organization partners with a range of institutions, including local research universities, colleges, medical centers, economic development agencies and companies both small and large, to identify needs and opportunities. LSGPA then works to help transfer technologies, to develop new companies, to provide support for existing companies (particularly those seeking to expand or relocate), and to ensure that the infrastructure necessary to support a thriving life sciences industry keeps pace with development. A typical LSGPA investment is founded on a novel life sciences technology with strong market potential that is supported by a skilled management team and sound financial plan. Further, the investee will have demonstrated a long-term commitment to Pennsylvania and a high likelihood of raising matching funds and/or follow-on funding.

The *Community First Fund* was founded in 1992 as a federally certified Community Development Financial Institution. It provides loans and technical assistance for small business owners, affordable housing developers and community groups in low-wealth communities in central Pennsylvania. CFF operates out of five offices covering a thirteen county region in central Pennsylvania. The majority of loans are made to Persons of Color, women and low-wealth individuals. Loans are made to a wide spectrum of business sectors, including retailers, the service industry, wholesalers, light manufacturing, construction entities, housing developers and social service providers.

*PA Grows* is a program of the *Pennsylvania Department of Agriculture* that specializes in helping farmers, food processors, farmer's market operators, and other agricultural businesses access the variety of state and federal lending programs. **The First Industries Fund**, a part of PA Grows, is a grant and loan program aimed at strengthening Pennsylvania's agriculture and tourism industries.

*Penn Venture Partners, LP*, is a private equity fund whose objective is to seek long-term capital appreciation primarily through growth and expansion stage venture capital investments in companies located within Central and Northern Pennsylvania. The Fund invests in equity and equity-like securities, and may also provide operational assistance grant funding to enterprises in which Penn Venture Partners has made or expects to make an investment. The Fund invests in companies that possess a proprietary technological niche or uniquely exploit a proven technology to gain a competitive advantage. Industries targeted for investment include manufacturing, basic industries (such as material and material

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technology, printing, powdered metals, tool and die, agribusiness, and environmental technology), computer hardware and software, interactive media, networking, educational products and services, control systems, industrial automation, energy, telecommunications, biotechnology and the life sciences.

### *Organizations Specializing in Technical Assistance*

The ***Small Business Start-Up Center at HACC, Lebanon Campus*** is a new center dedicated to helping local entrepreneurs to be successful by providing hands-on technical assistance for the business' crucial first three years.

The ***Lebanon County Conservation District*** is actively involved in Farmland Preservation, gypsy moth management, Erosion and Sedimentation Pollution Control, Nutrient Management, Biosolids, the Chesapeake Bay Program and NPDES Storm Water Management permitting, Dirt and Gravel Roads Program, and Watershed Improvement Opportunities and the Lebanon County Conservation Awards Program. The Conservation District is a subdivision of state government, administered by a Board of Directors, composed of at least four farm directors, no less than two public directors and one County Commissioner. It operates under supervision of the State Conservation Commission of the Pennsylvania Department of Environmental Protection. The Directors serve without pay and are chosen primarily for their interest in soil and water conservation.

***Penn State College of Agricultural Sciences, Cooperative Extension*** provides educational programs to enable the Commonwealth to maintain a competitive, environmentally sound food and fiber system, as well as to prepare youth, adults, and families to participate more fully in community decisions. The Lebanon County Cooperative Extension office is staffed with a number of educators, with specialties in a variety of fields of interest to agricultural producers.

The ***Small Business Development Center, Kutztown University of Pennsylvania*** fulfills its mission to encourage regional economic growth by providing existing and potential entrepreneurs with consulting services and learning opportunities. The Kutztown SBDC has outreach office in Reading, Lancaster, Harrisburg, and Exton.

***MANTEC, the Manufacturers Technology Center***, is one of the seven private, non-profit Industrial Resources Centers providing technical assistance to small and mid-sized manufacturers in Pennsylvania. Headquartered in York, MANTEC maintains satellite offices in Carlisle, Chambersburg, Lancaster, and Lebanon.

***PENNTAP, the Penn State Technical Assistance Program***, is an outreach program of Penn State University to help Pennsylvania businesses improve their competitiveness by providing a limited amount of free technology assistance and information, on a confidential basis, to help resolve specific technical questions or needs.

### *Organizations and Programs Promoting the Location or Local Products*

The ***Lebanon Valley Tourist Promotion Agency*** organizes events and conducts marketing campaigns to draw visitors to the county's tourist attractions.

The ***Community of Lebanon Association*** is a professional/business organization focused on the City of Lebanon and its immediate surroundings. The Association sponsors a variety of activities geared to bringing foot traffic to the City, including the Fall and Spring Craft Festivals and the Halloween Parade.

***South central TeamPA*** organizes efforts to market the eight-county south central region as a place to do business. Its most noteworthy current initiative is the "Smart Market" regional branding campaign, conducted in partnership with the economic development corporations of the region, the Life Sciences Greenhouse of Central PA, and MANTEC.

The ***Pennsylvania Department of Agriculture Pennsylvania Preferred™*** program assists Pennsylvania farmers by encouraging consumers to purchase Pennsylvania farm and forest products.