# The Chester County Economy

Background Economic Data for Restore Chester County

December 2021



This report was prepared by the Chester County Planning Commission, with assistance from the Chester County Economic Development Council, for the Restore Chester County Initiative, which is focused on reopening and restoring Chester County after the COVID-19 pandemic.



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# Introduction

With the COVID-19 pandemic causing much of the county's economy to shut down temporarily in 2020, Chester County continues to be in unprecedented times. COVID-19 caused many businesses to close temporarily or permanently, leaving many unemployed. Continued unemployment filings went as high as 38,654 in the week of May 2nd 2020, and unemployment reached a high of 11.6% in April 2021. With the availability of a vaccine in 2021, businesses were able to re-open and employment saw improvements. The unemployment rate has since decreased, remaining at 4.7% or lower since March 2021, marking a return to unemployment rates seen pre-COVID-19. Despite these positive indicators, the impacts of COVID-19 remain. Many businesses lost revenue and remain unstable, industries such as restaurants are struggling to attract employees, and COVID variants are causing reimplementation of precautions. Continued efforts will be required to assist with economic recovery.

This report provides local economy data that can be used to guide economic recovery planning and future growth for the county. The impact and effects of COVID-19 remain ongoing, and the 2019 through 2021 data used in this report provide a snapshot of the county's economy throughout the pandemic. The data in this report highlights the County's economic strengths and weaknesses that can be used to inform recommendations for economic recovery planning and implementation of the county's comprehensive plan, Landscapes3.

The Chester County Planning Commission plans to provide updated annual economic data, beginning with this 2021 update. Comparing Chester County to other counties provides a better understanding of how Chester County's economy is performing. Comparisons at both the local, regional, and national level can provide valuable insight to Chester County's unique strengths and challenges. While comparing to national figures can provide general impressions, data at the national level provides averages for counties both similar and vastly different from Chester County. For this reason, data was collected and analyzed for both local counties located in Southeastern Pennsylvania, as well as counties located outside major northeastern cities with similar attributes to Chester County.

# Data

Data used in the report was derived from multiple sources; the Bureau of Labor Statistics, U.S. Census, Bureau of Economic Analysis, ArcGIS Business Analyst, the PA Department of Labor, CoStar, National Establishment Time-Series (NETS), Chester County Assessment Data, Chester County building permits, site visits, Google Maps, and municipal outreach. The most recent available year of data varies by source, ranging between 2019 and 2021, data year is noted in figure titles. Detailed information on data sources can be found on page 86.

# **Overview**



This report is divided into six chapters that describe the county economy.

# **1: RESIDENT CHARACTERISTICS**

- Chester County, with a 2020 estimated population of 534,413 people, is projected to be the fastest growing county in southeastern PA, with 146,000 projected new residents by 2050.
- County residents had a high labor force participation rate of 68%, a decline of only 1% from before the pandemic.
- A high share of residents work in professional occupations. This is reflected in the county's high median household income of over \$102,016, the highest in the state.
- About the same number of residents commute out of the county as workers from other places commute into Chester County.

# **2: EMPLOYMENT CHARACTERISTICS**

- In 2020, the county had 235,948 people working in establishments. This number increases when accounting for employees that are not counted in the federal data such as unincorporated self-employed and proprietors.
- In 2020 the County had 16,751 fewer people working in establishments than in 2019, a result of the pandemic. However, Chester County was one of few Southeast Pennsylvania counties to have maintained growth of employment from 2000, largely due to gains prior to the pandemic.
- Over 50% of jobs are in the top five industries health care, professional and technical services, retail, finance and insurance, and manufacturing.
- The highest job loss was seen in accommodation and food services (4,381), other (2,185), and retail trade (2,166) between 2018 and 2020. Despite the pandemic, six industries saw job gains between 2018 and 2020 including finance and insurance (1,358), information (663), and management of companies and enterprises (296).
- The average individual wage of \$78,802 is very high compared to both the region and the United States, and increased from \$71,000 in 2018.
- While previously Chester County had the highest average individual wage in the region, in 2020 Montgomery County saw a large increase to \$79,119, surpassing Chester County.
- The county has strong employment shares in agriculture, finance and insurance, information, management of companies and enterprises, and professional, scientific, and technical services.
- Looking at specific industries, the county has a particularly high share of employment in household appliance manufacturing, greenhouse and nursery production (mushrooms), other financial investment activities, support activities for crop production, and agricultural chemical manufacturing.
- Specific industries with employment growth from 2015 to 2020 due to local strengths include nondepository credit intermediation, administration of economic programs, local messengers and local delivery, educational support services, furniture and furnishing merchant wholesalers, software publishers, and other crop farming.
- Specific industries with employment decline from 2015 to 2020 due to local weaknesses include machinery and equipment rental and leasing, semiconductor and electronic component manufacturing, medical and diagnostic laboratories, HVAC and commercial refrigeration equipment, warehousing and storage, petroleum merchant wholesalers, and commercial equipment merchant wholesalers.







# **3: BUSINESS CHARACTERISTICS**

- The top five enterprises with the most employees are Vanguard, QVC, The Chester County Hospital, County of Chester, and Giant Food Stores.
- The county has nearly 16,000 establishments, and 16 of these establishments have over 1,000 employees.

# **4: GROSS DOMESTIC PRODUCT**

- The county's Gross Domestic Product in 2019 was \$41 billion, which is a 52% real growth rate since 2001.
- The top industries that drove Gross Domestic Product were professional, scientific, and technical services; information; finance and insurance; and real estate and rental and leasing.
- Looking at the change in Gross Domestic Product from 2015 to 2019, agriculture, finance, and information all had positive local factors leading to Gross Domestic Product increases.

# **5: KEY INDUSTRIAL GROUPS**

- Federal statistics and categorizations do not always fit neatly into the way businesses and the public think about industries. The Chester County Economic Development Council has identified nine industry groupings that are not necessarily the largest industries in the county, but they are critical for a variety of reasons. These nine industry groupings are agriculture and food production, education, energy, finance, health care, information technology, life sciences, manufacturing, and tourism and entertainment.
- Of the nine industry clusters, health care, with 27,854 employees, finance, with 23,597 employees, and manufacturing, with 17,419 employees, are the largest.
- With closures due to COVID-19, tourism and entertainment, which was the 2nd strongest industry in 2018 with 24,809 employees decreased by 31% to 16,993 employees.



# **6: REAL ESTATE CHARACTERISTICS**

- In the late 2010s, the county added approximately 1,400 new housing units per year, with new units increasing to 1,732 in 2020. While high, the recent annual number of new units was lower than the mid 2000s, which saw over 3,000 new units each year.
- Over the past few years, single-family detached homes have been less than half of the homes built, with many apartments and townhouses being constructed.
- Although nearly 20% of 2020 home sales could be considered affordable at under \$250,000, the number of home sales in this bracket has been steadily decreasing every year.
- · Non-residential construction held steady between 2019 and 2020.
- The county has a significant amount of office space, which has been renting at approximately \$28 per square foot per year. The office vacancy rate in the county is about 11%, which is relatively average within the region.
- Chester County's shopping centers and retail stores serve local community needs and are not generally a draw for those outside of the county. The average rental rate of around \$20 per square foot is high for the region, as is the vacancy rate of around 6.2%
- The county's industrial space rents for approximately \$8 per square foot, which is very high for the region. The vacancy rate of 4.2% is around average for the region.

# **Economic Strengths and Weaknesses**

Overall, Chester County has a very strong economy. This strength will help the county continue to recover from the COVID-19 pandemic.

# **Strengths**

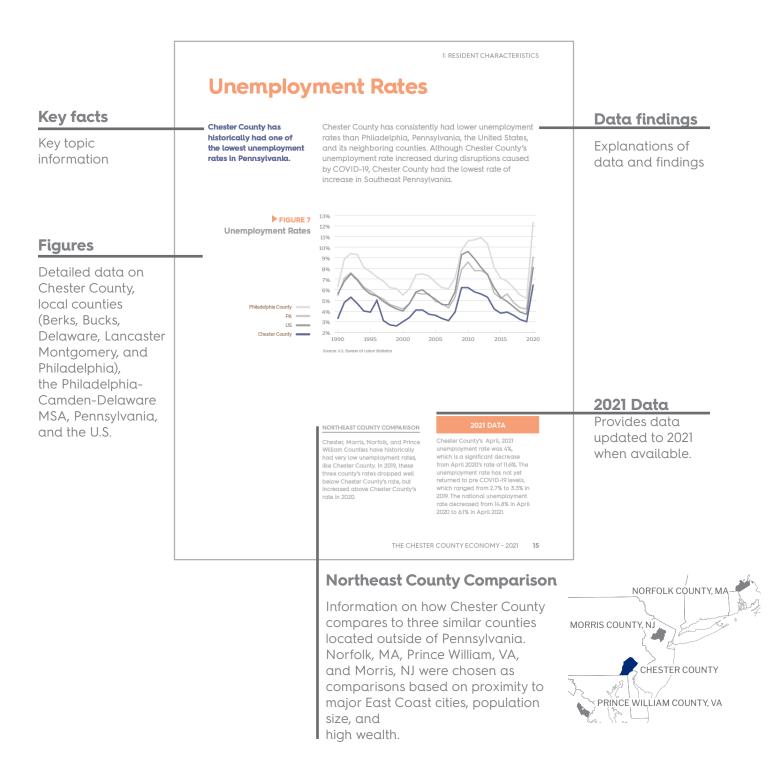
- The county's economy is very diverse and not overly dependent on any one industry.
- + Strong industries in the county, such as management of companies and enterprises, finance and insurance, and professional and technical services, have high wages and are generally growing industries.
- Specific higher growth industries, including software publishing, financial investment, and scientific research and development, are high-paying industries. Life sciences, within the scientific research category, has seen particularly strong local growth.
- + The county has a highly-paid and highly-educated workforce that normally has a high workforce participation rate and low unemployment rate.
- + The county is part of the Philadelphia regional economy and has easy connections to major East Coast destinations like New York City and Washington, DC.
- The county has a history of diverse agricultural industries which remain strong and nationally competitive.

# Weaknesses

- The real estate sector has higher vacancies and higher costs than nearby counties, and housing costs are high for the Philadelphia region.
- Certain business sectors that have been strong in the past, such as computer system design or electric shopping, have seen declines in employment.
- The county has lower employment in a few industries, such as restaurants and health care, than expected given national norms.
- Office parks along major corridors have fueled growth over the years. The pandemic may lead to dramatically different office use and development patterns.

# **Using This Document**

Consistent features are used throughout the report:







This chapter summarizes characteristics of Chester County's residents, who may work in the county or commute out of the county.



# **Population Change**

Since 1970, Chester County has led Southeastern PA's population growth. The county is expected to continue leading in this growth through 2050. Chester County has grown rapidly, adding over 250,000 people since 1970, which is about a 92% growth rate. The growth rate has slowed down recently, but significant growth is still expected. DVRPC forecasts show the County adding 111,260 people by 2050 for a 20.8% increase over the base year of 2020.

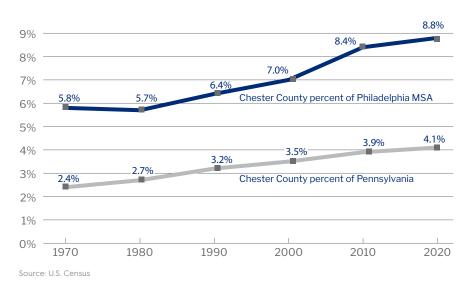
### **FIGURE 1**

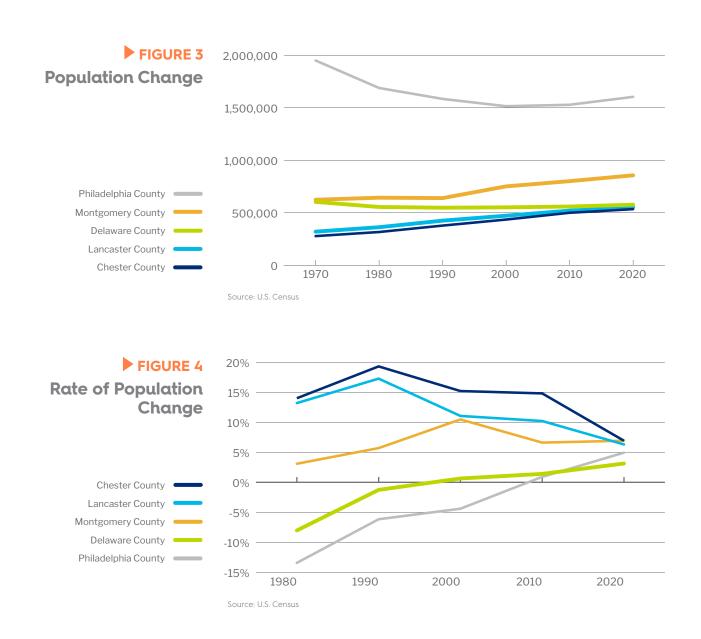
### **Total Population**

	1970	1980	1990	2000	2010	2020
Chester County	277,746	316,660	377,832	435,303	499,797	534,413
Berks County	296,996	312,509	337,812	374,546	411,850	428,849
Bucks County	418,645	479,180	543,091	599,085	625,472	646,538
Delaware County	603,456	555,023	548,033	551,536	559,276	576,830
Lancaster County	320,079	362,346	424,947	471,955	520,156	552,984
Montgomery County	624,080	643,377	680,066	751,335	801,052	856,553
Philadelphia County	1,949,996	1,688,210	1,584,293	1,514,563	1,528,306	1,603,797
Philadelphia MSA	4,817,914	5,547,902	5,892,937	6,188,463	5,971,483	6,102,434
PA	11,800,766	11,864,720	11,903,299	12,280,548	12,666,858	13,002,700
US	203,302,037	226,542,250	249,464,396	282,162,411	309,349,689	331,449,281

Source: U.S. Census

# FIGURE 2 County Percent of MSA and PA Population





### NORTHEAST COUNTY COMPARISON

As a suburban county near a major city, Chester County's population growth is not unique. Chester County's population growth fell in the middle of the three northeast comparison counties - with Norfolk County, MA and Morris County, NJ much lower and Prince William County, VA higher.

# **Labor Force Participation**

Chester County is tied with Montgomery County for the highest rate of workforce participation in Southeastern PA. Chester County, along with Montgomery County, has the highest labor force participation rate when compared with the region, state, or nation, which reflects the county's prosperity and job opportunities.

# FIGURE 5 Labor Force Participation, 2019

	Population 16 and Older	In Labor Force	Percent in Labor Force
Chester	421,901	287,299	<b>68.1</b> %
Berks	338,456	221,825	65.5%
Bucks	517,501	348,617	67.4%
Delaware	455,671	297,357	65.3%
Lancaster	431,887	285,152	66.0%
Montgomery	673,231	458,529	68.1%
Philadelphia	1,275,366	790,653	62.0%
Philadelphia MSA	4,938,756	3,238,388	65.6%
PA	10,474,419	6,592,650	62.9%
US	263,534,161	167,501,734	63.6%

Source: U.S. Census

## FIGURE 6 Change in Labor Force, 2010-2019

### NORTHEAST COUNTY COMPARISON

Chester, Morris, Norfolk, and Prince William Counties all have relatively high shares of their population aged 16 and older in the labor force.

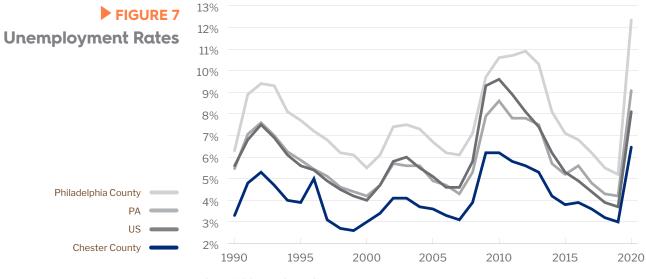
	Change in Labor Force	Percent Change in Labor Force	Change in Civilian Employed	Percent Change in Civilian Employed
Chester	17,292	6%	24,254	10%
Berks	6,397	3%	17,430	9%
Bucks	(2,049)	-1%	15,436	5%
Delaware	2,990	1%	16,184	6%
Lancaster	13,757	5%	26,831	11%
Montgomery	14,296	3%	30,235	7%
Philadelphia	80,778	11%	127,435	21%
Philadelphia MSA	119,761	4%	274,081	10%
PA	122,642	2%	442,319	8%
US	10,534,965	7%	19,724,866	14%

Source: U.S. Census

# **Unemployment Rates**

# Chester County has historically had one of the lowest unemployment rates in Pennsylvania.

Chester County has consistently had lower unemployment rates than Philadelphia, Pennsylvania, the United States, and its neighboring counties. Although Chester County's unemployment rate increased during disruptions caused by COVID-19, Chester County still had the lowest rate of increase in Southeast Pennsylvania.



#### Source: U.S. Bureau of Labor Statistics

### NORTHEAST COUNTY COMPARISON

Chester, Morris, Norfolk, and Prince William Counties have historically had very low unemployment rates, like Chester County. In 2019, these three county's rates dropped well below Chester County's rate, but increased above Chester County's rate in 2020.

### 2021 DATA

Chester County's July, 2021 unemployment rate was 4.7%, which is a significant decrease from April 2020's rate of 11.6%. The unemployment rate has not yet returned to pre COVID-19 levels, which ranged from 2.7% to 3.3% in 2019. The national unemployment rate decreased from 10.5% in July 2020 to 5.7% in July 2021.

# **Occupations**

## Chester County has high numbers of residents in professional and business occupations.

## FIGURE 8 Resident Occupations, 2019

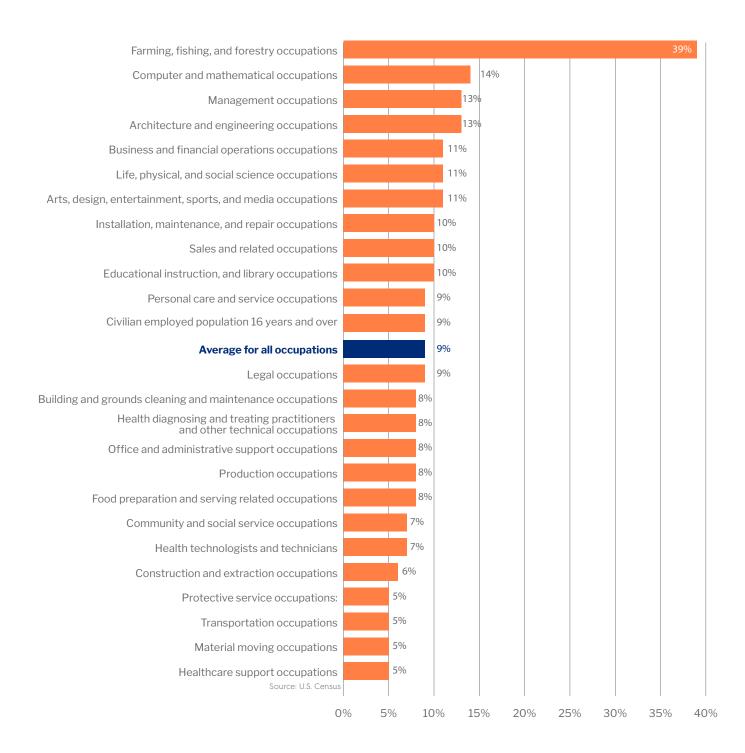
### NORTHEAST COUNTY COMPARISON

Morris, Norfolk, and Prince William Counties also have high shares of workers in professional and business occupations, although Chester County has higher rates of workers in business and finance and lower rates in management, office, administrative, and legal occupations. Chester County has both high numbers of residents and a high share of the region's residents who are working in computer, management, business, sales, and education occupations. The county has 39% of the share of the region's residents working in agriculture. While still high, the share of the region's residents in agriculture decreased from 50% in 2018, driven primarily by employment losses in the greenhouse and nursery industry. Chester County also has large shares of residents working in architectural, engineering, life science, physical science, and social science occupations.

	Chester County Residents	Percent of Total Chester County Employment
Civilian employed population 16 years and over	277,247	100%
Management occupations	46,302	17%
Sales and related occupations	27,683	10%
Office and administrative support occupations	25,801	9%
Business and financial operations occupations	22,894	8%
Educational instruction, and library occupations	19,793	7%
Computer and mathematical occupations	16,123	6%
Health diagnosing and treating practitioners and other technical occupations	14,034	5%
Food preparation and serving related occupations	11,573	4%
Production occupations	9,005	3%
Personal care and service occupations	8,200	3%
Installation, maintenance, and repair occupations	7,846	3%
Architecture and engineering occupations	7,552	3%
Building and grounds cleaning and maintenance occupations	7,538	3%
Construction and extraction occupations	7,078	3%
Arts, design, entertainment, sports, and media occupations	6,316	2%
Life, physical, and social science occupations	5,298	2%
Healthcare support occupations	5,207	2%
Community and social service occupations	4,683	2%
Material moving occupations	4,653	2%
Legal occupations	4,282	2%
Health technologists and technicians	4,068	1%
Protective service occupations:	3,489	1%
Protective service occupations:	3,489	1%
Farming, fishing, and forestry occupations	2,563	1%

Source: U.S. Census

# ▼ FIGURE 9 Resident Occupations as Share of Philadelphia MSA, 2019



# **Commuting Patterns**

## Chester County has a balance between residents working in the county and workers commuting in.

Chester County has a balance between significant numbers of residents commuting out of the county and workers commuting into the county. Unlike neighboring Lancaster County, which is relatively self-contained, Chester County's workforce is strongly linked to the rest of the Philadelphia region, as well as the Wilmington, DE area. The number of workers both living and working within the county increased by 1.5% from 2017 to 2019.

Commuting data comes from the Census Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics (LODES) data, which releases one year behind other Census data.

County	Commute Into County	Commute Out of County	Live and Work in Same County
Chester County	134,321	133,934	107,400
Berks County	64,732	82,574	107,760
Bucks County	128,058	182,514	123,492
Delaware County	119,963	163,350	93,788
Lancaster County	72,963	81,584	159,664
Montgomery County	299,887	206,673	190,702
Philadelphia County	312,945	239,553	354,321

Source: U.S. Census Longitudinal Employer Household Dynamics

	Net Workers Imported Into County (Inbound-Outbound)	Workers Living and Working in County (%)
Chester County	387	28.6%
Berks County	-17,842	42.2%
Bucks County	-54,456	28%
Delaware County	-43,387	25%
Lancaster County	-8,621	51%
Montgomery County	93,214	27%
Philadelphia County	73,392	39%

Source: U.S. Census Longitudinal Employer Household Dynamics

# FIGURE 10

FIGURE 11

Commuter Patterns Comparison, 2019

NORTHEAST COUNTY COMPARISON

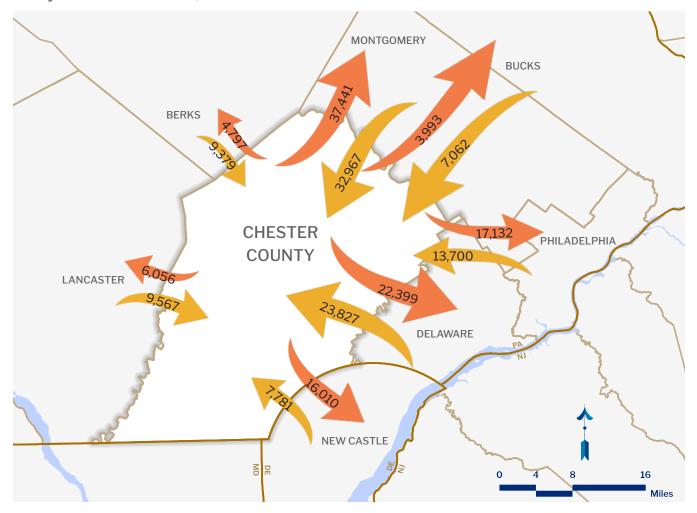
Despite having similar population, the Northeast County comparison counties either import or export employees at a much larger scale than Chester County. This indicates the counties have a larger

dependence on their major cities.

Commuter Patterns, 2019

## **FIGURE 12**

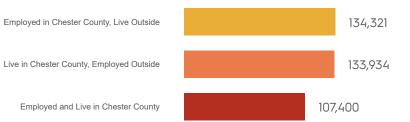
Daily Commuter Flows, 2019



Source: U.S. Census Longitudinal Employer Household Dynamics

Daily commuter flows from Longitudinal Employer-Household Dynamics (LODES) data. Data includes jobs covered by unemployment insurance which excludes employment including (but not limited to) sole proprietors, unincorporated self-employed, and some agricultural workers.

Additional workers commute in and out of Chester County from other counties not shown.



# **Household Income**

# Chester County has the highest household income in the state.

Chester County has high household income compared to both Pennsylvania and the Philadelphia region. This reflects the high-paying professions of the county's residents and relatively high labor force participation, as well as the income required to purchase housing in the county. Chester County's median household income increased from \$99,119 in 2018 to \$102,016 in 2019.

## **FIGURE 13**

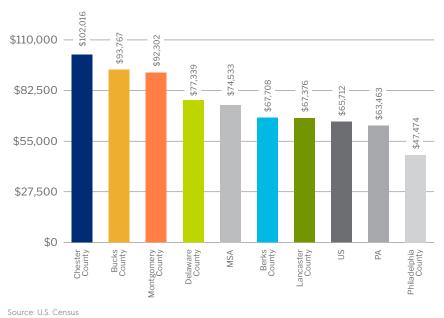
## **Chester County Household Income, 2019**

	Number of Households	Percent of Households
Total	193,234	100%
Less than \$10,000	6,259	3%
\$10,000 to \$24,999	12,557	6%
\$25,000 to \$49,999	24,274	13%
\$50,000 to \$99,999	51,809	27%
\$100,000 to \$149,999	34,562	18%
\$150,000 or More	63,773	33%

Source: U.S. Census

## **FIGURE 14**

## Median Household Income Comparison, 2019



### NORTHEAST COUNTY COMPARISON

Norfolk, Morris, and Prince William counties are all high income places, and all three have higher household incomes than Chester County, with Morris having the highest median income in 2019 at \$116,283. The higher income in comparison counties can be attributed to multiple factors including higher costs of living and greater employment in higher paying industries.

# **Education and Race**

Chester County has a greater percent of residents with a bachelors degree or higher than many other local counties. Chester County residents are highly educated; 55% have a bachelors degree or above. The educational attainment may correspond with the high income and managerial occupations of residents.

## **FIGURE 15**

## **Regional Educational Attainment, 2019**

	Chester County	Berks County	Bucks County	Delaware County	Lancaster County	Montgomery County	Philadelphia County	Philadelphia MSA	PA	US
High school graduate or higher	94%	87%	94%	93%	86%	95%	86%	91%	91%	89%
Associates degree or higher	<b>61</b> %	34%	51%	48%	36%	58%	37%	46%	41%	42%
Bachelors degree or Higher	55%	25%	42%	41%	28%	50%	31%	39%	32%	33%

Source: U.S. Census. Percentages reflect population 25 years and older

Chester County has a predominantly white population. The percentages of the population that are Black or African American, or some other race are low compared to the Philadelphia-Camden-Wilmington MSA, Pennsylvania, and the US, while the percentages for all other races remain comparable. The percentage of the population that is of Hispanic or Latino Origin is lower than for the Philadelphia-Camden-Wilmington MSA and US, but it is comparable with that of Pennsylvania.

# FIGURE 16

## Race and Hispanic Origin, 2019

	Chester County	Philadelphia MSA	PA	US
White	<b>82</b> %	66%	80%	72%
Black or African American	<b>6</b> %	21%	11%	13%
Asian	<b>6</b> %	6%	4%	6%
Two or more races	3%	3%	3%	3%
Some other race	3%	4%	3%	5%
American Indian and Alaska Native	0%	0%	0%	1%
Native Hawaiian and Other Pacific Islander	0%	0%	0%	0%
Hispanic or Latinx (of any race)	8%	10%	8%	18%

Source: U.S. Census



# EMPLOYMENT CHARACTERISTICS

This chapter summarizes characteristics of workers in Chester County, who may be residents of the county or commute into the county from other places.



Photograph Credit: Chester County Chamber of Business & Industry

# **Employees Working in County**

Prior to 2020, Chester County's rate of job growth exceeded national and local rates. However, in 2020 the County saw greater rates of job loss than Philadelphia, Montgomery County, Pennsylvania, and the U.S. With 235,948 jobs in 2020, Chester County saw a 16,952 decrease in employment from 2019, largely attributed to COVID-19. Chester County's 201902020 job loss rate of change (-7%) was on par with Pennsylvania (-7%) and slightly lower than the US (-8%). The county's job loss rate of change was in the middle for Southeast Pennsylvania. Philadelphia saw a lower job loss rate of change than Chester County, and neighboring Montgomery County had an increase in employment from 2019-2020.

Job estimates vary based on data source. The U.S. Bureau of Labor Statistics (BLS) data used in this report for total, industry, and top industry employment includes all part-time or full-time workers who are paid a wage or salary. The BLS data excludes self-employed, proprietors, owners and partners in unincorporated firms, household workers, and unpaid family workers.

## ▼ FIGURE 17 Regional Employment

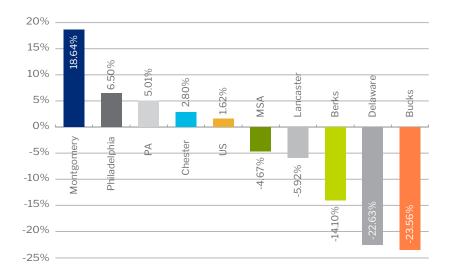
	Jobs									
Year	Chester County	Berks County	Bucks County	Delaware County	Montgomery County	Lancaster County	Philadelphia County	Philadelphia MSA	PA	US
2000	229,523	187,690	319,083	267,671	397,383	244,446	602,049	2,738,837	5,854,551	136,891,000
2010	252,699	191,919	311,423	263,287	400,493	247,925	615,073	2,756,241	5,840,887	139,064,000
2019	252,900	176051	268787	226885	505372	245179	699722	2,981,300	5,925,588	150,905,000
2020	235,948	161,217	243,896	207,104	471,470	229,975	641,189	2,611,007	5,488,654	139,106,969
Change in Jobs 2000-2020	6,425	(26,473)	(75,187)	(60,567)	74,087	(14,471)	39,140	(127,830)	4,904,103	2,215,969

Source: U.S. Bureau of Labor Statistics

## FIGURE 18 Percent Change in Employment, 2000–2020

### NORTHEAST COUNTY COMPARISON

Job growth varied widely among Northeast Comparison counties. Morris County had been experiencing job loss in previous years, but employment increased in 2020. Norfolk County saw 2019-2020 decline at a slightly higher rate than Chester County. Prince William County, which has been more of a commuter county, and had been seeing tremendous job growth, far outpacing Chester County in previous years, had a -48% decrease in employment from 2019-2020.



Source: U.S. Bureau of Labor Statistics

# **Employment by Industry**

Chester County's employment is concentrated in service and professional industries. Employment data is broken into broad industry categories by the federal government called NAICS codes. Health care, professional service, retail, finance, and manufacturing employ the most people in the county. Job totals can vary by source and year, and the most current data for detailed industry breakdown is from 2020.

## FIGURE 19

Employment by Major Industry, 2020 2-Digit NAICS Codes

### NORTHEAST COUNTY COMPARISON

Morris, Norfolk, and Prince William Counties also have employment concentrations in service and professional industries.

	Chester County Employment	Percent of Total Chester County Employment
TOTAL	235,948	100%
Health Care and Social Assistance	35,145	15%
Professional, Scientific, and Technical Services	25,302	11%
Retail Trade	24,481	10%
Finance and Insurance	22,322	9%
Manufacturing	17,263	7%
Educational Services	16,187	7%
Accommodation and Food Services	12,551	5%
Construction	10,821	5%
Administrative and Support and Waste Management and Remediation Services	10,395	4%
Wholesale Trade	9,977	4%
Management of Companies and Enterprises	9,430	4%
Other Services (except Public Administration)	7,548	3%
Transportation and Warehousing	7,514	3%
Information	7,236	3%
Agriculture, Forestry, Fishing and Hunting	4,957	2%
Public Administration	4,650	2%
Arts, Entertainment, and Recreation	3,576	2%
Real Estate Rental and Leasing	2,945	1%
Utilities	589	0%
Mining	156	0%

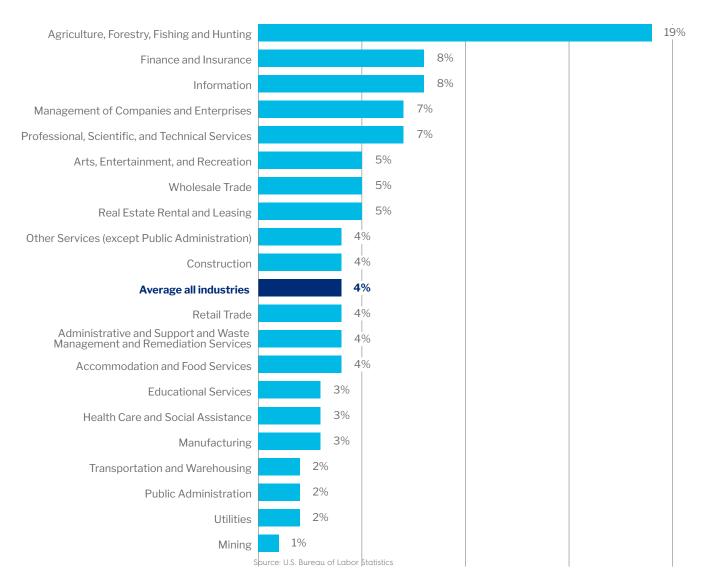
Source: U.S. Bureau of Labor Statistics

Chester County has a exceptionally high share of the state's employment in many industries. This is particularly notable for agriculture, because of the mushroom industry; finance and insurance, because of companies including the county's largest employer, Vanguard; information, because of the county's tech companies; and professional and technical services, because of life science companies.

### **FIGURE 20**

## **Chester County Share of Pennsylvania Employment**

2- Digit NAICS Codes



The broad industry categories described earlier in this report provide a good overall picture of the county economy, but more detailed industry breakdowns can provide a finer level of information. This finer level of NAICS codes shows the largest number of employees in 2020 were in elementary and secondary schools, other financial investment activities, restaurants, management of companies and enterprises, computer system design, and general medical and surgical hospitals. This represents a change from 2019 in which restaurants, elementary and secondary schools, other financial investment, company management, computer system design, and grocery stores had the most employment.

> FIGURE 21 Top 20 Specific Industries, 2020 4-Digit NAICS Codes

	Chester County	
Elementary And Secondary Schools	Employment 13,716	5.8%
	,	
Other Financial Investment Activities	13,667	5.8%
Restaurants and Other Eating Places	10,477	4.4%
Management of Companies and Enterprises	9,430	4.0%
Computer Systems Design and Related Services	7,225	3.1%
General Medical and Surgical Hospitals	6,664	2.8%
Grocery Stores	5,510	2.3%
Management, Scientific, and Technical Consulting Services	4,919	2.1%
Individual and Family Services	4,658	2.0%
Scientific Research and Development Services	4,582	1.9%
Services to Buildings and Dwellings	4,293	1.8%
Offices of Physicians	3,739	1.6%
Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	3,724	1.6%
Executive, Legislative, and Other General Government Support	3,608	1.5%
Greenhouse, Nursery, and Floriculture Production	3,553	1.5%
Building Equipment Contractors	3,380	1.4%
Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities	3,268	1.4%
Electronic Shopping and Mail-Order Houses	2,913	1.2%
Architectural, Engineering, and Related Services	2,893	1.2%
Software Publishers	2,848	1.2%

Source: U.S. Bureau of Labor Statistics

# Wages by Industry

# Chester County has the second highest average individual wage in the region.

Chester County had a high overall average wage in 2020 of \$78,802, up from \$71,031 in 2018, which might account for the county's high household income. The county has the second highest annual average wage, lower only than, and comparable to, Montgomery County's \$79,119. These high wages are driven by certain industries, such as finance, real estate, management, and utilities. Other large industries, such as education, health care, lodging, and food services are closer to state and national figures.

# FIGURE 23 Average Wages, 2020

### NORTHEAST COUNTY COMPARISON

Chester County's wage is high even compared to other high wage counties nationally. Morris, Norfolk, and Prince William Counties are also all located in high cost-of-living metropolitan areas, but only Morris County has a higher average wage than Chester County.

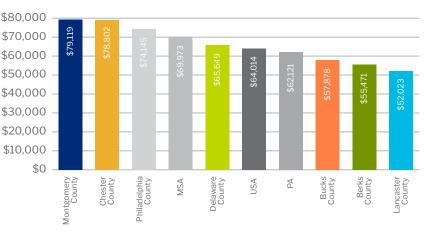
## **FIGURE 22**

## Wages by Major Industry, 2020

2-Digit NAICS Codes

	Average Annual Wage				
Industry	Chester County	PA	US		
Total, all industries	\$78,802	\$62,120	\$64,013		
Management of Companies and Enterprises	\$165,122	\$138,931	\$132,287		
Utilities	\$147,104	\$102,146	\$105,510		
Finance and Insurance	\$137,633	\$104,047	\$121,405		
Professional, Scientific, and Technical Services	\$122,274	\$103,505	\$106,903		
Information	\$118,875	\$105,085	\$131,805		
Real Estate Rental and Leasing	\$114,168	\$68,164	\$64,971		
Wholesale Trade	\$108,824	\$86,597	\$84,232		
Manufacturing	\$80,941	\$66,954	\$73,454		
All Industries	\$78,802	\$62,121	\$64,014		
Construction	\$77,131	\$70,063	\$67,090		
Mining	\$65,584	\$88,368	\$110,310		
Educational Services	\$61,192	\$62,210	\$56,275		
Public Administration	\$59,948	\$66,098	\$70,185		
Transportation and Warehousing	\$55,989	\$52,551	\$56,944		
Health Care and Social Assistance	\$53,849	\$55,975	\$56,321		
Administrative and Support and Waste Management and Remediation Services	\$52,608	\$42,060	\$46,531		
Agriculture, Forestry, Fishing and Hunting	\$44,639	\$38,502	\$39,897		
Retail Trade	\$41,908	\$33,161	\$36,728		
Other Services (except Public Administration)	\$40,699	\$39,484	\$44,124		
Arts, Entertainment, and Recreation	\$29,787	\$40,093	\$44,568		
Accommodation and Food Services	\$21,445	\$19,728	\$22,913		

Source: U.S. Bureau of Labor Statistics.



Source: U.S. Bureau of Labor Statistics

## **FIGURE 24**

## Wages by Specific Industry, 2020

This table only includes 4-digit NAICS code industries with over 50 employees.

Many specific industries have particularly high average wages. Many of these are generally acknowledged as high paying industries, such as scientific research, financial investments, and software publishing. Others are not always as universally known as high wage industries, particularly a variety of wholesalers, but also equipment leasing and highway construction. Many industries saw large increases in median wage from 2018-2020, many likely due to changes caused by COVID-19. These include lessors of real estate, pharmaceutical and medicine manufacturing, and semiconductor and electronic component manufacturing.

	Average Annual Wage				
Industry	Chester County	PA	US		
Lessors of real estate	\$177,040	\$65,610	\$60,896		
Scientific research and development services	\$169,627	\$146,487	\$154,595		
Druggists' goods merchant wholesalers	\$168,323	\$163,178	\$139,116		
Management of companies and enterprises	\$165,122	\$138,931	\$132,287		
Basic chemical manufacturing	\$160,995	\$90,569	\$106,316		
Pharmaceutical and medicine manufacturing	\$152,427	\$147,838	\$126,197		
Other financial investment activities	\$150,277	\$158,367	\$244,636		
Commercial equip. merchant wholesalers	\$146,797	\$98,569	\$116,090		
Software publishers	\$144,736	\$148,191	\$182,471		
Insurance carriers	\$133,395	\$99,742	\$102,345		
Data processing, hosting and related services	\$130,537	\$101,337	\$137,045		
Semiconductor and electronic component mfg.	\$128,631	\$75,572	\$123,934		
Management and technical consulting services	\$127,529	\$113,440	\$103,636		
Nondepository credit intermediation	\$127,330	\$124,312	\$118,454		
Computer systems design and related services	\$127,148	\$115,237	\$130,641		
Activities related to credit intermediation	\$124,648	\$116,085	\$126,526		
Wired and wireless telecommunications carriers	\$121,686	\$122,067	\$98,458		
Metal and mineral merchant wholesalers	\$114,444	\$77,017	\$75,667		
Highway, street, and bridge construction	\$114,203	\$69,316	\$72,256		
Electronic markets and agents and brokers	\$112,512	\$125,966	\$108,276		

Source: U.S. Bureau of Labor Statistics

Automotive equipment rental and leasing was excluded from the table due to potential data inaccuracy.

# **County vs. National Trends**

Chester County has competitive advantages in agriculture, company management, finance, and professional services. Two analyses can help put Chester County's industrial mix into perspective. The first, location quotients, compares the Chester County industry ratio of total jobs to the national ratio. The second, shift share analysis, examines job change and removes the overall national rate of growth and national industry-specific rate of growth to estimate the amount of change caused by unique local conditions.

# **Employment Location Quotient by Industry**

The employment location quotient compares the portion of jobs in an industry in Chester County with the portion of jobs in the nation. For industries where Chester County mimics the national ratio exactly, the location quotient will be 1. When the county has a higher share of jobs than the nation, the location quotient will be greater than 1. Location quotients higher than 1 indicate that the industry is exporting goods or services outside of the county. Location quotients of less than 1 mean the county has a lower share of jobs, which indicates that the county is importing goods or services from that industry.

## **FIGURE 25**

# **Employment Location Quotient for Major Industries, 2020**

2-Digit NAICS Codes

	Chester County	Berks County		Montgomery County	Delaware County	Lancaster County	Philadelphia County	PA
Management of Companies and Enterprises	2.40	2.07	0.70	1.68	2.12	1.04	1.01	1.24
Agriculture, Forestry, Fishing and Hunting	2.34	1.95	0.23	0.08	0.03	1.43	0.00	0.46
Finance and Insurance	2.16	0.58	0.77	1.73	1.32	0.68	1.02	0.98
Professional, Scientific, and Technical Services	1.56	0.61	0.89	1.66	0.65	0.66	1.26	0.86
Information	1.50	0.24	0.69	1.11	0.42	0.48	1.07	0.69
Other Services (except Public Administration)	1.12	0.98	1.19	1.00	1.21	1.05	1.08	0.97
Wholesale Trade	1.05	0.91	1.34	1.12	0.77	1.27	0.48	0.82
Arts, Entertainment, and Recreation	1.04	0.62	1.27	0.79	1.05	0.87	0.96	0.78
Retail Trade	0.97	1.00	1.20	0.96	1.00	1.13	0.64	0.87
Health Care and Social Assistance	0.96	1.12	1.35	1.08	1.29	1.10	1.68	1.10
Construction	0.86	0.79	1.18	0.92	0.99	1.36	0.31	0.77
Manufacturing	0.84	2.07	1.21	1.09	0.76	1.76	0.32	1.00
Real Estate Rental and Leasing	0.79	0.65	0.70	1.01	0.77	0.60	0.95	0.64
Educational Services	0.79	0.13	0.81	0.72	0.62	0.19	1.46	0.87
Administrative and Support and Waste Management and Remediation Services	0.71	0.84	0.82	1.12	0.97	0.57	0.61	0.75
Transportation and Warehousing	0.68	1.04	0.74	0.54	1.04	1.43	1.00	1.08
Accommodation and Food Services	0.66	0.77	0.90	0.65	0.81	0.85	0.75	0.72
Utilities	0.43	1.32	0.66	1.03	0.73	0.40	1.36	0.96
Public Administration	0.37	0.51	0.37	0.40	0.60	0.35	1.44	0.71
Mining	0.17	0.36	0.16	0.15	0.09	0.49	0.00	0.94

Source: U.S. Bureau of Labor Statistics

### NORTHEAST COUNTY COMPARISON

The mix of jobs in Morris and Norfolk Counties is similar to Chester County, with emphases on finance, management, and professional services, while Prince William County has strengths in retail, construction, and public administration.

# Employment Location Quotient by Industry (continued)

The majority of specific industries with high location quotients fall into key industry groups identified by the Chester County Economic Development Council (additional information on page 51). Chester County has extraordinarily high location quotients for other financial investment activities and greenhouse and nursery production, indicating that the County is exporting these goods and services nationally and potentially internationally. Both nursery production and financial investment have multiple significant employers in the county, indicating Chester County has attracted and formed clusters of these industries. These cluster industries have generated spin-off industries such as agricultural chemical manufacturing, another industry with a high location quotient, as a result of the mushroom growing industry.

Chester County also has cluster industry strength in management of companies and enterprises. Two of the top 20 industries with the highest location quotients were in management: management of companies and enterprises, and management of technical consulting services.

Other high location quotients are driven by one major employer. Examples of this include electronic shopping and mail-order houses with QVC, school and employee bus transportation with Krapf Transportation, and household appliance manufacturing with Lasko Products.

Chester County also showed strength in software, medical and scientific research, development, and manufacturing.

### **FIGURE 26**

# **Employment Location Quotient for Specific Industries, 2020**

This table only includes 4-digit NAICS code industries with over 50 employees.

	Employment Location Quotient							
Industry (Chester County Major Influencer)	Chester County	Berks County	Bucks County	Montgomery County	Delaware County	Lancaster County	Philadelphia County	PA
Other financial investment activities (Vanguard, De Lage Landen, Automated Financial , Brinker Capital, Chatham Financial Corp, Moody's Analytics, DFG World)	16.2	0.4	0.7	3.7	1.6	0.6	1.5	1.5
Greenhouse and nursery production (Mushroom Industry)	12.9	8.0	0.9	0.2	0.1	2.1	0.0	1.3
Electronic shopping and mail-order houses (QVC)	4.5	0.0	0.0	0.0	0.0	1.0	0.0	0.4
Agricultural chemical manufacturing (Mushroom Industry)	4.1	0.0	0.8	1.0	0.3	0.9	0.6	1.0
Machinery and equipment rental and leasing (DII Financial Solutions)	3.9	0.0	1.2	5.3	0.5	1.0	0.5	0.9
Household appliance manufacturing (Lasko Products Inc)	3.5	0.1	0.9	5.2	0.6	0.8	1.7	1.2
School and employee bus transportation (George Krapf)	3.3	0.1	0.8	1.5	0.4	0.2	0.3	0.6
Other animal production (Horses and Equine)	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Scientific research and development services (XL Caitlin, Environmental Standards Inc, Virtualscopics Inc, Absorptions Systems Lp, Qiagen Inc, Charles River Laboratories Inc, Teva, Venatorx Pharmaceuticals)	3.2	0.7	1.1	0.4	0.0	4.3	0.0	0.9
Software publishers (Cerner, Tivo, Bentley Systems)	2.7	1.8	2.6	0.9	4.2	1.3	2.0	1.8
Druggists' goods merchant wholesalers (Endo , West Pharmaceutical, Amerisourcebergen, Eisai, Johnson & Johnson)	2.5	2.1	1.2	1.4	1.6	1.3	1.0	1.8
Pharmaceutical and medicine manufacturing (Agc Chemicals, Fujirebio Diagnostics, Sphaera Pharma, Jackson Immuno Research Labs)	2.5	2.7	1.4	1.8	2.1	2.8	1.3	2.4
Direct selling establishments (Flik Hospitality Group)	2.4	2.1	0.7	1.7	2.1	1.0	1.0	1.2
Management of companies and enterprises (Banks and Holdings Companies)	2.3	1.8	3.1	2.1	3.0	5.3	0.7	1.6
Computer systems design and related services (Decision One Corp, Bracket Global Llc, Unisys Corp, Cenero)	1.9	0.0	1.7	10.3	0.3	0.0	0.7	1.4
Management and technical consulting services (Aegon Direct Marketing, West Analytical Services, Genex, IBM Talent Solutions, Concordia Valsource, Liquid Hub, West Goshen Township)	1.9	0.3	0.6	1.4	0.5	0.3	0.5	0.7
Resin, rubber, and artificial fibers mfg. (Sartomer, Rgf Materials, Resin Enterprise, Channel Polymers)	1.9	0.6	0.9	1.5	0.8	0.4	1.3	0.7
Other nonmetallic mineral products (Various)	1.7	0.0	1.6	0.0	0.0	0.0	0.5	0.7
Medical equipment and supplies manufacturing (De Puy Synthes, Merit Medical, Teleflex)	1.7	3.6	1.9	0.8	0.5	0.7	0.3	1.0
Commercial equip. merchant wholesalers (Keeler, Ricoh USA, Biotelemetry, Freedom Medical)	1.7	1.4	2.4	1.7	2.0	1.2	1.1	1.2
Religious organizations	1.7	0.6	0.8	1.5	0.8	1.2	1.1	1.0
Data processing, hosting and related services	1.7	0.3	1.2	1.9	0.1	0.1	0.3	0.8
Facilities support services	1.7	1.0	0.9	1.5	4.1	1.2	2.0	1.1
Other nonmetallic mineral products	1.7	0.5	0.0	1.0	0.0	3.3	0.0	0.8
Specialty food stores	1.7	1.5	1.8	0.7	2.6	2.3	1.1	0.9

Source: U.S. Bureau of Labor Statistics, ArcGIS Business Analyst data

# **Employment Shift Share Analysis by Industry**

A shift share analysis removes the influence of national overall and industry employment changes from the actual local change that occurred, to estimate an "expected" local change in employees due to local factors. While not important in themselves, the "expected" local change numbers can be used to identify potential strengths and weaknesses at the local level. The analysis cannot identify the causes of the change at the local level. Unique local factors influencing employment change vary and may include:

### Labor Force Specialization

The area may have a labor force with specific industry skills.

### **Educational Feeders**

Schools and colleges can increase labor force specialization and generate spin-offs.

### **Local Assets**

Local natural or historical characteristics may cause industry specialization.

### Large Employers

Major employers opening, terminating employees, or closing in a local area will impact changes in employment.

### **Industry Clusters**

Areas may develop strengths in an industry, which supports future growth in the industry.

### **Industry Support**

Industries may open to support existing strong industries, such as produce distribution centers to support restaurants or farms.

### **Industry Externalities**

Industries may develop to handle the externalities of other prominent businesses, such as compost as a result of farm refuse.

### **Technology Changes**

Advances in technological efficiencies may cause decreases in employment at the local level.

### **Cost-Of-Living**

Costs such as housing and transportation costs can assist or stymie industry growth.

### **Major Events**

Events and festivals can cause increases in industry employment.

### **Population Growth**

Local growth can increase demand for industries such as construction as new housing is needed.

### **Government Intervention**

Local government policy, taxes, and assistance can grow or hinder industries.

### Local Disaster

Natural disasters, epidemics, and man-made disasters at the local level can cause increases or decreases in employment.

### **National Clusters**

Strong clusters in other areas of the country (such as tech jobs in California) may cause disproportionate national growth

The analysis should be combined with additional analyses and local knowledge to understand the unique local factors influencing employment change. Chester County showed indications of strong employment growth due to local factors for: finance (other financial investment, nondepository credit intermediation), software publishers, management of companies and enterprises, and scientific research and development activities.

# FIGURE 27

## Specific Industries With Highest Indications of Growth Due to Local Factors, 2015-2020

This table only includes 4-digit NAICS code industries with over 50 employees.

Industry	Indications of Growth
N 1 1 11 11 11 11 11 11	Due to Local Factors
Nondepository credit intermediation	Very High
Administration of economic programs	Very High
Local messengers and local delivery	Very High
Educational support services	Very High
Furniture and furnishing merchant wholesalers	Very High
Software publishers	Very High
Other crop farming	Very High
Other ambulatory health care services	High
Other support services	High
Social advocacy organizations	High
Centers of America, Alcoholics Anonymous, Bowling Green	High
Spectator sports	High
Newspaper, book, and directory publishers	Medium
Oilseed and grain farming	Medium
Beer, wine, and liquor stores	Medium
Travel arrangement and reservation services	Medium
Business, computer and management training	Medium
Vegetable and melon farming	Medium
Agricultural chemical manufacturing	Medium
Coating, engraving, and heat treating metals	Medium
Machine shops and threaded product mfg.	Medium
Vocational rehabilitation services	Medium
Rehabilitation, 470 Manor, Pennbrook, Brian's House	Medium
Office furniture and fixtures manufacturing	Medium
Other information services	Medium
Electronic equipment repair and maintenance	Medium
Commercial machinery repair and maintenance	Medium
Household goods repair and maintenance	Medium
Commercial and service industry machinery	Medium
Motion picture and video industries	Medium

Source: U.S. Bureau of Labor Statistic, ArcGIS Business Analyst data

# Employment Shift Share Analysis by Industry (continued)

Chester County saw indicators of employment decline due to local factors in computer systems design and related services, commercial equipment merchant wholesalers, greenhouse and nursery production, and restaurants and eating places.

#### FIGURE 28

#### Specific Industries With Highest Indications of Decline Due to Local Factors, 2015-2020

This table only includes 4-digit NAICS code industries with over 50 employees.

Industry	Indications of Decline Due to Local Factors
Machinery and equipment rental and leasing	High
Semiconductor and electronic component mfg.	High
Medical and diagnostic laboratories	High
Hvac and commercial refrigeration equipment	High
Warehousing and storage	High
Petroleum merchant wholesalers	High
Commercial equip. merchant wholesalers	High
Waste treatment and disposal	Medium
Utility system construction	Medium
Pharmaceutical and medicine manufacturing	Medium
Animal food manufacturing	Medium
Computer systems design and related services	Medium
Waste collection	Medium
Couriers and express delivery services	Medium
Other heavy construction	Medium
Ag., construction, and mining machinery mfg.	Medium
Motor vehicle and parts merchant wholesalers	Medium
Insurance carriers	Medium
Greenhouse and nursery production	Medium
Freight transportation arrangement	Medium
School and employee bus transportation	Medium
Accounting and bookkeeping services	Medium
Resin, rubber, and artificial fibers mfg.	Medium

Source: U.S. Bureau of Labor Statistic, ArcGIS Business Analyst





# BUSINESS CHARACTERISTICS

This chapter identifies basic business characteristics in Chester County, including major employers, number of establishments, and size of establishments.



# **Major Employers**

Major Employers Chester County's largest employers, by number of employees, include financial, online retail, governmental, hospital, educational, grocery, pharmaceutical, and computer companies and organizations.

#### **FIGURE 29**

#### Major Employers, 2020

According to PA Department of Labor and Industry

- 1. Vanguard Group Inc Multiple Locations
- 2. QVC Network Inc West Chester
- 3. The Chester County Hospital West Chester
- 4. County of Chester Multiple Locations
- 5. Giant Food Stores LLC Multiple Locations
- **6. Federal Government** Multiple Locations
- 7. Main Line Hospitals Inc Multiple Locations
- 8. United Parcel Service Inc Multiple Locations
- PA State System of Higher Education Multiple Locations
- **10. The Devereux Foundation** West Chester
- 11. Downingtown Area School District Multiple Locations
- 12. Chester County Intermediate Unit Downingtown
- 13. Janssen Research & Development LLC Tredyffrin
- 14. West Chester Area School District Multiple Locations
- **15. Comcast Cablevision Corp (PA)** Kennett Square
- 16. Communications Test Design Inc West Chester
- 17. Wawa Inc Multiple Locations

- **18. Wal-Mart Associates Inc** Multiple Locations
- **19. State Government** Multiple Locations
- 20. Wegmans Food Markets Inc Multiple Locations
- 21. Siemens Medical Solutions USA Inc Malvern
- 22. De Lage Landen Financial Services Tredyffrin
- **23. ACME Markets Inc** Multiple Locations
- 24. Tredyffrin/Easttown School District Multiple Locations
- 25. Johnson Matthey Inc West Chester
- 26. AmerisourceBergen Services Corp Chesterbrook
- 27. Phoenixville Hospital LLC Phoenixville
- **28. Target Corporation** Multiple Locations
- 29. Owen J Roberts School District Multiple Locations
- **30. YMCA of Greater Brandywine Valley** Multiple Locations
- **31. The Arc of Chester County** West Chester
- 32. Herr Foods Inc Nottingham
- **33. Cerner Health Services Inc** Malvern

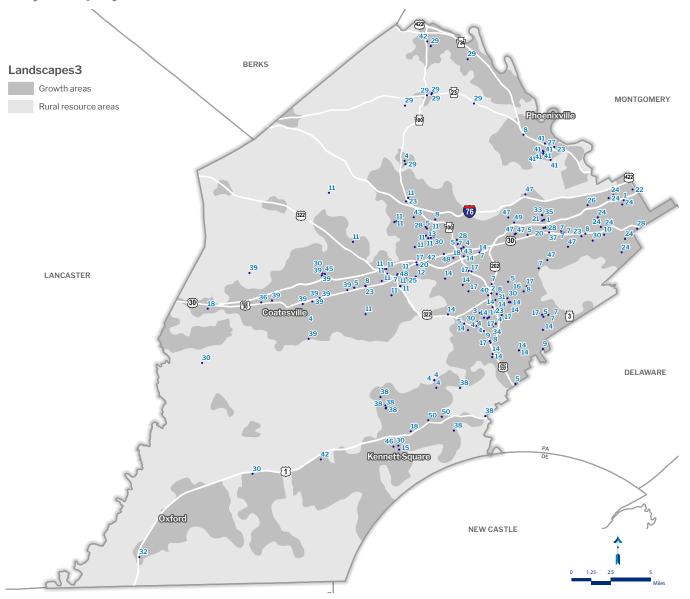
**34. A. Duie Pyle Inc** Multiple Locations

- **35. Cerner Corporation** Malvern
- **36. Total Renal Care Inc** Coatesville
- **37. Infosys** Malvern
- **38. Unionville Chadds Ford School District** Multiple Locations
- **39. Coatesville Area School District** Multiple Locations
- **40. George Krapf Jr & Sons Inc** Glenmoore
- **41. Phoenixville Area School District** Multiple Locations
- **42. Lowe's Home Centers LLC** Multiple Locations
- 43. West Pharmaceutical Services Inc Exton
- 44.Bentley Systems Inc Exton
- **45. Brandywine Hospital** Coatesville
- 46. Genesis Administrative Services LLC
- Kennett Square
- **47. Great Valley School District** Multiple Locations
- **48. Bayada Home Health Care Inc** Multiple Locations
- 49. CertainTeed Corporation Malvern
- 50. Kendal-Crosslands Communities Kennett Square

Source: Pennsylvania Department of Labor and Industry Center for Workforce Information & Analysis

#### **FIGURE 30**

**Major Employers** 



Source: ArcGIS Business Analyst

# **Employers by Industry**

The largest number of establishments are in professional services, health care, construction, and retail. These are industries that often have many small businesses. It is important to note that sole proprietors are not captured in this data; so, a self-employed web designer who works from home would not be included in these numbers.

FIGURE 31 Employers by Industry, 2020

	Number of Chester County Establishments	Percent of County Establishments
Total All Industries	15,863	100%
Professional and technical services	2,529	16%
Health care and social assistance	1,887	12%
Other services, except public administration	1,525	10%
Construction	1,454	9%
Retail trade	1,368	9%
Accommodation and food services	1,014	6%
Finance and insurance	1,009	6%
Administrative and waste services	969	6%
Wholesale trade	933	6%
Manufacturing	629	4%
Real estate and rental and leasing	580	4%
Educational services	407	3%
Transportation and warehousing	305	2%
Information	296	2%
Arts, entertainment, and recreation	281	2%
Management of companies and enterprises	267	2%
Agriculture, forestry, fishing and hunting	243	2%
Public administration	128	1%
Utilities	30	0%
Mining, quarrying, and oil and gas extraction Source: U.S. Bureau of Labor Statistics	10	0%

Source: U.S. Bureau of Labor Statistic

#### FIGURE 32 Establishments by Size, 2020

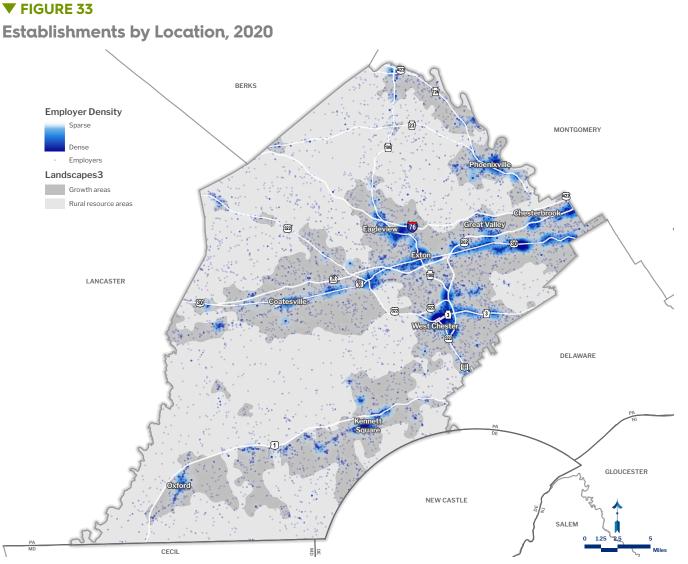
Only 16 of the county's establishments have over 1,000 employees. The vast majority have 2 to 9 employees.

Number of Employees	Chester County Establishments	Establishment Size
2 to 9	10,700	72.1%
10 to 49	3,258	21.9%
50 to 249	764	5.1%
250 to 999	111	0.7%
1,000 or more	16	0.1%

Source: U.S. Bureau of Labor Statistics

# **Establishments by Location**

Chester County's businesses and other establishments are concentrated near population centers and transit nodes. These establishments are largely in or near the Landscapes3 urban and suburban centers.



Source: ArcGIS Business Analyst





# 4 Photograph Credit: Chester County Econo Development Council ARD CELL 11 URGE TERIAL

# GROSS DOMESTIC PRODUCT

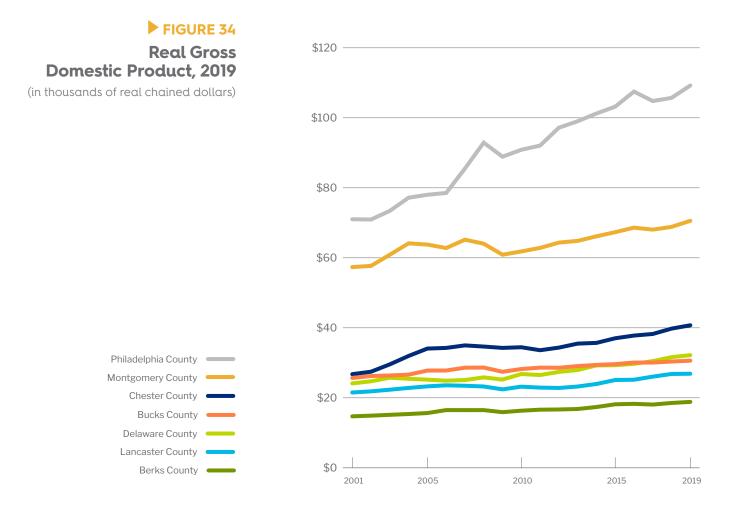
This chapter identifies Gross Domestic Product totals for counties and industries. Industries that lead in employment do not necessarily lead in Gross Domestic Product.



# **Gross Domestic Product**

Chester County led its regional peers in GDP growth.

Gross Domestic Product (GDP) measures the estimated value of goods and services produced in an area. Real Gross Domestic Product is an inflation adjusted GDP. Chester County's Real Gross Domestic Product grew 52% over the last 19 years, growing from \$27 billion in 2001 to \$41 billion in 2019. This outpaced the rate of growth in nearby counties and pulled Chester County further away from Delaware and Lancaster counties, both of which have slightly larger populations. Philadelphia and Montgomery counties remain very strong in Gross Domestic Product, but have significantly larger populations than Chester County.



Source: U.S. Department of Commerce Bureau of Economic Analysis

#### NORTHEAST COUNTY COMPARISON

Chester County's Gross Domestic Product was about 80% of Norfolk and Morris counties but grew at a much faster pace. Prince William has a much smaller Gross Domestic Product, less than half the size of Chester County's, largely due to military being one of their leading industries.

### **Gross Domestic Product by Industry**

In addition to employment and wages, the impact of an industry can be measured by Gross Domestic Product. Some industries have a exceptionally strong impact on Gross Domestic Product in relation to their number of jobs.

#### **FIGURE 35**

Real Gross Domestic Product by Major Industry, 2019

Industry	Chester County Real GDP (in thousands)	Percent of Total
All industry total	\$40,731,215	100%
Professional, scientific, and technical services	\$8,907,908	22%
Information	\$5,520,991	14%
Finance and insurance	\$4,271,050	10%
Real estate and rental and leasing	\$4,102,244	10%
Manufacturing	\$3,336,150	8%
Wholesale trade	\$3,150,091	8%
Retail trade	\$2,855,153	7%
Government and government enterprises	\$2,236,724	5%
Health care and social assistance	\$2,151,059	5%
Management of companies and enterprises	\$2,122,107	5%
Construction	\$1,346,256	3%
Administrative and support and waste management and remediation services	\$1,014,028	2%
Agriculture, forestry, fishing and hunting	\$837,455	2%
Other services (except government and government enterprises)	\$678,883	2%
Transportation and warehousing	\$534,950	1%
Accommodation and food services	\$529,082	1%
Educational services	\$385,019	1%
Arts, entertainment, and recreation	\$259,813	1%
Utilities	\$94,931	0%
Mining, quarrying, and oil and gas extraction	\$36,513	0%

Source: U.S. Department of Commerce Bureau of Economic Analysis

### **County vs. National Trends**

Local factors in Chester County caused GDP growth in agriculture, information, finance, and insurance industries. The Real Gross Domestic Product of the county's information sector grew dramatically between 2015 and 2019 as well as finance and insurance. In these industries, local factors led to positive growth, which was also the case for agriculture, utilities, mining, construction, other services, administrative, and retail growth. However, analysis indicated that all other industries would have seen decline in Real Gross Domestic Product if not for the influence of growth at the national level for the industries and economy as a whole.

#### **FIGURE 36**

Real Gross Domestic Product Shift Share Analysis, 2015-2019

Industry	Local Factors Causing Growth or Decline
All industry total	Decline V
Agriculture, forestry, fishing and hunting	Growth 🔺
Mining, quarrying, and oil and gas extraction	Growth 🔺
Finance and insurance	Growth 🔺
Information	Growth 🔺
Utilities	Growth 🔺
Retail trade	Growth 🔺
Construction	Growth 🔺
Other services (except government and government enterpris-es)	Growth 🔺
Administrative and support and waste management and re-mediation services	Growth 🔺
Professional, scientific, and technical services	Decline
Government and government enterprises	Decline V
Educational services	Decline 🗸
Accommodation and food services	Decline V
Management of companies and enterprises	Decline 🔻
Transportation and warehousing	Decline V
Arts, entertainment, and recreation	Decline
Health care and social assistance	Decline V
Real estate and rental and leasing	Decline 🗸
Wholesale trade	Decline V
Manufacturing	Decline 🔻

Source: U.S. Department of Commerce Bureau of Economic Analysis



# KEY INDUSTRIAL GROUPS

This chapter describes nine key industry groups identified by the Chester County Economic Development Council as critical industry groupings.



### **Overview**

The Chester County Economic Development Council has identified nine priority industry groupings for Chester County:

- Agriculture & Food Production
- Education
- Energy
- Finance
- Health Care
- Information Technology
- Life Science
- Manufacturing
- Tourism and Entertainment

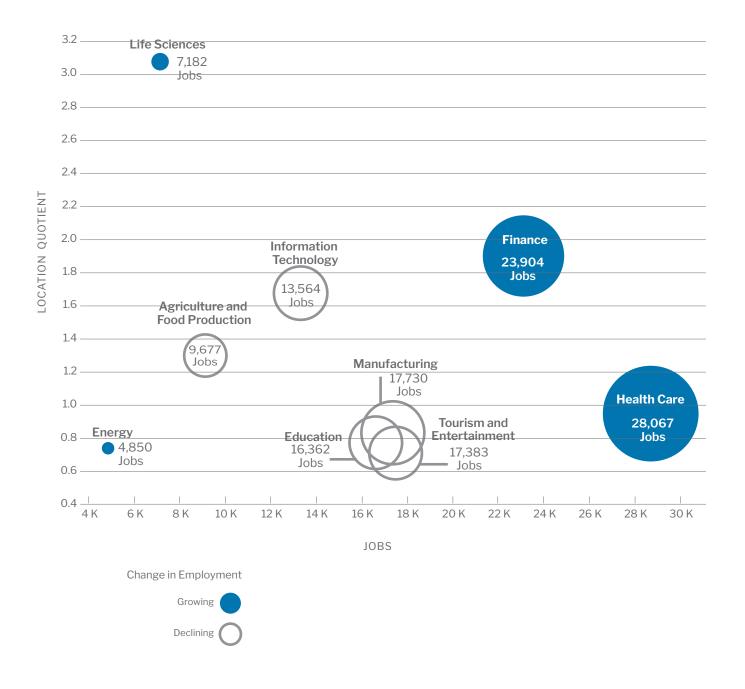
These are not necessarily the largest industries in the county, but they are critical for a variety of reasons, including the industry's relative strength, its high profile for the business community and the public, its importance for general economic development, and its historic significance in the county.

The way people think about industries does not necessarily fall into the categories created by the federal Bureau of Labor Statistics. This analysis has alternative groupings that may overlap at times between the nine industries. In addition, this analysis estimates sole proprietors and contract employees, which are particularly important in certain industries, such as agriculture.

The ratio of establishments with one person from the NETS 2013 data were used to estimate self-employed persons in 2018. Figures were adjusted to account for growth of self-employed persons from 2013 to 2020.

#### **FIGURE 37**

#### **Industry Group Comparison**



Key Industrial Groups value differ from data in other sections of this report due to the combination of multiples NAICS codes. For a list of NAICS codes used see page 88.

### Agriculture and Food Production



Chester County has a long and distinguished history as an agricultural powerhouse. Chester County agriculture ranks 2nd among Pennsylvania's 67 counties in the value of agricultural products sold. This is due to the diversity of the industry, the fact that half of the nation's mushrooms are grown in the county, and the county's location near affluent markets for direct-to-consumer sales. The county's prime agricultural soils have positioned it to excel in the following industries: crop production, Christmas tree nurseries, forestry, landscaping, viticulture, and orchard

and vegetable production. The county also has a significant amount of dairy, swine, poultry and egg production, and it is one of the most densely populated equine areas in the country. Chester County's unique indoor growing sectors, led by advancements in the mushroom sector, are cutting edge, as are advancements in greenhouse production and aquaculture.

For this analysis, the agricultural industry is broadly defined as agricultural producers, food manufacturing, beverage manufacturing, agricultural chemical manufacturing, farm machinery manufacturing, agricultural wholesalers, fruit and vegetable stores, farm stores, and agricultural veterinary education/services. When compared with nearby Pennsylvania counties, Chester County has more employment directly in agricultural production than other counties, most likely due to the mushroom industry. Lancaster, Montgomery, and Philadelphia Counties have significantly more workers in food manufacturing than Chester County.

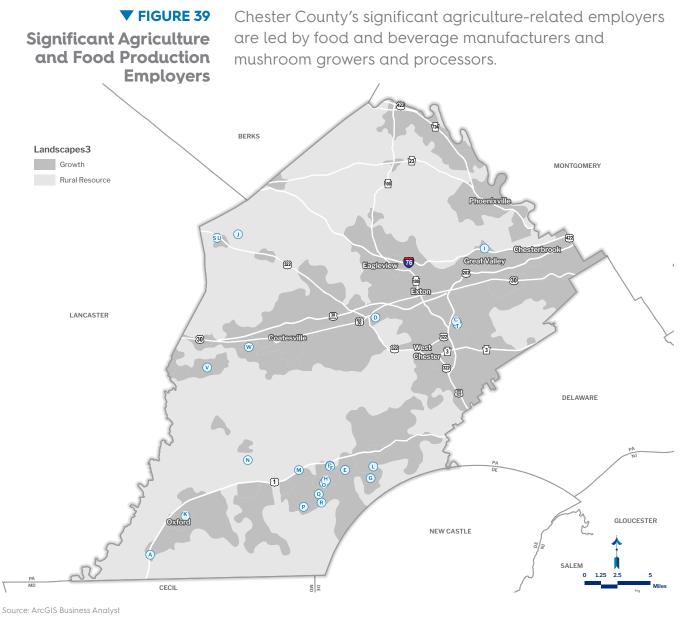
#### FIGURE 38

Estimated Agricultural and Food Production Employment, 2020

Bolton Vet School) Total	9,677
Other (From estimated New	400
Estimated Self Employed	139
Agricultural Industry, based on Bureau of Labor Statistics	9,138

Source: ArcGIS Business Analyst

- The location quotient for agriculture and food production, broadly defined, was 1.35 in 2020. This shows that agriculture and food production were strong in Chester County, although it should be noted that, because sole proprietors and some agricultural workers are not in the BLS data, a place with corporate farming, like the mushroom industry, will show a higher location quotient.
- The shift share analysis for employment between 2015 and 2020 indicates local factors are having a negative impact on change in agricultural employment.



- A. Herr Foods Inc
- B. Giorgio Fresh Co
- C. Mars Drinks
- D. Victory Brewing Co
- E. County Fresh Mushroom
- F. Modern Mushroom Farms Inc
- **G.** Phillips Gourmet Mushrooms
- H. To-jo Mushrooms Inc

- I. Devault Packing
- J. Suplee Hollow Cereal
- K. Tasty Baking Co
- L. Kennett Square Specialties
- M. C P Yeatman & Sons Inc
- N. C T Bartoli Mushrooms Inc
- **O.** Basciani Foods Inc
- P. Gourmet's Finest Mushroom Co

- Q. Jd Mushrooms
- **R.** Kaolin Mushroom Farms Inc
- S. Good Food Inc
- T. Keystone Foods Corp
- U. Zook Molasses Co
- V. Victory Brewing Co
- W. Keystone Foods Corp

### Education



Chester County is known for having some of the best primary and secondary schools in the Commonwealth. Within the past few years, multiple Chester County schools were ranked in the top five best school districts in the state.

Chester County is home to a variety of educational institutions, which include: 12 public school districts composed of 60 elementary schools, 19 middle schools, and 17 high schools; 95 private early childhood education/ elementary schools; 20 private high schools; 18 charter schools/online options; three technical college high school

campuses; 6 colleges/universities; and numerous postsecondary education institutions. West Chester University, a state public school, is the largest university in the county. Uniquely, the county is also home to two historically black colleges or universities, Cheyney University of Pennsylvania (the oldest HBCU in the country) and Lincoln University.

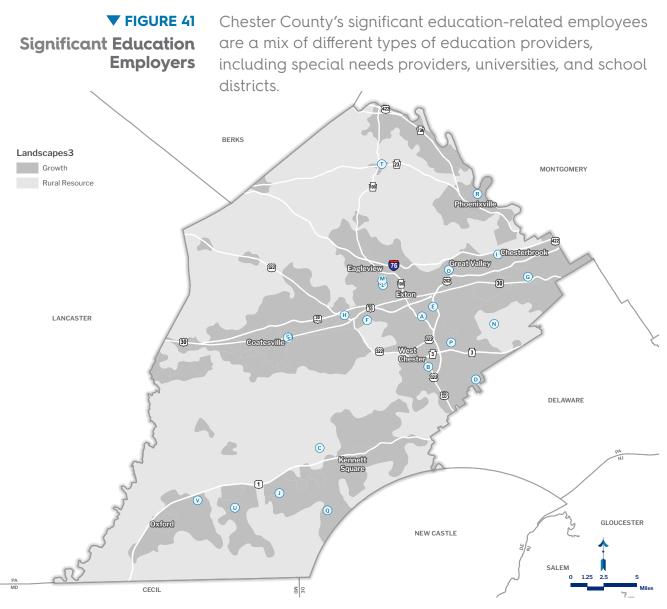
Chester County is within the Philadelphia region, which is one of the most robust higher education areas in the country, with major universities like the University of Pennsylvania, Temple University, and Drexel University, and many well-established smaller colleges and universities, such as Villanova University, Haverford College, Bryn Mawr College, and Ursinus College. Philadelphia leads the region in education employment, with approximately 81,000 jobs, although some of these jobs may be health care related because of the way teaching hospitals, such as the Penn Health system, get classified.

> FIGURE 40 Estimated Education Employment, 2020

Education Industry, based on Bureau of Labor Statistics	16,187
Estimated Self Employed	175
Total	16,362

Source: ArcGIS Business Analyst

- The location quotient for education was 0.79 in 2020, which was relatively low compared to the nation as a whole. Philadelphia's location quotient, on the other hand, was 1.45 in 2020, which reflects the city's role as a major education center for the country.
- The shift share analysis of employment between 2015 and 2020 indicates that local factors are having a negative impact on change in education employment, which has also been declining nationally.



Source: ArcGIS Business Analyst

- A. Children's Intellectual
- B. West Chester University
- C. New Bolton Ctr Sch-vet
- D. Cheyney University
- E. Immaculata University
- F. Chester County Intermediate
- G. Conestoga High School
- H. Downingtown High School West

- I. Valley Forge Educational Svc
- J. Avon Grove School District
- **K.** Child & Career Development Ctr
- L. Downingtown High School East
- M. Lionville Middle School
- N. Institutes
- O. Great Valley High School
- P. East High School

- Q. Kennett Middle School
- **R.** Renissance Academy
- S. Coatesville Area Senior High
- T. Owen J Roberts High School
- U. Delaware County Community College
- V. Lincoln University

### Energy



The energy sector is a key part of any local economy, keeping businesses, homes, and institutions going. The sector includes electric power, energy production, and water supply/disposal. Alternative or renewable energy sources are an important and growing part of the energy sector, especially as the county works to reduce greenhouse gas emissions. These sources include solar, wind, geothermal, bio-energy, water, and energy efficiency improvements.

For this analysis, the energy sector is broadly defined as

utilities, utility system construction, electrical and wiring contractors, plumbing and HVAC contractors, petroleum merchant wholesalers, fuel dealers, pipeline transportation, and utility regulation.

When compared with nearby Pennsylvania counties, Chester County has less employment in the energy sector. Montgomery County, with just under 13,000 employees in the sector, leads the region in energy employment.

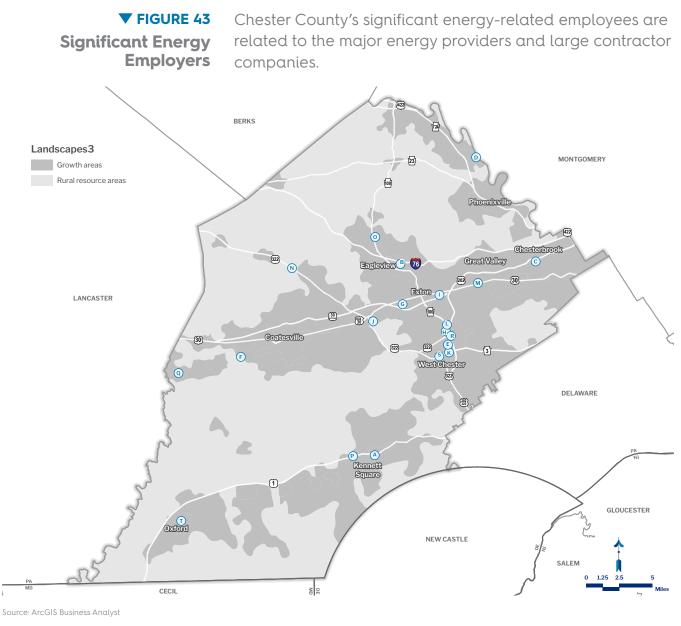
FIGURE 42

**Estimated Energy** Employment, 2020

Energy Industry, based on Bureau of Labor Statistics	4,588
Estimated Self Employed	262
Total	4,850

Source: ArcGIS Business Analyst

- The location quotient for energy, broadly defined, was 0.74 in 2020, which was relatively low compared to the nation as a whole. Chester County has not historically been a major energy center.
- The shift share analysis of employment between 2015 and 2020 indicates that local factors had a small negative impact on energy employment change. This industry grew moderately in Chester County, largely due to national industry trends of energy employment growth, but growth in other industries outpaced growth in energy.



- A. Exelon Generation Co Llc
- B. Servicemark Heating Cooling
- C. Peco Energy Co
- **D.** Spring City Electrical Manufacturing Co
- E. DDM Energy
- F. Zeke's Oil Co

- **G.** Allen-Sherman-Hoff
- H. Communications Construction
- I. Energy Management Systems Inc
- J. Marco Fire Suppression Spclst
- K. Signature HVAC Inc
- L. Mauger and Co., Inc
- M. Pusey Electric

- N. B.L. Myers Bros.
- O. Mcgovern Environmental, LLC.
- P. R & D Construction Ltd
- **Q.** Summers & Zim's Inc
- R. Aabbots Heating Oil
- S. HOP Energy
- T. Alger Oil & Propane

### Finance



Chester County is home to a very significant and strong financial industry, with considerable employment, high wages, and a strong Gross Domestic Product. The sector includes businesses involved with portfolio management, commercial banking, investment advisory services, mortgage and loan brokering, credit union banking, and secondary market financing. Chester County's largest employer, Vanguard, is also the largest of the finance industry businesses, with its global headquarters located in Malvern, PA, employing more than 8,000 people in Chester

County. The finance industry is heavily concentrated around the central portion of the county including Wayne, Berwyn, Malvern, and West Chester.

For this analysis, the finance sector is defined as finance, insurance, accounting, bookkeeping, and public finance.

When compared with nearby Pennsylvania counties, Chester County has fewer employees than Montgomery or Philadelphia counties but has seen more growth in the financial sector than these places.

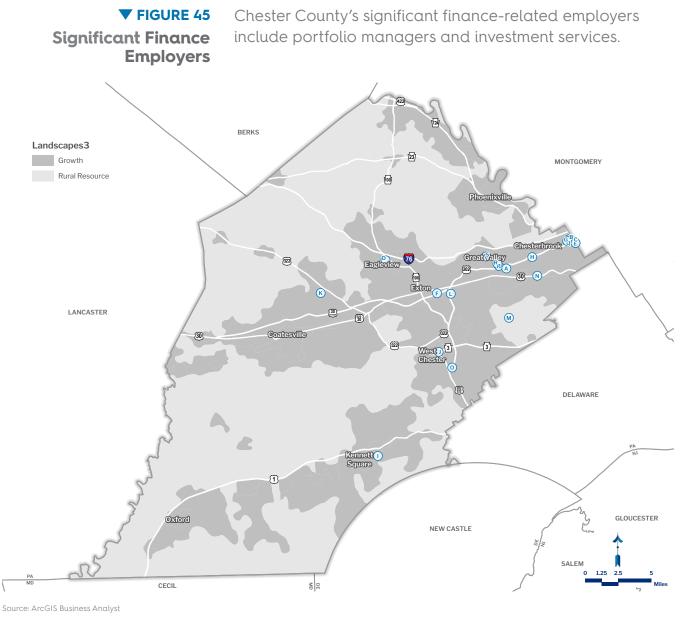
FIGURE 44 Estimated Finance

Employment, 2020

Finance Industry, based on Bureau of Labor Statistics	23,597
Estimated Self Employed	307
Total	23,904

Source: ArcGIS Business Analyst

- The location quotient for finance was 1.89 in 2020, which was high compared to the nation as a whole. This was also higher than nearby Pennsylvania counties.
- The shift share analysis of employment between 2015 and 2020 indicates that local factors are having a very large impact on finance employment growth in Chester County. Neighboring counties do not have a similar increase. Chester County's strong growth is due to both Vanguard's exceptional growth and the strong financial cluster in the county



- A. Vanguard Group Inc
- **B.** De Lage Landen
- **C.** Us Investment Corp
- **D.** X L Global Svc
- **E.** United States Liability Ins
- F. Automated Financial Systs Inc
- G. Hsb Inc

- H. Brinker Capital Securities Inc
- I. Chatham Financial Corp
- J. Moody's Analytics
- K. Reverse Mortgage Team
- L. Primepay Llc
- M. American Institute for Cpcu
- N. Dfc Global Corp

- **O.** Maillie Falconiero & Co Llp
- P. Dfg World Inc
- Q. Hartford Steam Boiler Inspctn
- **R.** Ac Lordi Consulting Inc
- S. Workspace Property Trust

### **Health Care**



The Health Care industry is an important component of both the business and residential communities in Chester County. In non-urban settings, this sector can be overlooked, but it is actually the largest employment sector in the county. Health care includes hospitals, long-term care facilities (continuing care retirement communities, assisted living, and nursing homes), home health and hospice care, acute rehabilitation centers, emergency medical services, and professional medical offices.

For this analysis, the health care sector is defined as hospitals, ambulatory health care services, nursing and residential care facilities, direct health and medical insurance carriers, home health equipment rental, and public health administration.

Despite the need for health care workers caused by COVID-19, Chester County saw only a 4% increase in employment in the sector between 2015 and 2019. Although there has been recent growth in the health care sector, Chester County has fewer employees in health care than Delaware, Lancaster, Montgomery, or Philadelphia counties. Traditionally, Philadelphia, a national leader in the sector with over 120,000 health care jobs, has had the majority of employment; however, many hospital systems in Philadelphia have opened up satellite offices in Chester County, which is leading to the county's recent growth.

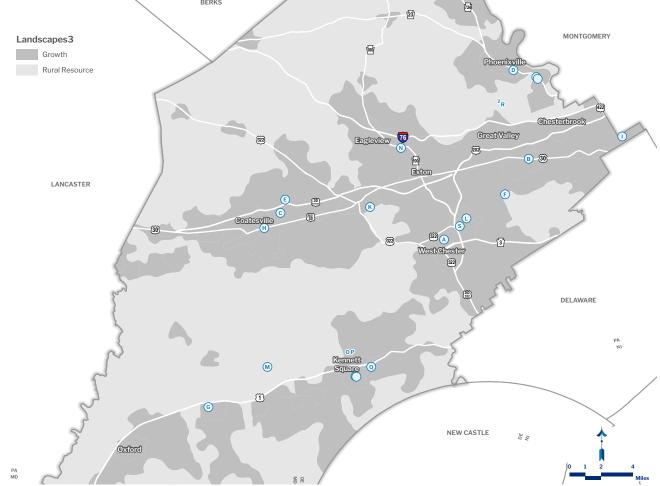
► FIGURE 46 Estimated Health Care Employment, 2020

Health Care Industry, based on Bureau of Labor Statistics	27,854
Estimated Self Employed	213
Total	28,067

Source: ArcGIS Business Analyst

- The location quotient for health care was 0.9 in 2020, which put the county a little below the nation as a whole. Philadelphia had a location quotient of 1.46 in 2020 and was the regional leader in health care.
- The shift share analysis of employment between 2015 and 2020 indicates that local factors are negatively impacting health care employment change in Chester County; despite growth nationally in the industry. Although Philadelphia is seeing health care growth, it is not as much as would be expected given national trends.

▼ FIGURE 47
 Significant Healthcare Employers
 Chester County's significant health care-related employers are led by hospitals, followed by senior-oriented nursing and assisted living facilities.



Source: ArcGIS Business Analyst

- A. Chester County Hospital
- B. Paoli Hospital
- C. Coatesville Veterans Affairs
- **D.** Phoenixville Hospital
- E. Brandywine Hospital
- F. Bryn Mawr Rehab Hospital
- G. Jennersville Regional Hospital

- H. Unique Aid
- I. American-european Congress
- J. Personal Health Care
- K. Human Services Inc
- L. Complete Healthcare Comms Inc
- $\ensuremath{\textbf{M}}\xspace$  . Twin Pines Health Care Ctr
- N. Southeastern Home Health Svc

- **O.** Genesis Healthcare Llc
- P. Genesis Physician Svc
- Q. West Chester Gi Assoc Pc
- **R.** Professional Nursing Svc
- S. Arc of Chester County

# **Information Technology**



Chester County is home to a robust tech community, with organizations that produce, process and distribute information as well as a broad set of industries that utilize information technology to run their businesses such as broadcasting, finance, healthcare, biotech and pharmaceuticals. Named the "Top Tech Hub" in Pennsylvania, Chester County has a high concentration of tech-related businesses.

For this analysis, the information technology sector is defined as computer and electronic product

manufacturing, computer and software merchant wholesalers, software publishers, data processing and hosting, internet publishing and web search portals, and computer systems design.

Although Montgomery County has the most information technology employees in the area, Chester County has more employees in information technology than Delaware, Lancaster, or Philadelphia counties and has more employment concentrated in this industry. Recently, there has been a decline in information technology employment, which seems to be driven by changing employment at certain large companies like Cerner.

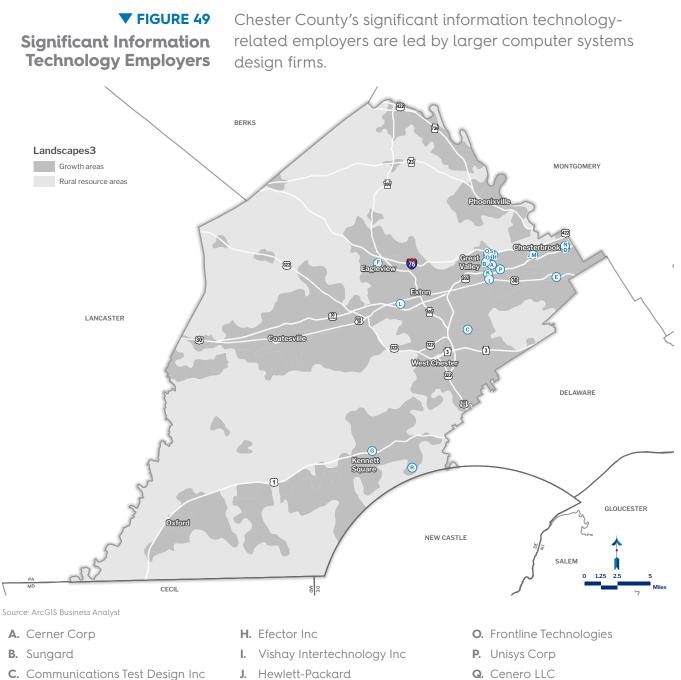
#### FIGURE 48

Estimated Information Technology Employment, 2020

Total	13,564
Estimated Self Employed	243
Information Technology Industry, based on Bureau of Labor Statistics	13,321

Source: ArcGIS Business Analyst

- The location quotient for information technology was 1.69 in 2020, which put the county well above the nation as a whole and was the highest location quotient of nearby PA counties. Chester County remained a key high tech location for the region in 2020, however the location quotient decreased from 2018's 1.77
- The shift share analysis of employment between 2015 and 2020 indicates that local factors are negatively impacting information technology employment change. This decline is driven by job losses in computer systems design; meanwhile, software publishing is growing dramatically, with employment more than doubling between 2015 and 2020, increasing from 1,108 employees to 2,848.



- D. Tivo
- E. DecisionOne Corp
- F. Bentley Systems Inc
- G. Tri-M Electrical

- J. Hewlett-Packard
- K. Cisco Systems
- L. Neutronics Inc
- M. Wendover Financial
- N. Bracket Global LLC

- R. General Dynamics Corp
- S. Livery Coach Software

### Life Sciences



Historically, Chester County had many life science businesses. After employment declines in the early part of the 21st century, Chester County is seeing growth in this sector again. The life science cluster includes biotechnology and pharmaceutical research, development, manufacturing, and distribution firms.

For this analysis, the life science sector is defined as pharmaceutical and medicine manufacturing, research and development in biotechnology, medical equipment and supplies manufacturing, medical equipment wholesalers,

ophthalmic goods merchant wholesalers, druggist goods merchant wholesalers, analytical laboratory instrument manufacturing, and medical and diagnostic laboratories.

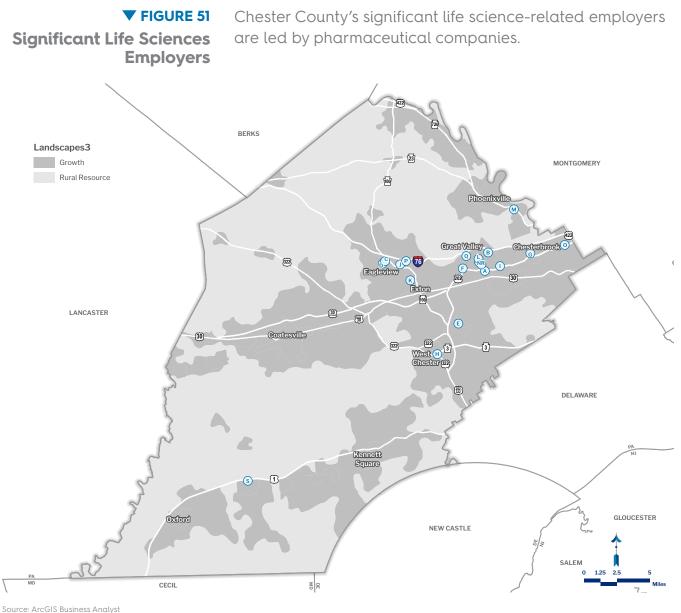
Although Montgomery County has the most life science employees in the area, Chester County has more employees in life sciences than Delaware, Lancaster, or Philadelphia counties. Recently, there has been dramatic growth in life science employment in Chester County.

#### ► FIGURE 50 Estimated Life Science Employment, 2020

Life Science Industry, based on Bureau of Labor Statistics	7,172
Estimated Self Employed	10
Total	7,182

Source: ArcGIS Business Analyst

- The location quotient for life sciences was 3.07 in 2020, a slight decrease from 3.16 in 2018, which put the county significantly above the nation as a whole. Montgomery County led the region in this sector, with 17,306 employees in life sciences in 2020. Despite a dramatic location quotient of 3.71 in 2020, Montgomery's location quotient decreased significantly from 4.97 in 2018.
- The shift share analysis of employment between 2015 and 2020 indicates that local factors are positively impacting life science employment change. This has been driven by research and development in biotechnology.



- A. Keeler Ltd
- B. Endo International
- **C.** Xl Catlin
- D. West Pharmaceutical Svc Inc
- E. De Puy Synthes Co
- F. Teva Biologics & Spclty Prdcts
- G. Amerisourcebergen Corp

- H. Mallinckrodt Pharmaceuticals
- I. Biotelemetry Inc
- J. Agc Chemicals Americas Inc
- K. Eisai
- L. Merit Medical Systems
- M. Environmental Standards Inc
- N. Fujirebio Diagnostics Inc

- O. Teleflex Inc
- P. Freedom Medical
- Q. Johnson & Johnson
- R. Mc Kesson Corp
- S. Jackson Immuno Research Labs

# Manufacturing



As the original home of the country's iron industry, Chester County has a long heritage of manufacturing and includes firms ranging in size from small to large, with an increasing number providing products to international markets. Industry specialization includes precision metal fabrication; electronic components and electronic products; telecommunications equipment supplies; medical products and devices, as well as medical product processing systems; food products, such as snack foods, beverages and baked goods; large blowers, compressors

and control technology; chemical processing technologies, pharmaceutical ingredients and fabricated precision metal alloys.

For this analysis, the manufacturing sector is defined as manufacturing and mining.

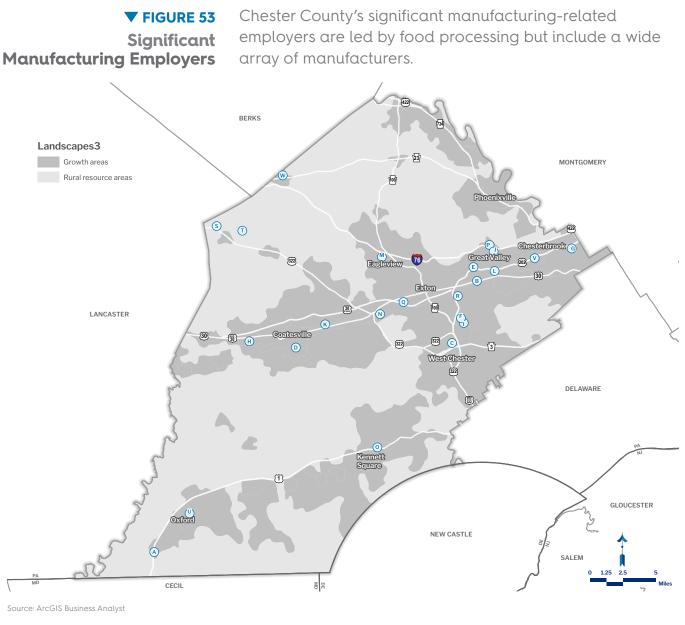
A number of counties in the region have strong manufacturing sectors, but manufacturing is no longer a dominant industry in the regional economy. Chester County has seen declines in manufacturing employment, following national trends in this sector.

> FIGURE 52 Estimated Manufacturing Employment, 2020

Manufacturing Industry, based on Bureau of Labor Statistics	17,419
Estimated Self Employed	311
Total	17,730

Source: ArcGIS Business Analyst

- The location quotient for manufacturing was 0.81 in 2020, which put the county below the national norm. Locally, Lancaster and Montgomery counties, with location quotients of 1.7 and 1.05 respectively, had higher shares of workers in manufacturing than the nation as a whole in 2020.
- The shift share analysis of employment between 2015 and 2020 indicates that local factors are negatively impacting manufacturing employment change. Locally, only Lancaster and Montgomery Counties are seeing positive manufacturing employment growth due to local factors. Lancaster has seen growth in the manufacturing sector and with over 35,000 manufacturing employees in 2019, and may eventually surpass Montgomery County, long the leader in the state for manufacturing employment currently with nearly 45,000 employees.



- A. Herr Foods Inc
- **B.** Strawberry Bakery
- C. Lasko Products Inc
- **D.** ArcelorMittal USA
- E. CertainTeed Corp
- F. Mars Drinks/ Lavazza
- **G.** Johnson Matthey Inc
- H. Sikorsky Aircraft Corp

- I. DePuy Synthes Co
- J. Endo Pharmaceuticals Inc
- **K.** HandiCrafters
- L. PQ Corp
- M. Graco Children's Products
- N. Victory Brewing Co
- O. Tri- Electrical
- P. Devault Packing

- **Q.** Idemia
- **R.** Johnson Matthey Inc
- S. R-V Industries Inc
- T. Suplee Hollow Cereal
- U. Tasty Baking Co
- V. TE Connectivity
- W. Whitford Corp

# **Tourism and Entertainment**



The tourism and entertainment industry provides both job opportunities and recreational benefits for its residents. The county is home to Longwood Gardens, the most visited display garden in Pennsylvania and one of the most prominent in the country, as well as other arts and cultural museums, attractions and event facilities. In addition, the county's main streets and villages attract many visitors to shop and dine.

For this analysis, the tourism and entertainment sector is broadly defined as arts, entertainment, recreation,

accommodation, food services, breweries, wineries, baked goods stores, gift stores, and travel services.

Philadelphia, as a convention and tourism and entertainment hub, leads the region in this sector with 48,865 jobs, down from 77,000 in 2018. Prior to COVID-19, all of the region, including Chester County, had seen strong growth in this sector, possibly due to the region becoming more popular as a tourist destination. Tourism employment in 2020 declined drastically across the region, likely caused by COVID-19 related shut-downs. The negative impact of COVID-19 on the tourism industry is likely to be reflected higher in 2021 data.

**FIGURE 54** 

Estimated Tourism and Entertainment Employment, 2020

Tourism Industry, based on Bureau of Labor Statistics	16,993
Estimated Self Employed	390
Total	17,383

Source: ArcGIS Business Analyst

- The location quotient for tourism and entertainment was 0.73 in 2020, which put the county well below the national norm. The region as a whole was below the nation as a whole for tourism and entertainment in 2020.
- The Shift Share analysis of employment between 2015 and 2020 indicates that local factors are negatively impacting tourism and entertainment employment, however, the decline was caused mainly by declines in the industry nationally.. Chester County lost nearly 3,523 tourism related jobs between 2015 and 2020, and 5,311 between 2018 and 2020.

Reflecting the diversity of the industry and its tendency to **FIGURE 55** have many smaller employers, Chester County's significant Significant Tourism and **Entertainment Employers** tourism-related employers are a mix of businesses, although hotels and restaurants are most common. BERKS Landscapes3 MONTGOMERY Growth areas Rural resource areas Phoenixville Chesterbrook Great Valley (202) 30 Exton LANCASTER 3 8 Coatesville 30 322 (322) WestChester DELAWARE Kennetit m GLOUCESTER (Oxford NEW CASTLE SALEN CECIL MD

Source: ArcGIS Business Analyst

- A. Desmond Hotel & Conference Ctr
- **B.** Longwood Gardens
- **C.** Victory Brewing Co
- D. White Manor Country Club
- E. Hilton Hotel
- **F.** Sheraton
- G. Chester Valley Golf Club
- **H.** Embassy Suites

- I. HMS Host
- J. Olive Garden Italian Kitchen
- K. On the Border Mexican Grill
- L. Texas Roadhouse
- M. Downingtown Country Club
- N. Waynesborough Country Club
- O. Whitford Country Club
- P. Arrowhead Day Camp

- Q. Dilworthtown Inn
- R. Inn At Mendenhall Bw Premier
- S. Quality Inn-Suites Conference
- T. Cracker Barrel Old Country Str
- U. Red Robin Gourmet Burgers
- V. Seven Stars Inn
- W. Sheraton Great Valley Hotel
- X. Vickers Restaurant





# REAL ESTATE CHARACTERISTICS

This chapter identifies a few real estate characteristics, including residential construction, housing sale prices, nonresidential construction, office market conditions, industrial market conditions, and retail market conditions.



## **Housing Construction**

2020 had the highest number of new units constructed in Chester Countysince 2008.

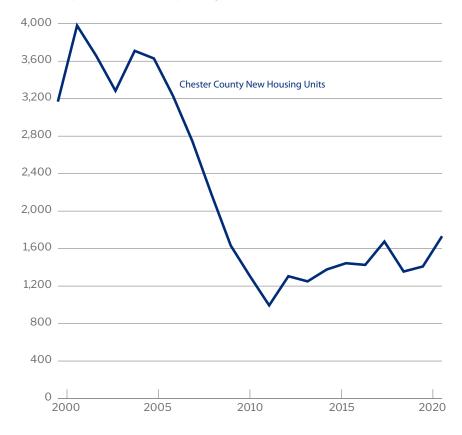
#### **FIGURE 56**

New Housing Units

Year	New Housing Units	Cumulative New Housing Units
2000	3,168	3,168
2001	3,980	7,148
2002	3,656	10,804
2003	3,284	14,088
2004	3,710	17,798
2005	3,629	21,427
2006	3,227	24,654
2007	2,747	27,401
2008	2,178	29,579
2009	1,632	31,211
2010	1,306	32,517
2011	994	33,511
2012	1,305	34,816
2013	1,250	36,066
2014	1,377	37,443
2015	1,444	38,887
2016	1,426	40,313
2017	1,675	41,988
2018	1,355	43,343
2019	1,409	44,752
2020	1,732	45,075

Chester County saw large amounts of new housing units completed in the early 2000s, adding 2,750 to 4,000 new units annually. Housing construction drastically declined in 2009 after the recession and largely remained consistent through 2019 at 1,250 to 1,450 new units annually thereafter. In 2020 unit construction increased to the highest since 2008, but still remained below annual new units prior to the recession.

Construction of new apartment units saw a surge in 2014-2017, adding 400 to 700 new units annually, then declined in 2018 and 2019 to between 110 and 225 units, but increased back to 615 units in 2020. Construction of multi-family apartment units are expected to remain higher in 2021, with the completion of multiple projects currently under construction. Chester County collects data through the Chester County Department of Assessment on built units; units are considered built once fully assessed, which occurs upon 50% occupancy.



Source: Chester County Assessment Data Construction of new apartment units increased in 2020 from the prior two years; unit construction is expected to remain higher in 2021 due to projects currently under development.

#### **FIGURE 57**

#### **Housing Type**

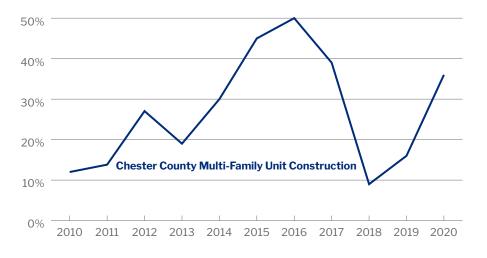
	Total	Single Family Detached	Single Family Attached	Apartments
New Units	531	586	615	221 (16%)

Source: Chester County Building Permits and Assessment Data

#### **FIGURE 58**

Multi-Family Construction (Percent of Total New Units)

Year	Multi-family units built	Multi-family units built (% of total)
2010	157	12%
2011	141	14%
2012	355	27%
2013	235	19%
2014	415	30%
2015	643	45%
2016	708	50%
2017	656	39%
2018	116	9%
2019	221	16%
2020	615	36%



Source:

Chester County Assessment Data

### **Home Sales**

# Housing sales have been increasing slowly since 2011.

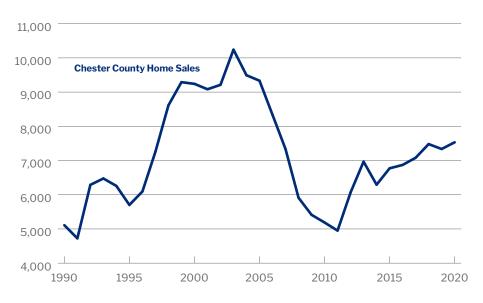
Chester County home sales increased drastically in the early 2000s but began decreasing in 2004, hitting a low point during the Great Recession. Home sales continued to decrease through 2011, but have been mostly increasing since, with more than 7,000 sales each year.

#### **FIGURE 59**

#### **Annual Home Sales**

Year	Number of Sales	Percent Change from Prior Year
2000	9,241	-0.5%
2001	9,083	-1.7%
2002	9,212	1.4%
2003	10,240	11.2%
2004	9,492	-7.3%
2005	9,333	-1.7%
2006	8,336	-10.7%
2007	7,335	-12.0%
2008	5,911	-19.4%
2009	5,413	-8.4%
2010	5,188	-4.2%
2011	4,952	-4.5%
2012	6,067	22.5%
2013	6,967	14.8%
2014	6,293	-9.7%
2015	6,772	7.6%
2016	6,871	1.5%
2017	7,080	3%
2018	7,480	5.6%
2019	7,337	-1.9%
2020	7,532	0.7%

Source: Chester County Building Permits and Assessment Data



## **Housing Values**

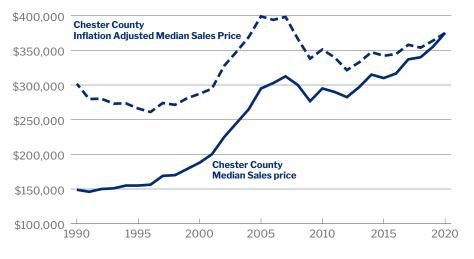
#### Chester County's median housing value is the highest in the state.

Chester County's inflation adjusted median housing sale price has increased by 31% since 2000. The highest median sale price occurred in 2005, when there was an inflation adjusted value of \$399,064. This is significantly higher than the 2020 value of \$375,064. The median housing price increased drastically between 2019 and 2020. From 2010 to 2019, the median inflation-adjusted housing value increased by only \$12,623, but then increased by another \$11,236 from 2019 to 2020.

#### **FIGURE 60**

Annual Home Sales Median Price

Year	Inflation Adjusted Median Sales Price	Inflation Adjusted % Change
2000	\$287,314	2.2%
2001	\$294,656	2.6%
2002	\$327,598	11.2%
2003	\$347,842	6.2%
2004	\$369,127	6.1%
2005	\$399,064	8.1%
2006	\$393,916	-1.3%
2007	\$398,269	1.1%
2008	\$366,644	-7.9%
2009	\$338,067	-7.8%
2010	\$351,204	3.9%
2011	\$339,708	-3.3%
2012	\$321,518	-5.4%
2013	\$332,714	3.5%
2014	\$347,393	4.4%
2015	\$342,185	-1.5%
2016	\$344,628	0.7%
2017	\$357,999	3.9%
2018	\$353,860	-1.2%
2019	\$363,827	2.8%
2020	\$375,064	3.1%



Housing prices increased in 2020 as demand for housing outpaced supply.

#### **FIGURE 61**

#### Change in Home Sales Median Price

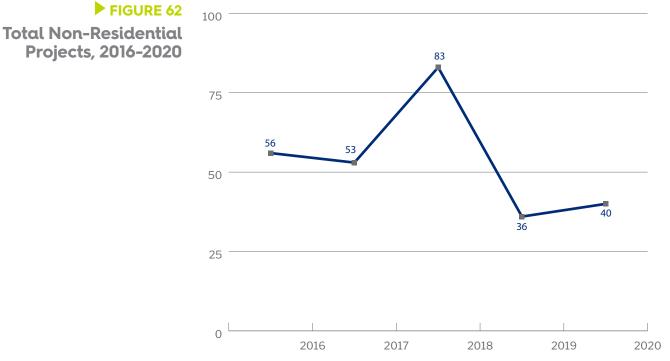
	Increase in Inflation-Adjusted Value	Percent Change
Difference 1991 - 2000	(\$14,395)	-5.1%
Difference 2001-2010	\$56,549	19.2%
Difference 2011-2020	\$35,355	10.4%

Source: Chester County Building Permits and Assessment Data

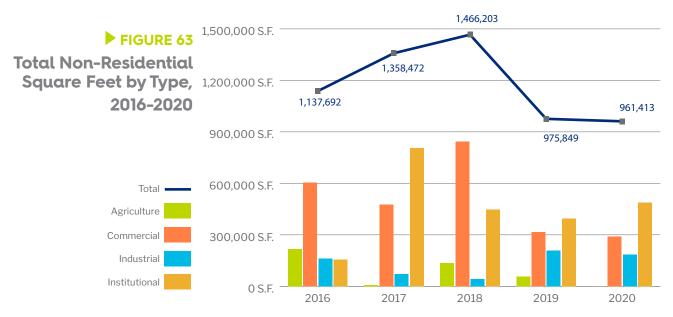
Source

## **Non-Residential Construction**

The number of projects and square feet added in 2020 were consistent with 2019. Non-residential projects and square feet added increased from 2016 through 2018, then saw a drop in 2019. Commercial projects made up the majority (43%) of nonresidential square feet added between 2016-2020, with 2,525,230 square feet added.



Source: Chester County Building Permits and Assessment Data



Source: Chester County Building Permits and Assessment Data

#### **FIGURE 64**

#### Largest Non-Residential Construction Projects, 2020

Building Square Feet	Project Name	Municipality	Туре
183,717	Commercial warehouse manufacturing/office building - Spec	Uwchlan Township	Industrial
128,885	Church Farm School expansion, eleven new and seven building expansions	West Whiteland Township	Institutional
113,000	Flex office space	Upper Uwchlan Township	Commercial
81,969	Uwchlan Elementary replacement building and parking	Uwchlan Township	Institutional
76,240	Assisted living facility	West Whiteland Township	Institutional
48,085	Mixed use commercial office building	West Chester Borough	Commercial
34,735	Lincoln University expansion	Lower Oxford Township	Institutional
33,936	Barclay Friends	West Chester Borough	Institutional
31,796	Downingtown Stem Academy	Downingtown Borough	Institutional
25,013	East Goshen Elementary School Expansion	East Goshen Township	Institutional
19,966	Kaolin Mushrooms	New Garden Township	Commercial
19,752	Kennel	East Brandywine Township	Commercial
19,152	Radnor Hunt Indoor Riding Ring	Willistown Township	Commercial
15,258	Valley Township Municipal Complex	Valley Township	Institutional

## **Office Building Market**

Chester County has a strong office market, although the vacancy rate of 10.6% is high. The office market in Southeastern PA is reasonably strong, with rents around \$28 a square foot per year and many companies competing for office space. Chester County falls into this market and is attractive to companies that want to be in the Philadelphia market. Overall, Chester County has a large and competitive office market, with concentrations of offices in Chesterbrook, the Main Line, Great Valley/ Malvern, the West Chester area, and Exton/Lionville. There are also scattered offices in developed parts of southern, western, and northern Chester County.

Like Montgomery County, Chester County has a relatively high vacancy rate. Some of this vacancy is due to the many offices built in the 1980s and 1990s that are now being retrofitted and modernized to address demand for new technology and collaborative work environments. The office vacancy rate increased by around 2% from 2019 to 2021, indicating COVID-19 negatively impacted the office market in Chester County.



Chester County Economic Development Council

#### FIGURE 65

Office Building Characteristics, July 2021

	Number of Buildings	Rentable Building Square Footage	Average Vacancy Rate	Average Annual Rental Rate Per Square Foot
Chester County	1680	31,961,285	10.60%	\$28.41
Berks County	767	13,216,582	5.50%	\$18.75
Bucks County	1713	20,395,815	12.10%	\$23.49
Delaware County	1313	20,929,976	9.10%	\$30.63
Lancaster County	1116	15,206,272	3.40%	\$19.04
Montgomery County	3211	62,451,630	13.00%	\$28.33
Philadelphia County	2985	91,324,135	9.10%	\$29.26
Philadelphia MSA	15896	306,602,921	10.50%	\$27.77

Source: Costar



## **Retail Building Market**

Chester County's retail primarily serves local community needs. The retail market in Southeastern PA is dominated by Montgomery County and Philadelphia, with the other counties in the region primarily having smaller malls and shopping centers that are focused on community needs.

Chester County falls into a community-focused retail category, with retail centers scattered around major population hubs. The county is surrounded by major shopping areas to the north, east, and south, including King of Prussia, the Route 422 Corridor with its outlets and new centers, Concordville in Delaware County, and malls and shopping centers near Wilmington.

Exton, with its mall and large shopping centers, is the primary retail hub for the county. Exton is anchored by the Exton Square Mall, where the owner of the mall is addressing high vacancy rates by adding new land uses and businesses. Recently, entertainment uses and a medical center were added to the core mall building, while the perimeter now has new retail and an apartment building. The Coventry Mall in North Coventry has a new owner who is bringing new retailers and investment to the mall.

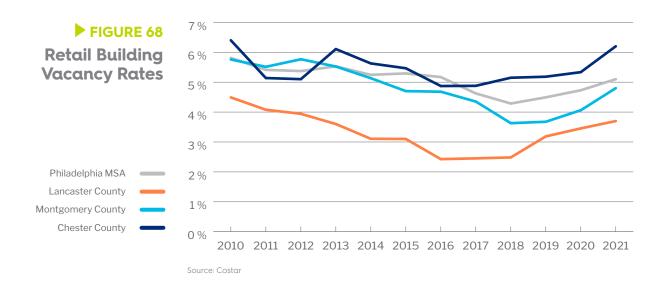


#### FIGURE 67

Retail Building Characteristics, July 2021

	Number of Buildings	Rentable Building Square Footage	Average Vacancy Rate	Average Annual Rental Rate Per Square Foot
<b>Chester County</b>	2,199	27,378,876	6.20%	\$20.56
Berks County	1,739	23,718,954	8.40%	\$11.76
<b>Bucks County</b>	2,571	35,602,467	5.20%	\$17.33
Delaware County	2,585	24,912,096	4.30%	\$22.86
Lancaster County	2,065	25,801,970	3.70%	\$16.41
Montgomery County	4,618	56,695,143	4.80%	\$18.35
Philadelphia County	11,369	73,859,912	2.90%	\$23.66
Philadelphia MSA	32,936	327,107,523	5.10%	\$18.37

Source: Costar



## **Industrial Building Market**

Chester County has a varied industrial market, with the highest rents in the region. The industrial market remains an important part of the Philadelphia region's commercial real estate sector. Over time, industrial uses have shifted from heavy industry to lighter industrial and manufacturing, although some heavy industry remains, such as steel production in South Coatesville and Coatesville. Much of Chester County's modern industrial space is advanced manufacturing, such as medical products, pharmaceuticals, and other specialized manufacturing.

Industrial uses are spread around the county, with major concentrations of newer buildings in corporate parks, including ones in Exton, West Chester, and Lionville.

Around the country, mega-warehouses have been a major driver of new industrial construction, but, locally, these warehouses have mostly been locating in south-central PA, the Lehigh Valley, and southern New Jersey. Chester County has not had major new warehouse space delivered recently, which could be due to the county's price of land and relative lack of interstate highway interchanges. The most likely location for major new warehouses is near the Route 100 and PA Turnpike interchange.



Chester County Economic Development Council

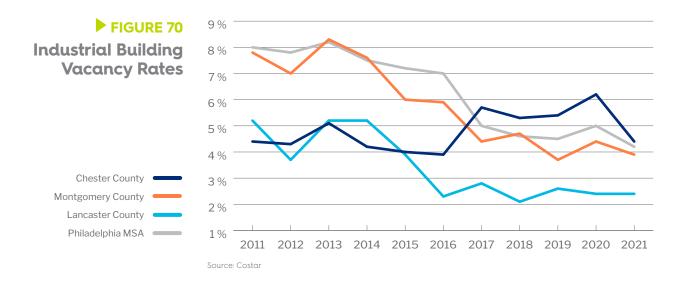
#### FIGURE 69

Industrial Building Characteristics, July 2021

Number of Buildings	Rentable Building Square Footage	Vacancy Rate	Average Annual Rental Rate Per Square Foot
792	27,449,676	4.40%	\$7.67
739	43,337,624	6.40%	\$3.95
1,536	62,255,815	3.60%	\$6.78
699	25,708,689	5.20%	\$5.50
1,114	58,252,828	2.40%	\$6.31
1,719	67,507,310	3.90%	\$6.32
2,840	110,536,938	5.90%	\$6.13
11,019	458,487,830	4.20%	\$6.50
	Buildings 792 739 1,536 699 1,114 1,719 2,840	Buildings         Building Square Footage           792         27,449,676           739         43,337,624           1,536         62,255,815           699         25,708,689           1,114         58,252,828           1,719         67,507,310           2,840         110,536,938	Buildings         Building Square Footage         Rate           792         27,449,676         4.40%           739         43,337,624         6.40%           1,536         62,255,815         3.60%           699         25,708,689         5.20%           1,114         58,252,828         2.40%           1,719         67,507,310         3.90%           2,840         110,536,938         5.90%

Source: Costar

Chester County's Average Annual Rental Rate Per Square Foot is high largely due to new industrial space.



## **Data Sources**

Although the report aims to use the best and most recent data available, data sets will present different issues. Data will have exclusions, have delays in availability, be subject to human error, and may be incomplete. Here is an overview of data sources, notes, and identified potential inaccuracies:

#### **Bureau of Labor Statistics (BLS)**

Source for unemployment rates, and data by industry including establishments, employment, and wages. Data for private and public establishments were combined. Data does not include proprietors, unincorporated selfemployed, and some agricultural employment. BLS suppresses data where it would identify individual businesses. Non-seasonally adjusted data was used. The BLS is also the source of unemployment rates, with the most recent data from June 2020.

#### U.S. Census Data

The Census is the source for resident population data (population, income, and commute, education, race, occupation) as well as establishments by size. One year estimates were used for population data, with the most recent available year being 2018. Statistics of US Businesses (SUSB) was used for establishment data, the most recent available data is from 2017.

#### Bureau of Economic Analysis (BEA)

The BEA is the source for Gross Domestic Product (GDP) data. Real GDP was used, which presents data adjusted to account for inflation, using 2012 as a base year. The GDP data provides estimates of the value of goods and services produced in an area. Raw GDP for states and the nation is presented in millions, county and MSA data is presented in thousands. All data was adjusted for the report. The most recent available data is from 2018.

#### **Chester County Data**

Building permits and assessment data were cross referenced and combined to compile residential and non-residential construction and sales data. Additional outreach to municipalities, site visits, and aerial image review was completed to ascertain status of construction projects. Estimated year of construction was used for non-residential projects built prior to 2019 where annual aerial photography was unavailable. Residential and non-residential construction data is updated annually, with the most recent data year being 2019.

#### CoStar

Real estate data (rent and vacancy rates) were collected using CoStar data. CoStar uses calls, property canvasing, and photographs to gather data. Due to the large number of properties, data may not be fully up to date or exhaustive. Data is updated continuously.

#### ArcGIS

Business Analyst Data on individual establishments including location, name, and employment size was taken from ArcGIS Business Analyst. The ArcGIS data is drawn from Infogroup, which uses business sources, directories, and direct contact for information. The data is updated guarterly, with the most recent data availability being January 2020. Infogroup data estimates employment and sales data based on comparables where data is unavailable. The business list is not exhaustive of all establishments. As the data is drawn from different sources, and businesses will report data differently, data display varies. Individual locations of larger entities may list employment for the local location, or full entity. Data often lists multiple establishments under the same enterprise separately, which may cause inaccuracies in the largest employers' data.

## Methodology

#### Bureau of Labor Statistics Data

Data for employment and wages is from the Quarterly Census of Employment & Wages (QCEW). The BLS provides raw data separated by employment type (private, local government, state government, and federal government). To obtain employment by industry numbers, all employment types were combined. To obtain annual average wage, total wages for all employment types by industry were combined and then divided by the summed employment figures.

#### **Location Quotient**

Location quotients were calculated using the formula:

(local industry employment / local total employment) / (U.S. industry employment / U.S. Total employment) from BLS data

Example businesses were generated through ArcGIS Business Analyst data. Industry NAICS codes were matched to the NAICS codes attached to establishments in ArcGIS Business Analyst.

#### **Shift Share Analysis**

For both the employment and GDP shift share numbers the following formulas were used:

#### **National Share**

2015 local industry amount \* 2018 U.S. total amount /2015 U.S. total amount

#### **Industrial Share**

2015 local industry amount \* 2018 U.S. industry amount / 2015 U.S. industry amount – National Share

#### **Regional Share**

2015 local industry amount \* 2018 local industry amount / 2015 local industry amount – 2018 U.S. industry amount / 2015 U.S. industry amount

#### "Expected" Rates

Regional Share / 2015 industry amount

Example businesses were generated through ArcGIS Business Analyst data. Industry NAICS codes were matched to the NAICS codes attached to establishments in ArcGIS Business Analyst.

The value of the expected rate of change was used to determine strength of influence of local factors, as defined as:

Very High: >70% High: 31%-70% Medium: 11%-30% Low: 0-10%

#### **Employer Matching**

ArcGIS Business Analyst data was used to identify employers where called out in the document. NAICS codes were used to match employers to data. To identify largest employers in an industry, employers with highest employment numbers as reported in the ArcGIS Business Analyst data were used. For enterprises with multiple establishments, establishments were counted individual unless identified as major employers through staff review.

#### Self-Employed Estimate

BLS employment data does not include sole proprietors or unincorporated self employed. Data from the 2013 NETS database was used to provide an estimate of self-employed soleproprietors not included in the BLS data. The number of establishments with only one employer was calculated for each industry grouping, matched by NAICS codes. The number of establishments with one employee was divided by total number of establishments in the key industry to obtain a rate of self employment. The rate of self-employment was multiplied by 1.0569, to adjust for the change in self employment occurring nationally since 2013. The result was multiplied by the 2018 BLS employment data as an estimate of selfemployment by key industry in 2018.

## Methodology (continued)

#### **Residential Construction**

Residential construction numbers were generated by sales and construction data provided by the Chester County Assessment Office. Data includes all 2019 records added through May 2020.

#### **Non-Residential Construction**

Land development proposals submitted to the Chester County Planning Commission were used to identify potential projects, square feet added, and non-residential type. Assessment data and historical aerial imagery were cross referenced with identified land developments to ascertain status for projects proposed prior to 2019. For land developments not identified as built through the prior process and 2019 land developments, the Chester County Planning Commission obtained information through municipal outreach and site visits. Type of project was checked using internet searches and site visits.

#### **NAICS** Codes

# Agriculture and Food Production11 - Agriculture, forestry, fishing, hunting311 - Food manufacturing312 - Beverage and tobacco manufacturing3253 - Agricultural chemical manufacturing333111 - Farm machinery manufacturing42382 - Farm equipment wholesalers42448 - Fruit and vegetable merchant wholesalers42491 - Farm supply merchant wholesalers42493 - Nursery and florist merchant wholesalers42331 - Lumber and wood merchant wholesalers44523 - Fruit and vegetable markets44523 - Fuit and vegetable markets42491 - Agricultural market and commodity regulation

#### Tourism and Entertainment

- 31212 Breweries 3113 - Wineries
- 445291 Baked goods stores
- 45322 Gift, novelty, and souvenir stores
- 5615 Travel arrangement and reservation services
- 71 Arts, entertainment, and recreation
- 72 Accommodation and food services

#### Energy

- 22 Utilities
- 2371 Utility system construction
- 23821 Electrical and wiring contractors
- 23822 Plumbing and HVAC contractors
- 4247 Petroleum merchant wholesalers
- 45431 Fuel dealers
- 486 Pipeline transportation
- 92613 Utility regulation and administration

#### Manufacturing

21 - Mining, quarrying, and oil and gas extraction 31-33 - Manufacturing

#### **Life Sciences**

3254 - Pharmaceutical and medicine manufacturing
541714 - Research and development in biotechnology
3391 - Medical equipment and supplies manufacturing
42345 - Medical equipment merchant wholesalers
42346 - Ophthalmic goods merchant wholesalers
4242 - Druggist goods merchant wholesalers

#### Information Technology

334 - Computer and electronic product manufacturing
42343 - Computer and software merchant wholesalers
5112 - Software publishers
518 - Data processing, hosting, and related services
51913 - Internet publishing and web search portals
5415 - Computer systems design and related services

#### Education

61 - Educational Services 92311 - Administration of Education Programs.

#### Finance

52 - Finance and insurance5412 - Accounting and bookkeeping services92113 - Public finance activities.

#### **Health Care**

524114 - Direct health and medical insurance carriers
532283 - Home health equipment rental
621 - Ambulatory health care services
622 - Hospitals
623 - Nursing and residential care facilities
92312 - Administration of public health programs.

## Definitions

#### Annual Wage

From the BLS, wages are total earnings before payroll deductions, excluding premium pay for overtime and work on weekends or holidays, shift differentials, and nonproduction bonuses. Average Wage is calculated by dividing the number of employees by the sum of all wages.

#### **Chained Type Index**

From the Bureau of Economic Analysis, an index created by linking indexes to make a time series.

#### **Employment**

From the Bureau of Labor Statistics, employment includes covered workers who worked during the pay period including the 12th of the month. Employment includes employees in the private and public sectors. Employment includes full time, part time, piece workers, and many farm workers. Data also includes workers on sick leave, paid holiday, paid vacation, or similar. Employment excludes workers including unincorporated self-employed, proprietors, unpaid family members, certain farm and domestic workers, and others. Workers who earned no wages during the pay period are also excluded. For full details on included and excluded workers in employment data please visit the Bureau of Labor Statistics.

#### Enterprise

From the Bureau of Labor Statistics, a private firm, government, or nonprofit organization.

#### **Establishment**

From the Bureau of Labor Statistics, the physical location of an economic activity. One enterprise may have multiple establishments.

#### "Expected" Change of Employees/GDP

A calculation from the Shift-Share analysis. The change that the analysis calculates would have occurred absent the influences of the national overall economy and industry trends.

#### "Expected" Rate of Change of Employees

The calculated rate of change from the beginning period used in a Shift-Share analysis. Calculated by taking the "Expected" change in employees/GDP and dividing it by the beginning period figure.

#### Gross Domestic Product (GDP)

The estimated value of goods and services produced.

#### **Key Industry**

Industries defined by the Chester County Economic Development Council as major industry groupings in Chester County. Key industries combine NAICS codes to better represent the industries.

#### Labor Force Participation Rate

From the Bureau of Labor Statistics, includes people over the age of sixteen who are employed or actively making efforts to find a job.

#### **Major Industries**

Industries at the highest level of NAICS codes (two digits).

#### **Managaement of Companies**

The Management of Companies and Enterprises sector comprises (1) establishments that hold the securities of (or other equity interests in) companies and enterprises for the purpose of owning a controlling interest or influencing management decisions or (2) establishments (except government establishments) that administer, oversee, and manage establishments of the company or enterprise and that normally undertake the strategic or organizational planning and decision making role of the company or enterprise. Establishments that administer, oversee, and manage may hold the securities of the company or enterprise.

Establishments in this sector perform essential activities that are often undertaken, in-house, by establishments in many sectors of the economy. By consolidating the performance of these activities of the enterprise at one establishment, economies of scale are achieved.

North American Industry Classification System

#### **NAICS Codes**

The North American Industry Classification System. Used by federal agencies to classify establishments. NAICS codes have levels of detail, from two digit to six digit codes. Longer codes are subsectors of shorter codes. For example, code 111411 (Mushroom Production) is a subset of code 1114 (Greenhouse, Nursery, and Floriculture Production), which is a subset of code 11 (Agriculture, Forestry, Fishing, and Hunting).

#### **Philadelphia MSA**

The Philadelphia MSA includes Burlington County, NJ; Camden County, NJ; Gloucester County, NJ; Bucks County, PA; Chester County, PA; Montgomery County, PA; Delaware County, PA; Philadelphia County, PA; New Castle County, DE; Cecil County, MD, and Salem County, NJ.

#### **Real GDP**

From the Bureau of Economic Analysis, GDP calculated for inflation relative to a reference year, 2012 used in data. Calculated in chain-type quantity index and presented in chained dollars.

#### **Unemployment Rate**

From the Bureau of Labor Statistics, to be unemployed a person must not have been employed during the week of the survey, must have been available for work during the survey week (unless unavailable due to temporary illness), and made one or more specific active efforts to find a job during the 4 week period ending with the survey week or were temporarily laid off and expecting to be recalled to their job.

