



Armstrong County Profile

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Penn State Center for Economic and
Community Development



PennState



Armstrong County Profile

This profile is intended to help you better understand your county and identify opportunities and challenges it faces. It reviews important population, quality of life, economic, and agricultural information about your county. The profile includes figures and tables with information specific to your county, as well as information from neighboring counties and Pennsylvania as a whole, so you can see how your county compares to them. Discussion questions are included to help you think about what the information reveals about your county. This profile was developed by Penn State’s Center for Economic and Community Development.

The information used in this profile comes from several different important federal and state data sources, including the American Community Survey of the U.S. Census, the U.S. Bureau of Labor Statistics, the U.S. Bureau of Economic Analysis, the U.S. Census of Agriculture, the Centers for Disease Control and Prevention, OverdoseFreePA (a project of the University of Pittsburgh), and the Pennsylvania Department of Labor and Industry (Center for Workforce Information and Analysis).

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Population Summary

The size and characteristics of a county's population have important implications for jobs and economic development, the types and nature of services (such as public education, senior services, and health care) that residents require, local quality of life, and other factors. These factors affect and are affected by the number and characteristics of people living and working in your county, as well as by whether and how the population changes. Several methods of looking at the population in your county can be particularly useful.

Population Size

How the size of your population has been changing is important. The number of residents in a county affects the types and quantity of goods and services required within the local economy, such as food, clothing, and entertainment. It also affects how easily employers can find workers with the range of skills they require to be successful. The population size thus affects the number and types of businesses in the county, and the jobs available. Changes in the size of the population can affect how well local businesses survive and thrive, as well as the ability of the local economy to attract new businesses and employers.

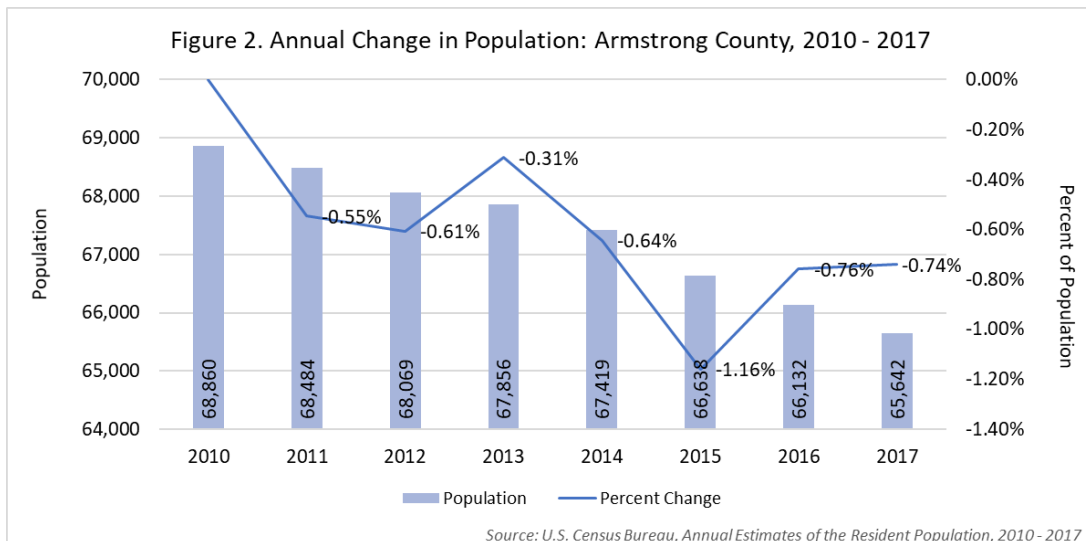
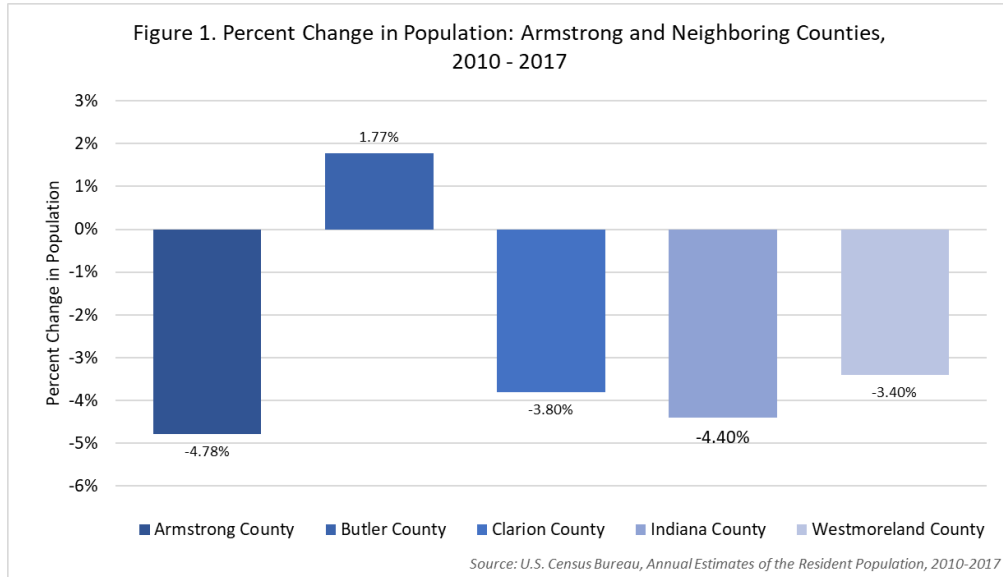
Population size can similarly affect the demand for local government and school services, as well as whether these public services need to be decreased (because of population loss) or expanded (because of population growth). Changes in population size can also impact the cost of providing those public services. Some services can involve large fixed costs that do not vary with how many people use the service, such as paying off long-term debt from building schools or sewage treatment plants. If the population size falls before these debts are paid off (or if other fixed costs exist), the cost will be spread among a smaller number of taxpayers, making each individual pay more. If the population size increases, existing public services can sometimes be provided to new residents without large tax increases, as long as these fixed costs can be spread over a larger number of taxpayers and no new infrastructure investment is needed (such as for widening roads or expanding the schools).

According to the U.S. Census' American Community Survey, Pennsylvania's population as a whole grew slightly between 2010 and 2017 at a rate of 0.8% during that period (see Table 1). This is in strong contrast to the population growth rate of 5.6% across the United States during the same time period. The change in your county's population size also appears in Table 1, so you can see how it changed compared to the state.

	Armstrong County	Pennsylvania
Population - 2010	68,938	12,702,857
Population - 2017	65,642	12,805,537
Percent Change, 2010 to 2017	-4.78%	0.81%

Source: U.S. Census Bureau, Annual Estimates of the Resident Population, 2010-2017

Figure 1 shows how your county’s change compares to population change in neighboring counties. How these changes occurred year to year during this timeframe appear in Figure 2.



Discussion Questions

1. How did your county’s population change in size between 2000 and 2017?
2. What do you think the size of your county’s population will be in five years? 10 years?

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3. What was the impact of the change in population size on employment opportunities for residents, on property values, and on other elements within your county?

If population growth:

4a. By how much did the population increase? Who are the new residents (age, employment status, number of children, where they work, etc.), and why did they move to your county?

5a. What has been the impact of this population increase on the local economy and local businesses?

6a. What was the impact of this population increase on the demand for local public services? What public services changed as a result? What public services need to be expanded?

7a. Will this trend continue in the future? What will happen as a result to the demand for local services?

If population decline:

4b. By how much did the population decline? Which population groups do you think have moved away or left? Why did they leave?

5b. What has been the impact of this population decline on the local economy and local businesses?

6b. What has been the impact of this population decline on the demand for local public services? Have they declined?

7b. Will this trend continue in the future? What will happen as a result to the demand for local services, or to the ability of the county to pay for existing service infrastructure (such as sewerage treatment plants, school buildings, roads)?

Population Age Structure

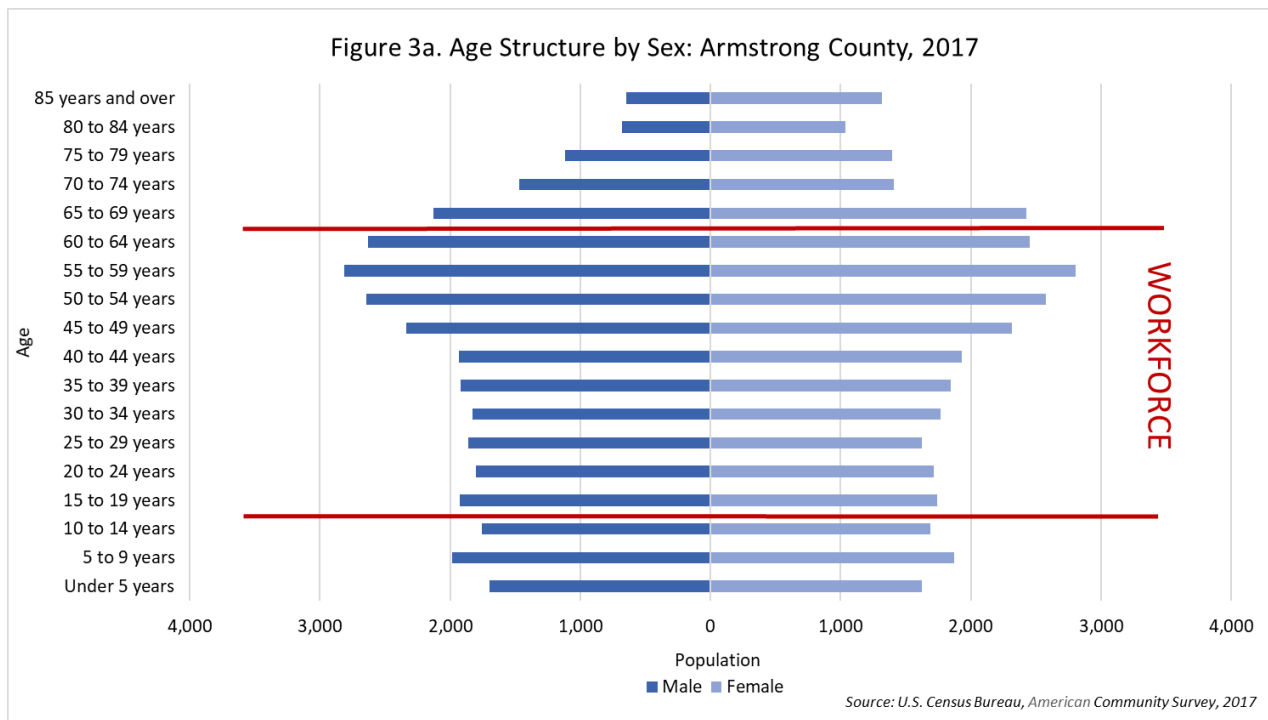
The age and sex characteristics of your county can help you imagine future population trends and understand the strengths and weaknesses of your county's tax base and public service needs. People who study population trends, called demographers, sometimes develop a population pyramid graph to visualize how a county's population is distributed by age and sex.

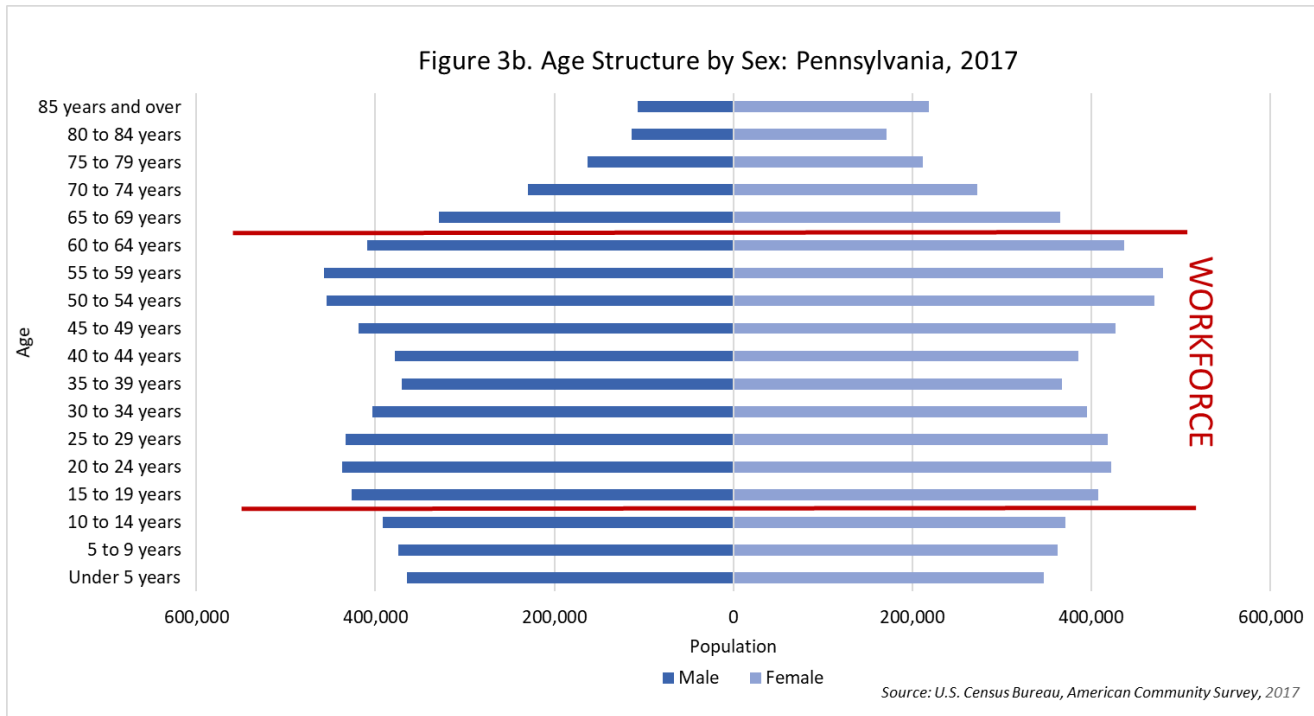
Figure 3a has a population pyramid of your county, based on population information from the 2017 U.S. Census American Community Survey. The length of each horizontal bar illustrates each particular age group's share of your county's total population; the number of males appears on the axis to the left of the center line, while the number of females falls to the right of the center line. Figure 3b shows the population pyramid for the entire Commonwealth of Pennsylvania, allowing you to see how your county compares to the statewide population. Notice how the Pennsylvania pyramid has a

'bulge' in the number of males and females between the ages of 45 and 64, as well as a bulge between the ages of 15 and 29. This is a visual way of seeing that Pennsylvania's population has a larger share of its residents within these age ranges.

A population pyramid with a large base indicates a growing population. A pyramid with a more uniform shape suggests that the population is stable. A pyramid with a large top and a small bottom can show signs of a shrinking population.

Seeing age and sex information graphically in such a pyramid makes it easier to predict how the population will change in the future as the population ages. As people age, population "bulges" will move into older age brackets, with related effect on service demands. New residents moving into the county or residents moving away will also affect how the population changes.





Discussion Questions

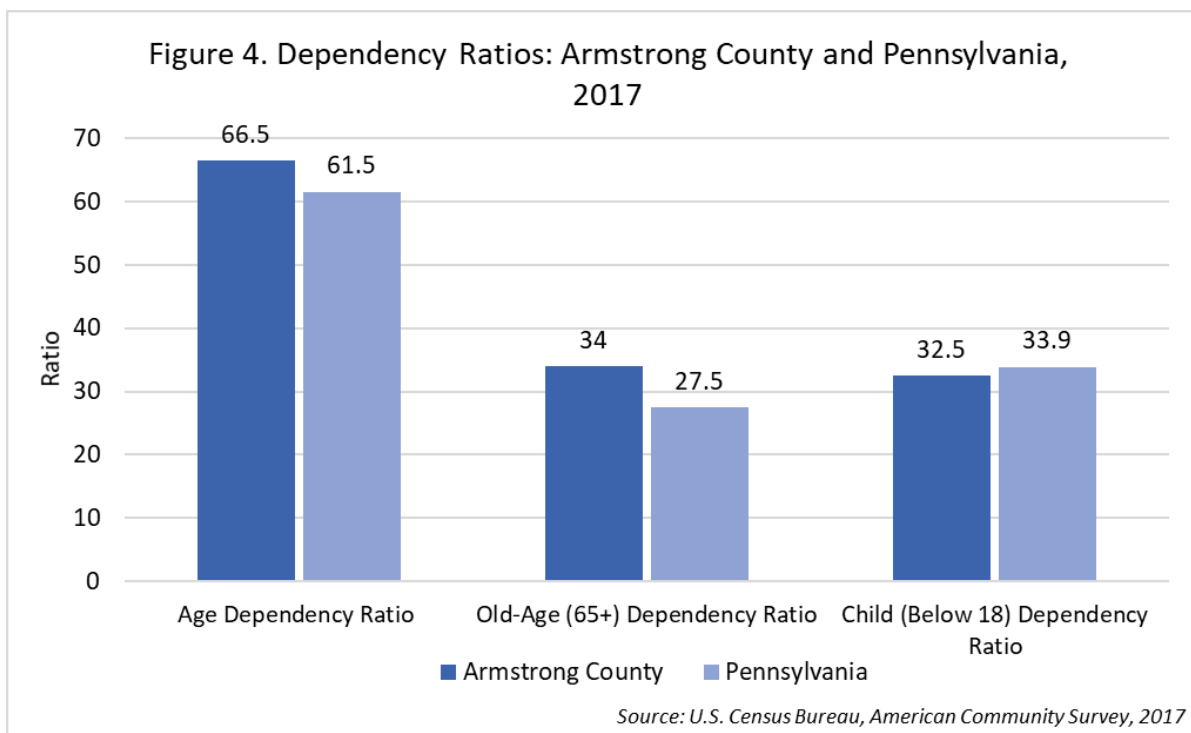
1. What, if anything, surprised you about the population pyramid from your county? What did you expect to see?
2. Are there noticeable population “bulges” in your county’s population pyramid? Which are the largest age groups in your county? Which are the smallest? What might these bulges suggest?
3. Are there any interesting patterns in the distribution of males and females across age groups? How does your county’s mix compare to the state?
4. How does the population pyramid in your county compare to the Pennsylvania population pyramid? Is your county generally older or younger than the state average? What implications might there be of this?
5. What local government and school services might these different age groups currently demand?
6. Your county’s population in the future will change as a result of new residents moving into the county, births, deaths, existing residents aging, and some current residents moving away. Over the next 10 to 20 years, do you expect more newcomers and births than people moving away or dying? In which age groups will most of these newcomers belong? For how long do you expect these newcomers to remain in your county? How might this affect your county? What will happen to the demand for local services in 10 to 20 years as your county ages, and these groups become older?

Dependency Ratio

How many working-age residents there are to support your county's children and elderly is also important to consider because it affects how tax burdens can be distributed across workers and other local taxpayers. Demographers call this the age dependency ratio, and often measure it as the number of children (<18 years) and retirement-age persons (age 65+) per 100 working-age persons (age 18-64). A high dependency ratio means there are a relatively large number of children and elderly per 100 working-age residents, while a low dependency ratio means there are relatively few children and elderly.

A small number of working-age persons relative to a larger number of children and retirement-age people makes it more difficult (and perhaps less fair, depending upon your perspective) to shift the local tax burden onto working-age people, such as through higher reliance on the earned income tax. The local tax burden could end up being carried by a smaller proportion of the population, making the burden on individual workers higher than if local taxes were spread across a larger number of working-age people.

Use Figure 4 to look at these relationships in your own county. Statewide, the ratio of working-age people to children and retirement-age people was 61.5. This means for every 100 working-age people, there were, on average, 27.5 retirement-age people and 33.9 youth. The child dependency ratio looks at the number of children per 100 working-age people, and the old-age dependency ratio looks at the number of retirement-age people per 100 working-age people.

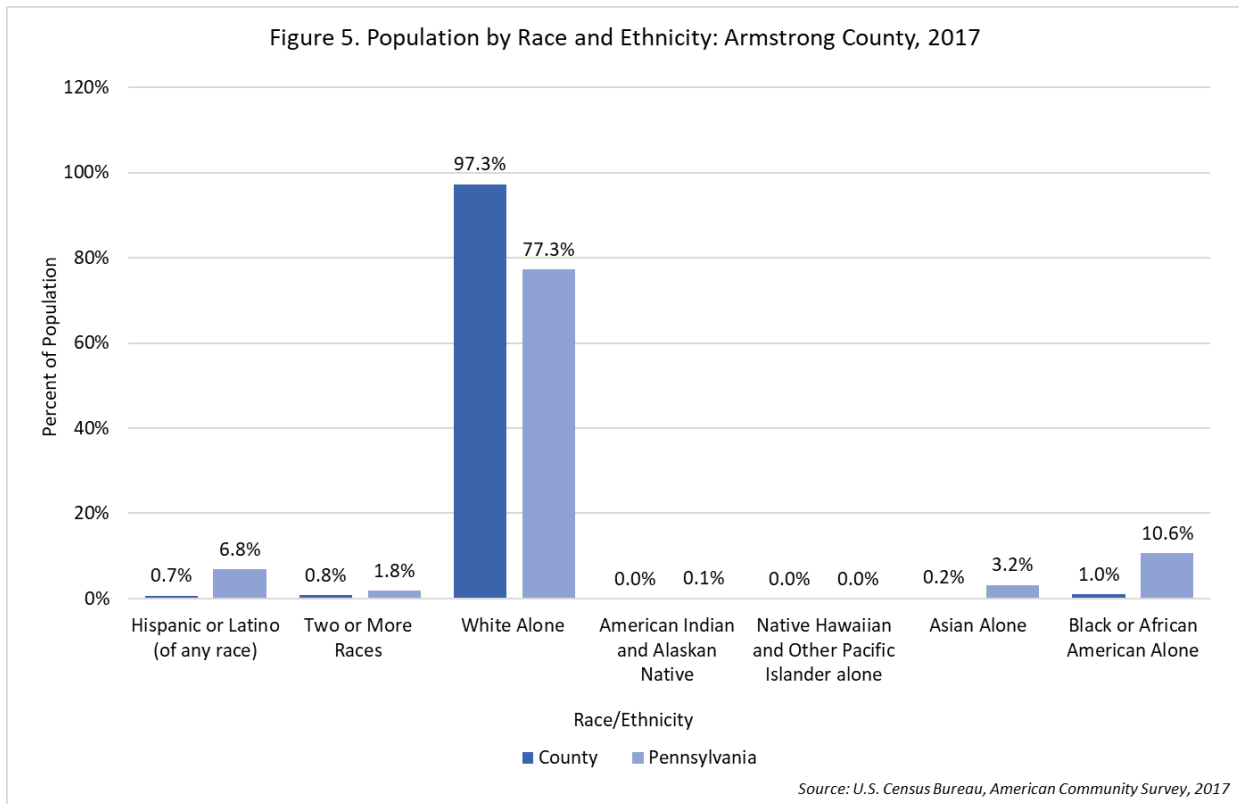


Discussion Questions

1. How does the number of children per 100 working-age persons in your county compare to the state average?
2. How does the number of retirement-age people per 100 working-age persons in your county compare to the state average?
3. Use the population pyramid in Figure 3 to think about how your population might age and change over time. How might these ratios change in the future? Will they get larger? Smaller? What might that mean for your county?

Race and Ethnicity

The racial and ethnic composition of your county is important because it reflects the cultural heritage of the people who live there. It can also affect how welcoming the county feels to people considering moving there. Statewide, in 2017, about 77% of Pennsylvania residents were White, 10.6% were Black or African American, and 6.8% were Hispanic or Latino (see Figure 5). Use Figure 5 to see how your county's racial and ethnic mix compares to the composition statewide.



Discussion Questions

1. How diverse is your county's population by race and ethnicity? How has your county's history affected the racial and ethnic composition?
2. How does the racial and ethnic composition of your county compare to the state?

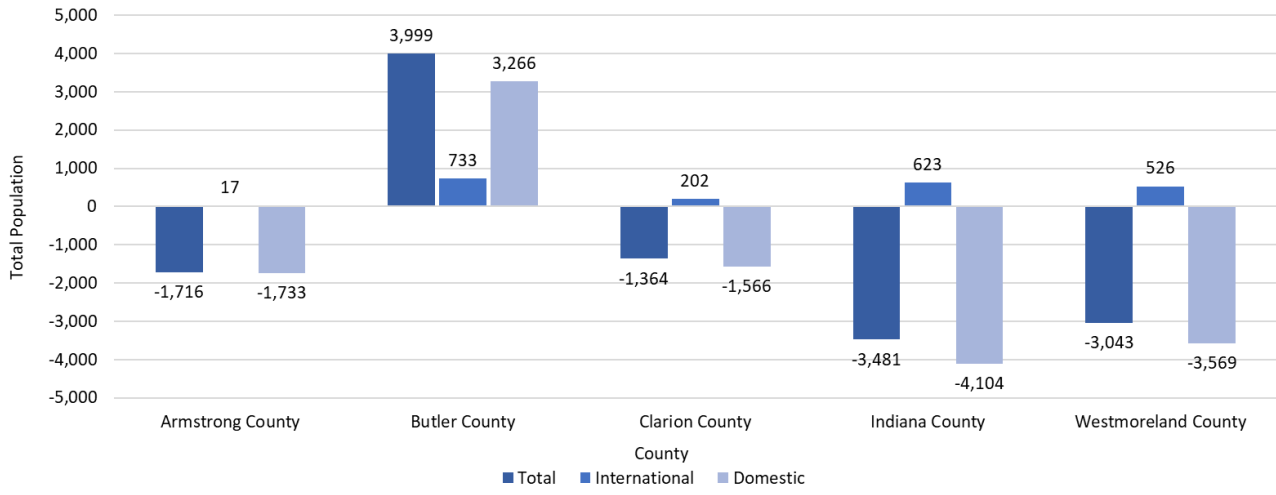
Net Migration

Population change occurs through the combination of births, deaths, and people moving into or out of the county. Movement in or out is called migration and it includes two components: (1) domestic migration, or the movement of people within the United States across state and county borders, and (2) international migration, the movement of people into and out of the United States. International migration includes people moving from the U.S. to other countries and people moving from other countries to the U.S., and those people may be American citizens or citizens of other nations. Net migration describes the difference between the number of people entering an area and the number of people leaving an area. This data is useful in providing a picture of migration in your county, but this figure does not provide details about which people are moving, where they come from, or where they go.

Statewide, international migration was an important component of Pennsylvania's population growth between 2010 and 2017 (see Figure 6). During this time, Pennsylvania experienced negative net domestic migration, losing a total of 214,426 residents through movement within the U.S. Contrastingly, during the same period, Pennsylvania gained a total of 234,870 residents through net international migration. In this way, international migration helped to account for Pennsylvania gaining a net total of 20,444 residents between 2010 to 2017.

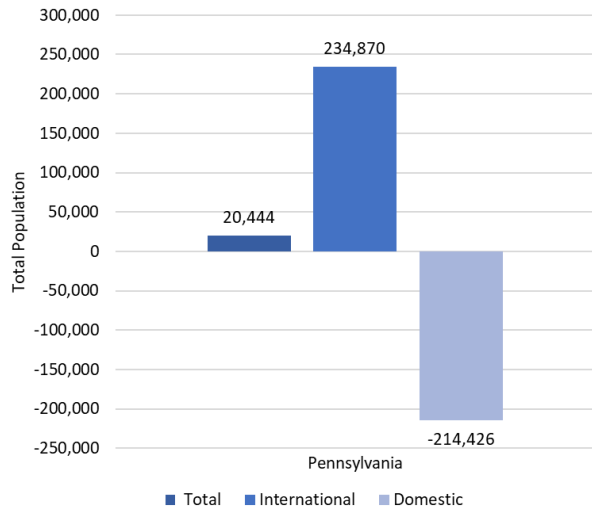
Figure 6 shows the composition of net migration for your county and for neighboring counties. Positive net migration means that, overall, your county is gaining more new residents than it is losing, while negative net migration means that your county is losing more residents than it is gaining. Pay close attention to how the numbers for domestic and international migration compare to overall net migration in your county.

Figure 6a. Net Migration (Cumulative 2010-2017): Armstrong County and Neighboring Counties



Source: U.S. Census Bureau, Estimates of the Components of Resident Population Change, 2010-2017

Figure 6b. Net Migration (Cumulative 2010-2017): Pennsylvania



Source: U.S. Census Bureau, Estimates of the Components of Resident Population Change, 2010-2017

Discussion Questions

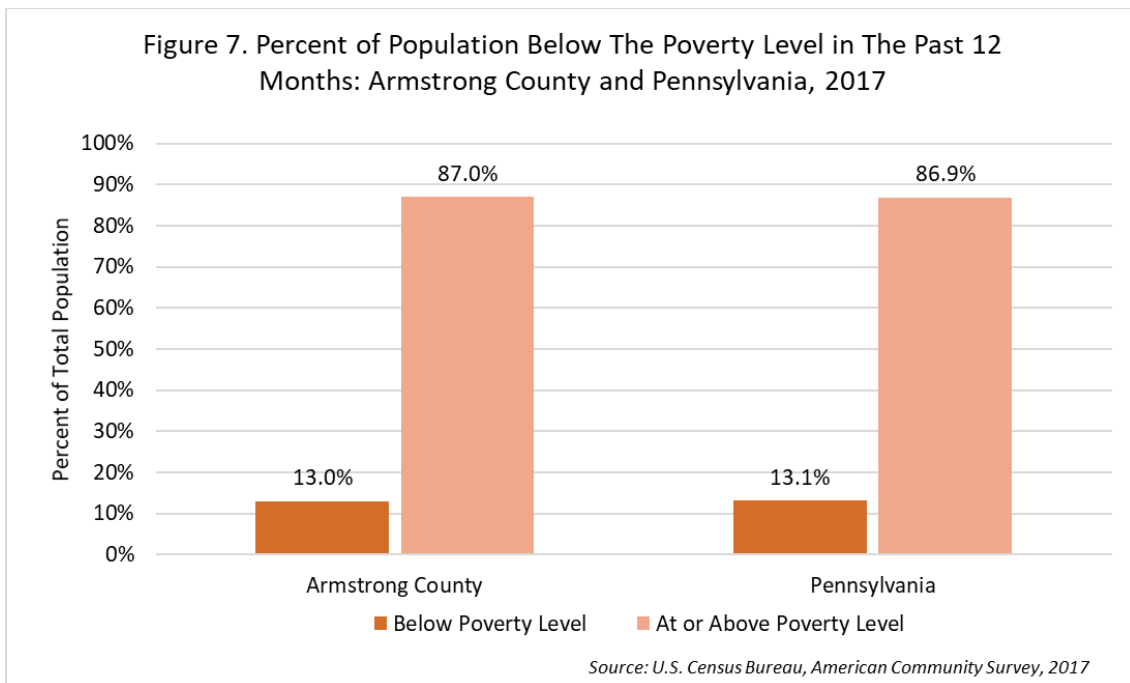
1. Was the total net migration in your county positive or negative?
2. How many people moved in or out of your county through domestic migration between 2010 and 2017? Did your county experience a net gain or loss of such residents? What might be some factors that affected this?
3. How many people moved in or out of your county through international migration between 2010 and 2017? Did your county experience a net gain or loss of such residents? What might be some factors that affected this?
4. How do the figures for net international and net domestic migration for your county compare? What might be some factors that affected this? What might this imply about your county's future population and population change?

Quality of Life

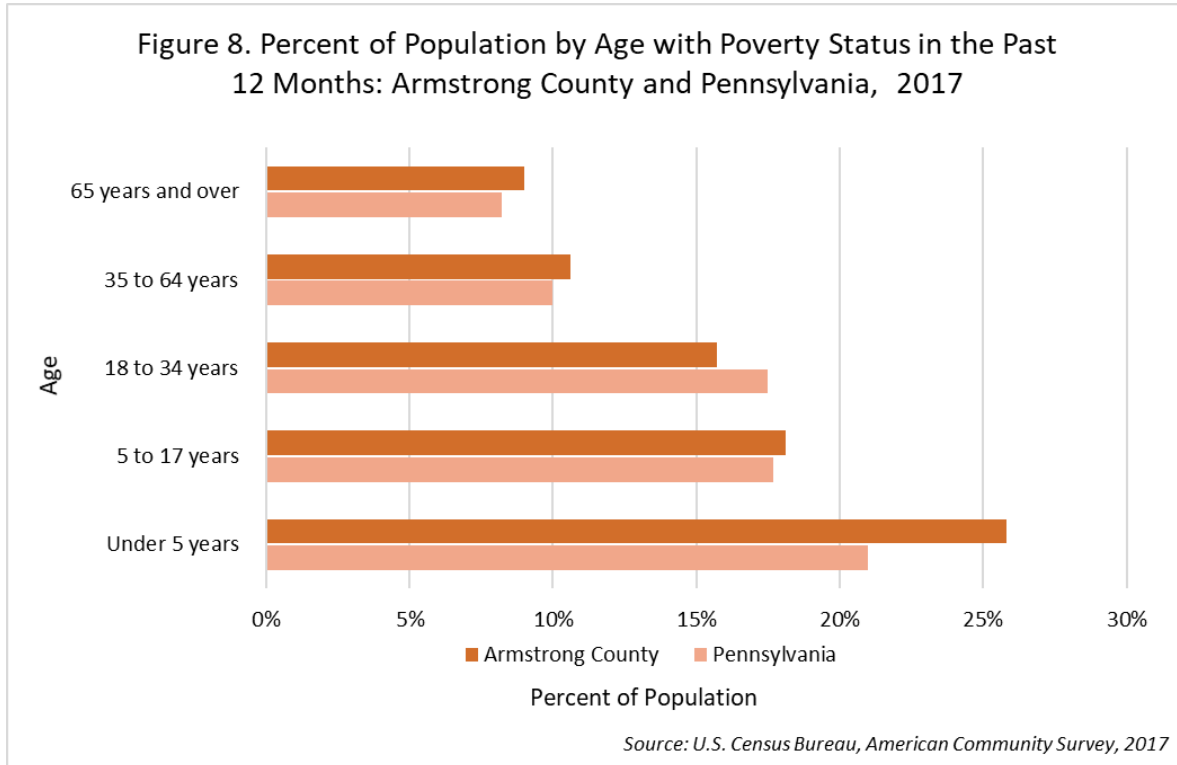
In addition to understanding a county’s population and how it may or may not be changing, it is important to consider the quality of life of the people who live there. For the purposes of this profile we consider a variety of indicators which can suggest how well residents are doing. This includes poverty, educational attainment, housing, and several health metrics.

Poverty

About 13.1% of Pennsylvania residents live in poverty, which the U.S. Census Bureau defines using thresholds that vary according to family size and the age of family members. For 2017, the national poverty thresholds range from \$12,488 for one individual, \$15,877 for two people, \$25,094 for a household with four individuals, to \$50,681 for a household with nine people or more. People living in poverty include some working people earning the minimum wage and some people working part-time not earning enough to support a family, as well as some residents with physical or mental disabilities which prevent them from working. The percentage of residents living below the poverty line in a county thus is affected by a number of factors, such as the strength of the local economy, including typical wage rates and how easy it is to find a job; the age characteristics of a county, particularly the presence of a large university with many college-aged residents; the education level of the population; and structural factors that affect or have affected who is able to build wealth and access opportunities and resources. Figure 7 shows the percentage of residents in your county who live below the poverty line, as well as the percentage in the state.



Statewide, about 21% of children under 5 years old live in poverty, as do 17.7% of children between 5 and 17 years old (see Figure 8). Older Pennsylvania residents are less likely to live in poverty, with those 65 years and over being the least likely to be in poverty (only 8.2% of those age 65 and over live in poverty). Poverty status varies by age within your county, as well (see Figure 8).



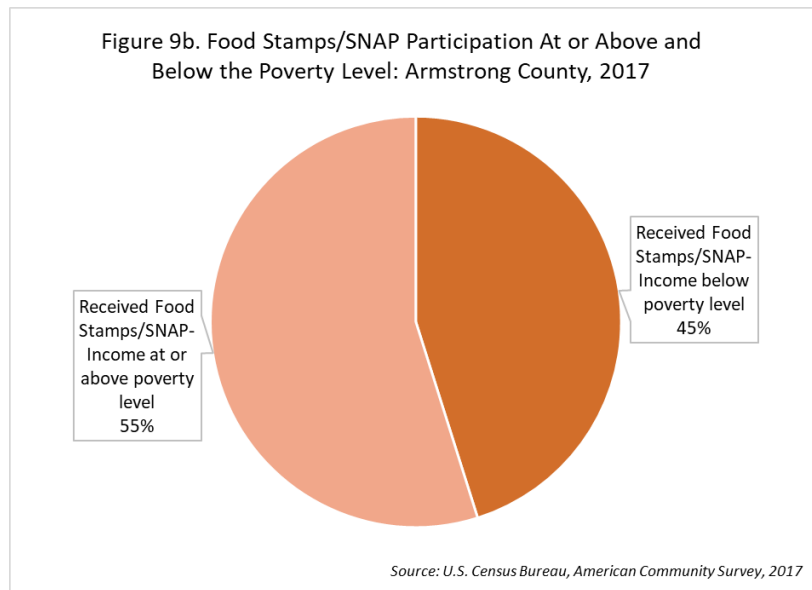
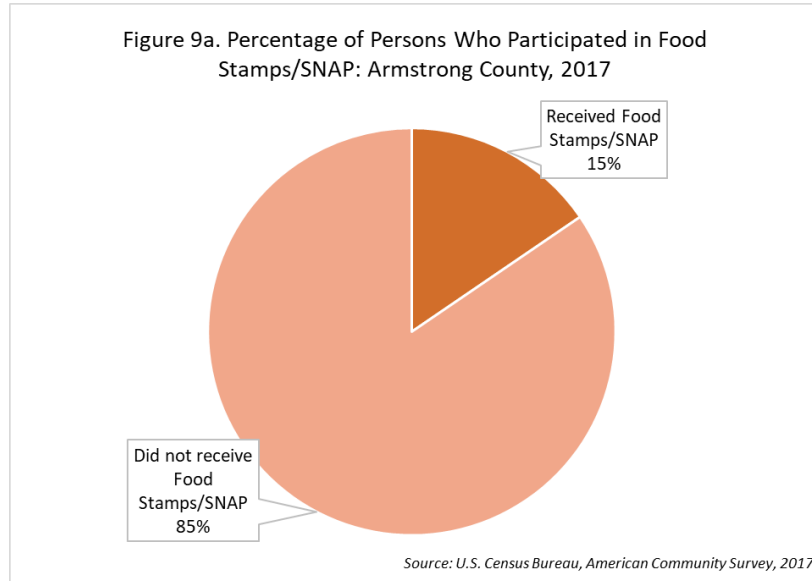
Discussion Questions

1. How does the poverty rate in your county compare to the poverty rate statewide? What factors do you think may contribute to what you see?
2. Which age groups are most likely to be in poverty in your county? Least likely? How do these rates compare to poverty statewide? What may have surprised you about this information?
3. What factors do you think contribute to these rates in your county?

SNAP Participation

Another way to consider poverty is by looking at the percentage of residents who participate in the Supplemental Nutrition Assistance Program (commonly called Food Stamps). SNAP is a federal program intended to help low income residents supplement their food purchases. Eligibility for SNAP depends upon a household’s number of residents, income, rent or mortgage, utility bills, and other expenses. The income level for eligibility is above the poverty line, so program participants include both those below and those slightly above the poverty line. Not every resident that qualifies for SNAP

benefits is enrolled in the program. Figure 9a shows the percentage of residents in your county who participate in SNAP, and Figure 9b details the percentage of SNAP participants whose income falls at and above or below the poverty level. Table 2 provides a numerical overview of participation in your county.



	Armstrong County - Number of Persons
Did not receive Food Stamps/SNAP	23,873
Received Food Stamps/SNAP	4,369
Received Food Stamps/SNAP- Income below poverty level	1,972
Received Food Stamps/SNAP- Income at or above poverty level	2,397

Source: U.S. Census Bureau, American Community Survey, 2017

Discussion Questions

1. How many residents of your county participate in SNAP? How do these percentages compare to the poverty rate information you reviewed in the prior section?

Educational Attainment

The education level of residents can have important implications for economic activity and quality of life. The number of jobs available to unskilled workers has been declining for several decades, while simultaneously many of the new jobs being created in the economy require higher education levels than in the past. Typically, jobs requiring higher skill levels provide higher wages or salaries, so there can be a financial benefit to workers taking these positions. The education level of the workforce can also affect the location decisions of businesses who are looking to start up or expand, particularly if the new jobs will require skilled workers.

A breakdown of the educational attainment of residents 25 years and older in your county and in Pennsylvania appears in Table 3. The table shows the percentage of the population by the highest degree they have obtained (in other words, a resident who graduated from high school and a 4-year college will only appear in the bachelor's degree column). The table includes a breakdown by females and males, allowing you to see whether educational attainment varies by sex. Use Table 3 to consider how your county compares to the state.

Table 3. Educational Attainment of Population 25 Years and Older: Armstrong County, 2017

Education level	Percent Total Population		Percent Female		Percent Male	
	Armstrong County	Pennsylvania	Armstrong County	Pennsylvania	Armstrong County	Pennsylvania
Less than 9th grade	2.6%	3.3%	2.5%	3.3%	2.7%	3.4%
9th to 12th grade, no diploma	8.0%	6.8%	8.1%	6.4%	7.9%	7.2%
High school graduate or equivalency	48.6%	35.6%	47.2%	35.1%	50.0%	36.1%
Some college, no degree	15.6%	16.1%	14.9%	16.1%	16.4%	16.0%
Associate's degree	9.9%	8.2%	10.6%	9.0%	9.1%	7.3%
Bachelor's degree	10.2%	18.3%	11.5%	18.2%	8.9%	18.3%
Graduate or professional degree	5.0%	11.8%	5.1%	12.0%	4.9%	11.6%

Source: U.S. Census, American Community Survey, 2017

Discussion Questions

1. What percentage of your county's population aged 25 years and older are high school graduates? What percent are college graduates (associates, bachelor, or graduate or professional degree)?
2. How might this relate to the rate of poverty in your county?
3. How does educational attainment in your county compare to that across the state?

Housing

Overview Characteristics

Local housing conditions can have important implications for the quality of life of residents, affecting the cost of living, the ability to build equity and save for retirement, and the ability to attract and keep businesses. The proportion of single-family homes, apartments, and other housing units which are occupied by their owners versus rented can affect how easily people can find a place to live in the county. In addition, housing costs paid by owners and by renters also affect how much income residents have to spend on food, medical care, and other necessities.

An overview of housing characteristics for your county and Pennsylvania appears in Table 4. Pay particular attention to the percentage of rental units that pay more than 35% of household income on housing, which is the breakpoint for housing affordability issues, and appears in the last row of the table. The percentage shown for your county reflects the percentage of county renters who are challenged by housing affordability.

	Armstrong County	Pennsylvania
Total Housing Units	32,773	5,653,599
Occupied	28,242	5,007,442
Vacant	4,531	646,157
Housing Tenure Total Occupied	28,242	5,007,442
Owner	21,421	3,456,360
Renter	6,821	1,551,082
Owner Occupied Median Value	\$98,600	\$170,500
Monthly Owner Costs		
Median, with mortgage	\$1,084	\$1,446
Median, without mortgage	\$412	\$515
Monthly Renter Costs		
Median Gross Rent	\$639	\$885
Gross Rent Units Paying >35% or more of Household Income (%)	30%	40%

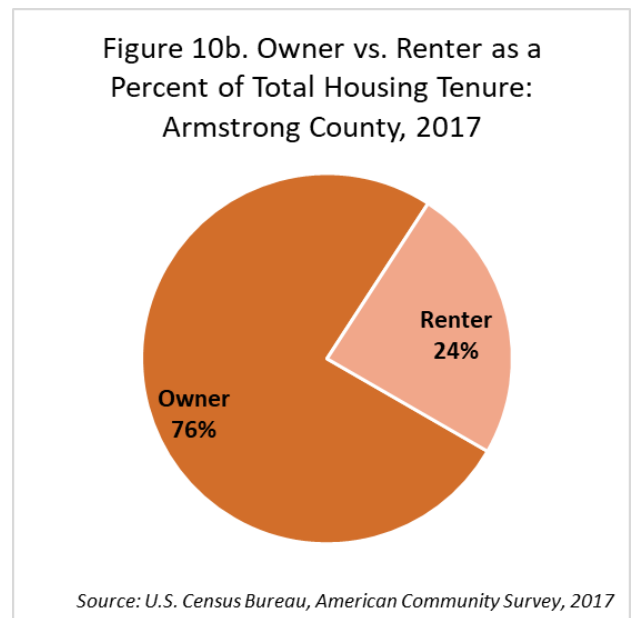
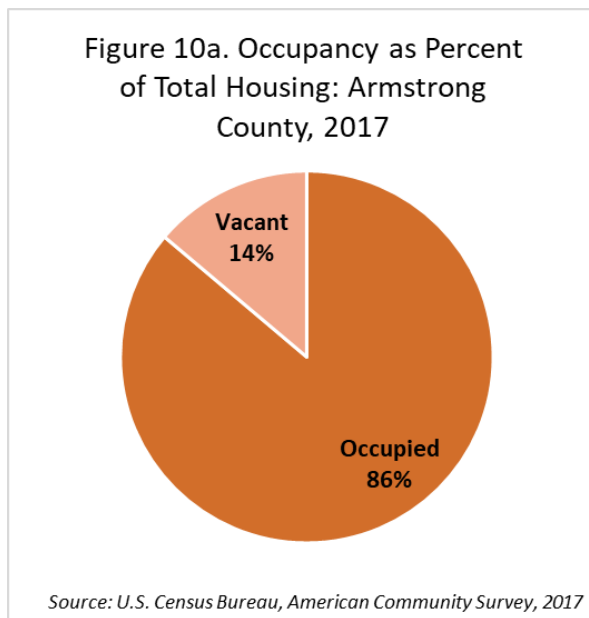
Source: U.S. Census Bureau, American Community Survey, 2017

Discussion Questions

1. How many of the housing units in your county are vacant or occupied? How many are rented or owned? What factors may be affecting these numbers in your county?
2. What percentage of renting households in your county face with housing affordability problems?
3. How do the local housing characteristics of your county compare to the rest of the state?

Occupancy and Tenure

Typically, at any point in time, a share of local housing stock will be vacant, such as having just been vacated by renters or by owners who are selling. Having some vacant properties in the county can be beneficial because such units create the opportunity for people to move into the county, or for residents to move between housing units, such as moving from an apartment to a single-family home they purchased. Too high a vacancy rate, however, is problematic, because it can reflect that the condition of many existing housing units is poor and thus uninhabitable, that more people want to sell or move away than purchase properties or move into the county, or other factors. Figure 10a shows the percentage of housing units in your county which were vacant or occupied in 2017. The percentage of households renting and owning their home appears in Figure 10b.



The proportion of households who rent versus who own the housing unit in which they live is important to understand. A high percentage of renting households can reflect local housing conditions, such as high housing costs, which limit how many households can afford to purchase their own home; a largely transitory population in the county (such as occurs if a local university draws many college students into the county); or high rates of poverty that similarly limit how many households can afford to purchase their home.

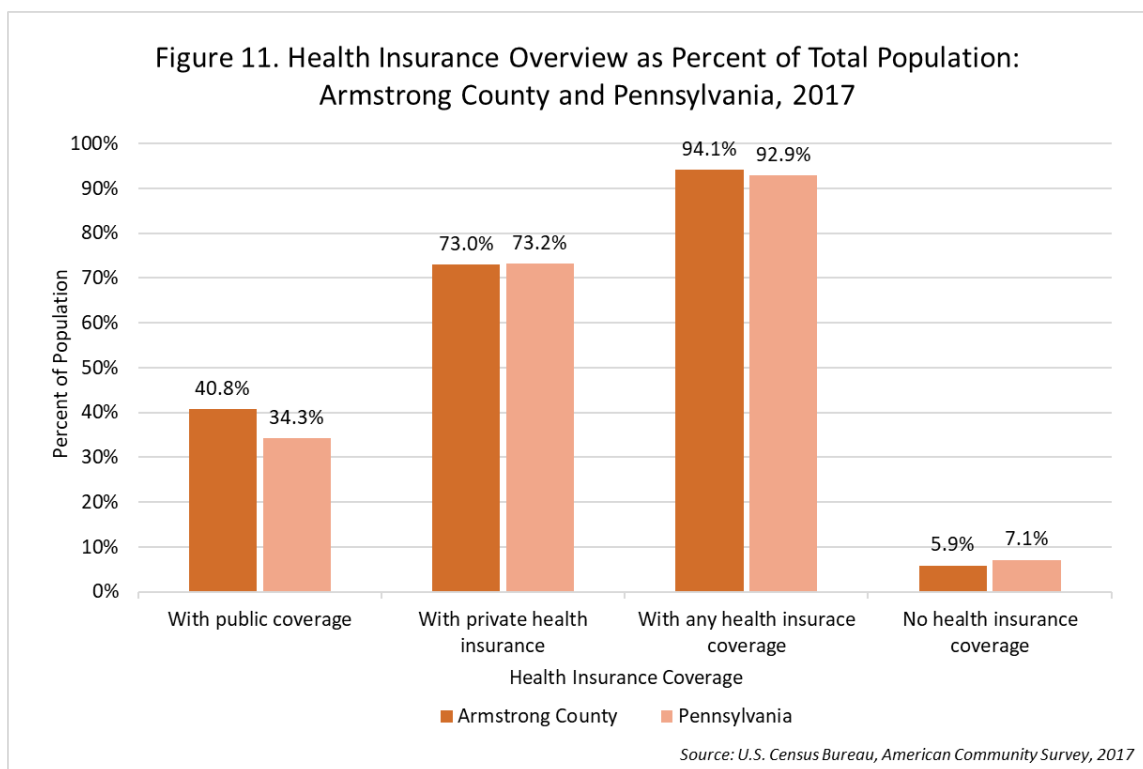
Discussion Questions

1. What percentage of housing units are vacant in your county? How do you think the population changes you observed in Figures 1 and 2 may be affecting this? What other factors may be affecting the number of vacant housing units in your county?

2. What percentage of households in your county are renting their home? What factors may be affecting this?

Health Insurance

Access to health care, and particularly the ability to pay for needed health care through health insurance, is important for the quality of residents' lives. Residents can receive health insurance from several sources, such as through an employer or by purchasing it. Residents with low income may be qualified for publicly funded Medicaid insurance, while some residents with disabilities and all residents aged 65 and over are qualified for publicly funded Medicare insurance. Figure 11 shows the percentage of residents in your county who have no health insurance coverage, the percentage with health insurance coverage, the percentage who have private health insurance, and the percentage who have publicly provided health insurance. Because a person can have both Medicare and privately funded supplemental insurance, the sum of the population with private health insurance and with public coverage can be greater than total percentage of the population with health insurance.

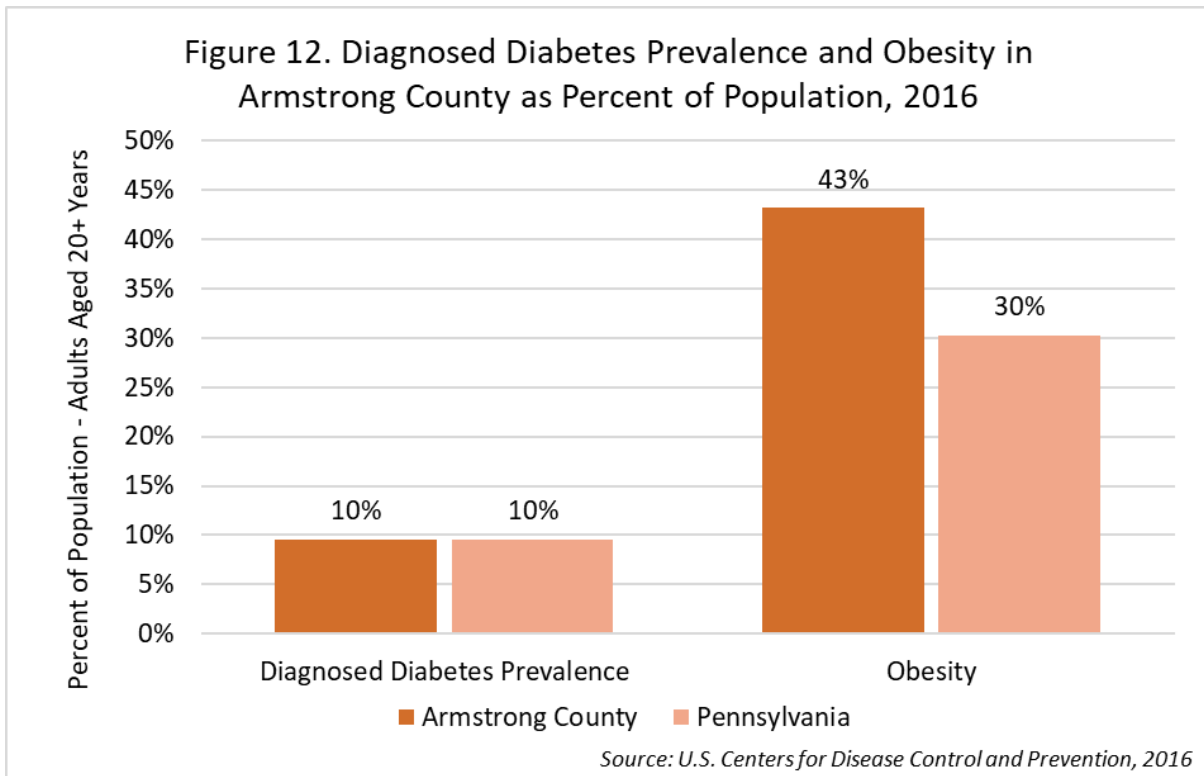


Discussion Questions

1. What percentage of residents in your county have no health insurance? How does this compare to the percentage statewide who have no health insurance? What factors might explain this?
2. In your county, what percentage of residents receive their health insurance through a private insurer? And what percentage receive coverage through public insurers?

Diabetes and Obesity

Another measure of health status is the diabetes and obesity rates among residents. The rates of diabetes and obesity are affected by diet, lifestyle, genetics, and other environmental factors. These conditions affect quality of life for patients and their families, and their prevalence affects healthcare costs, demand for services, and household budgets. Statewide, 10% of residents have been diagnosed with diabetes and 30% are obese. Figure 12 shows the rates of diabetes and obesity in your county.



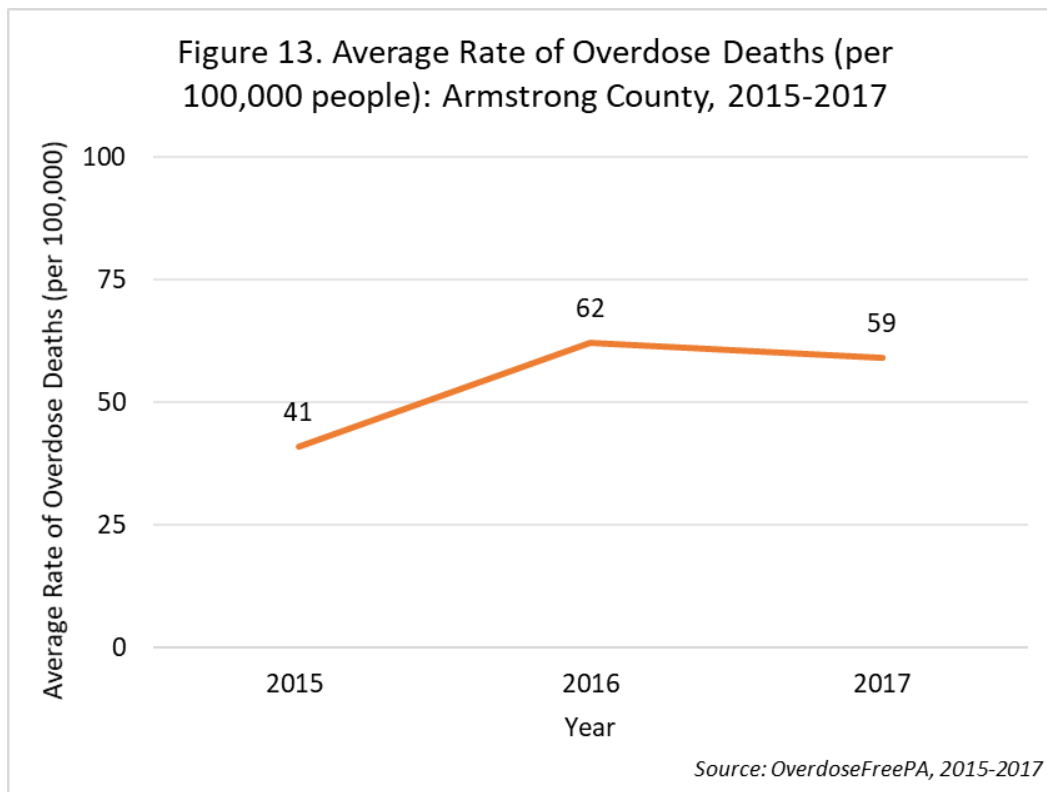
Discussion Questions

1. How do the rates of diabetes and obesity in your county compare to the rates for the state?
2. What implications might these rates have for the health of your residents? How might this impact healthcare costs for individuals and for your county? What demands for services might this impact?

Drug-Related Overdose Deaths

The opioid crisis has received much attention recently, particularly regarding the disruption that drug and opioid misuse can make in peoples' lives and in communities. The number of drug-related overdose deaths similarly is of concern in many Pennsylvania communities. Figure 13 shows the average overdose death rate in your county for 2015, 2016, and 2017. Statewide, in 2017, the

overdose death rate was 43 per deaths per 100,000 people. Note that this data details overdose deaths related to the use of prescription and non-prescription opioids, synthetic opioids (like Fentanyl), as well as other drugs such as cocaine and alcohol.

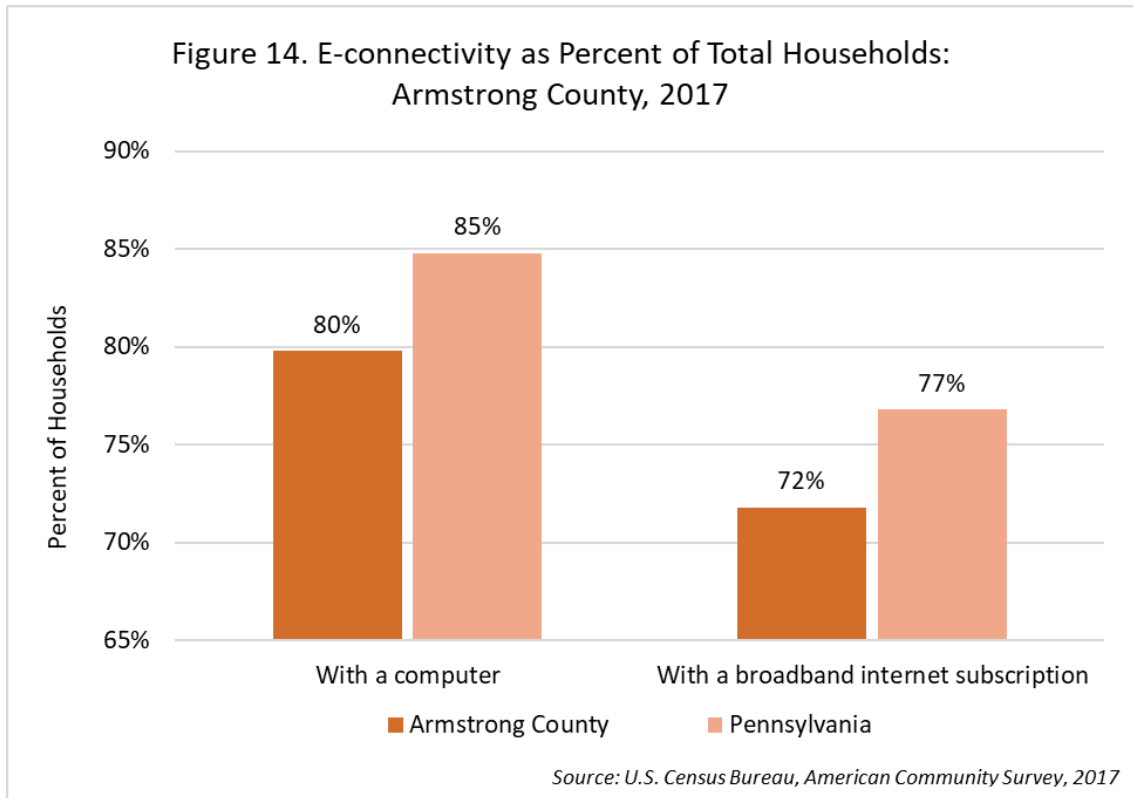


Discussion Questions

1. How does the overdose death rate in your county compare to the overdose death rate statewide?
2. How has the overdose death rate changed between 2015 and 2017? How well do potential responses in your county appear to be addressing such deaths?

Internet Connectivity

Access to the internet is becoming increasingly important in daily life, as the internet is used for staying in touch with family and friends, work, education, paying bills and managing records, shopping, and entertainment. Geographic areas with limited internet access are finding themselves at a disadvantage for attracting jobs and younger residents, accessing important information, and participating fully in modern society. The percentage of households in your county and in Pennsylvania with broadband internet access appears in Figure 14, as does the percentage of households with a computer.



Discussion Questions

1. How does the percentage of households in your county with broadband internet access compare to the percentage across the state? What factors might explain this rate? What are some impacts on residents and local businesses?
2. How does the percentage of households in your county with a computer compare to the percentage across the state? What factors might explain this rate? What are some impacts on local businesses and residents?

Economy

Economic activity within a county has important implications for residents, local businesses and other organizations, and the county at large. It affects the job and wage/salary opportunities for residents, what goods and services are readily available in the county, and how well local entrepreneurs and businesspeople are able to maintain and grow their businesses. If the local economy or businesses are doing poorly, working-age residents may find it difficult to find jobs, particularly at a living wage, so many may move away to seek jobs elsewhere. The level of economic activity, size of the population, and the skills and education level of residents similarly affects local businesses, particularly regarding the types and quantities of goods and services demanded locally, as well as how readily local businesses can find workers with the skills and expertise they need.

Household Income

Statewide, total personal income grew by about 13.7% between 2010 and 2017. During the same period, statewide per capita income grew slightly slower (12.8%) because Pennsylvania’s population grew slightly during this time period (see Table 5). The changes in total and per capita personal income in your county also appear in Figure 15 and Table 5.

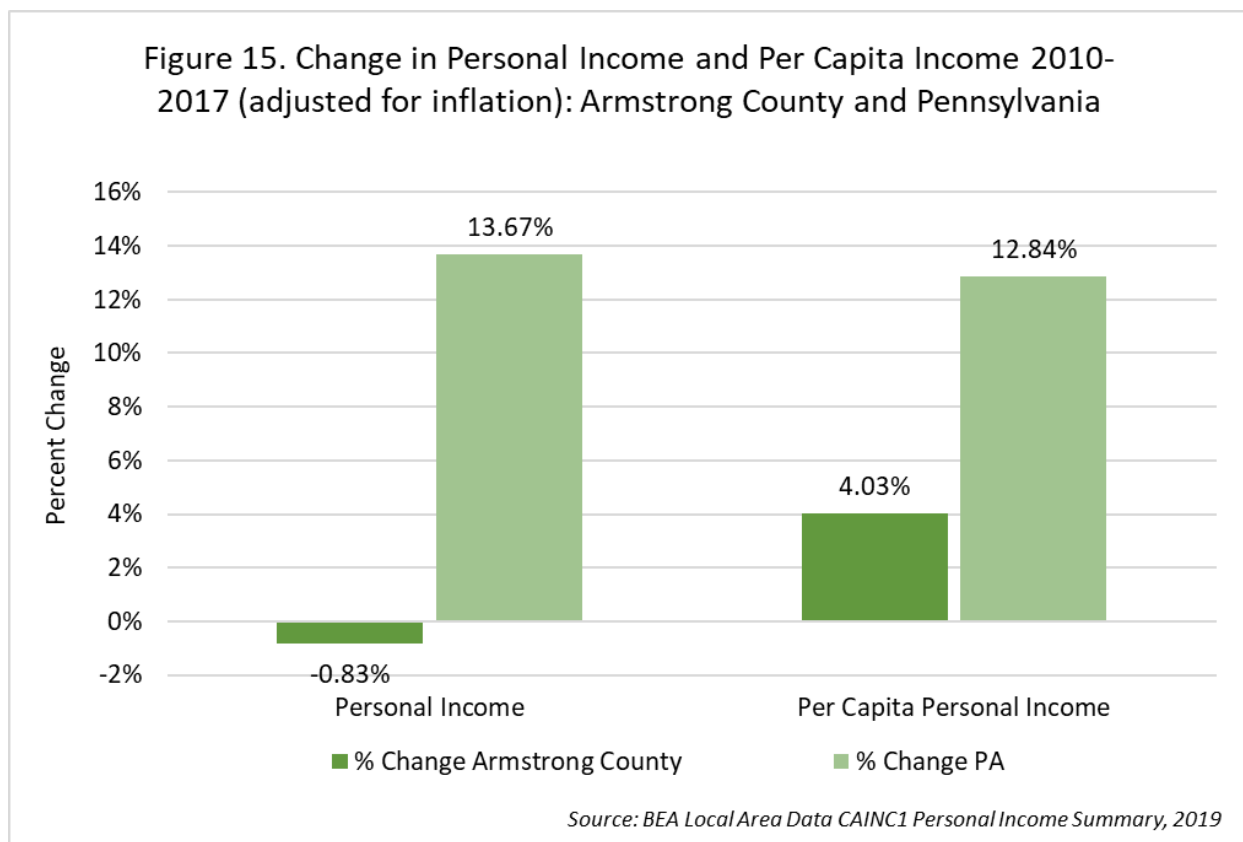
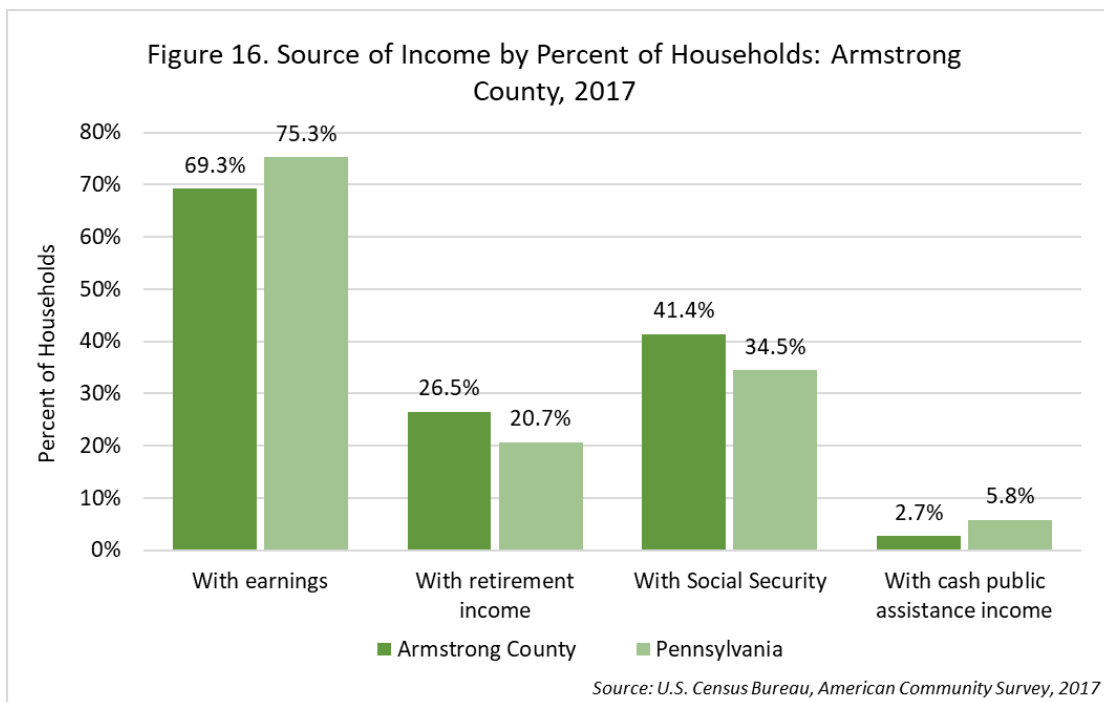


Table 5. Personal Income and Per Capita Personal Income: Armstrong County, 2010-2017

	2010	2010 (inflation adjusted)	2017	Percentage Change (inflation adjusted)	
				Armstrong County	Pennsylvania
Personal income (thousands of dollars)	\$2,457,333	\$2,763,912	\$2,740,970	-0.83%	13.67%
Per capita personal income (dollars)	\$35,686	\$40,138	\$41,756	4.03%	12.84%

Source: BEA Local Area Data
Data from 2010 and change calculations are adjusted for inflation.

Understanding where residents get their income from is also important because it identifies how diverse income sources are (and potentially how vulnerable or resilient residents are to economic shocks). Sources of household income also show the relative importance of jobs, retirement, social programs, and other income sources to local residents. About 75% of Pennsylvania households in 2017 had some income from earnings, such as wages, salaries, or tips (see Figure 17). A third of Pennsylvania households (34.5%) had income from Social Security, while 20.7% had income from other retirement sources, such as pensions and 401K savings. Income sources for households in your county also appear in Figure 17, so you can see how income to your county’s residents compares to that statewide.



Discussion Questions

1. How has personal income in your county changed between 2010 and 2017? How does this change compare to what happened statewide during that same time period? Why might your county be similar to or different than the state? What does this information imply about how well your county’s residents are doing, and about the local economy?

2. What are the most important sources of household income in your county, and in what ways is your county similar to or different from income sources across Pennsylvania?

Full-Time and Part-Time Employment

Changes in both full- and part-time employment reflect how the local economy has been changing over time, and particularly whether the number of jobs has increased, decreased, or stayed about the same. Statewide, employment across both full- and part-time workers increased by 5.5% between 2012 and 2017 (see Table 6). This change included a 4% increase in the number of people who worked for a wage or salary, and an 11.94% increase in the number of people who were either self-employed or ran a business (i.e. “proprietors”). The number of farm proprietors decreased slightly during this time period (-0.86%), while nonfarm proprietors increased by 12.46%. Rates of employment change in your county between 2012 and 2017, as well as the total number of jobs and proprietors in both years, appear in Table 6.

	2012	2017	Change	Percent Change, 2012 to 2017	
				Armstrong County	Pennsylvania
Total employment (number of jobs)	25,563	25,257	-306	-1.20%	5.50%
By type					
Wage and salary employment	19,326	17,625	-1,701	-8.80%	4.00%
Proprietors employment	6,237	7,632	1,395	22.37%	11.94%
Farm proprietors employment	726	723	-3	-0.41%	-0.86%
Nonfarm proprietors employment	5,511	6,909	1,398	25.37%	12.46%

Source: BEA CA25 Local Area Data

It is important to note that this employment information reflects the number of jobs located within the county and within the state, *not* the number of county residents or Pennsylvania residents who work. Because many people commute across county lines to get their job, the numbers in Table 6 do not reflect the number of county residents who are employed. That number appears in Table 7, which shows the total number of your county’s residents who are employed (regardless of whether they work in your county, in a neighboring county, or elsewhere) and unemployed.

Employed	30,533
Unemployed	1,615
Unemployment Rate	5.0%

Source: Bureau of Labor Statistics Local Area Data, 2019

Discussion Questions

1. How does your county's unemployment rate compare to the rate statewide? If your rate is different than the unemployment statewide, why do you think this is?
2. What do you think are some of the specific reasons that your county's unemployment rates is what it is? What role does the mix of local businesses, educational attainment of county residents, and other factors play in this?

Change in Unemployment

The number of residents who are unemployed reflects the strength of the local economy, as well as how readily residents can find a job. It is important to note that the definition of 'unemployed' means that someone does not have a job *and* is actively seeking one, not simply that a person has no job. During tough economic times, some unemployed people may give up on looking for a job, meaning that they are no longer counted in the unemployment rate. A very low unemployment rate can be beneficial to workers in that they should have an easier time finding a job than when the unemployment rate is higher; yet too low an unemployment rate can create difficulties for employers, particularly those who want to expand and need to find new employees.

Statewide the unemployment rate in 2018 was 4.3%, which was a 0.6% net decrease from the 4.9% rate in 2017 (see Table 8). Table 8 also shows how your county's unemployment rate changed over that time period.

	Armstrong County	Pennsylvania
2017	6.1%	4.9%
2018	5.0%	4.3%
12-Month Change	-1.1%	-0.6%

Source: Bureau of Labor Statistics Local Unemployment Statistics, 2019

Discussion Questions

1. How did your county's unemployment rate change between 2017 and 2018?
2. How do changes in your county's unemployment rate compare to what is occurring statewide? Is your county doing worse, about the same, or better than what is occurring across Pennsylvania? What factors might explain these patterns?

Employment by Sector

In addition to understanding how many jobs there are in your county, it also is helpful to understand which types of businesses or sectors account for many of the jobs, and thus how diversified the county's economy is. Table 9 shows the number and percent of jobs in your county by sector. Statewide, 14.3% of all jobs were in the health care and social assistance sector (the classification of sectors is based upon the North American Industrial Classification System (NAICS), which categorizes employers by the primary goods or services they produce). About 10% were in retail trade and about another 10% were in government. An additional 7.8% of jobs were in manufacturing.

Table 9. Employment & Percent Employment by Sector: Armstrong County and Pennsylvania, 2017

	Employment, Armstrong County	Percent of Total Employment	
		Armstrong County	Pennsylvania
Total employment (number of jobs)	25,257		
Farm employment	844	3.3%	1.0%
Nonfarm employment	24,413	96.7%	99.0%
Private nonfarm employment	21,603	85.5%	88.9%
Accommodation and food services	1,425	5.6%	6.6%
Administrative, waste mgmt & remediation services	622	2.5%	5.1%
Arts, entertainment, and recreation	345	1.4%	2.2%
Construction	1,574	6.2%	5.1%
Educational services	158	0.6%	4.0%
Finance and insurance	818	3.2%	5.4%
Forestry, fishing, and related activities	75	0.3%	0.2%
Health care and social assistance	3,488	13.8%	14.3%
Information	286	1.1%	1.3%
Management of companies and enterprises	143	0.6%	1.9%
Manufacturing	2,055	8.1%	7.8%
Mining, quarrying, and oil and gas extraction	2,221	8.8%	0.7%
Other services (except gov't and gov't enterprises)	2,031	8.0%	5.5%
Professional, scientific, and technical services	794	3.1%	6.8%
Real estate and rental and leasing	698	2.8%	4.0%
Retail trade	2,878	11.4%	10.0%
Transportation and warehousing	1,262	5.0%	4.4%
Utilities	239	0.9%	0.4%
Wholesale trade	491	1.9%	3.1%
Government and government enterprises	2,810	11.1%	10.1%
Federal civilian	194	0.8%	1.3%
Military	168	0.7%	0.5%
State and local	2,448	9.7%	8.3%

Source: BEA CA25 Local Area Data, 2019

If cell shows a "D" it means the data was not disclosed due to confidentiality rules.

Discussion Questions

1. Which sectors employ the most people in your county? How does this compare to statewide employment? What factors may be contributing to this?

2. Are many of the jobs in sectors that typically employ many part-time workers or pay relatively low wages, such as the accommodations and food services or retail trade sectors? Or are many of the jobs in sectors that typically pay higher wages, such as manufacturing or professional, scientific and technical services? What might this mean for job opportunities in your county, and for local income?

Top Industries

The top 25 industries by employment in your county appear in Table 10, sorted by rank order. This information reflects total employment across all the businesses or organizations within that industry, such as all the total across all restaurants, not at an individual business level.

Economists and others who study local economies often talk about the importance of having a diversified economy, which means having jobs broadly distributed across a wide variety of sectors rather than having jobs heavily clustered in just a few sectors, such as a ‘one industry town.’ Diversified economies often can weather economic downturns more effectively than economies with many jobs concentrated in a few sectors, because major layoffs or other downturns in an important sector can more easily be balanced by the remaining jobs in the county. You may find it interesting to compare this list to the ‘Employment by Sector’ information in Table 9. The information in Table 10 is more specific than the broader categories used in the prior table.

Rank	NAICS Industry Description
1	Elementary and secondary schools
2	Restaurants and other eating places
3	General medical and surgical hospitals
4	Individual and family services
5	General Merchandise Stores, including Warehouse Clubs and Supercenters
6	School and employee bus transportation
7	Nursing care facilities, skilled nursing
8	Executive, legislative and general government
9	Grocery stores
10	Residential mental health facilities
11	Health and personal care stores
12	Support activities for mining
13	Depository credit intermediation
14	Building equipment contractors
15	Metalworking machinery manufacturing
16	Outpatient care centers
17	General freight trucking
18	Medical equipment and supplies manufacturing
19	Coal mining
20	Iron and steel mills and ferroalloy mfg.
21	Gasoline stations
22	Offices of physicians
23	Offices of other health practitioners
24	Civic and social organizations
25	Oil and gas extraction

Source: PA Department of Labor and Industry - Quarterly Census of Employment and Wages, PA Workforce and Analysis, 4th Quarter, 2018

Discussion Questions

1. How do the top industries in your county compare to the sector information in Table 9? Are many of these industries actually clustered within one of the sectors? What does this suggest about how diversified your county's economy is across sectors? How might your county's economy be impacted if specific sectors suffer an economic downturn?
2. If the economy is heavily concentrated in just a few sectors, which sectors are these, and how at risk might they be to downturn?

Top Employers

The top individual employers located in your county appear in Table 11, with the ranking based upon the total number of people who work for each of these businesses or organizations. Several of these are likely from the same industry, such as medical services or retail.

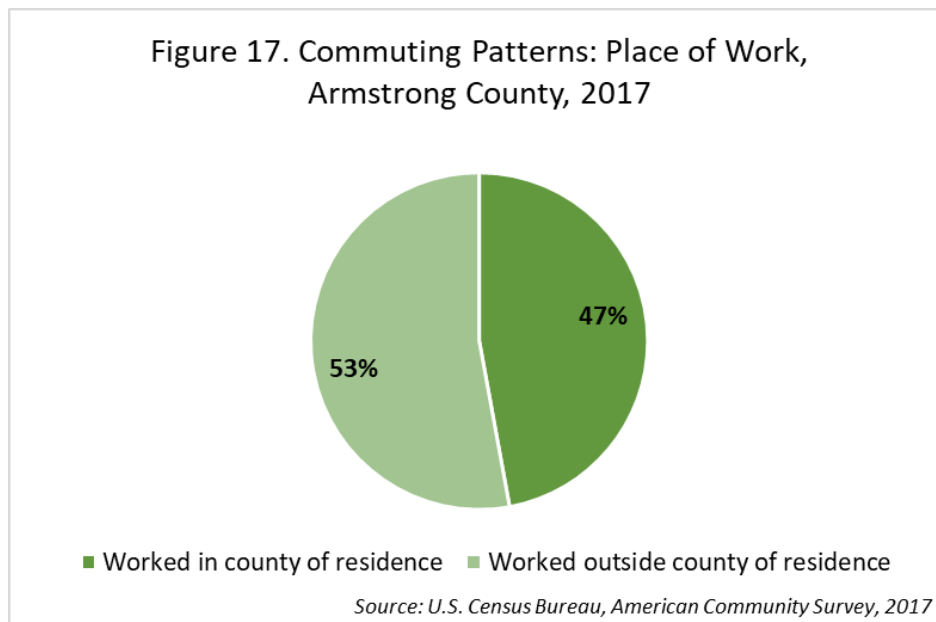
Table 11. Top 25 Employers - Armstrong County, 4th Quarter, 2018	
1	Armstrong County Memorial Hospital
2	Armstrong School District
3	Armstrong County
4	Wal-Mart Associates Inc
5	Rosebud Mining Company
6	Cook Vandergrift Inc
7	State Government
8	ATI Flat Rolled Products LLC
9	Apollo-Ridge School District
10	Federal Government
11	Barker Incorporated
12	Family Counseling Center
13	UFP Parker LLC
14	Evergreen Homes Inc
15	Quality Life Services Sugar Creek
16	Kittanning Care Center LLC
17	Bank of New York Mellon
18	Valley Advantages LLC
19	United Parcel Service Inc
20	Leechburg Area School District
21	KPM HerkulesGroup
22	Carson Industries Inc
23	Shriver Contract Services Inc
24	Lenape Area Vo-Tech School
25	Klingensmith Drug Inc
<i>Source: PA Department of Labor and Industry - Quarterly Census of Employment and Wages, PA Workforce and Analysis, 4th Quarter, 2018</i>	

Discussion Questions

1. Who are the top employers in your county? Are you surprised by any of them, and if so, why?
2. How do these specific employers compare to the top industries (Table 10) and sectors (Table 9) in your county? Are some of the top industries comprised of just a handful of individual employers, and thus not very diversified, or, instead, are they comprised of many smaller employers?

Commuting Patterns

The percentage of your county's working residents who work in your county versus the percentage who commute to a job in a different county (or even state) appears in Figure 17. As mentioned earlier, many Pennsylvanians work in a different county than where they live, so commuting across county borders is relatively common. Statewide in 2017, about 5.2% of Pennsylvania residents worked in a different state, while 70.5% worked in the county where they lived and 24.3% worked in a different Pennsylvania county than where they lived.



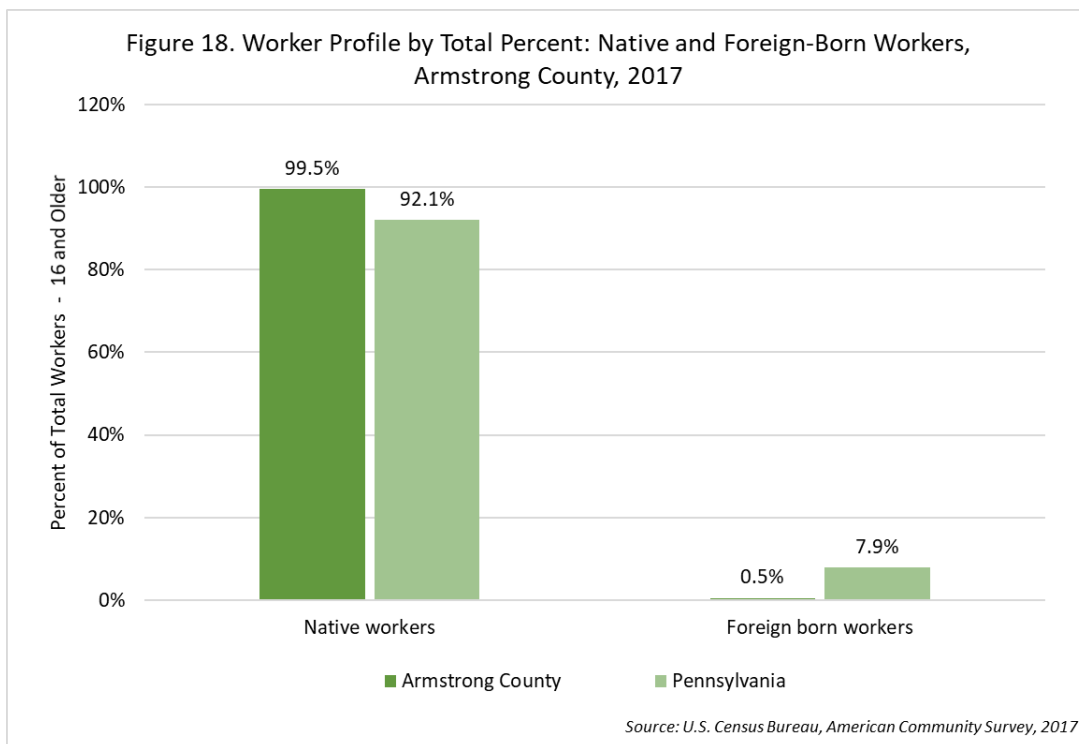
Discussion Questions

1. What percentage of your county's working residents commute to another county to work? What types of jobs are residents typically finding in your county, and in neighboring counties, and how might this affect how many of your county's residents work outside the county? What sectors, industries or employers do you believe may account for many of these commuters? What types of skills and expertise are required in these sectors, and thus may be held by the commuters?
2. In which other counties do you believe many of your county's commuting residents work? Why do you believe they travel to those counties to work?

3. How do you expect commuters to travel in and out of your county, and what are the major roads or transportation systems they use?
4. What impact may such commuting patterns have on local services, such as childcare and transportation services? How might commuting patterns affect local businesses in your county?

Native- and Foreign-Born Workers as Percent of Total Workers

There has been much political discussion about immigration and the role of foreign-born workers. Note that ‘foreign-born’ workers include residents who moved to the U.S. and have become citizens. Foreign-born workers work in many sectors of the economy. They can bring needed skills that a county may be lacking otherwise, such as medical or technology training. Employers that have difficulty finding people to work in certain jobs, such as some jobs in agriculture, meat packing, and restaurants, may rely upon foreign-born workers. In 2017, about 92% of workers in Pennsylvania were native-born, and just under 8% were foreign-born (see Figure 18). Figure 18 also shows the percentage of workers in your county who are native- and foreign-born.



Discussion Questions

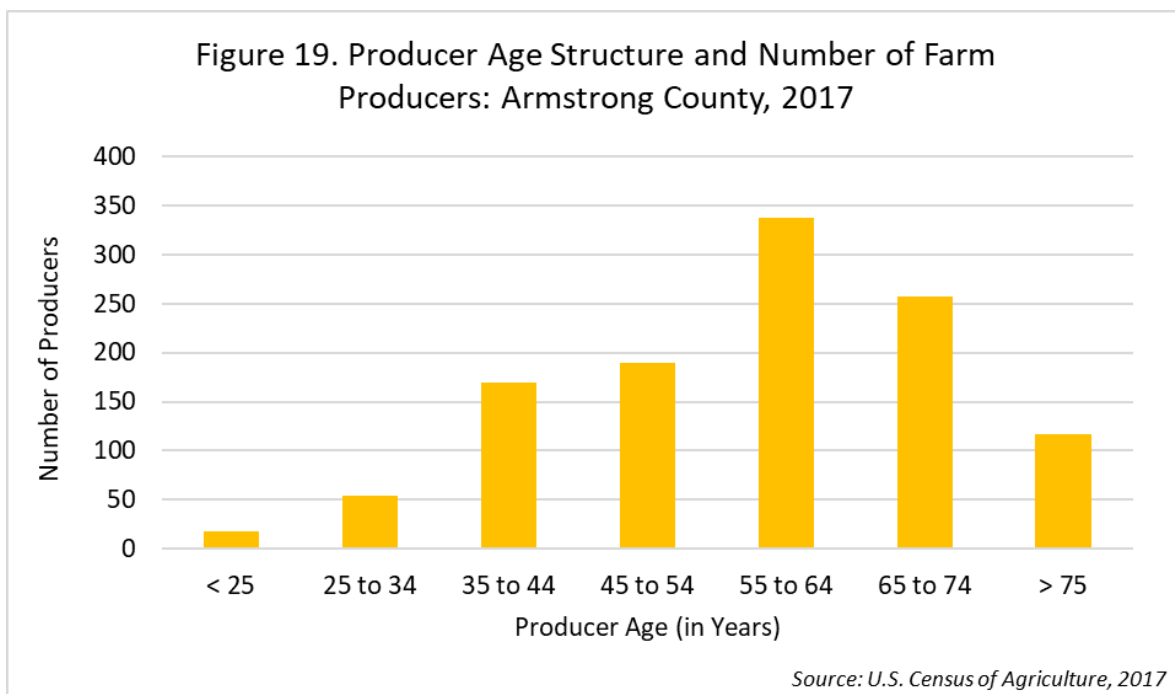
1. How do the percentages of native- and foreign-born workers in your county compare to those across the state?
2. What types of jobs do foreign born workers typically have in your county? Are these largely skilled or unskilled jobs, or is there a mix of both?

Agriculture

Agriculture can be an important part of a community; in addition to producing food, fuel, and fiber, it provides jobs and income to residents, helps maintain open space, and can provide a range of environmental benefits. Agriculture can also play an important cultural role, as well as serving as a historical legacy for how Pennsylvania was founded and grew.

Farmer Demographics

Farmers typically tend to be older than the general population (see Figure 19). The vast majority of farms in Pennsylvania are family-run, which means there can be several generations working together on the farm. The data in Figure 19, which was collected by the U.S. Census of Agriculture, reflects the age range of people who were involved in decision-making on the farm, such as family members and hired managers. There thus may be more than one producer on a farm. The data does not include hired workers or others not involved in significant decision-making.



Statewide in 2017, about 65% of farm operators were male and 35% were female. The number and proportion of female farmers has increased steadily over the past few years, and likely will continue to grow. The number and percentage of female and male farm operators in your county appear in Table 12.

Table 12. Number and Percent of Farm Producers by Sex: Armstrong County, 2017

	Number of Producers	Percent of Producers
Female	369	31.8%
Male	791	68.2%

Source: U.S. Census of Agriculture, 2017

Discussion Questions

1. What is the age structure of your county’s farm economy? How do you think this might change in the future, and what could this mean for your county’s farm economy?
2. What is the proportion of male and female farm producers in your county? How does this compare to the state? How do you think this might change in the future?

Farm Size by Acreage

One frequent method of considering farm size is by the physical acreage that the farm covers. Statewide, about 38% of farms have between 50 and 179 acres, and 15% had between 180 and 499 acres (see Figure 20). The data for your county also appears in Figure 20.

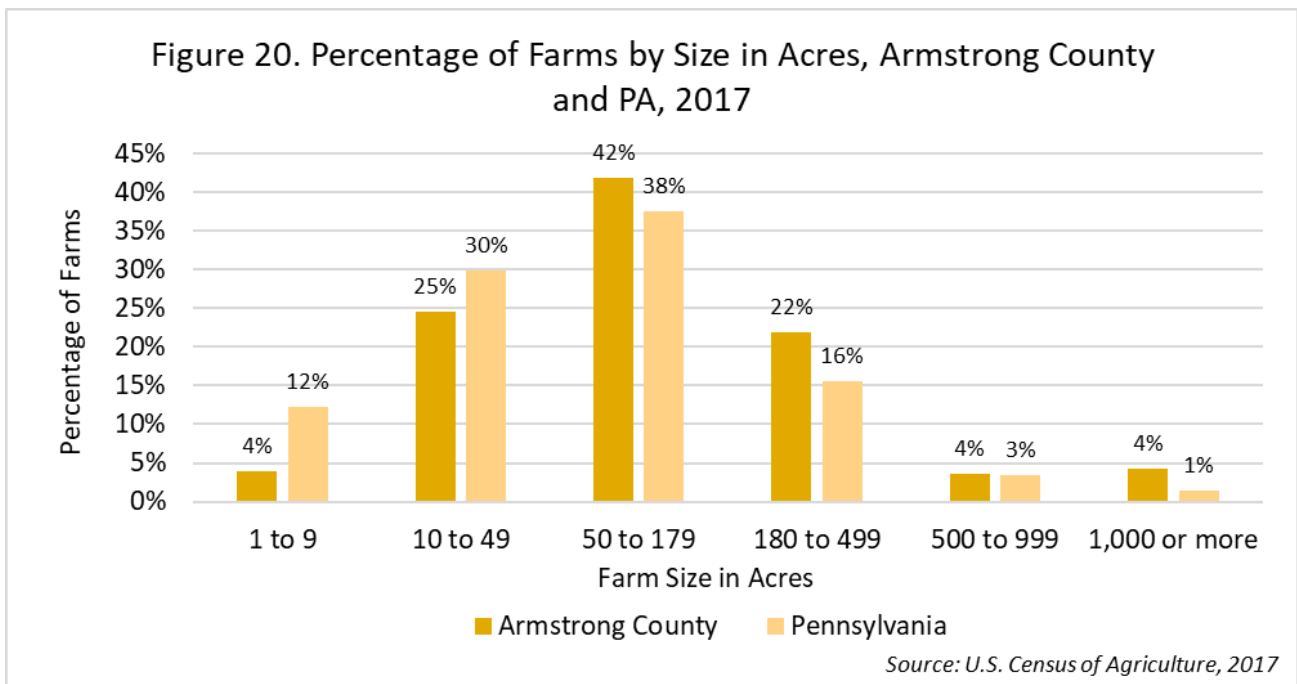


Table 13 shows the number of farms in your county in each acreage size category, as well as the percentage of farms in your county that are in each acreage group.

	Number of Farms	Percent of Farms*
1.0 to 9.9 Acres	26	4%
10.0 to 49.9 Acres	164	25%
50 to 179 Acres	280	42%
180 to 499 Acres	146	22%
500 to 999 Acres	24	4%
1,000 or more Acres	28	4%

Source: Ag Census, 2017
*Numbers do not equal exactly 100 due to rounding

Discussion Questions

1. What’s the most common size of farm by acreage in your county? How many farms of less than 10 acres are there, and what proportion of all farms is this? In contrast, how many farms of 500 or more acres are there, and what proportion of all farms is this?

Farm Size by Sales

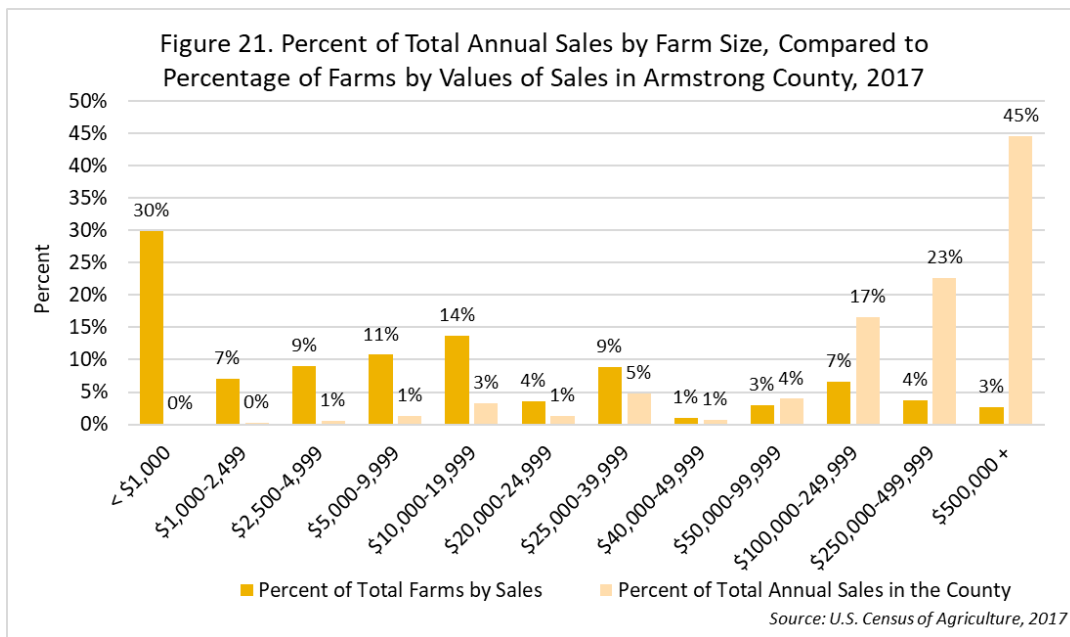
According to the 2017 U.S. Census of Agriculture, about half (49.7%) of farms in Pennsylvania are considered small when measured by sales, with less than \$10,000 in annual sales. In fact, about one in every five Pennsylvania farms (19.4%) have less than \$1,000 in annual sales. Many of these farms with \$10,000 or less in annual sales are lifestyle or hobby farms, used by their owner to supplement their income, for the pleasure of farming, or to produce food for their own consumption. On average, such small farms tend to lose money, and collectively they produce less than 1% of total farm production in Pennsylvania.

In contrast, about one in every five Pennsylvania farms (21.5%) have \$100,000 or more in annual sales. Farms of this size are typically being operated as a major source of income for the family which owns the farm, and they collectively account for 92.5% of total farm production in Pennsylvania. Much of this is produced by the farms with \$1 million or more in annual sales, who collectively accounted for 52.4% of total farm production in Pennsylvania in 2017. Table 14 shows the value of total annual sales by farm size in your county, as well as the percentage of total sales in the county by that size of farm. Figure 21 shows this same information but compares the proportion of farms by sales to the value of total sales. In most Pennsylvania counties, though small in number, the largest farms typically account for the largest proportion of farm production and sales.

Farm Size by Sales	Total Annual Sales by Farm Size	Percent of Total Sales in the County
Farms with less than \$1,000 in Sales	\$46,000	0.1%
Farms with \$1,000-2,499 in Sales	\$84,000	0.2%
Farms with \$2,500-4,999 in Sales	\$204,000	0.5%
Farms with \$5,000-9,999 in Sales	\$532,000	1.3%
Farms with \$10,000-19,999 in Sales	\$1,301,000	3.3%
Farms with \$20,000-24,999 in Sales	\$544,000	1.4%
Farms with \$25,000-39,999 in Sales	\$1,886,000	4.7%
Farms with \$40,000-49,999 in Sales	\$304,000	0.8%
Farms with \$50,000-99,999 in Sales	\$1,584,000	4.0%
Farms with \$100,000-249,999 in Sales	\$6,597,000	16.6%
Farms with \$250,000-499,999 in Sales	\$8,980,000	22.6%
Farms with \$500,000 or more in Sales	\$17,704,000	44.5%
TOTAL	\$39,768,000	100.0%

Source: U.S. Census of Agriculture, 2017

If a cell shows a "D" it means the U.S. Census didn't disclose the data due to confidentiality rules



Discussion Questions

1. Which size of farms account for the largest shares of annual farm sales in your county (see Table 14)? What proportion of farm sales in your county are done by farms that make less than \$1,000 a year in sales? What proportion of farm sales are done by farms with \$100,000 or more in annual sales? With \$250,000 or more in annual sales? With \$500,000 or more in annual sales?
2. How does total sales compare to the proportion of farms of each size, as shown in Figure 23? What does this imply about how concentrated farm production is in your county?

- Collectively, smaller farms typically account for just a small share of total annual farm sales. What important roles do such farms play in your county? What important roles might they play for the farm operators who own and work these smaller farms? How might these farms relate to the amount of acreage being farmed in your county, and thus open space?

Sales by Farms

Across Pennsylvania in 2017, 31.9% of farms sold grain (such as corn and wheat), oilseeds (such as soybeans), or dry beans (see Table 15). About 38.4% of Pennsylvania farms reported selling other field crops during this time period, with the majority of this being hay. About 34% of farms sold cattle or calves, 11.5% sold milk, and 8% sold vegetables. Table 15 shows the number and percentage of farms in your county who sold specific farm products during 2017, and how that compares to the state.

Table 15. Percent of Farms Who Sold Specific Farm Products: Armstrong County and Pennsylvania, 2017

Farm Type with Sales	Armstrong County		Pennsylvania	
	# of Farms	% of Farms*	# of Farms	% of Farms*
Grain, oilseeds, dry beans, and dry peas	194	29.0%	16,952	31.9%
Other crops, including hay	350	52.4%	20,409	38.4%
Fruit and tree nut, including berries	26	3.9%	2,978	5.6%
Nursery, greenhouse, floriculture, and sod	15	2.2%	2,573	4.8%
Christmas trees	16	2.4%	962	1.8%
Vegetables	42	6.3%	4,266	8.0%
Milk	29	4.3%	6,092	11.5%
Cattle and calves	244	36.5%	18,149	34.1%
Hogs	27	4.0%	2,878	5.4%
Horses, ponies, mules, burros, and donkeys	31	4.6%	2,186	4.1%
Poultry and eggs	83	12.4%	7,346	13.8%
Sheep and goat	25	3.7%	3,955	7.4%
Specialty animals	13	1.9%	1,788	3.4%
Total	668		53,157	

Source: U.S. Census of Agriculture

**Numbers do not equal 100 because many farms sell more than one type of product*

If a cell shows a dash "-" it means data does not exist

Discussion Questions

- What type of farm products are commonly produced and sold in your county? What percentage of farms are selling each type of product, and how does this compare to farming statewide?

Farm Sales by Farm Product

Milk from farms accounted for about 25.5% of the value of Pennsylvania farm sales in 2017, the top product by total sales. Poultry and eggs accounted for about 21.7% of total farm sales during that same year. Sales from nurseries and greenhouses accounted for another 13.1% of total farm sales, with the majority of this resulting from sales of mushrooms. Agricultural product sales within your own county appear in Table 16, so you can compare to the state.

Table 16. Percentage of Farm Sales by Farm Product: Armstrong County and Pennsylvania, 2017

Farm Product	Armstrong County		Pennsylvania	
	Value of Sales	% of Sales	Value of Sales	% of Sales
Grain, oilseeds, dry beans, and dry peas	\$12,309,000	31.0%	\$980,977,000	12.6%
Other crops, including hay	\$6,888,000	17.3%	\$360,622,000	4.6%
Fruit and tree nut, including berries	\$272,000	0.7%	\$171,575,000	2.2%
Nursery, greenhouse, floriculture, and sod	\$570,000	1.4%	\$1,015,948,000	13.1%
Christmas trees	\$682,000	1.7%	\$28,812,000	0.4%
Vegetables	\$2,285,000	5.7%	\$187,319,000	2.4%
Milk	\$10,958,000	27.6%	\$1,979,362,000	25.5%
Cattle and calves	\$5,376,000	13.5%	\$625,530,000	8.1%
Hogs	\$87,000	0.2%	\$572,495,000	7.4%
Horses, ponies, mules, burros, and donkeys	\$152,000	0.4%	\$44,140,000	0.6%
Poultry and eggs	\$132,000	0.3%	\$1,684,535,000	21.7%
Sheep and goat	\$21,000	0.1%	\$17,140,000	0.2%
Specialty animals	\$22,000	0.1%	\$33,567,000	0.4%
Total	\$39,768,000		\$7,758,884,000	

Source: U.S. Census of Agriculture

If a cell shows a "D" it means the U.S. Census didn't disclose the data due to confidentiality rules

If a cell shows a dash ("-") it means data does not exist

Discussion Questions

1. What are the most important types of farm products in your county, as measured by sales? What, if anything, surprised you about the most common types of farm products in your county?

Farm Employment as a Percentage of County Employment

Farms can be an important component of a local economy through the value of sales, profits and wages earned by farmers, and employment. Yet for most Pennsylvania counties, farms account for only a small percentage of all employment in the county. Statewide, only about 1% of all jobs were on farms (see Table 17). The proportion of farm and nonfarm employment in your own county also appears in Table 17 so you can see how you compare to the state.

	2012	2017	% Change	Percent of Total Employment 2017	
				Armstrong County	Pennsylvania
Total Employment	25,563	25,257	-1.20%		
Farm Employment	834	844	1.20%	3.34%	1.07%
Nonfarm Employment	24,729	24,413	-1.28%	96.66%	98.93%

Source: BEA CA25 Local Area Data, 2019

Discussion Questions

1. How important is farm employment in your county compared to employment in other sectors? In what other ways might farm employment be important?

Consumer Food Expenditures

A county's agricultural economy typically has two separate components: 1) the production component that is reflected by the county's farms and the products generated by these businesses, firms that provide inputs to farms, and those businesses who process farm products and; 2) the consumption component composed of grocery stores and restaurants that deliver food to consumers, and exists because county residents need to eat.

Understanding these two components is important because while they may interrelate, the consumption component in the county will continue regardless with what happens to farms in the county. The county's residents have to eat and residents will continue to spend money to do so, regardless of where the food is produced. Table 18 provides a snapshot of consumer food expenditures in your county for 2017. 'Food away from home' includes spending at restaurants and other food venues outside of the home.

Total annual consumer expenditures	Armstrong County
All Food & Alcoholic Beverages	\$245,564,190
All Food	\$231,669,126
Food at home	\$137,171,394
Cereals and bakery products	\$19,656,432
Meats, poultry, fish, and eggs	\$28,157,274
Dairy products	\$13,979,790
Fruits and vegetables	\$29,173,986
Other food at home	\$46,232,154
Food away from home	\$94,469,490
Alcoholic beverages	\$13,895,064

*Source: Consumer Expenditure Survey, U.S. Bureau of Labor Statistics, September, 2018
U.S. Census Bureau, American Community Survey, 2017*

Discussion Questions

1. How much do residents in your county annually spend on food? What specific types of food items account for the largest share of their food spending?
2. How does food spending at home compare to spending away from home?
3. How does total resident spending on food compare to the total value of farm sales in your county, as shown in Table 14? What opportunities may there be for farmers in your county to capture a larger share of this spending?

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The Center conducts more detailed analysis around these and other topics of interest. For more information please contact:

Cristy Halerz Schmidt, Applied Research Educator

cah215@psu.edu

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