

Introduction

The recently released age cohort data from the 2020 Census show that rural Pennsylvania is aging faster than urban Pennsylvania. This is not a new trend. Since 1990, rural Pennsylvania’s population has aged faster than the urban population. To better understand the implications of an aging population, the Center for Rural Pennsylvania examined historic age cohort data and found that:

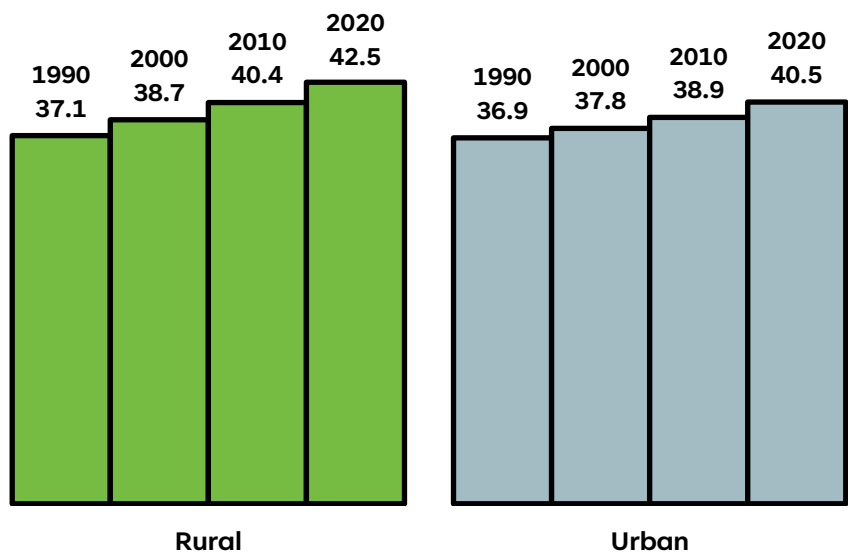
- 24 of Pennsylvania’s 67 counties have more senior citizens (65 years old and older) than youth (under 20 years old).
- Rural Pennsylvania has a higher age dependency ratio, which is a rough approximation of economic dependency in a population, than urban Pennsylvania.
- Pennsylvania is not alone in having a high number of senior citizens.
- The aging rural population has implications for education, the workforce, housing, households and families, and local government finances.

Average Age¹

According to Center for Rural Pennsylvania estimates, rural residents are 42.5 years old, on average, which is an increase of 2.1 years from the 2010 average of 40.4 years old. The average age of urban residents increased as well, from 38.9 in 2010 to 40.5 in 2020, which is an increase of 1.6 years.

This aging trend is not unique to rural and urban Pennsylvania. In 2010, the average age of a rural American was 38.2 years old, and in 2020, was 40.3. Similarly, in 2010, the average age of an urban American was 38.2, and 38.8 in 2020.

Figure 1: Average Age of Rural and Urban Pennsylvanians, 1990 to 2020



Data source: Decennial Censuses, U.S. Census Bureau.

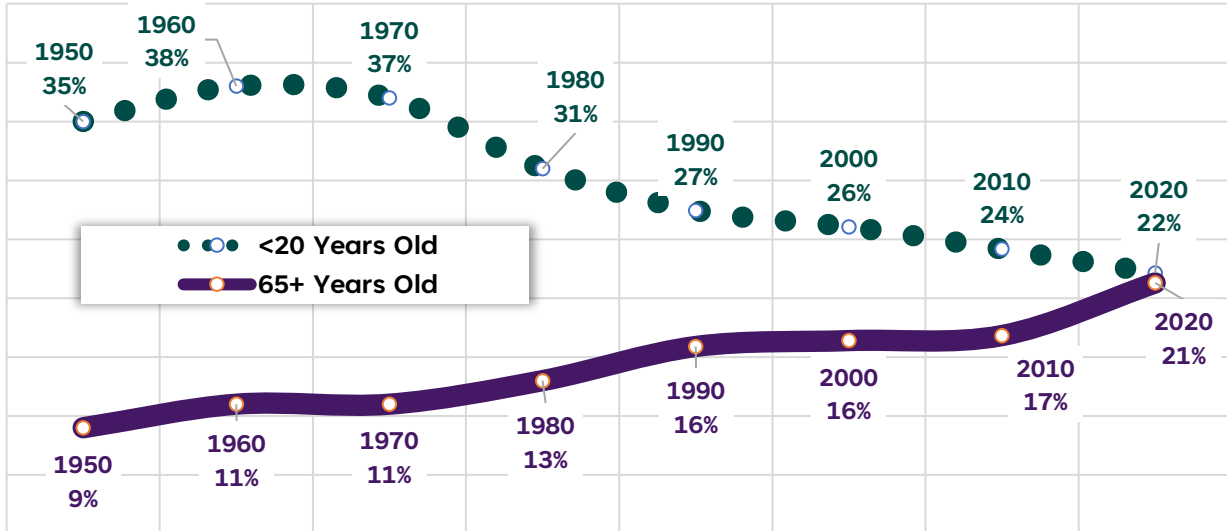
Increase in Senior Citizens

One reason why rural Pennsylvania’s population is aging is due to an increase in senior citizens (aged 65 years old and older) and a decrease in youth (under 20 years old). From 2010 to 2020, rural Pennsylvania

¹ Average age was calculated by multiplying single-year age cohorts by their age. This product was then divided by the total population. For people under 1 year old, their age was assumed to be 0.5 years old. For people 100 years old and older, their age was assumed to be 102.

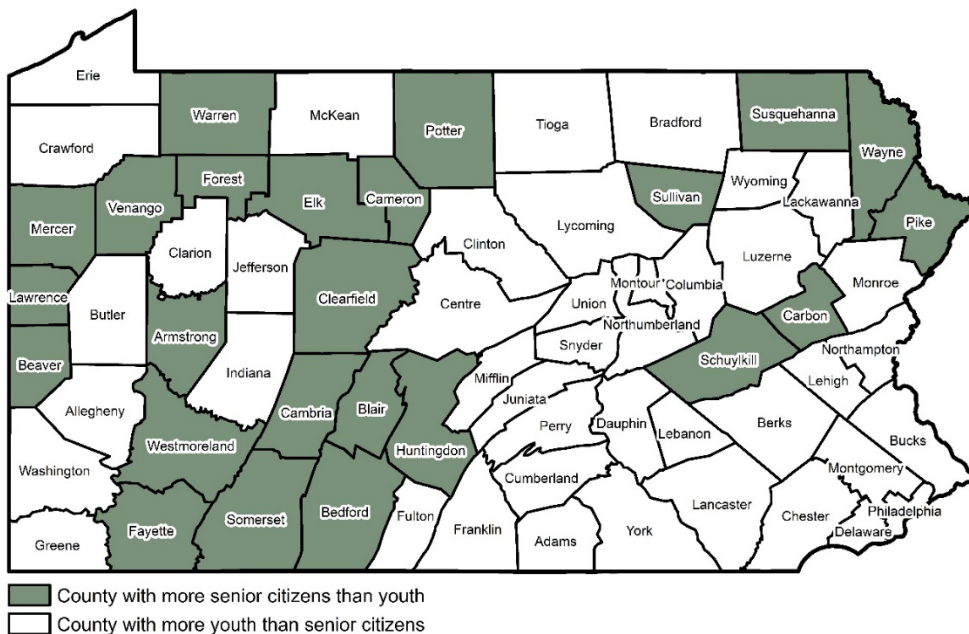
had a 23 percent increase in the number of senior citizens and an 11 percent decrease in the number of youth. During the same period, urban Pennsylvania had a 28 percent increase in senior citizens and a 4 percent decrease in youth. The decrease in rural youth has been ongoing since 1970 (See Figure 2). In 2020, 24 Pennsylvania counties had more senior citizens than youth (See Figure 3).

Figure 2: Percent of Rural Pennsylvania’s Population Under Age 20 and Age 65 and Older, 1950 to 2020



Data source: Decennial Censuses, U.S. Census Bureau.

Figure 3: Pennsylvania Counties with More Senior Citizens than Youth, 2020



Data source: 2020 Census, U.S. Census Bureau.

Comparing Pennsylvania Senior Citizens to Those in Other States

The five states with the largest number of senior citizens (65 years old and older) in 2020 were: California (6.02 million), Florida (4.57 million), Texas (3.92 million), New York (3.41 million), and Pennsylvania (2.48 million). Another way to compare states is to look at the percent of the population

that is 65 years old and older. The five states with the highest percentages were: Maine (22 percent), Florida (21 percent), Vermont (21 percent), West Virginia (20 percent), and Montana (20 percent). Pennsylvania had the ninth highest ratio at 19 percent.

Age Dependency Ratio

Another way to understand population is to look at dependency ratios. According to the Census Bureau, this ratio provides a rough approximation of economic dependency in a population by dividing the dependent-age populations (children under 15 years old and adults 65 and older, who are not generally expected to work) by the working-age population (15 to 64 years old). The higher the ratio the more dependent the population.

In 2020, the age dependency ratio in rural Pennsylvania was 59.3 and in urban Pennsylvania, it was 54.7. At the county level, Philadelphia (45.6), Forest (39.3), and Centre (37.9) had the lowest age dependency ratios. The three counties with the highest ratios were Sullivan (73.8), Cameron (72.6), and Potter (71.0).

The U.S. age dependency ratio was 53.8 in 2020. The three states with the lowest ratios were Massachusetts (50.0), California (49.9), and Colorado (49.9). The three states with the highest ratios were South Dakota (61.8), Montana (60.8), and Idaho (60.3). Among all 50 states, Pennsylvania had the 23rd highest with 55.9.

Generational Cohorts

A popular way to understand a population's age structure is to look at generational cohorts. These cohorts can be thought of as groups of people who were born in the same period and grew up sharing similar experiences. Pew Research has identified six generational cohorts. The two largest groups are Baby Boomers (born 1946 to 1964) and Generation Z (born after 1996). The first Baby Boomer turned 65 years old in 2011. From 2021 to 2028, approximately 44,000 rural Pennsylvanians will turn 65 years old every year. In urban Pennsylvania, more than 119,000 people will turn 65 years old every year. The growth of Generation Z is primarily driven by the fact that the end year for this cohort has not yet been determined (See Figure 4).

Implications

There are many implications of an aging population. The Center has identified five for more consideration.

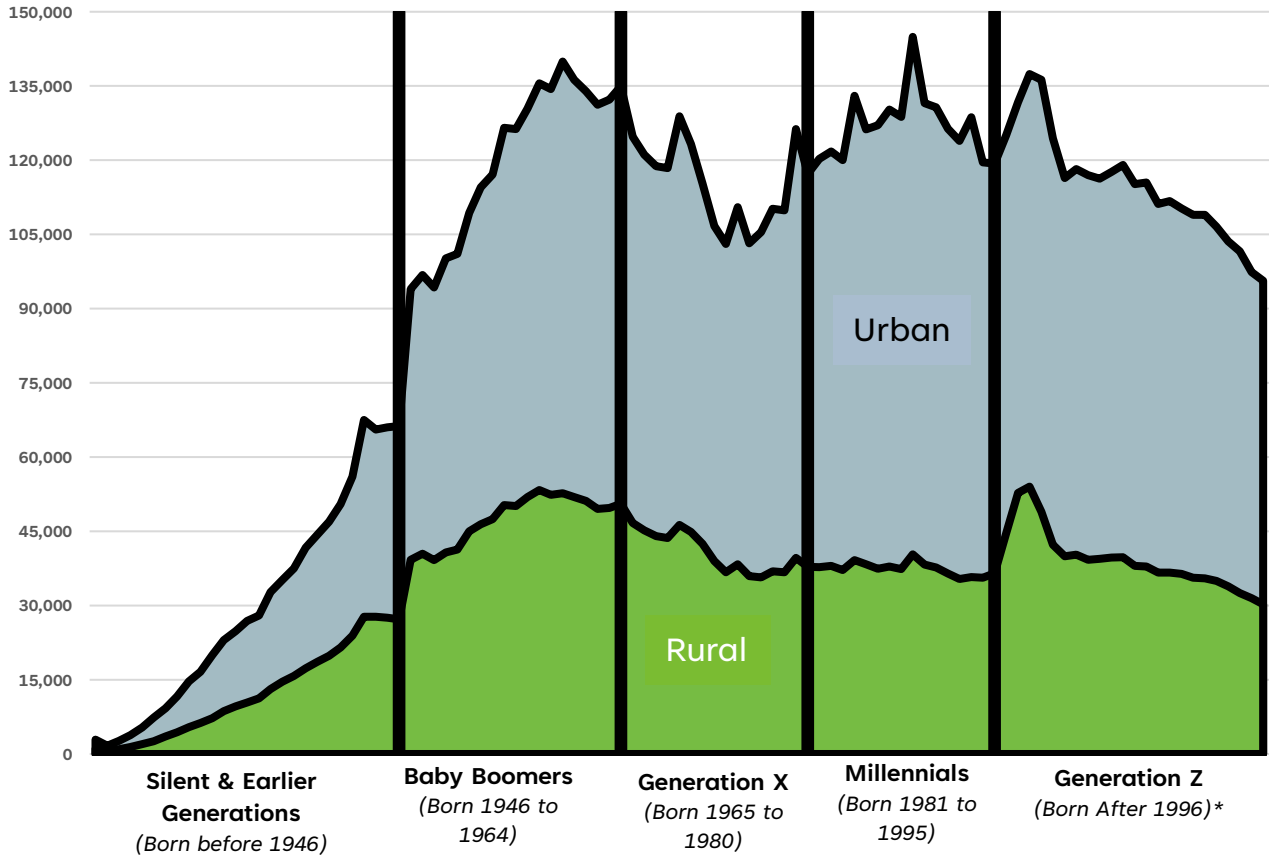
Education

From 2010-11 to 2021-22, the number of children enrolled in rural school districts decreased 16 percent. Enrollment projections from the Pennsylvania Department of Education indicate that this trend will continue. The likely cause of this trend is a decrease in the number of births. Perhaps because of enrollment decreases, 38 percent of rural school districts had a net decrease in the number of school buildings. The decrease in enrollment is not just limited to K-12 public schools. Colleges and universities throughout Pennsylvania have seen a 12 percent decrease in enrollment between fall of 2010 and 2021.

Economic Development

In 2010, rural Pennsylvania had a labor force participation rate of 49 percent. This number means that almost one-half of the working age rural residents were employed. By 2021, this rate dropped to 47 percent. The decrease is driven by several factors, including an increase in retirement, increase in working age adults with a disability, and overall population decline. In addition, those in the labor force

Figure 4: Generational Cohorts in Rural and Urban Pennsylvania, 2020



*According to Pew Research, no chronological endpoint has been set for Generation Z. Data sources: 2020 Census, U.S. Census Bureau, and the Pew Research.

are getting older. In 2010, 21 percent of rural workers were 55 years old and older. In 2021, 27 percent of workers were over age 55. With an aging population, labor shortages will likely continue; at the same time, the demand for certain aging services, especially health care, will likely increase.

Housing

As people age, there may be a shift in housing demand from large family homes to smaller homes, which are easier to maintain and offer more accessibility. In addition, interest in revitalizing older housing units in boroughs and cities is likely to continue. One of the challenges many areas will face is how to keep senior citizens in their homes longer.

Families/Households

Over the past 30 years, the average number of people in rural households has steadily decreased. The trend is largely being driven by a decrease in households with children under age 18 and an increase in people living alone.

Local Government Implications

Echoing the decrease in the labor force, many rural municipalities may experience a decrease in earned income tax (EIT) revenues. From 2010 to 2021, 21 percent of reporting rural municipalities had a decrease in EIT revenues, after adjusting for inflation. During this time, EIT went from 48 percent of rural municipal tax revenues to 46 percent.

Recreation is another local government implication. As the population ages, the demand for children’s playground equipment will likely be eclipsed by the need for facilities suited to older adults, such as walking trails and various athletic courts.

These are just some of the many implications of aging rural and urban population. It is important for decision makers to explore and understand how these changes will potentially affect their communities and make necessary future plans.

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Pennsylvania County Age Cohorts, 2020

Data source: 2020 Census, U.S. Census Bureau.

	Total Population, 2020	<20 Years Old, 2020		20 to 64 Years Old, 2020		65+ Years Old, 2020	
		#	%	#	%	#	%
Pennsylvania	13,002,700	3,001,038	23.1%	7,518,608	57.8%	2,483,054	19.1%
Adams	103,852	23,930	23.0%	57,522	55.4%	22,400	21.6%
Allegheny	1,250,578	262,949	21.0%	744,769	59.6%	242,860	19.4%
Armstrong	65,558	13,641	20.8%	36,961	56.4%	14,956	22.8%
Beaver	168,215	35,780	21.3%	95,171	56.6%	37,264	22.2%
Bedford	47,577	10,319	21.7%	26,119	54.9%	11,139	23.4%
Berks	428,849	107,880	25.2%	243,439	56.8%	77,530	18.1%
Blair	122,822	27,128	22.1%	68,346	55.6%	27,348	22.3%
Bradford	59,967	14,277	23.8%	32,854	54.8%	12,836	21.4%
Bucks	646,538	146,492	22.7%	372,314	57.6%	127,732	19.8%
Butler	193,763	44,274	22.8%	110,814	57.2%	38,675	20.0%
Cambria	133,472	28,876	21.6%	73,369	55.0%	31,227	23.4%
Cameron	4,547	884	19.4%	2,405	52.9%	1,258	27.7%
Carbon	64,749	13,795	21.3%	36,746	56.8%	14,208	21.9%
Centre	158,172	29,839	18.9%	104,440	66.0%	23,893	15.1%
Chester	534,413	137,098	25.7%	305,187	57.1%	92,128	17.2%
Clarion	37,241	8,724	23.4%	20,468	55.0%	8,049	21.6%
Clearfield	80,562	16,147	20.0%	46,894	58.2%	17,521	21.7%
Clinton	37,450	9,135	24.4%	20,632	55.1%	7,683	20.5%
Columbia	64,727	14,902	23.0%	36,642	56.6%	13,183	20.4%
Crawford	83,938	19,556	23.3%	45,981	54.8%	18,401	21.9%
Cumberland	259,469	59,757	23.0%	149,235	57.5%	50,477	19.5%
Dauphin	286,401	69,067	24.1%	166,995	58.3%	50,339	17.6%
Delaware	576,830	145,880	25.3%	331,086	57.4%	99,864	17.3%
Elk	30,990	6,427	20.7%	17,500	56.5%	7,063	22.8%
Erie	270,876	64,766	23.9%	154,623	57.1%	51,487	19.0%
Fayette	128,804	26,680	20.7%	73,185	56.8%	28,939	22.5%
Forest	6,973	739	10.6%	4,729	67.8%	1,505	21.6%
Franklin	155,932	38,578	24.7%	85,265	54.7%	32,089	20.6%
Fulton	14,556	3,373	23.2%	7,990	54.9%	3,193	21.9%
Greene	35,954	7,722	21.5%	20,968	58.3%	7,264	20.2%
Huntingdon	44,092	9,322	21.1%	25,217	57.2%	9,553	21.7%
Indiana	83,246	19,747	23.7%	46,292	55.6%	17,207	20.7%
Jefferson	44,492	10,243	23.0%	24,365	54.8%	9,884	22.2%
Juniata	23,509	5,738	24.4%	12,852	54.7%	4,919	20.9%
Lackawanna	215,896	48,609	22.5%	122,560	56.8%	44,727	20.7%
Lancaster	552,984	142,897	25.8%	303,953	55.0%	106,134	19.2%
Lawrence	86,070	19,073	22.2%	47,442	55.1%	19,555	22.7%
Lebanon	143,257	35,672	24.9%	77,857	54.3%	29,728	20.8%
Lehigh	374,557	92,546	24.7%	215,243	57.5%	66,768	17.8%
Luzerne	325,594	71,436	21.9%	187,486	57.6%	66,672	20.5%
Lycoming	114,188	26,500	23.2%	64,349	56.4%	23,339	20.4%
McKean	40,432	9,327	23.1%	22,728	56.2%	8,377	20.7%
Mercer	110,652	24,788	22.4%	60,687	54.8%	25,177	22.8%
Mifflin	46,143	11,088	24.0%	24,867	53.9%	10,188	22.1%
Monroe	168,327	38,944	23.1%	99,349	59.0%	30,034	17.8%
Montgomery	856,553	203,070	23.7%	493,579	57.6%	159,904	18.7%
Montour	18,136	4,133	22.8%	9,937	54.8%	4,066	22.4%
Northampton	312,951	71,595	22.9%	178,974	57.2%	62,382	19.9%
Northumberland	91,647	20,241	22.1%	51,600	56.3%	19,806	21.6%
Perry	45,842	10,933	23.8%	25,738	56.1%	9,171	20.0%
Philadelphia	1,603,797	372,043	23.2%	1,002,682	62.5%	229,072	14.3%
Pike	58,535	12,405	21.2%	32,942	56.3%	13,188	22.5%
Potter	16,396	3,562	21.7%	8,710	53.1%	4,124	25.2%
Schuylkill	143,049	30,122	21.1%	81,767	57.2%	31,160	21.8%
Snyder	39,736	10,261	25.8%	21,781	54.8%	7,694	19.4%
Somerset	74,129	14,885	20.1%	41,830	56.4%	17,414	23.5%
Sullivan	5,840	1,125	19.3%	3,019	51.7%	1,696	29.0%
Susquehanna	38,434	8,303	21.6%	21,009	54.7%	9,122	23.7%
Tioga	41,045	9,554	23.3%	22,179	54.0%	9,312	22.7%
Union	42,681	10,112	23.7%	24,524	57.5%	8,045	18.8%
Venango	50,454	11,139	22.1%	27,372	54.3%	11,943	23.7%
Warren	38,587	8,258	21.4%	21,192	54.9%	9,137	23.7%
Washington	209,349	45,470	21.7%	118,643	56.7%	45,236	21.6%
Wayne	51,155	9,462	18.5%	29,100	56.9%	12,593	24.6%
Westmoreland	354,663	72,843	20.5%	198,147	55.9%	83,673	23.6%
Wyoming	26,069	5,741	22.0%	14,638	56.2%	5,690	21.8%
York	456,438	111,236	24.4%	261,349	57.3%	83,853	18.4%