

Chapter 14

Population and Housing Characteristics

Introduction

This chapter will review the population and housing characteristics of the Shippensburg Area, including present trends and projections for the future. This chapter includes discussion about expected housing increases and the anticipated demand for land zoned for residential use over the next ten and twenty years.

It is useful to begin by considering the pattern of residential development that has occurred so far. The growth pattern of the Shippensburg region has been strongly affected by the Borough's history of providing a variety of community and public services to the surrounding communities: public water and sewer services, road infrastructure, and a downtown center for people of the region to meet and socialize to name the most obvious. We expect that the Borough will continue to serve the Region in this way as residential development expands in the neighboring municipalities.

There is little land available for new development in either the Borough or the Township, as much of it has already been developed or is within proposed residential subdivision plans. Since 2000, Shippensburg Township has had several higher density residential subdivisions proposed; those that were not yet built as of the publication date of this Plan were shown in the previous chapter on the Approved and Proposed Major Subdivision and Land Development Plans Map, Figure 13.4. The proposed residential activity in the Township will be included in the discussion of the housing needs for the region and used as an indicator to compare how the recent growth rate will affect the number of housing units needed in the next ten years for this region. This growth will affect the Borough, Township and the University as many of the proposed subdivision plans are proposing additional rental units that may be available to the students attending Shippensburg University as off-campus housing.

This chapter includes tables that show past and present conditions as well as projections of future growth. This information is intended to assist local officials in the decision-making process, as well as point out opportunities for intermunicipal cooperation. By presenting information from a school district wide perspective, each municipality can better understand how it fits into the region and what kind of growth is occurring in other neighboring municipalities.

Demographics

SUMMARY OF BASIC DEMOGRAPHIC INFORMATION

The U.S. Bureau of the Census presents the information from the decennial national census under a wide variety of parameters. The most basic information is provided below in Figure 14.1; Appendix A includes tables that provide a more detailed breakdown. This information is analyzed in the text that follows. The Census Bureau defines "household" as "all the people who occupy a housing unit as their usual place of residence." This includes individuals who live alone as well as any combination of people who may reside together. In contrast, "family" is a *type* of household, and is defined as "two or more people who reside together and who are related by birth, marriage, or adoption." Also, the census counts population by place of *actual residents* on the census date, which is April 1. As a result, University students living in the Borough or the Township (including those in dormitories) are counted as residents.

FIGURE 14.1: BASIC DEMOGRAPHIC CHARACTERISTICS

All figures from 2000 Census. See preceding text for explanation of difference between "household" and "family." "Region" indicates the Borough and the Township combined.

	BOROUGH	TOWNSHIP	REGION TOTAL
Total Population	5,586	4,504	10,090
Total Households	2,404	860	3,264
Total Families	1,101	385	1,486
<i>Racial Composition</i>			
White	94.16%	93.65%	93.93%
African-American	3.44%	3.73%	3.57%
Other, including mixed racial composition	2.40%	2.62%	2.50%
<i>Household Characteristics</i>			
Average number of persons	2.32	2.49	*
Married-couple households	34.5%	34.4%	34.7%
Households with children under 18	20.9%	20.6%	22.9%
Female-headed households	9.9%	6.5%	7.5%
Single persons	33.4%	25.3%	31.2%
Persons over 65 living alone	15.1%	6.3%	12.8%
<i>Age Characteristics</i>			
Median age	28	20	*
Percentage of persons under 18	17.6%	7.5%	13.1%
Percentage of persons aged 18-24	28.5%	68.5%	46.3%
Percentage of persons aged 25-44	21.8%	11.0%	17.0%
Percentage of persons aged 45-64	16.4%	6.2%	11.9%
Percentage of persons aged 65 and over	15.6%	6.8%	11.7%
<i>Income Characteristics</i>			
Median household income	\$27,660	\$27,661	*
Median family income	\$39,896	\$40,521	*
Per capita income	\$14,816	\$8,712	*
Persons below poverty line	28.6%	36.8%	32.2%
Families below poverty line	9.4%	8.1%	9.1%

SOURCE: U.S. Bureau of the Census, 2004.

* These data cannot be determined for the Region from available information.

In addition to the information shown in the preceding figure, the Township population includes 2,243 dormitory residents¹ for Shippensburg University: nearly half (49.8%) of the entire Township population. These totals for the Township and the Borough include off-campus residents too, however the non-student population has not been separated from the student population.

The effects of the large proportion of students are reflected in the high proportion of single-person households, low median age, a high percentage of persons aged 18 to 24 (extraordinarily high in the Township), and a large percentage of persons below poverty level (again, more pronounced in the Township).

¹ Shippensburg University

There does not seem to be a high degree of diversity, which could be due to the fact that the University draws much of its student population from the local area, therefore the racial demographics mimic that of the State and region.

Shippensburg Region Population and Housing Trends

Figure 14.2 shows 1990 and 2000 total population, land area, and density information in persons per square mile for the municipalities that comprise the Shippensburg Area School District. Figure 14.3 provides population projections by number and percent change. Information for the Borough and the Township is shown in bold-faced print.

FIGURE 14.2: POPULATION, LAND AREA, AND DENSITY

Municipality	Area (sq.mi.)	1990 Population	1990 Density*	2000 Population	2000 Density*
Shippensburg Boro.	2.0	5,331	2,665.5	5,586 (+4.8%)	2,793.0
Shippensburg Twp.	2.5	4,606	1,842.4	4,504 (-2.2%)	1,801.6
Southampton Twp. (Cumberland Co.)	52.5	3,552	67.7	4,787 (+34.8%)	52.5
Southampton Twp. (Franklin Co.)	38.0	5,484	144.3	6,138 (+11.9%)	161.5
Hopewell Twp.	28.0	1,913	68.3	2,096 (+9.6%)	74.9
Orrstown Boro.	0.1	220	2,200.0	231 (+5.0%)	2,310.0
School District Total	123.1	21,106	171.5	23,342 (+10.6%)	189.6

SOURCE: U.S. Bureau of the Census, 2004.

* Persons per square mile.

The high population densities for the two boroughs are typical of small urban areas; the similarly high density for Shippensburg Township is more remarkable because this figure is substantially higher than any of the other townships shown. This figure suggests that the Township has a more urban (or at least suburban) character than what is typical for the area.

The increase in the Borough's population is not typical: most Pennsylvania boroughs experienced population loss in the 1990-2000 period. The slight drop in the Township's population is also unusual. It can be argued that the increase in the Borough population is due to the fact that the University was increasing enrollment during this period, but no new student housing was constructed.² As a result, a larger number of students were forced to find off-campus housing, most of it in the Borough. The drop in the Township population is more difficult to explain, but may be due to a low rate of construction for new housing and a declining number of persons per household. The change in University enrollment would have had little effect on the Township population as the amount of student housing remained static during the period.

² The newest dormitory is Seavers Hall, completed in 1976; Stone Ridge Commons is a newer apartment facility in Shippensburg Township that is leased by the University for student housing, but, for the purposes of the census, is considered to be a multi-family dwelling rather than a dormitory. Stone Ridge residents were not included in the "dormitory" population provided in the 2000 census records.

FIGURE 14.3: POPULATION ESTIMATES AND PROJECTIONS THROUGH 2020

Percentages shown are anticipated rates of increase between decennial censuses. For example, the increase of 12.4% in the population of Shippensburg Borough is over the 2000-2010 period. The five-year intervals were skipped in order to allow better comparison among all of the communities, and inter-census estimates are not available for the Franklin County communities.

Municipality	2000 Census	2005 Estimate	2010 Projection	2015 Projection	2020 Projection
Shippensburg Boro.	5,586	6,052	6,279 (+12.4%)	6,484	6,667 (+6.2%)
Shippensburg Twp.	4,504	4,931	5,129 (+13.9%)	5,308	5,468 (+6.6%)
Southampton Twp. (Cumberland Co.)	4,787	5,662	6,069 (+26.8%)	6,436	6,763 (+11.4%)
Southampton Twp. (Franklin Co.)	6,138	*	6,627 (+8.7%)	*	7,359 (+11.0%)
Hopewell Twp.	2,096	2,424	2,576 (+22.9%)	2,714	2,836 (+10.1%)
Orrstown Boro.	231	*	256 (+10.8%)	*	274 (+7.0%)
School District Total	23,342	n/a	26,981 (+15.6%)	n/a	29,367 (+8.8%)

SOURCE: U.S. Bureau of the Census, 2004; Cumberland County Comprehensive Plan, 2003; Cumberland-Franklin Joint Municipal Authority Act 537 Plan Update, 2000.

* 2005 and 2015 population estimates not available for Franklin County communities.

According to the census figures, the Borough gained population from 1990 through 2000. This is against the national trend of populations relocating outside of urbanized and local centers into surrounding suburban and rural areas. The reason for this anomalous pattern is reviewed in the preceding paragraph. The Township actually lost population from 1990 through 2000. Given the level of development since the 2000 census, it is unlikely that this trend will continue.

Together, the Borough and the Township are anticipating a total population increase of 1,318 persons between the 2000 Census and 2010, and 2,045 persons between the 2000 census and 2020. The latter is the more critical figure for our purposes, as it suggests the number of additional housing units that will need to be provided over the life of this plan. Housing issues are discussed below in greater detail.

Housing

It is necessary to review the housing data for both the Borough and the Township with an understanding of the effect of student housing. While the on-campus dormitories are not included in the Township's housing stock in the chart shown below (they are considered "group quarters" rather than housing available to the general public), the Borough and Township both provide a number of rental units for students who prefer to live off-campus. These units are included, as they are essentially market units available to anyone.

FIGURE 14.4: BASIC HOUSING & OCCUPANCY CHARACTERISTICS

All figures from 2000 Census; "Region" indicates the Borough and the Township combined.

	BOROUGH		TOWNSHIP		REGION TOTAL	
	1990	2000	1990	2000	1990	2000
Owner-occupied housing units	1,014	989	473	457	1,487	1,446
Renter-occupied housing units	1,217	1,408	352	403	1,569	1,451
Total Occupied Housing Units	2,231	2,397	835	860	3,056	3,257
Vacant housing units	135	205	39	78	174	283
Total All Housing Units	2,366	2,602 (+10.0%)	864	938 (+8.6%)	3,230	3,540 (+9.6%)

SOURCE: U.S. Bureau of the Census, 2004.

The most interesting observation from the preceding figure is that both the Borough and the Township experienced a *drop* in the number of owner-occupied units, but a significant increase in the number of rental units such that the total number of units rose. It can be assumed that this reflects the effect of demand by students (and perhaps some University staff as well) for rental housing. The Township also dropped in total population over the same period - which may explain the drop in owner-occupied housing, but not the increase in total housing units. In fact, this observation may be attributed to declining family and household sizes: a trend that has been observed nationwide for several decades.

Examining data on the region's building permits can provide some insight into how the housing picture has changed since 2000. These are summarized below in Figure 14.5.

FIGURE 14.5: ISSUANCE OF BUILDING PERMITS, 2000-2003

"Conversions" are typically units created when a single-family home is divided internally into smaller units, although it may also include conversions of previously non-residential structures to residential use. The number shown is the *net increase* in the number of units after the conversion is complete. "Rehabilitated units" are existing units that were abandoned or uninhabitable, but were returned to the stock of housing as a result of the rehabilitation. Again, the number shown indicates the *net increase* in the number of units after completion of the rehabilitation activity.

Municipality	Single Family	Semi-Detach	Apartment Units	Town Houses	Manuf. Homes	Conversions	Rehabed D.U.s	Units De-molished	Net Increase Residential D.U.s
Shippensburg Borough 2000	2	0	24	0	0	6	8	0	40
Shippensburg Borough 2001	3	2	0	14	0	0	2	0	21
Shippensburg Borough 2002	4	2	0	0	0	0	0	1	6
Shippensburg Borough 2003	6	4	0	0	0	0	0	0	10
Total Permits Issued- Borough	15	8	24	14	0	6	10	1	77

Municipality	Single Family	Semi-Detach	Apartment Units	Town Houses	Manuf. Homes	Conversions	Rehabed D.U.s	Units De-molished	Net Increase Residential D.U.s
Shippensburg Township 2000	38	52	0	107	5	0	0	0	202
Shippensburg Township 2001	0	0	0	29	0	0	0	0	29
Shippensburg Township 2002	0	0	0	0	2	0	0	0	2
Shippensburg Township 2003	0	0	2	54	0	1	0	0	57
Total Permits Issued-Township	38	52	2	190	7	1	0	0	290
Total Permits issued by the Borough and Township	53	60	26	204	7	7	10	1	367

D.U.s = Dwelling Units

Source: Cumberland County Planning Commission Annual Reports 2000 - 2003.

Given the total number of units in the community, this represents significant activity. The increase in the total number of units during this four-year period is about 1.5 times greater than the increase documented between 1990 and 2000. In addition to these built projects, the Township has received proposals for a number of residential developments that have not (yet) been built. The Michael Adler Subdivision proposed sixty (60) multi-family units, CSR Enterprises proposed sixty (60) multi-family units, and Bard Meadows proposed an additional thirty (30) townhouses to their existing property. It is assumed that most of these multi-family dwellings are intended to meet the demand for off-campus housing for the student population at Shippensburg University.

Future Housing Needs Projections - 2010 and 2020

Figures 14.6 and 14.7 show housing needs and the acreage needed to accommodate that housing for the population as projected through 2020. This projection is based on the Census Bureau's 2000 housing information and on information obtained from the Tri-County Regional Planning Commission "Housing Needs Assessment of the Region" and the Cumberland County Planning Commission.

Figure 14.6 shows the projected need for new housing units for the Borough and the Township for 2010 and 2020. These figures are based upon the population projections presented above and assume "ideal" vacancy rates of five percent.³

³ This rate is considered "ideal" as real estate experts have determined that a larger number of vacant units will depress the market value of available homes; conversely, a lower vacancy rate will inflate the price of housing. Furthermore, this rate is considered sufficient to accommodate new arrivals to a neighborhood as well as those who wish to change homes within the same region.

FIGURE 14.6: PROJECTED HOUSING DEMAND, 2010 AND 2020

“Net population” is the total population less the population housed in group quarters. In the Shippensburg Region, the most prominent examples of group quarters are the dormitories on the University campus. The “persons per occupied dwelling” is based upon the *net* population. For purposes of this analysis, the number of persons per dwelling is assumed to be constant over the entire study period.

	BOROUGH	TOWNSHIP	REGION TOTAL
2000			
Total population	5,586	4,504	10,090
Net population	5,565	2,139	7,704
Total occupied dwellings	2,397	860	3,257
Persons per occupied dwelling	2.3	2.5	2.4
Total dwelling units	2,602	938	3,540
Actual vacancy rate (5% = ideal)	7.9%	8.3%	8.0%
2010			
Projected total population	6,279	5,129	11,408
Projected net population	6,258	2,764	9,022
Projected occupied dwellings	2,721	1,106	3,827
Total dwelling units req'd (@ 5% vac.rate)	2,864	1,164	4,028
Total Additional units	262	226	488
2020			
Projected total population	6,667	5,468	12,135
Projected net population	6,646	3,103	10,749
Projected occupied dwellings	2,890	1,241	4,131
Total dwelling units req'd (@ 5% vac.rate)	3,042	1,306	4,348
Total Additional Units	440	368	808

SOURCE: U.S. Bureau of the Census, 2004; Cumberland County Planning Commission, 2003; Tri-County Regional Planning Commission, 2003; SSM, 2004.

As described in the previous paragraphs, the region is well on its way to meeting the projected 2010 demand as of the end of 2003, principally due to some relatively large projects in the Township. This rate of growth suggests that the 808 new units by 2020 as shown in this Figure may in fact be on the low side, assuming the region continues to grow at the same rate. This also assumes that the University will provide housing for an ever-increasing number of students such that the demand for off-campus housing remains static.

Once an approximate number of housing units is established, calculations must be completed to estimate how much land they will require. This is largely a function of the type of unit: apartment units are much more space-efficient than single-family detached homes. Figure 14.7 provides a range of land needs based upon a variety of densities. Currently, the highest residential density permitted in the region is 2,000 square feet per unit, which is accommodated in the Borough’s “N-C” zoning district. It is extremely unlikely that all new housing would be accommodated at such a high density, but it is *possible*, so we have included it in our analysis as the minimum acreage necessary to accommodate the projected housing need. We have also calculated the acreage necessary if the average lot size is a quarter-acre (just over 10,000 square feet), which is reasonable in the context of the municipalities, as well as for one-acre average lots. There are few places in the Borough that could accommodate a significant number of lots this size.

The Borough occupies approximately 1,296 acres: barely two square miles. Analysis of the Existing Land Use Map shows that the Borough has 449.3 acres in residential use: 386.0 acres in single-family residential, 37.0 acres in multi-family residential, 26.3 acres in mixed-use developments, and 74.0 acres in vacant buildings and/or lands.

The total area of the Township is 1,596 acres, or about 2.5 square miles. Of this amount, 608 acres are designated as agriculture/agribusiness and 385 acres are dedicated to residential uses.

FIGURE 14.7: PROJECTED DEMAND FOR RESIDENTIAL LAND, 2010 AND 2020

These figures assume that all additional units will be provided by new construction. While this is not an unreasonable assumption, there are alternatives to this approach, particularly in the Borough and the more developed portions of the Township. Both projections are based upon increases from 2000, so the 2020 land requirement calculation *includes* the 2010 requirements; it is not in addition to them. These figures do not include University housing.

	BOROUGH	TOWNSHIP	REGION TOTAL
2010			
Projected increase in dwellings from 2000	262	226	488
Land required @ 2,000 sq.ft./dwg.	12.1 acres	10.4 acres	22.5 acres
Land required @ 5,000 sq.ft./dwg.	30.1 acres	25.9 acres	56.0 acres
Land required @ 0.25 ac./dwg.	65.5 acres	56.5 acres	122.0 acres
Land required @ 1.00 ac./dwg.	262.0 acres	226.0 acres	488.0 acres
2020			
Projected increase in dwellings from 2000	440	368	808
Land required @ 2,000 sq.ft./dwg.	20.2 acres	16.9 acres	37.1 acres
Land required @ 5,000 sq.ft./dwg.	50.5 acres	42.2 acres	92.7 acres
Land required @ 0.25 ac./dwg.	110.0 acres	92.0 acres	202.0 acres
Land required @ 1.00 ac./dwg.	440.0 acres	368.0 acres	808.0 acres

SOURCE: SSM, 2004.

Planning Considerations

The data presented in this chapter validates the need to plan for residential development. Much of the growth is driven by the University, but there are other factors, including ease of access to employment centers, the availability of sanitary sewerage and water supply, and a high quality of life.

Interstate Route 81 provides the Shippensburg region with easy access to Baltimore, Harrisburg, and other larger urban centers, as well as to the Pennsylvania Turnpike. Commuters who work in these larger urban areas may find the Shippensburg area, with its small-town atmosphere, an attractive and convenient place to live. Improvements to the interchanges along the I-81 corridor may attract additional development as well.

Shippensburg Borough provides public water and sanitary sewerage not only to Shippensburg Township, but to the Southampton Townships (Cumberland and Franklin Counties), which are both experiencing significant growth. The Borough's wastewater treatment plant has been recently expanded, providing capacity for new development.

The expected growth of Shippensburg University will continue to have a considerable effect upon the residential neighborhoods in both municipalities. If the University does not provide on-campus housing for the rising number of students, then the student population will continue to be forced to rent housing off campus, which will result in an ever-shrinking proportion of owner-occupied housing units within the region. The proximity of a university also has many benefits, as it provides residents with a range of cultural and recreational opportunities that are more characteristic of much larger communities. The assets tend to attract more affluent, highly educated people to the area. The down side is that the students are a transient population and may not patronize local businesses to the extent that "full-time" residents do.