

CHAPTER TWO

The analysis of current and future population trends serves as a fundamental basis for many planning decisions. The size of the population, its composition, and spatial distribution can significantly impact future social, economic, and physical land use needs. An examination of the current and future population size as well as composition also serves as a reference point to predict future demand for additional facilities and services.

PAST POPULATION TRENDS

It is necessary to examine past population trends to understand future projections. In order to put these trends into context it is important to understand population shifts as they have affected the state as a whole. As documented in the *Atlas of Kentucky*, the mean center of population in the United States has shifted westward since the first national census in 1790. In fact, the mean population center for the United States was located in extreme Northern Kentucky in 1880. Since the first census, the population of Kentucky has never declined but has experienced periods of slow growth as shown in Figure 2-1.

One of the most significant trends affecting population growth in Kentucky occurred between 1980 and 1990. During this time, the state's population increased by less than one percent (0.8%). This increase is extremely low compared to the national average increase of 10% during this same period. Lack of economic opportunities in the state relative to other states in the 1980's contributed to Kentucky's slow growth. During this period, many people sought employment in other states, mostly in the Sun Belt.

In 2000, the state's population totaled 4,041,769 which was a 9.63% increase from the year 1990. The Kentucky State Data Center (KSDC) estimates that the state had a population of 4,117,827 in July 2003, an increase of 1.8% since 2000. KSDC also estimates that Kentucky will continue to grow between 6% - 8% through the year 2030. By 2030, it is estimated that Kentucky will have a total population of 5,006,887.



The growth patterns for Mercer County, Harrodsburg and Burgin are shown in Figures 2-2, 2-3, and 2-4. The county as a whole maintained a fairly steady population throughout the first half of the century and has grown rapidly with the exception of the period between 1980 and 1990 when the population of the county only grew 0.72%. The most significant increase (19.1%) in population occurred between 1970 and 1980. From 1990 to 2000, Mercer County grew 8.71%. In July 2003, KSDC estimated the population in Mercer County to be 21,410. Mercer County ranked 53rd out of 120 counties in terms of population size.

The City of Harrodsburg, a fourth class city, is the county's largest city and county seat. Harrodsburg has historically experienced continued growth without any periods of population decline. The period of slowest growth for the city occurred from 1980 to 1990 when the population only increased by 70 persons or 1%. From 1990 to 2000, the population of Harrodsburg grew by 679 persons or 9.3%. The KSDC estimates, released on July 10, 2003, reported Harrodsburg's population at 7,993. The city ranked 46th out of 422 Kentucky cities in terms of population size.

The second largest city in Mercer County is Burgin, a fifth class city. Burgin, similar to Mercer County and Harrodsburg, experienced continued growth from 1950 to 1970. From 1970 to 1990 the population remained relatively unchanged with an increase of seven (7) persons or .6%. However, from 1990 to 2000 the population of the city sharply declined by 135 persons or 13.4%. The KSDC estimates, released on July 10, 2003, reported Burgin's population at 872. The city ranked 226th out of 422 Kentucky cities in terms of population size.

FUTURE PROJECTIONS

Population projections for Mercer County are shown on Figure 2-2. These projections are issued by the Kentucky State Data Center (KSDC) located at the University of Louisville. The projections represent the latest official population forecasts since the 2000 U.S. Census. These forecasts are based on a cohort-component method. For each county, assumptions regarding future births, deaths, and migration are derived from recent demographic trends by age, gender, and white and nonwhite racial groups. These forecasts use a "bottom up" approach in which county populations are projected independently.

As can be seen in Figure 2-2, Mercer County's population is projected to continue to grow over the next thirty (30) years. KSDC has estimated that the current rate of growth (8%) will continue into the year 2010 and then slightly slow to 5-7% from 2010 to 2030. By the year 2030, it is estimated that a total of 25,420 people will reside in the county. Mercer County's increased population can be attributed to the growth occurring in Fayette County and the Bluegrass Region due to favorable economic conditions. In addition, the migration of people from urban to suburban areas has influenced the county's population growth. Migration is the most important variable affecting the population growth of an area because of its correlation with the economic vitality of the area. Migration is often directly related to the quality of life, employment opportunities, road accessibility and the availability of community facilities. New employment opportunities in the county or neighboring counties will be reflected in a corresponding in-migration to the area. In Mercer County, lower land costs, development of the U.S. 127 bypass, and proximity of the Bluegrass Parkway and I-64 have contributed to the in-migration of new residents.

The Kentucky State Data Center (KSDC) does not issue population projections for cities. City populations are projected as a proportion of the county's population. As shown in Figure 2-3, Harrodsburg's population has ranged from 27.8% to 42.2% of the county's total population since 1930. Future projections for the city are shown in Figure 2-3 and assume that the city will account for 38.5% (the average) of the county's population in the future. By the year 2030, it is estimated that the population of Harrodsburg will total 9,787.

Figure 2-4 shows population trends for the City of Burgin. Burgin's percentage of the county's population has varied between 4.2% to 6.3% since 1930, an average of 5.3%. However, the city is currently experiencing a decline in population (-13.3% since 1990). Therefore, it will be assumed that the city will only account for 3.5% of the county's population in the future. By the year 2030, it is anticipated that the population of Burgin will be approximately 889.



POPULATION COMPOSITION

AGE & SEX CHARACTERISTICS

A population pyramid shows the proportion of a population by sex and age group. Age groups are broken down into five (5) year increments up to age 85. Those 85 and older are typically shown as one group. A population pyramid for a growing population is in the shape of a true pyramid, wide on the bottom and tapering smaller at the top. A large base of young and working aged persons support a smaller number of elderly persons. An inverted pyramid, with fewer young persons than older persons, indicates that the population is declining. The figures shown on the next page show the population pyramids for Mercer County for the years 2000, 2010, and 2020 as developed by the University of Louisville Urban Studies Institute (released August 2003). These figures depict changes in the population composition in Mercer County from 2000 to 2020. During this time period, the number of elementary school aged children (0-9) continues to decline while those in the workforce (50-60) age toward retirement. By the year 2020 the pyramid is more inverted. For this reason it is anticipated that the median age of Mercer County residents will gradually increase over the next twenty (20) years with the majority of workers entering retirement age. There are slightly more females than males in the population overall. The pyramid also shows that females account for the majority of elderly persons in the population.

GENDER DISTRIBUTION

There are normally slightly more females than males in the population overall. In 2000 for example, 51.1% of the state's population was female and 48.9% was male. Table 2-1 is a breakdown of gender distribution for the county. Mercer County and Burgin are similar to the state in relation to gender; however, Harrodsburg has slightly more females (53.8%) in the population.

TABLE 2-1
GENDER DISTRIBUTION

JURISDICTION	% FEMALE	% MALE
Mercer County	51.5%	48.5%
Harrodsburg	53.8%	46.2%
Burgin	51.6%	48.4%

AGE COMPOSITION

Figure 2-5 shows the age composition of the Mercer County population in the years 1980, 1990, and 2000. In 1980, the number of school aged children was 31.8% of the population, working aged persons accounted for 55%, with elderly persons comprising 13.1% of the population overall. In 1990, the number of school aged children decreased to 27.6% while the number of workforce aged persons increased to 57.4%. The number of elderly persons also increased as a percentage of population to 15%. From 1990 to 2000, the number of school aged children continued to decrease to 26.7% of the overall population, while the percentage of working aged persons continued to increase to 58.7%. The percentage of elderly persons slightly declined to 14.6% of the total population.

In summary, the number of school aged children, as a percentage of the overall population, has been steadily decreasing over the past twenty (20) years while the number of those of working age continues to increase. The percentage of persons of retirement age has fluctuated. From 1980 to 1990, the number of those aged 65 years and up increased by 2%. However, from 1990 to 2000, this number slightly decreased to 14.6%. In the short term, it is estimated that the number of workforce aged persons will continue to grow in the future while the number of school aged children will slightly decline. However, as the baby boomers begin to retire in the year 2010, the number of elderly persons in the population will increase as the number of working aged persons decreases. For this reason, it is anticipated that additional in-migration will occur as the working age population retires and local jobs become available.

RACIAL CHARACTERISTICS

Although the county has become more racially diverse since the 1990 Census, Mercer County and the Cities of Harrodsburg and Burgin have a relatively homogeneous racial composition with the majority of the population categorized as “White” as shown in Figure 2-6. In 2000, Mercer County had a total population of 20,817 with 20,617 persons (99.0%) considering themselves as one race and 200 persons (1%) considering themselves as two or more races. Of the persons considering themselves as one race, 19,568 (94.0%) of the total population were white. Black or African American persons accounted for 3.7% of the population. A very small percentage of the population (.2%) was categorized as American Indian



Population

and Alaska Native, .5% were Asian, and less than 1% Native Hawaiian and Other Pacific Islander. The number of persons categorized “some other race” comprised .6% . Persons considering themselves to be Hispanic accounted for 1.3% of Mercer County’s population.

In 2000, the City of Harrodsburg had a total population of 8,014 with 7,894 persons (98.5%) considering themselves as one race and 120 persons (1.5%) considering themselves as two or more races. Of the persons considering themselves as one race, 7,126 (88.9%) of the total population were white. Black or African American persons accounted for 7.5% of the population. A very small percentage of the population (.1%) was categorized as American Indian and Alaska Native, .8% were Asian, and less than 1% Native Hawaiian and Other Pacific Islander. The number of persons categorized as “some other race” comprised .1% Persons considering themselves to be Hispanic accounted for 2.1% of Harrodsburg’s population.

In 2000, the City of Burgin had a total population of 874 with 857 persons (98.1%) considering themselves as one race and 17 persons (1.9%) considering themselves as two or more races. Of the persons considering themselves as one race, 813 (93.0%) of the total population were white. Black or African American persons accounted for 3.9% of the population. A very small percentage of the population (.3%) was categorized as American Indian and Alaska Native, and less than 1% Native Hawaiian and Other Pacific Islander. The number of persons categorized as “some other race” comprised .7% . Persons considering themselves to be Hispanic accounted for .7% of Burgin’s population.

Minority populations are expected to increase as a percentage of the United States population overall. As a high level of migration into the county is anticipated for the foreseeable future, it can be expected that minority populations in Mercer County, Harrodsburg, and Burgin will continue to increase.

POPULATION DISTRIBUTION

In 1930, 66.7% of the county’s population lived in the rural areas while 33.3% lived in one of the two incorporated cities. From 1930 to 1970, the urban areas continued to grow more rapidly than the county as a whole until nearly 50% of the population was located in Harrodsburg and Burgin in 1970. From 1970 to

1980, the percent of population in urban areas decreased slightly most likely due to development of residential subdivisions outside the city limits of Harrodsburg. The population distribution remained unchanged from 1980 to 1990, reflecting a steady population during this period. In 2000, the percentage of rural population increased slightly to 59.48%, with 38% of the population continuing to reside in Harrodsburg and 4% living in Burgin. Therefore, the unincorporated areas of the county are continuing to grow while the population of Harrodsburg remains the same and Burgin slightly loses population.

HOUSEHOLDS AND FAMILY

The basic reporting unit, in terms of demographic data, is the household. The household is also the most prevalent living arrangement in American society. A household can either be classified as a family household or a non-family household. A family household is comprised of two (2) persons or more who are related by blood, legal adoption, or marriage.

In 1990, Kentucky had 2.60 persons per household. However, by the year 2000, the number of persons per household had declined to 2.47. The number of persons per household for Mercer County, Harrodsburg, and Burgin are as follows:

TABLE 2-2

NUMBER OF PERSONS PER HOUSEHOLD

COUNTY	1990	2000
Mercer County	2.56	2.45
City of Harrodsburg	2.36	2.32
City of Burgin	2.55	2.35

The county and both cities are experiencing the same trend as Kentucky and the U.S. overall as household sizes continue to shrink. It is anticipated that this trend will continue in the future as the population continues to age and as family sizes continue to remain small.



EDUCATIONAL LEVEL

The educational level of an area's population must be considered when analyzing the ability of those in the local workforce to obtain and sustain meaningful and well-paying employment in the future. In today's economy, the fastest growing professional occupations require at least a bachelor's degree and are concentrated heavily on professional specialty occupational groups. The following table compares U.S., Kentucky, with Mercer County, Harrodsburg, Burgin, and other counties within the labor market area in terms of the percentage of the population which are high school graduates and persons with bachelor's degrees and higher for persons 25 years and older.

**TABLE 2-3
EDUCATIONAL LEVEL OF POPULATION**

Location	% High School Graduates or Higher	% of 25++ with Bachelors or above
USA	80.4%	24.4%
Kentucky	74.1%	17.1%
Mercer County	75.8%	13.5%
Harrodsburg	72.0%	13.9%
Burgin	80.5%	8.4%

TABLE 2-3 CONTINUED

Anderson County	80.4%	12.0%
Boyle County	76.6%	19.3%
Fayette County	85.8%	35.6%
Garrard County	69.4%	10.5%
Jessamine County	79.1%	21.5%
Lincoln County	64.6%	8.4%
Washington County	68.8%	13.3%
Woodford County	82.6%	25.9%

In 2000, 75.8% of Mercer County's population aged 25 years old or more had completed high school, with an average of 13.5% having a bachelors degree or

higher. While the number of those graduating high school are higher than that of the state, the number of those with a bachelor's degree or above is lower than that for the state and U.S. overall. The City of Burgin exceeded both the state and U.S. overall in terms in high school graduates or higher, but was significantly lower in terms of those who had attained a bachelor's degree or higher. Of the Mercer County labor market, Fayette County exceeded the U.S., state and all other counties in both categories. Lincoln County had the lowest percentage (64.6%) of high school graduates or above, and the lowest (8.4%) of those with a bachelor's degree or above.

