#### **CHAPTER TWO**

#### **INTRODUCTION**

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.

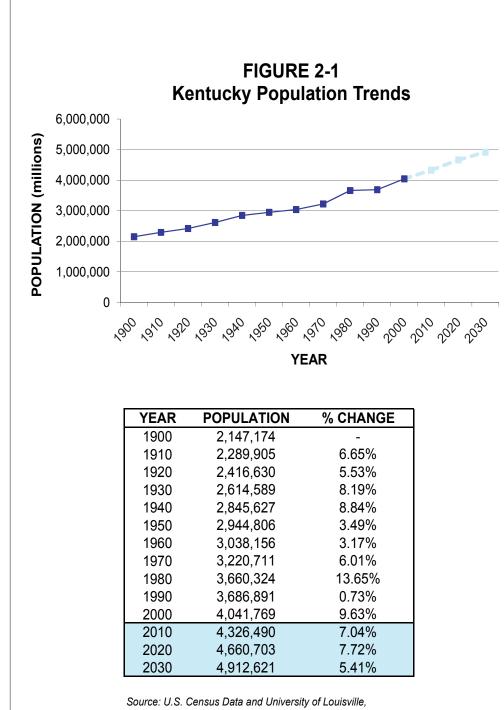
#### PAST POPULATION TRENDS

It is necessary to examine past population trends for an area in order 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. As of July 1, 2005, the Kentucky State Data Center estimated that the state had a population of 4,173,405, an increase of 3.3% since 2000. KSDC also estimates that Kentucky will continue to grow





Urban Research Institute, Kentucky State Data Center, Population Forecasts, released November 2004

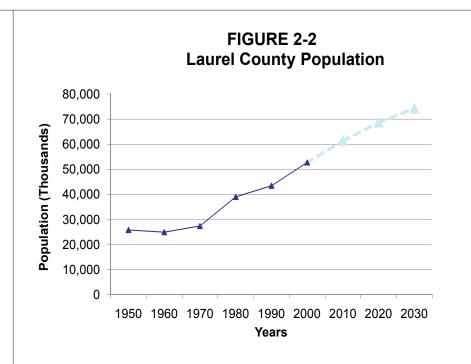
between 5.4% and 7.8% through the year 2030. According to KSDC middle growth population projections, released November 2004, it is estimated that Kentucky will have a total population of 4,912,621 by 2030.

Figures 2-2 and 2-3 depict the changes in population for Laurel County and the City of London. Changes in population in Laurel County from the year 1950 projected into the year 2030 are shown in Figure 2-2. From reviewing the chart it can be seen that the population of Laurel County has continually grown, after 1960, with fluctuations in the rate of growth. The period of greatest population growth (42.34%) occurred between 1970 and 1980. From 1990 to 2000, the population increased by 9,277 or 21.36%. As of July 1, 2005, the Kentucky State Data Center (KSDC) estimates that the population of Laurel County had increased to 56,338 or by 6.9%. In the years 2000 and 2005, Laurel County ranked 15th out of 120 counties in terms of population size.

Figure 2-3 details the population of the City of London from 1950 to 2000 and moderate growth projections for the city through the year 2030. The population of London has experienced spurts of growth and loss over the past fifty years. The period of most rapid growth occurred from 1950 to 1960 when the city experienced a 17.8% increase in population. However, from 1990 to 2000, the city experienced a population decrease of a little over four percent (4.2%). As of July 1, 2005, the Kentucky State Data Center estimates the population of the city to be 7,787. This is a 36.8% increase from 2000 however, this growth can be attributed to the annexation of a large area of land in December of 2000 which added approximately 2,487 persons to the city's' population. According to the KSDC estimate, the City of London ranks 48th out of 422 cities in Kentucky in terms of population size.

Table 2-1 shows population trends by census tract for Laurel County from 1990 to 2000. The location of each census tract can be viewed in Figure 2-4. From reviewing this data on the eleven census tracts it can be seen that there are distinct population shifts occurring in the county. The largest decreases in population were found on the east side of London and just south of the city. Despite environmental limitations for development, the largest percentage increase (37.8%) occurred in census tract 9711, a large portion



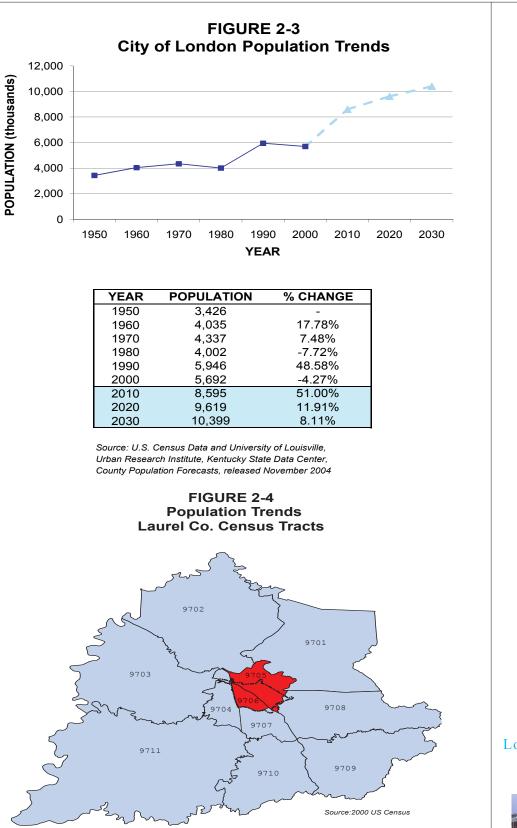


YEAR	POPULATION	% CHANGE	
1950	25,797		
1960	24,901	-3.47%	
1970	27,386	9.98%	
1980	38,982	42.34%	
1990	43,438	11.43%	
2000	52,715	21.36%	
2010	61,391	16.46%	
2020	68,708	11.92%	
2030	74,278	8.11%	

Source: 1950-2000 Census, University of Louisville Urban Research Institute, Kentucky State Data Center, Population Forecasts, released November 2004

		- <b>3</b> - <b>)</b>	
Census Tract	1990 Population	2000 Population	% Change
9701	2071	2402	16.0%
9702	5428	6397	17.9%
9703	3161	4001	26.6%
9704	2277	2816	23.7%
9705	4129	3923	-5.0%
9706	3209	3112	-3.0%
9707	3943	5031	27.6%
9708	3125	4092	30.9%
9709	2639	3255	23.3%
9710	7429	9379	26.2%
9711	6027	8307	37.8%

Table 2-1						
Laurel County Population Change By Census Tract						



Increased Population

Decreased Population

London City Limits



of south west Laurel County that borders Whitley, Pulaski, and McCreary counties.

#### **FUTURE PROJECTIONS**

Population projections are derived from statistical analysis that considers both recent and historic population trends. Population forecasts for counties are typically accurate while those for cities are generally considered less accurate due to the possibility of annexations and potential for larger scale development due to the availability of infrastructure. Such possibilities could significantly alter the population of an area in a short period of time and are not easily predicted.

Population projections for Laurel County are shown on Figure 2-2. These projections were obtained from the University of Louisville Urban Studies Institute which produces and regularly updates projections of Kentucky state and county resident populations by age and sex. The size and demographic composition of county populations are projected individually and summed to provide projections for the state and fifteen Area Development Districts (ADDs). In general, the forecast assumptions are based on recent history and trends for county-level components of change, births, deaths, and migration. Kentucky county populations are then projected for five year intervals from 2000 to 2030 using the demographic cohort-component method. Projections were made for the total population with the delineation of males and females for each of the five year age groups through 85 years and above. Components of change (live births, deaths, and net migration) are also projected for each interval. The projections used for the development of the London-Laurel County Comprehensive Plan were released by the Kentucky State Data Center Urban Studies Institute in November 2004.

Figure 2-2 shows the population projections for Laurel County through the year 2030. These projections show that the population of the county will continue to grow at a faster rate than the state overall for the next thirty years. By the year 2030, the Kentucky State Data Center projects that population of Laurel County will reach 74,278. While most counties in southeastern Kentucky have declined in population, Laurel County has grown. The county's location along Interstate 75 is considered an important contributing factor to the county's growth.

Laurel County is being influenced by the same population trends as the United States overall, as well as much of western civilization which is entering a period of little or no growth. The birth rate is substantially lower than in earlier periods. Although the death rate has declined, more deaths are occurring due to the aging of the population overall. In 2000 Laurel County reported a total of 1,772 births. The number of deaths for the same year was 988. By 2030 the number of births is projected to be 4,198 compared to 3,755 deaths. In essence the number of deaths is approaching the number of births. Migration is now the key component of growth and the major determinant of major swings in population growth rates.

As previously stated, the Kentucky State Data Center (KSDC) does not issue population projections for cities. However, estimates of a city's population can be derived using the KSDC population projections for the county and making assumptions regarding the proportion of the city's population to that of the county.

Figure 2-3 shows population projections for the City of London. Since 1950, the number of persons within the City of London has accounted for 10% to 16% of the population of Laurel County with the percentage decreasing over the past few decades. In 2000, London accounted for 10.8% of the county's population. In December of 2000, London annexed two areas. One small annexation of 40 acres (.06 sq. mi.) in the north end of the city near North Laurel High School added 39 housing units with a population of 116 persons to the city. A larger area of 1,620 acres (2.53 sq. mi.) was annexed south of KY 192. This area included the South Laurel High School complex, the London-Corbin Airport and Southland Estates Subdivision. It contained a total of 798 housing units with a population of 2,271 persons. Considering these additions, London would represent 15.5% of the county's population. Unless the city annexes additional land or experiences a boom in high density housing the assumption can be made that the City of London will continue to account for this portion or the county or a somewhat lower amount as most



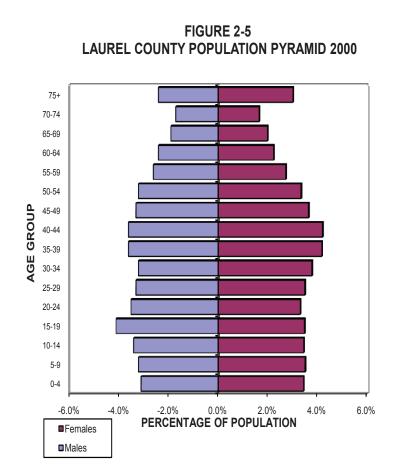
new development is occurring in the unincorporated areas. Thus, a 14% rate of change will be used to project the city's population. Using this method, estimates suggest that the population of London will steadily increase at the same rate as the county over the next twenty-five (25) years. This means that London's population will reach 7,367 by the year 2010, 8,245 by 2020, and 8,913 by 2030.

#### AGE AND SEX CHARACTERISTICS

A population pyramid shows the proportion of a population by sex and age group. Age groups are broken into five year increments up to the age of eighty-five. 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 younger persons than older persons, indicates that a population is declining.

Figures 2-5 and 2-6, show the population pyramids for Laurel County for the years 2000 and 2030 as projected by the University of Louisville Urban Studies Institute (released November 2004). During this time period, the number of school aged children and younger persons in the workforce steadily decline while middle aged workers age toward retirement. By the year 2030 the pyramid is becoming increasingly inverted and it is anticipated that the median age of Laurel County residents will gradually increase over the next twenty years. The pyramids also show that females account for the majority of elderly persons in the population. These shifts may indicate a greater need for housing for empty-nesters, retirement housing, and assisted living facilities over the next fifteen years.

The population pyramids also show that there are slightly more females than males in the population overall. In 2000 Laurel County's population distribution was 51.1% female and 48.9% male. This breakdown is expected to remain the same through the year 2030.

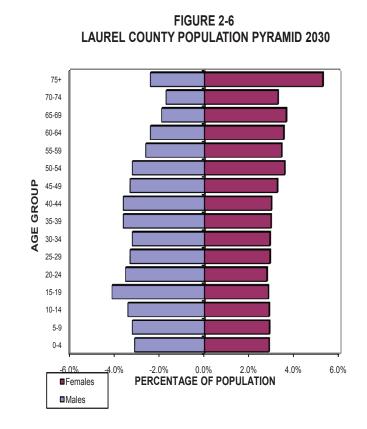


AGE GROUP	%FEMALE	%MALE	FEMALE	MALE	TOTAL
0-4	3.4%	3.1%	1,802	1,936	3,738
5-9	3.5%	3.2%	1,837	1,874	3,711
10-14	3.4%	3.4%	1,806	1,874	3,680
15-19	3.5%	4.1%	1,824	1,846	3,670
20-24	3.3%	3.5%	1,732	1,720	3,452
25-29	3.5%	3.3%	1,831	1,937	3,768
30-34	3.8%	3.2%	1,982	1,871	3,853
35-39	4.2%	3.6%	2,190	2,010	4,200
40-44	4.2%	3.6%	2,207	2,021	4,228
45-49	3.6%	3.3%	1,909	1,872	3,781
50-54	3.3%	3.2%	1,752	1,791	3,543
55-59	2.7%	2.6%	1,428	1,354	2,782
60-64	2.2%	2.4%	1,170	1,097	2,267
65-69	2.0%	1.9%	1,038	904	1,942
70-74	1.6%	1.7%	864	713	1,577
75+	3.0%	2.4%	1,578	945	2,523
TOTALS	51.1%	48.9%	26,950	25,765	52,715

London - Laurel County



Comprehensive Plan



AGE GROUP	%FEMALE	%MALE	FEMALE	MALE	TOTAL
0-4	2.9%	3.1%	2,117	2,202	4,319
5-9	2.9%	3.2%	2,132	2,214	4,346
10-14	2.9%	3.4%	2,124	2,205	4,329
15-19	2.8%	4.1%	2,095	2,174	4,269
20-24	2.8%	3.5%	2,049	2,119	4,168
25-29	2.9%	3.3%	2,151	2,214	4,365
30-34	2.9%	3.2%	2,149	2,284	4,433
35-39	2.9%	3.6%	2,185	2,204	4,389
40-44	3.0%	3.6%	2,198	2,243	4,441
45-49	3.2%	3.3%	2,390	2,350	4,740
50-54	3.5%	3.2%	2,635	2,517	5,152
55-59	3.4%	2.6%	2,533	2,535	5,068
60-64	3.5%	2.4%	2,600	2,260	4,860
65-69	3.6%	1.9%	2,687	2,169	4,856
70-74	3.3%	1.7%	2,415	1,806	4,221
75+	5.2%	2.4%	3,892	2,430	6,322
TOTALS	51.6%	48.5%	38,352	35,926	74,278

Figure 2-7 shows that the number of school aged persons and those in the workforce will steadily decline as a proportion of the county's population into the year 2030. Those aged 65 and older account for an increasing portion of the population during this same period.

#### **RACIAL CHARACTERISTICS**

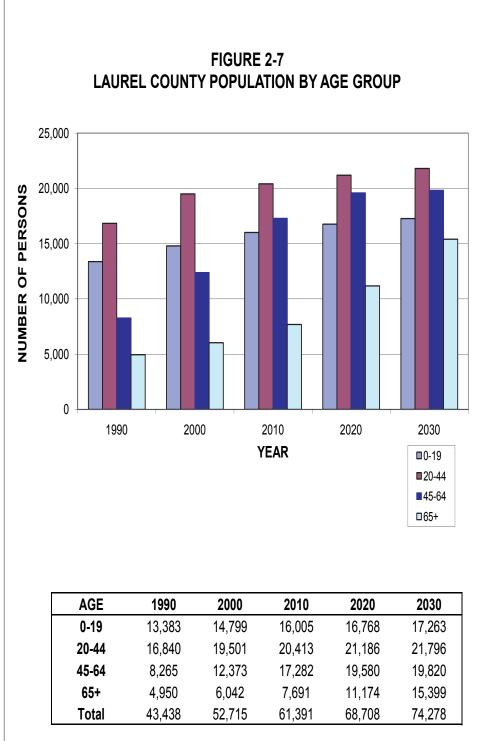
Although the population has grown over the past ten years, Laurel County and the City of London continue to have relatively homogeneous populations with the majority of the population being categorized as "White" as shown in Figures 2-8 and 2-9. In 2000, Laurel County had a total population of 52,715 with 51,484 persons or 99.1% considering themselves as one race and 476 persons (0.9%) as two or more races. Of the persons considering themselves to be one race, 51,484 (98.6%) were White. Black or African American persons accounted for 331 residents or 0.63% of the population. A small percentage (0.37%) of the population was categorized as American Indian or Native Alaskan, 0.35% were Asian, 0.01% Native Hawaiian, and 0.08% as "Other".

A little under a quarter of the minorities reside in the City of London. In 2000, the city had a total population of 5,692 with 5,634 persons or 99.0% considering themselves as one race and 58 persons (1.0%) as two or more races. Of the persons considering themselves to be one race, 5,466 (97%) were White. Black or African American persons accounted for 104 (1.9%) of the population. A very small percentage (0.34%) of the population was categorized as American Indian or Native Alaskan, 0.69% were Asian, and 0.11% as "Other". There were no persons claiming Native Hawaii/Pacific Islander as their race. According to the 2000 Census, the Hispanic population in Laurel County remains low. Only 291 persons or 0.6% of the county's population were Hispanic.

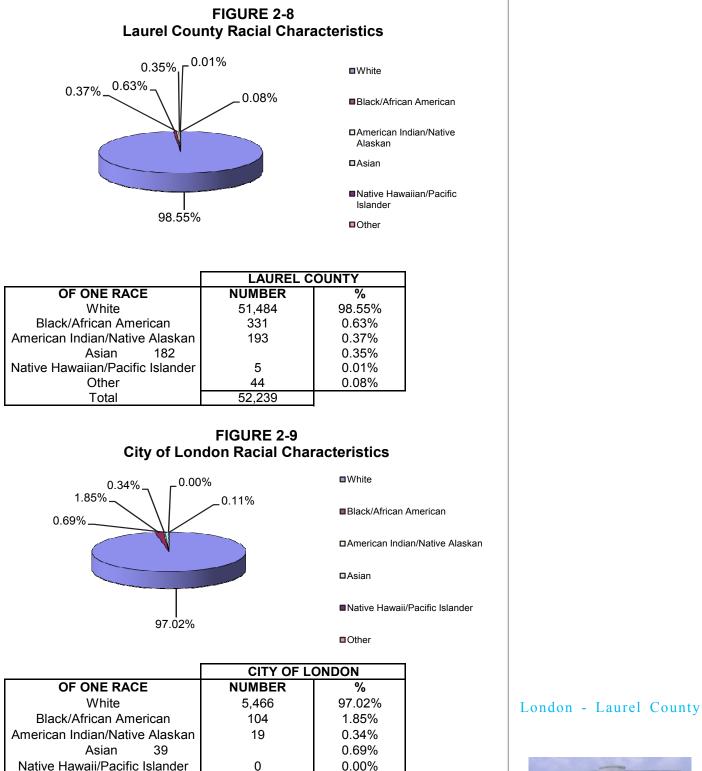
#### HOUSEHOLDS AND FAMILY

The basic reporting unit, in terms of demographic data is the household. The household is also the most prevalent living arrangement in Ameri-





Source: University of Louisville, Urban Studies Institute, Projections of Total Resident Populations by Age and Sex and Components of Change: Middle Series



0

6

5,634

Other

Total

0.00%

0.11%



Comprehensive Plan

can society. A household can either be classified as a family household or non-family household. A family household is comprised of two persons or more, related by blood, legal adoption, or marriage. In the year 2000, there were 2.59 persons per household in United States with slightly less than that (2.47) in the state of Kentucky, as can be seen in Table 2-2.

TABLE 2-2 PERSONS PER HOUSEHOLD

	US Census		KSDC Projections		
	1990	2000	2010	2020	2030
Laurel County	2.75	2.56	2.46	2.44	2.44
CVADD	2.73	2.51	2.41	2.39	2.39
Kentucky	2.60	2.47	2.41	2.40	2.40

According to the 2000 U.S. Census, Laurel County has consistently had more persons per household than the state or Cumberland Valley Area Development District. KSDC anticipates that this trend will continue in the future with the number of persons per household for Laurel County leveling off at 2.44 by the year 2030. In the year 2000, the City of London had an average household size of 2.16, which is lower than the state, CVADD, and county.

#### SUMMARY

The following statements summarize the findings of the population chapter:

- 1. The growth of Laurel County is anticipated to continue through the year 2030 when it is estimated that the county will have a total of 74,278 residents. As the death rate approaches the birth rate, migration patterns will be a major factor in continued population growth.
- 2. The City of London will experience moderate growth and continue to account for approximately 14% of the county's population. By the year 2030 it is estimated that the population will be 8,913. Unless the city makes an effort to reverse current trends, the population will continue to shift from London to more suburban areas of the city or unincorporated areas of the county mostly to the southwest of the county.

- 3. The population of Laurel County is expected to become more diverse as in-migration increases into the region during the planning period. This is important as the population characteristics of in-migrants are often different than those of out-migrants. If local businesses or industries do not offer certain amenities or incentives, young workers may leave and be replaced by older workers and families who may choose to retire in the area.
- 4. The number of persons per household will continue to decline into the year 2020 when it will stabilize.
- 5. An aging population and retiring workforce will increase the need for homes for empty-nesters, retirement communities, and assisted living facilities.

