Harrodsburg – Mercer County Comprehensive Plan 2022

Prepared in cooperation with

The Mercer County Joint Planning and Zoning Commission & Bluegrass Area Development District

Adopted – March 15, 2022

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Chapter One - Goals & Objectives

Kentucky Planning and Zoning Statutes (KRS 100) require that the Planning Commission of each planning unit prepare a Comprehensive Plan. This plan serves as a guide for public and private actions and decisions in order to assure the development of various land uses in the most appropriate relationships. A principle element of the Comprehensive Plan is the establishment of a statement of goals and objectives. This chapter of the plan serves as a guide for the preparation of the remaining elements of the plan. In addition, the goals and objectives provide the planning commission and its staff with the direction necessary to prepare a plan that accurately represents the wishes of the community.

The following statement of goals and objectives is intended to provide direct guidance for decisions made by the planning commission and local governmental bodies as related to future physical development of the county's planning area. These statements are presented in two levels of specificity. Goals are very broad and abstract ideals that the community desires. Objectives are more specific and concrete concepts which, when achieved, contribute to goal attainment. KRS 100.193 requires the planning commission to adopt the goals and objectives and to submit them to the legislative bodies of each governmental unit included in the planning area for their adoption. The Greater Harrodsburg-Mercer County Planning Commission, Harrodsburg City Commission, and Mercer County Fiscal Court adopted the following goals and objectives as follows:

Planning Commission - Public Hearing & Adoption Date: March 10, 2020

Harrodsburg City Commission Adoption: April 14, 2020 Mercer County Fiscal Court Adoption: April 28, 2020

Overall Goals

Promote a natural and man-made environment that balances environmental protection and preservation with the physical, social and economic needs of the population for the long-term benefit of both.

Environment

GOAL: Encourage and promote the conservation and protection of Mercer County's natural resources and areas including archaeological, geological, and/or biological sites.

- EN.1 Identify and protect sensitive natural resource sites and unique areas from the effects of incompatible development. Provide special consideration for the Palisade areas of the Kentucky and Dix Rivers.
- EN.2 Assemble and maintain a system of environmental information to be considered by the Planning Commission in making decisions regarding land use changes.
- EN.3 Encourage public education programs, conservation efforts by private organizations, and public policy which will promote the protection of the environment.
- EN.4 Minimize the impact of flooding in the human and natural environment of Mercer County by discouraging development in the floodplain and by enforcement of Federal Flood Insurance Program requirements.
- EN.5 Ensure compliance with federal, state and local environmental regulations and ordinances.
- EN.6 Protect ground water resources by complying with Kentucky on-site sewage disposal systems for new and existing systems.
- EN.7 Reduce soil erosion by requiring and ensuring compliance with erosion control measures during construction.
- EN.8 Require appropriate drainage facilities, including detention basins (as necessary), for all new developments in order to avoid flooding, erosion, and problems caused by post development runoff.
- EN.9 Promote the use and extension of public sewer systems in Harrodsburg and Mercer County.
- EN.10 Encourage conservation through the reduction, reuse, recycling of solid waste and use of new energy conservation technology.

Economic Development

GOAL: Provide economic growth which fosters employment opportunities for all Mercer County residents through commercial expansion, industrial development, and the protection of viable agricultural land.

- ED.1 Adopt an economic development growth strategy to retain existing industry, increase economic diversity, and create better employment opportunities in order to ensure that the county remains a vital part of a strong local and regional economy.
- ED.2 Seek to recruit and retain clean, non-polluting, worker-friendly and diversified industries which yield plentiful, higher paying jobs in order to grow and retain the county and regional existing workforce and increase quality future employment opportunities for young people. These industries should be located in suitable locations where adequate infrastructure is available with suitable facilities that are complementary to the physical character of Mercer County.
- ED.3 Encourage the development of public and private efforts that provide affordable, high-quality, licensed day care facilities for children and adults while their families are working.
- ED.4 Protect and promote the County's agricultural economy and agrarian character for the benefit of the public by encouraging high quality, diversified agricultural production and development of related "value-added" agricultural businesses and support services.
- ED.5 Encourage a partnership effort with the Chamber of Commerce, Tourist Commission, Harrodsburg First Program, Harrodsburg-Mercer County Industrial Development Authority and local government designed to work together to promote economic growth in Mercer County.
- ED.6 Encourage the revitalization of commerce within the Central Business District of Harrodsburg and continue to participate in the Renaissance Kentucky Program as a gold level city.
- ED.7 Enhance and promote Harrodsburg and Mercer County as a tourist attraction. Foster the development of small and unique businesses that increase the level of activity in the downtown area at varying hours of the day and evening. The Central Business District should be the most vibrant sector of the city.
- ED.8 Encourage and promote rural business in the appropriate county areas, and developing agri-tourism and historic sites in Mercer County

- ED.9 Support new and innovative means to boost local tourism and aggressively seek the assistance of federal, state and local governments, as necessary.
- ED.10 Increase Mercer County's share of Bluegrass tourism dollars by encouraging the development of tourist related facilities (such as lodging, restaurant and other entertainment facilities) which are complementary to the scenic and historic assets of the community.
- ED.11 Encourage cooperation and coordination among the various local interests that serve as attractions for visitors, such as hotels, motels, restaurants, museums, and bed and breakfast houses.
- ED.12 Support and encourage the preservation of historic sites, archaeological sites, and unique scenic areas that serve as "drawing cards" for the traveling public, with special consideration for the Palisade areas of the Kentucky and Dix Rivers.
- ED.13 Encourage the development of support services and technical assistance for small businesses.
- ED.14 Facilitate condensed, high quality commercial development by discouraging sprawl created by linear shopping areas.
- ED.15 Maintain the leadership position of Executive Director for the Harrodsburg-Mercer County Industrial Development Authority and economic development with a qualified and experienced professional. This position is to encourage the partnership and relationship between the Chamber of Commerce, Tourist Commission, Harrodsburg First Program, Greater Harrodsburg/Mercer County Planning and Zoning Commission and the Harrodsburg-Mercer County Industrial Development Authority.

Historic Preservation

GOAL: Recognize and preserve the historic and cultural resources of the City of Harrodsburg and Mercer County.

- HP.1 Encourage the identification, maintenance, and protection of significant historic districts, buildings, structures, fences, and archeological resources through education and, where appropriate, designation of local historic districts and places.
- HP.2 Obtain information and surveys from the Kentucky Heritage Council, Harrodsburg Historical Society, and other sources in order to develop and maintain a list of all historic buildings, sites and districts in Harrodsburg and Mercer County.
- HP.3 Develop zoning regulations, such as a Historic Overlay District, to protect unique historic buildings, districts, scenic corridors (U.S. 68), and sites from destruction or harm which can result from inappropriate in-fill development, land use changes, or new construction which is not compatible with adjacent uses or complementary to the character of the district.
- HP.4 Encourage the retention and productive use of historic buildings and sites by adopting local codes and ordinances which support private ownership and restoration efforts.
- HP.5 Encourage cooperation between local interest groups (public and private) which recognize, market, and promote the restoration of historic buildings, sites and districts within Mercer County.
- HP.6 Encourage the placement of all utility lines underground or in the rear of the buildings in the Harrodsburg Central Business District and other historic districts.

Housing

GOAL: Provide a diversity of safe, sanitary, affordable, and livable housing for all citizens in Mercer County.

- H.1 Provide adequate housing opportunities for citizens off all income levels including persons who are single, disabled, and elderly.
- H.2 Encourage the development of high quality upper-scale housing to enhance industrial recruitment efforts.
- H.3 Encourage the maintenance of the community's existing housing stock and neighborhoods by discouraging the encroachment of incompatible land uses within established residential areas, permitting appropriate in-fill development, and enforcing existing regulations related to property maintenance.
- H.4 Rehabilitate substandard housing through redevelopment projects by utilizing all available private and public funding sources.
- H.5 Encourage quality and diversity of design by encouraging residential development and construction that is compatible with existing land uses, transportation patterns, and the spatial arrangement of existing housing and neighborhoods.
- H.6 Designate areas for higher density, compact residential development, including townhouses, patio homes, landominiums/condominiums, as well as apartment buildings, in appropriate areas with adequate infrastructure.
- H.7 Encourage efforts to construct and maintain affordable housing for elderly, disabled, and other disadvantaged persons in areas with convenient access to recreation, commercial activity, and other services.
- H.8 Encourage the development of retirement community housing and assisted living facilities with appropriate services for the elderly and disabled.
- H.9 Develop standards for the appropriate location of various classes of manufactured homes.
- H.10 Discourage residential subdivision development that is scattered outside designated residential zones which cannot be efficiently served by urban services.
- H.11 Encourage contiguous and planned growth; avoid leapfrogging subdivisions.
- H.12 Encourage innovative residential proposals such as cluster or conservation

- subdivisions in the unincorporated areas in order to preserve Mercer County's scenic and rural character.
- H.13 Recognize and encourage the concept of limited low density residential expansion in existing small communities while preserving the unique, rural character of these areas.
- H.14 Provide for the fair, equal and uniform enforcement of building and zoning codes.

Community Facilities & Services

GOAL: Ensure that adequate, affordable community facilities and services are available and provided in an efficient and orderly manner while conserving human and natural resources.

- CF.1 Coordinate the rehabilitation, development, and expansion of community facilities with land development activities by requiring, at the time of development, infrastructure sufficient to accommodate projected growth.
- CF.2 Coordinate the land development decisions of the Harrodsburg-Mercer County Joint Planning & Zoning Commission with the service-providing organizations in the County and City in order to ensure the adequate improvement and extension of services to as many areas as feasible and cost effective, while promoting development policies that require development to locate in areas already served. Development that occurs surrounding the U.S. 127 By-Pass should be connected to city or county services.
- CF.3 Continually monitor the county's growth rate to determine if existing and proposed development will be provided the necessary, desirable, and advantageous community services and facilities in an orderly and efficient manner.
- CF.4 Require the dedication of easements and rights-of-way to meet future infrastructure needs when development or redevelopment occurs.
- CF.5 Plan for the development (or redevelopment) of existing rural settlements through the provision of approved sanitary sewers and water supply.
- CF.6 Encourage the improvement and upgrading of sewer treatment facilities and extension of sewer trunk "lines" in a logical and cost effective manner.
- CF.7 Encourage the improvement of the water storage capacity and pressure characteristics of the public water systems.
- CF.8 Adopt regulations for standardized storm water collection apparatus and facilities.
- CF.9 Encourage the City and County to continue to use legislative influence to seek and protect an adequate, high quality future water supply.
- CF.10 Develop easily accessible outdoor recreational areas serving the passive and active recreational needs of each community.
- CF.11 Encourage the development of indoor recreational facilities to serve residents

- throughout the year.
- CF.12 Encourage adequate amounts of permanent open space for recreational purposes in all future residential developments.
- CF.13 Develop proactive environmental, health care, police and fire protection services to meet the needs of each community by cooperating with local boards which regulate or make decisions about the expansion and location of these services.
- CF.14 Coordinate the addressing of all new development with the 911 numbering system during subdivision review.
- CF.15 Encourage greater quality, efficiency and cost effectiveness of the public education system by expanding, replacing and upgrading facilities as necessary.
- CF.16 Encourage the provision of continuing adult education classes and additional vocational training for Mercer County residents.
- CF.17 Provide adequate health services to citizens of all ages.
- CF.18 Encourage and support the development of affordable health facilities, nursing homes, and day care establishments.
- CF.19 Encourage communication and coordination between units of local government in order to facilitate informed decision-making on growth and development by periodically conducting outreach and educational programs on the planning and zoning issues facing Mercer County.
- CF.20 Expand use of citizen ad hoc committees to advise on public issues.
- CF.21 Require that all proposed cellular telecommunications facilities including towers, antennas, and other wireless facilities be developed in a manner which retains the integrity of neighborhoods and the overall character, property values, and aesthetic quality of life of the community at large. Future development policies for the locations of wireless facilities within the county shall:
 - A. Ensure that wireless facilities are constructed in practical locations and require facilities to minimize impacts to residential neighborhoods.
 - B. Minimize the number of wireless facilities by requiring the use of existing structures and co-location when feasible.
 - C. Ensure that there is a minimal impact upon the visual environment by requiring adequate screening and/or aesthetically pleasing design.
 - D. Protect the public health, safety, and welfare by requiring that the wireless facilities are adequately secured as well as encouraging the timely

- maintenance of the structures. In addition, require provisions for the removal of abandoned facilities.
- E. Establish an administrative process for the approval/disapproval or wireless facilities in accordance with KRS 100.985 100.987.

Transportation

GOAL: Develop and maintain an accessible, safe, and efficient multi-modal transportation system that effectively addresses regional and local development patterns.

- T.1 Promote better coordination between city, county, and state government in the planning and implementation of transportation improvements.
- T.2 Maintain the level of service of arterial, collector, and local streets by separating through traffic from local business traffic in the business districts and along majoraccess highways, and upgrading existing rights-of-way and roads as development occurs.
- T.3 Actively seek funding from the state, federal government or other entities for bridges, underpasses, signals and other road work to eliminate or mitigate the impacts of the Norfolk Southern railway crossings in Harrodsburg.
- T.4 Ensure the street system properly relates to residential, commercial, industrial and public uses of the land.
- T.5 Improve traffic circulation patterns to provide efficient and effective access to each sector of the City. All future land use and planning decisions shall be directed toward maintaining the level of service of existing roadways and creating a street system which is designed to serve its intended function.
- T.6 Limit the number of direct access points (curb cuts) along arterial and collector streets by encouraging the use of shared parking lots, frontage roads and other access management techniques. The use of access management techniques for any development proposed along the US 127 By-Pass shall be required, where feasible, in order to maintain the level of service of this roadway.
- T.7 Provide a balanced multi-modal transportation system by increasing opportunities for public transportation and encouraging citizens to walk or bicycle whenever possible by providing safe sidewalks, street crossings, bike paths, walking trails, and other alternatives to vehicular transportation.
- T.8 Strengthen the network of pedestrian transportation (i.e. bikeways, sidewalks, walking paths) by developing a recreational plan that requires these types of improvements be made as new development occurs.
- T.9 Actively pursue funding for the development of pedestrian paths and bikeways especially those that connect residential areas with the Anderson/Dean Recreational Park.

- T.10 Study and implement ways to improve traffic flow in the Harrodsburg Central Business District and old U.S. 127.
- T.11 Promote the development of well lit, landscaped off-street parking areas within adequate walking distance of downtown activity centers.
- T.12 Promote circulation systems which will encourage pedestrian movement in the downtown area while minimizing pass-through vehicular traffic.
- T.13 Require all developers to provide adequate off-street parking, rights-of-way, sidewalks, and paved travel surfaces that meet city and county specifications.
- T.14 Highway commercial uses shall be located in close proximity to major thoroughfares for maximum convenience and economy to the traveling public, while minimizing the impact to the community in terms of traffic congestion, local commuting patterns, and adjacent land uses.
- T.15 The interior street system of new residential developments shall ensure continuity with adjacent, built, or planned neighboring areas. Residential developments shall be encouraged to provide interconnections between sections of their developments and with adjacent developments to promote safe and easy transportation access and a sense of neighborhood interaction. Street extensions and the widening of existing roadways shall be developed where needed and feasible. The interior street system shall also coordinate with and continue the evolving multi-modal transportation system (pedestrian walkways, trails, bicycle facilities, etc.).

Land Use

GOAL: Achieve the best possible relationship between the various types of land uses and the major street system to provide for an increasingly safe, healthy and convenient environment in which to live and work for the residents of Harrodsburg and Mercer County.

- LU.1 Promote an innovative development pattern that establishes guidelines for planned growth, promotes the integration of compatible land uses, and frames development with open space.
- LU.2 Balance developmental needs with the preservation and protection of the community's existing character and resources.
- LU.3 Properly manage future development by planning for an adequate supply of developable land to accommodate anticipated growth and community needs within areas which are currently served by urban services.
- LU.4 Encourage future land development in centralized compact patterns near existing development in order to minimize decentralized sprawled patterns.
- LU.5 Reduce the cost and impact of development by encouraging growth in directions which most efficiently use the existing and planned utility systems. Emphasis should be placed upon restoration and redevelopment of existing commercial areas. New commercial, multi-family housing and other high density land uses should be near similar uses and adequately served by urban services.
- LU.6 Identify, establish and maintain open spaces and greenway corridors to enhance the natural environment, increase linkages between various recreational opportunities and protect scenic and/or environmentally sensitive areas.
- LU.7 Prohibit development in physically restrictive areas and require adequate preventive measures to minimize environmental degradation during construction in all areas.
- LU.8 Strive to protect recreation, tourism, unique natural areas, and cultural attractions by controlling any development that might harm the surrounding environment of such attractions.
- LU.9 Encourage the preservation of "prime farmlands" and/or agricultural land with high productivity capabilities from encroachment of residential, commercial, industrial and other types of uses in order to protect the county's agricultural economic base and productivity potential.

- LU.10 Preserve and increase the stability of existing rural settlements through proactive planning and land use regulations that promote compatible development or redevelopment in these areas.
- LU.11 Develop new guidelines for residential development that stresses flexibility and creativity in neighborhood design, focuses on the development or preservation of neighborhood character, landscaped streets, open spaces, recreational amenities, the human scale and walkability.
- LU.12 Require effective site placement, and compatible architectural and landscape design for commercial and industrial uses in order to ensure aesthetically pleasing development which is compatible to the character of Harrodsburg and Mercer County. The use of access management techniques, appropriate signage and landscaping shall be emphasized while nuisances such as smoke, dust, noise, light and odor shall be kept to a minimum.
- LU.13 Encourage "in-fill" development and the efficient provision of urban services by promoting restoration and redevelopment of property previously developed.
- LU.14 Establish regulations for "big box" retail establishments which ensure that this type of development contributes to Harrodsburg and Mercer County as a unique place by reflecting its physical character and adding to it in appropriate ways. Regulations should include provisions for the architectural character of the building, color and materials of the primary structure, relationship to the surrounding community (including civic amenities), pedestrian flows, vehicular traffic, and parking.
- LU.15 Require provisions for the elimination or reuse of abandoned buildings as part of the development review process for industries and retailers.
- LU.16 Develop land use policies and zoning regulations which promote governmental, commercial, trade, residential, educational, cultural, and recreational/entertainment, and professional office development within the Harrodsburg Central Business District in order to encourage use of downtown during both day and evening hours.
- LU.17 Support efforts to provide the downtown with a clean uncluttered appearance.
- LU.18 Discourage, through zoning, the development of poorly located and shallow commercial strips, particularly with direct access to major streets unless specifically designated in the Land Use Plan.
- LU.19 Restrict outlying commercial facilities to uses specifically oriented to the automobile or uses requiring extremely large amounts of parking. Proper access/utility roads must accompany the development.
- LU.20 Limit the adverse impacts of commercial and industrial development on residential areas by requiring adequate setbacks, landscaped buffers and overall site design

- which minimizes noise, light or other nuisances especially surrounding the U.S. 127 By-Pass. Specific requirements for the installation of buffers and landscaping for all new developments should be adopted and applied in all areas in the county and city, especially along the U.S. 127 By-Pass corridor.
- LU.21 Locate future industrial development where it will be most compatible with surrounding land uses, with the proper environmental controls, in areas served by utilities, police and fire protection, with access to existing and proposed highway and rail transportation.
- LU.22 Achieve planned and orderly commercial, residential, industrial and agricultural development of property adjacent to US 127 By-Pass.
- LU.23 Promote and protect the "green space" concept for land adjacent to the US 127 By-Pass by adopting a Greenway Overlay District in the zoning ordinance which requires the use of street trees for developments which intersect the by-pass.
- LU.24 Develop and integrate a sign ordinance for the city and county. This ordinance should be specific in terms of sign material and size and require centralized signage along the U.S. 127 By-pass. In addition, the ordinance shall provide for and encourage the development of aesthetically pleasing signage that promotes travel and tourism into areas of downtown Harrodsburg which may be negatively impacted by development along the U.S. 127 By-pass.
- LU.25 Achieve high quality development and land use through the fair, equal, and uniform enforcement of zoning and subdivision regulations.
- LU.26 Encourage coordination and cooperation between the planning commission and various government entities in order to ensure that land use policies are integrated into local decision making processes and policies.
- LU.27 Promote the concept of planning at the neighborhood level within Harrodsburg and in the small rural settlements in Mercer County by creating a more inclusive, ongoing process for community involvement.
- LU.28 Develop gateways into Harrodsburg which serve as aesthetically pleasing entrances or focal points in order to create a sense of "arrival" to the city and indicate that it is unique and distinctive from another.

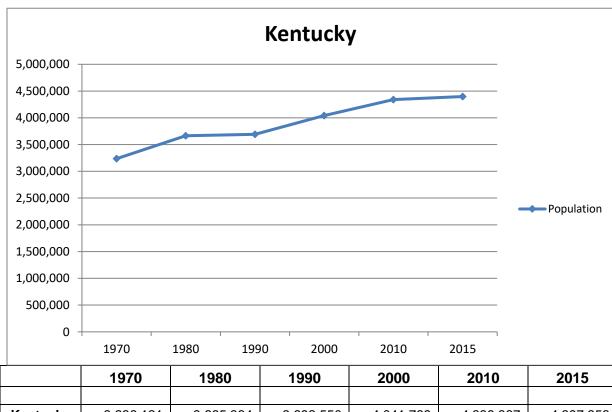
Chapter Two - Population

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

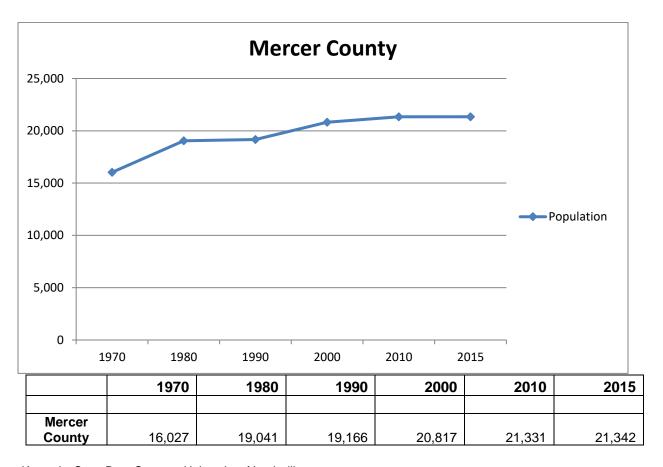
It is necessary to examine past population trends to understand future projections. In order to put these trends into context it is important to understand population shifts as they have affected the state as a whole. As documented in the Atlas of Kentucky, the mean center of population in the United 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.

FIGURE 2.1



	1970	1980	1990	2000	2010	2015
Kentucky	3,236,121	3,665,364	3,692,550	4,041,769	4,339,367	4,397,353

Source - Kentucky State Data Center - University of Louisville



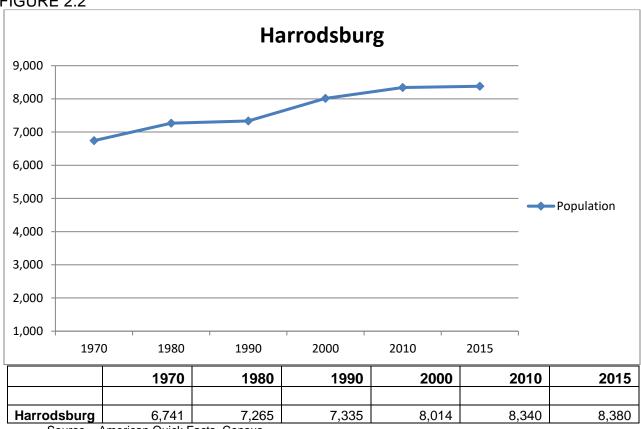
Source - Kentucky State Data Center - University of Louisville

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. In 2010, the state's population increased to 4,339,367 which was an increase of 7.36%. KSDC estimates that Kentucky will continue to grow averaging 4.5% through the year 2050. By 2050, it is estimated that Kentucky will have a total population of 5,349,720.

The growth patterns for Harrodsburg, Burgin, and Mercer County 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%. The KSDC estimates, released on May 25, 2017, reported the population in Mercer County to be at 21,477. 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 May 25, 2017, reported Harrodsburg's population at 8,419. The city ranked 49th out of 418 Kentucky cities in terms of population size.

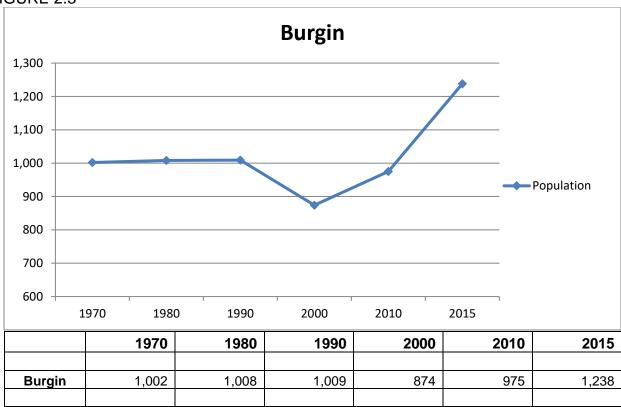
FIGURE 2.2



Source - American Quick Facts, Census

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 May 25, 2017, reported Burgin's population at 872. The city ranked 214th out of 418 Kentucky cities in terms of population size.

FIGURE 2.3

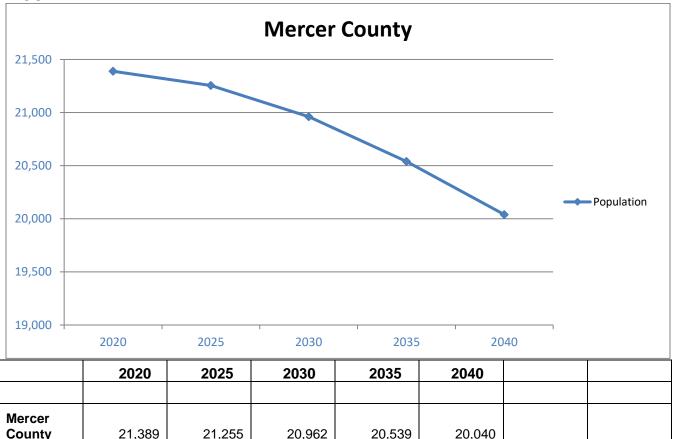


Source - American Quick Facts, Census

Future Projections

Population projections for Mercer County are shown on Figure 2-4. 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.

FIGURE 2.4

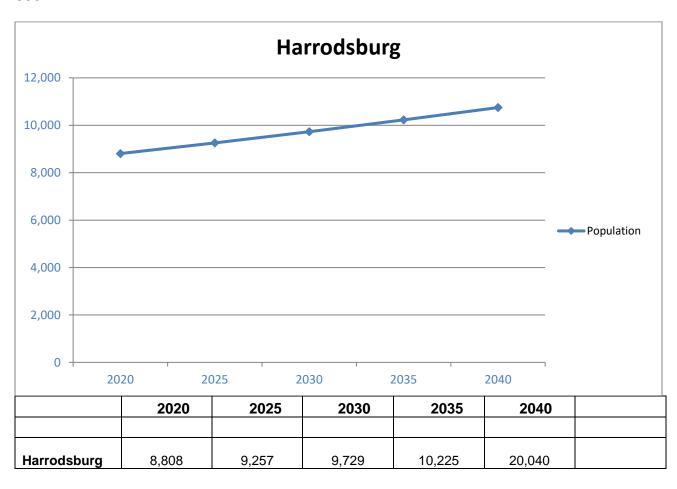


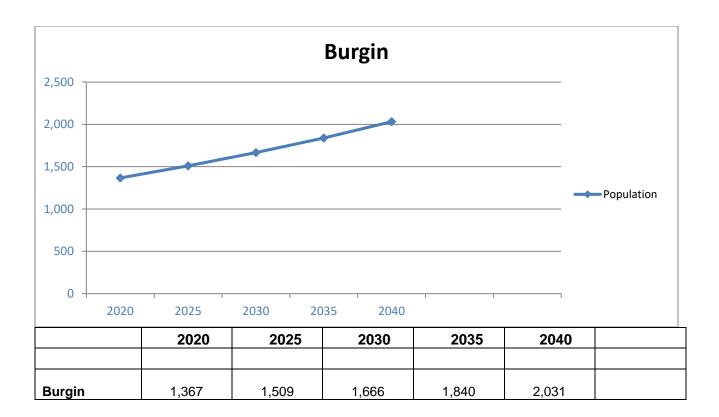
Source - Kentucky State Data Center - University of Louisville, 2016

As can be seen in Figure 2-2, Mercer County's population shows a slight increase between 2010 and 2020 and is then projected to decline an average of 1.5% per 10-year period over the next twenty (20) 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. 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 immigration 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, 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. The Burgin chart

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. 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.

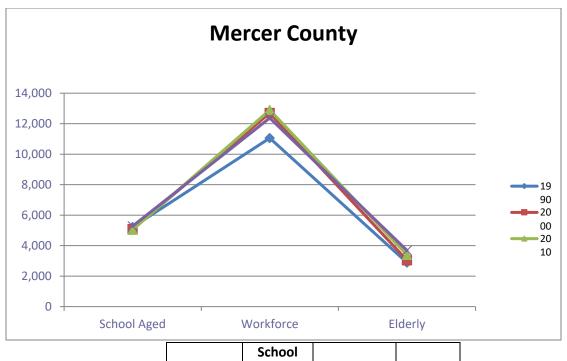
TABLE 2-1
GENDER DISTRIBUTION

JURISDICTION	% FEMALE	% MALE
Mercer County	51.2%	48.8%
Harrodsburg	53.8%	46.2%
Burgin	49.6%	50.4%

Source - U.S. Census, 2010

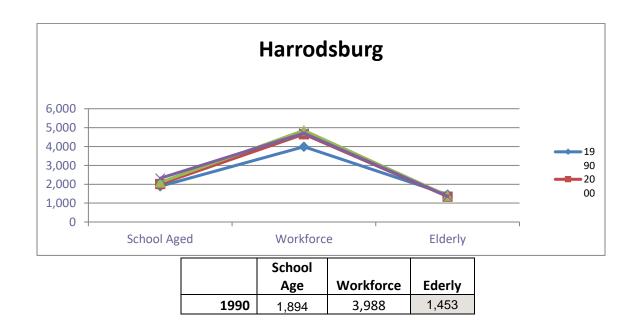
Age Composition

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, the number of elderly persons in the population has increased as the number of working aged persons decreases. For this reason, it is anticipated that additional inmigration will occur as the working age population retires and local jobs become available.



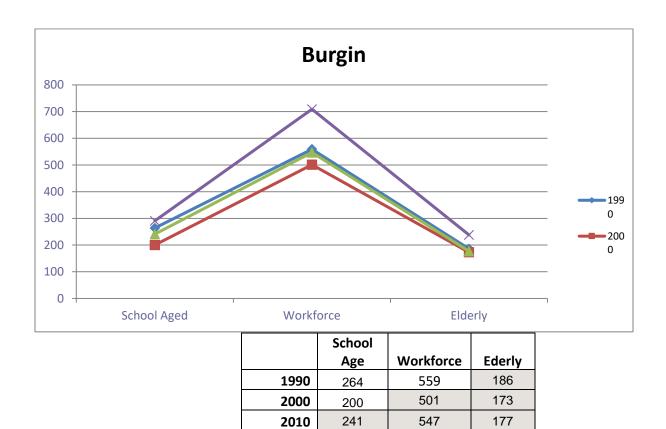
Workforce **Ederly** Age 2,886 1990 5,225 11,055 12,700 2000 3,037 5,080 12,898 2010 5,038 3,395 3,685 2015 5,284 12,373

Source – Kentucky State Data Center – University of Louisville, 2016, American Quick Facts, Census



2000	2,015	4,652	1,347
2010	2,094	4,853	1,393
2015	2316	4,705	1,359

Source – Kentucky State Data Center – University of Louisville, 2016, American Quick Facts, Census



2015

Source – Kentucky State Data Center – University of Louisville, 2016, American Quick Facts, Census

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 the 2010 Decennial Census, Mercer County had a total population of 21,331 with 20,951 persons (98.02%) considering themselves as one race and 380 persons (1.8%) considering themselves as two or more races. Of the persons considering themselves as one race, 19,635 (92.0%) of the total population were white. Black or African American persons accounted for 3.5% of the population. A very small percentage of the population (.2%) was categorized as American Indian and Alaska Native, .4% were Asian, and less than 1% Native Hawaiian and Other Pacific Islander. The number of persons categorized "some

291

709

238

other race" comprised 1.8%. Persons considering themselves to be Hispanic accounted for 2.3% of Mercer County's population. In the 2010 Decennial Census, the City of Harrodsburg had a total population of 8,340 with 8,090 persons (97%) considering themselves as one race and 250 persons (3%) considering themselves as two or more races. Of the persons considering themselves as one race, 7,200 (86.3%) of the total population were white. Black or African American persons accounted for 7.4% of the population. A very small percentage of the population (.2%) was categorized as American Indian and Alaska Native, .7% were Asian, and less than 1% Native Hawaiian and Other Pacific Islander. The number of persons categorized as "some other race" comprised 2.4% Persons considering themselves to be Hispanic accounted for 4% of Harrodsburg's population.

In the 2010 Decennial Census, the City of Burgin had a total population of 965 with 945 persons (97.9%) considering themselves as one race and 20 persons (2.1%) considering themselves as two or more races. Of the persons considering themselves as one race, 911 (94.4%) of the total population were white. Black or African American persons accounted for 2.8% of the population. Nobody in the population was categorized as American Indian, Alaskan Native, 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 0.8% 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. From 2000 to 2010, the percentage of rural population slightly decreased to 56.4% with 39.1% of the population residing in Harrodsburg and 4.5% living in Burgin. Therefore, the unincorporated areas of the county are slightly declining while the population of Harrodsburg and Burgin slightly gain population.

Households & 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

Area	1990	2000	2010	2015
Mercer County	2.56	2.45	2.44	2.13
City of Harrodsburg	2.36	2.32	2.33	2.21
City of Burgin	2.55	2.35	2.47	2.11

Source - U.S. Census, 1990, 2000, 2010

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.

Education 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	86.5%	25.9%
Kentucky	84.4%	19.5%
Mercer County	84.9%	17.0%
Harrodsburg	80.8%	16.9%
Burgin	77.6%	5.6%
Anderson County	87.8%	17.1%
Boyle County	86.2%	19.1%
Fayette County	90.4%	33.7%
Garrard County	76.7%	14.5%
Jessamine County	85.1%	24.9%
Lincoln County	78.7%	9.6%
Washington County	80.8%	12.6%
Woodford County	89.2%	29.5%

U.S. Census Bureau, 2015 American Community Survey 5-Year Estimates

In 2015, 84.9% of Mercer County's population aged 25 years old or more had completed high school, with an average of 17.0% having a bachelor's 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.

Chapter Three – Economic Conditions

An analysis of the structure and vitality of a community's economy is fundamental to develop a strategic plan for economic development and for future land use planning. Studies of the structure of the existing local economy identify the important economic activities within the community. The extent of economic activity and the population supported by such activity influences future economic development. The health and growth of the local economy is a key determinant of how rapidly land will be converted to various uses and can be gauged by its stability and balance. Stability is the ability to withstand fluctuations in the regional and national economies. Balance is the degree to which diversification allows the local economy to withstand fluctuations in a particular sector of the economy.

This chapter of the comprehensive plan focuses upon Mercer County but also contains information on the Mercer County labor market for comparative purposes.

The Mercer County labor market includes the fourteen (14) Kentucky Counties of Anderson, Boyle Casey, Fayette, Franklin, Garrard, Jessamine, Lincoln, Marion, Mercer, Nelson, Shelby, Washington, and Woodford as shown below.



Employment by Industry

Employment information at the county level is available for industries covered by unemployment insurance. This generally includes all workers except self-employed individuals, unpaid family members, some student workers, agricultural workers, domestic workers, rail workers, employees of certain religious organizations and some government employees.

Mercer County lost a total of 749 jobs, a 7.9% decrease, from 2001 to 2016. This significant loss can be attributed to the fewer number of jobs in the *Manufacturing* industry which decreased by 482 workers during this time period. Most other sectors decreased in the number of jobs from 2001 to 2016 with the exception of those classified as *Trade, Transportation & Utilities, Leisure & Hospitality and Other Services*. The sector with the greatest percentage increase in jobs was *Utilities, Trade, & Transportation*. This sector of the economy decreased by 344 jobs, a decrease of 64.42%. The alsecond largest percentage decrease in jobs occurred in the *Natural Resources and Mining* industry which experienced a decrease of 48 jobs (51.06%). The third largest percentage decrease was in the *Education & Health Services* sector which lost a total of 471 jobs or 42%.

Professional & Business Services jobs are the highest paying with an average weekly wage of \$1377 in 2016. Unfortunately, jobs in the Leisure & Hospitality sector pay the lowest wages (\$343.00) and depend upon the recirculation of local dollars rather than bringing new dollars into the local economy. However, Professional & Business Services jobs are the highest paying (\$1377.00) for all industries. This also shows that the average weekly wages in Mercer County increased overall from 2001 to 2016 with an increase of 58%. However, the overall average weekly wages (\$745.45) in the county are much lower than the average for the state overall (\$923.55). Mercer County ranks fourth out of all of the counties in the labor market area in terms of average weekly wages. Fayette had the highest average weekly wages for all industries at \$995.09. The lowest average weekly wages (\$627.82) are paid in Lincoln County.

https://www.bls.gov/lau/laucnty01.xlsx http://www.thinkkentucky.com/cmnty/workforce.aspx?cw=068 https://www.bls.gov/cew/datatoc.htm

Manufacturing

According to the Kentucky Cabinet for Economic Development, Division of Research, there were eleven (11) major manufacturing firms in Mercer County in 2017, all of which are located in the City of Harrodsburg. Table 3-1 lists each major manufacturing firm, the date the local facility was established, the firm's primary products, and the average employment as of July 2004. In Mercer County the manufacturing sector of the economy had the second largest increase in the number of jobs from 1990 to 2001. The vitality of this sector of the local economy is important as it employs the largest number of persons and accounts for 35% of all jobs covered by unemployment insurance. In addition, this sector is the highest paying with average weekly wages of \$779.91. In the labor market area, Mercer County is ranked second in the amount of average weekly wages for the manufacturing sector of the

economy. Fayette County had the highest average manufacturing wages at \$899.63 per week. Garrard County ranked the lowest of the nine (9) counties in the labor market area with average weekly wages of \$367.67 in the manufacturing sector of the economy.

TABLE 3-1
MERCER COUNTY MANUFACTURING FIRMS-JUNE 2019

FIRM, PRODUCT	DATE ESTABLISHED	EMPLOYMENT
Armstrong Custom Powder Coating Custom powder coating service, ceramic coating, metal cleaning, and media blasting	1996	1
Corning Inc. AMLCD Glass Substrate	1952	420
Harrodsburg Herald Newspaper publishing; offset & letterpress printing; spiral, side & saddle stitch binding, commercial printing	1884	13
Heritage Tobacco Group LLC Pipe Tobacco	2009	20
Hitachi Automotive Systems USA Inc. Automobile electric & electronic components	1986	1350
Hitachi Automotive Systems USA Inc. Warehouse and Distrubition Center	2008	8
Mercer Tool & Die Inc. Tools, dies, jigs & fixtures; machine shop; general machining, drilling, boring, cutting, honing, grinding, electric welding, mill & lathe work	1994	1
Mercer Stone Company Crushed stone & agricultural limestone	1966	14
Toyota Boshoku Kentucky LLC Automotive plastic components and interior sub- assemblies, door trims and injection molding	1998	434
Essity Paper towels, toilet paper, facial tissue & sanitary paper products	1990	550
	TOTAL	2847

Source: Kentucky Cabinet for Economic Development (10/03/17)

Wholesale & Retail Trade

The U.S. Department of Commerce periodically conducts a census of sales in the retail, service industry and manufacturing and wholesale trade sectors. The latest such census was conducted in 2012. The next update was conducted in 2017 but has not been published yetTherefore, this section will discuss the 2007 and 2012 Census findings. In 2007, it was reported that there were twelve (12) wholesale trade establishments in Mercer County with sales of \$14,950,000. In 2012, the number of wholesale trade establishments

were reported as eight (8) with sales of \$14,684,000. The decrease in the number of establishments and sales in the wholesale sector can most likely be attributed to the change in the U.S. Census Bureau's classification, and not a decline of this sector of the local economy.

In 2007 there were 74 retail establishments in Mercer County with total sales of \$157,041. This number was reported as 62 in 2012 with sales of \$169,718. Although it appears, due to the U.S. Census reclassification, that the number of establishments decreased, the amount of sales reported in 1997 is shown to have increased by approximately 86.4%. Table 3-2 provides Census information for retail trade establishments by type for 2012. It is important to note that the total sales/receipts for the service industry sector as a whole and some categories listed above cannot be reported as data is withheld on some establishments in order to avoid disclosing data for individual companies. This are marked as "D*" below.

TABLE 3-2
RETAIL ESTABLISHMENTS WITH PAYROLL - 2012

	Number	Sales (\$000)
Motor Vehicles & Parts	8	\$27,668
Furniture & Home Furnishings	1	D*
Electronics & Appliance Stores	2	D*
Building Materials & Garden Equipment	9	10,961
Food & Beverage Stores	6	D*
Health & Personal Care Stores	3	D*
Gasoline Stations	10	28,210
Clothing & Accessories	4	1,148
Sports, Goods, Hobby, Books, Music	2	D*
General Merchandise	6	D*
Miscellaneous Stores	6	3,457
Nonstore Retailers	5	D*
TOTAL	62	\$169,718

Source: U.S. Department of Commerce,

Bureau of the Census, 2012 Economic Census -Retail Trade

Service Industry

In terms of employment, the service industry is one of the fastest growing sectors of the national economy. It is also the most difficult sector to analyze since services are not generally taxed and the majority is classified as small businesses. Until recently, the Department of Commerce conducted a Census of the Service Industry as a whole with several category listings using SIC codes. The following is a list of sevice industries located in Mercer County, the number of establishments, and total sales or receipts for each.

TABLE 3-3
SERVICE INDUSTRY ESTABLISHMENTS WITH PAYROLL- 2012

CATEGORY	NUMBER	TOTAL SALES/RECEIPTS
Accommodations (6) and Food Service (32)	36	\$19,038,000
Arts, Entertainment and Recreation	12	\$9,874,000
Health Care and Social Assistance	42	\$62,184,000
Professional, Scientific, and Technical Services	23	\$9,066,000
Administrative & Support, Waste Management and Remediation Services	11	\$5,698,000
Other (except public administration)	29	\$13,388,000
TOTAL	153	\$119,248,000

Agriculture

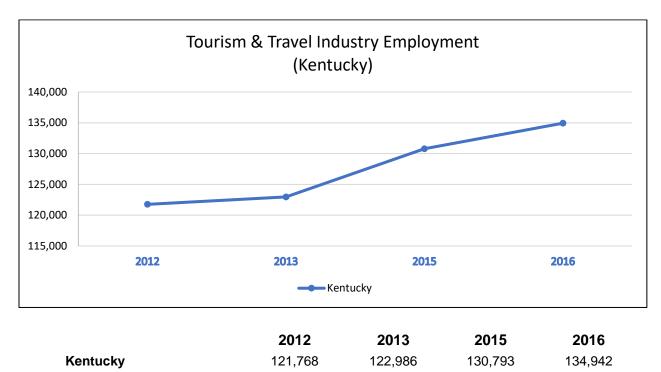
According to the U.S. Department of Commerce's 2012 Census of Agriculture, the number of hired farm laborers employed in the agricultural industry in Mercer County was 650 workers. This represents approximately 11% of employed residents when you compare to the total employed labor force in the 2012 U.S. Department of Labor, Bureau of Labor Statistics. Although agricultural activity in Mercer County has declined somewhat as the county becomes more urbanized, agriculture continues to be important to the county's economy and character.

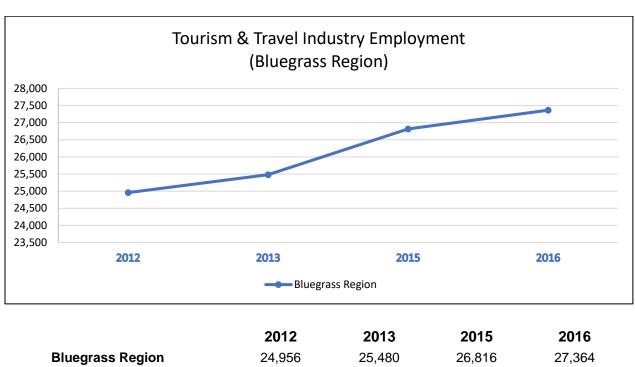
According to the U.S. Department of Commerce's 2012 Census of Agriculture, the number of farms in Mercer County has steadily increased since 1997. In the 1997 Census of Agriculture, there were 976 farms containing 126,389 acres of farmland and 38,053 acres of harvested cropland. The number of farms increased to 1,067 in the 2012 Census of Agriculture (+8.5%) with the number of acres of farmland growing to 144,250, which is a gain of 17,861 acres or +12.4, the number of harvested cropland has increased from 38,053 to 46,511 during this fifteen (15) year period, an increase of 8,458 acres or 18%.

Tourism

The Kentucky Tourism, Arts & Heritage Cabinet analyzes the economic impact of Kentucky's tourism and travel industry. Two (2) key areas analyzed at the county level are travel expenditures and tourism industry employment. Tourism and travel industry employment for Mercer County, Bluegrass Region, and Kentucky for the years 2012, 2013, 2015, and 2016 estimates are shown on Figure 3-3. Mercer County gained 134 jobs in this sector from 2012 to 2016, an increase of 13.7%. The Bluegrass Region which includes fifteen (15) counties in central Kentucky and the State of Kentucky also experienced a gain in tourism employment during this time period

FIGURE 3.3





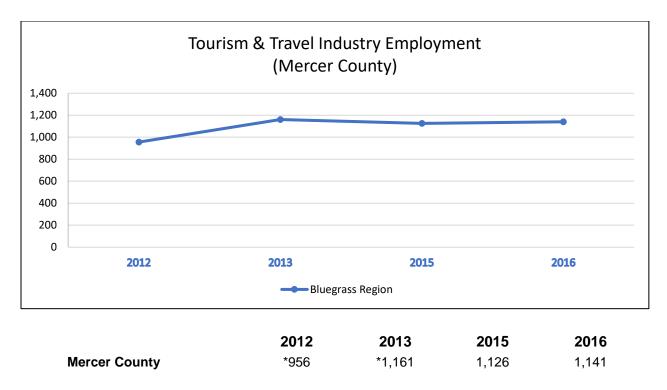
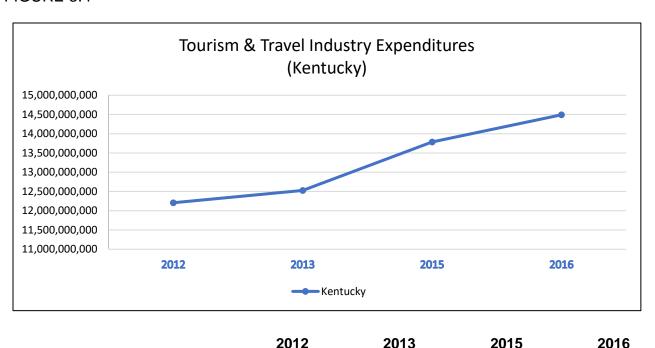


Figure 3-4 shows travel expenditures for the same period. Travel expenditures in Mercer County increased by 30% from 2012 to 2016. As of 2016, Mercer County ranked 26th out of 120 counties in terms of travel expenditures. Significant increases in travel expenditures were also experienced in the Bluegrass Region overall (17%) and the state of Kentucky (19%).

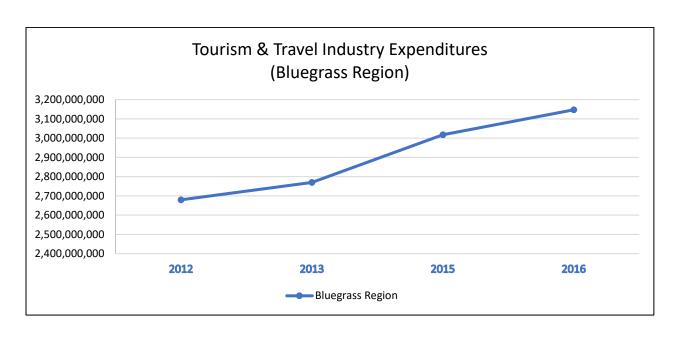
FIGURE 3.4

Kentucky



41

12,206,766,180 12,526,213,350 13,785,702,801 14,491,109,397



2012 2013 2015 2016 Bluegrass Region 2,679,606,281 2,769,862,675 3,017,256,643 3,147,169,852



 2012
 2013
 2015
 2016

 Mercer County
 40,537,392
 41,712,976
 46,762,594
 52,553,667

Source: Economic Impact of Kentucky's Travel and Tourism Industry – 2012 & 2013
Economic Impact of Kentucky's Travel and Tourism Industry – 2015 & 2016
*Employment statistics from Arts, entertainment, recreation, accommodation, food services,

and other services from the 2009-2013 American Community Survey because the 2012 & 2013

Economic Impact report did not list tourism employment by County.

Civilian Labor Force

The civilian labor force is defined as the sum of both employed and unemployed persons sixteen (16) years of age and older, excluding armed forces personnel and persons in penal and mental institutions, sanitariums and homes for the aged, infirmed and needy. Persons "not in the labor force" include those not classified as employed or unemployed and include:

- retired persons;
- persons engaged in their own housework;
- persons not working while attending school;
- persons unable to work because of a long term illness;
- persons discouraged from seeking work because of personal or job market factors;
 and
- persons who are voluntarily idle.

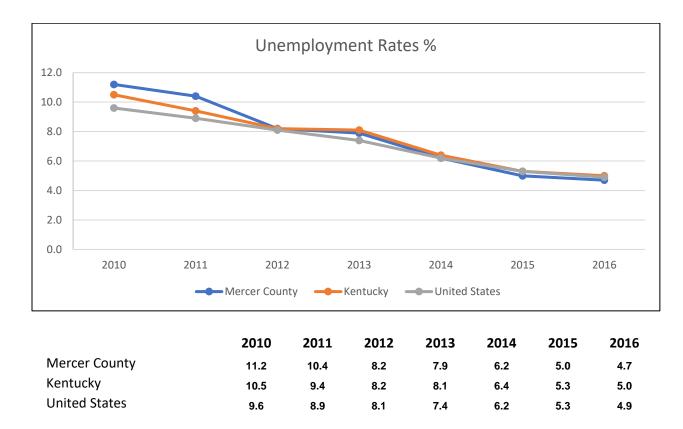
In 2016, Mercer County had a total of 9,910 persons in the civilian labor force. Of this number 9,443 were employed and 467 unemployed. Comparatively, Fayette County had the largest civilian labor force (168,079) in the labor market area. Washington County had the smallest civilian labor force at 6,161. Source: U.S. Department of Labor, Bureau of Labor Statistics

Unemployment

In 2016, there were 9,910 residents in the Mercer County labor force with an average of 467 residents being unemployed and an unemployment rate of 4.7%. In 2016, Boyle, Garrard, and Mercer County had one of the highest unemployment rates in the labor market area.

Woodford County had the lowest unemployment rate at 3.2%. Lincoln County had the highest at 6.0%. The average annual unemployment rate in the labor market area was 4.3% in 2016. For comparative purposes, the unemployment rates for Mercer County, Kentucky and the United States from 2010 to 2016 are shown in Figure 3-6. This figure shows that the unemployment rate in Mercer County has been consistently lower than the state of Kentucky and the United States during this time period. Historically Kentucky's unemployment rate has been higher than the national average.

FIGURE 3.6



Source: U.S. Department of Labor, Bureau of Labor Statistics

Employment of Mercer County Residents

The civilian labor force of Mercer County is employed in a wide range of industries (Table 3-6). This information is obtained from the 2015 American Community Survey and does not reflect the location of employment. As of 2015, there were 9,331 employed persons 16 and over. At this time, the majority of the Mercer County residents were employed in *Manufacturing* (22.86%), *Educational, Health, and Social Services* (21.55%), and *Retail Trade* (9.9%). The industry with the lowest percentage of employment was the *Information* Sector (1.58%). Employment statistics for the cities of Harrodsburg and Burgin are similar to Mercer County.

In 2015, the top three employment industries for Harrodsburg residents were: *Manufacturing* (26.93%), *Educational, Health, and Social Services* (21.69%), and *Retail Trade* (8.47%). However, the industry with the lowest percentage of employment was the *Wholesale Trade* sector (1.36%) which differs from the county.

The top three industries for Burgin residents in 2015 were: *Manufacturing* (27.24%), *Educational, Health, and Social Services* (16.95%), and *Construction* (11.62%). The industry with the lowest percentage of employment was the *Information* Sector (0.95%).

TABLE 3-6
INDUSTRY BY CLASS OF WORKER FOR THE CIVILIAN
EMPLOYED POPULATION 16 YEARS AND OVER (2015)

Merc	er County			Harrods	burg		Burg	in
	Employees	%		Employees	%		Employees	%
Agriculture	293	3.14%		68	2.26%		20	3.81%
Construction	724	7.76%		193	6.41%		61	11.62%
Manufacturing	2,133	22.86%		811	26.93%		143	27.24%
Wholesale Trade	166	1.78%		41	1.36%		10	1.90%
Retail Trade	924	9.90%		255	8.47%		59	11.24%
Transportation	384	4.12%		83	2.76%		29	5.52%
Information	147	1.58%		38	1.26%		5	0.95%
Finance	464	4.97%		246	8.17%		7	1.33%
Professional	470	5.04%		143	4.75%		35	6.67%
Educational,								
Health, and								
Social Services	2,011	21.55%		653	21.69%		89	16.95%
Arts,								
Entertainment,								
and Recreation	610	6.54%		227	7.54%		44	8.38%
Other Services	520	5.57%		89	2.96%		10	1.90%
Public								
Administration	485	5.20%		164	5.45%		13	2.48%
TOTAL	9331		TOTAL	3011		TOTAL	525	

Commuting Patterns

Table 3-7 details the commuting pattern estimates of Mercer County residents in 2015. At this time, the majority (54.1%) of Mercer County residents worked and lived in the county. Of the working residents that worked out of county, 45.0% worked within the State of Kentucky, while less than 1% commuted to other states for employment.

TABLE 3-7
MERCER COUNTY WORKERS 16 AND OVER
BY PLACE OF WORK

	#	%
Work and live in Mercer County	4,956	54.1%
Work in KY outside of Mercer County	4,123	45.0%
Work outside of KY	82	.90%
Total working residents	9,161	100%
Total commuting into Mercer County	2,422	32.8%
Total working and living in Mercer County	4,956	67.2%
Total workers in Mercer County	7,378	100%

U.S. Census Bureau, 2011-2015 American Community Survey

Tables 3-8 examines the number of persons working in Mercer County. Only 36.2% percent of persons working in the county come from other areas with the majority (63.8%) of workers being Mercer County residents. As can be seen from reviewing this data, the majority of workers stay in the county to work. The following summarizes the commuting patterns of the Mercer County and those commuting into the county from other places.

TABLE 3-8 PRIMARY AREAS THAT MERCER COUNTY RESIDENTS COMMUTE TO:

KENTUCKY	TOTAL 3,838
Boyle County	1,309 workers
Fayette County	1,219 workers
Franklin County	445 workers
Anderson County	393 workers
Jessamine County	252 workers
Woodford County	220 workers
OTHER STATES	TOTAL 98
Marion, IN	35 workers
Rockport, IN	20 workers
Atlanta, GA	17 workers
Huntington, IN	15 workers
San Francisco, CA	11 workers

PRIMARY AREAS THAT MERCER COUNTY WORKERS COMMUTE FROM:

KENTUCKY	TOTAL 2,208
Boyle County	1,147 workers
Lincoln County	411 workers
Fayette County	269 workers
Washington County	162 workers
Jessamine County	111 workers
Garrard County	108 workers
OTHER STATES	TOTAL 72
Clarksville, TN	21 workers
Ironton, OH	17 workers
Decatur, MS	16 workers
Mineola, TX	10 workers
Lawrenceburg, TN	5 workers

U.S. Census Bureau, 2009-2013 American Community Survey

Cincinnati, OH

3 workers

As reported by the 2015 American Community Survey for Mercer County, the preferred method of transportation to work is by car, truck or van with 7,861 residents (81.8%) driving to work alone and 1,269 residents (13.2%) carpooling. An additional 457 residents (4.7%) indicated that they walk to work or work at home. A total of 23 persons indicated that they use other means to get to work. No residents reported using public transportation. In 2000, the mean travel time to work was 24 minutes.

Monetary Income

There are two methods of determining per capita income. The first is on the basis of monetary income alone. This is the method used by the U.S. Census Bureau. Total monetary income includes wages and salaries, net farm and non-farm self-employment, interest dividend, net rental income, social security and all other regularly received income such as pensions, unemployment compensation and alimony. Receipts not counted include various "lump sum" payments such as capital gains and inheritances. The total represents the amount of income received before deductions. Table 3-9 shows the per capita income and median household incomes for Kentucky, Mercer County and the labor market area according to the U.S. Census Bureau based on monetary income. According to the 2000 U.S. Census, the per capita income of Mercer County, Harrodsburg, and Burgin were lower than State of Kentucky overall and most of the labor market area. The median household incomes of Mercer County and Burgin exceeded that of the state; although the median household income for the Harrodsburg was considerably less than the state and was the lowest in the labor market area. The highest per capita income in the labor market was \$23,109 in Fayette County. Woodford County had the highest average median household income at \$49,491. Lincoln County had the lowest per capita income (\$13,602) and median household income (\$26,542) in the labor market area.

TABLE 3-9
CENSUS INCOME DATA 2015 (INFLATION-ADJUSTED DOLLARS)

Jurisdiction	Per Capita Income	Median Household Income
Mercer County	\$22,658	\$42,083
Harrodsburg	\$18,889	\$30,240
Burgin	\$17,521	\$34,688
Anderson County	\$24,353	\$53,974
Boyle County	\$22,368	\$39,704
Casey County	\$17,526	\$32,341
Fayette County	\$30,031	\$49,778
Franklin County	\$26,778	\$47,964
Garrard County	\$22,567	\$44,243
Jessamine County	\$26,230	\$50,558
Lincoln County	\$18,564	\$37,139
Marion County	\$19,347	\$38,826
Nelson County	\$24,699	\$49,298
Shelby County	\$27,631	\$60,324
Washington County	\$19,793	\$40,976
Woodford County	\$30,490	\$58,750
Kentucky	\$24,063	\$43,740

U.S. Census Bureau, 2011-2015 American Community Survey

Personal Income

The second method of calculating per capita income is more inclusive and is termed personal per capita income. Personal per capita income includes income received from all sources such as wages and salaries, other labor income (employer contributions to private pension funds, jury and witness fees, etc.) proprietor's income, rental income, dividend and interest earnings by individuals and transfer payments not for services rendered (such as food stamps and welfare payments). Personal contributions for social security are deducted. Personal per capita incomes for Mercer County, the labor market area; Kentucky and the United States from 1990 to 2000 are shown in Table 3-10.

TABLE 3-10
PERSONAL PER CAPITA INCOME

	1999	2010	% CHG
Mercer County	\$17,972	\$23,645	31.6%
Anderson County	\$18,621	\$24,516	31.7%
Boyle County	\$18,288	\$22,534	23.2%
Casey County	\$12,867	\$14,252	10.8%
Fayette County	\$23,109	\$28,345	22.7%
Franklin County	\$21,229	\$26,857	26.5%
Garrard County	\$16,915	\$18,735	10.8%
Jessamine County	\$18,842	\$24,097	27.9%
Lincoln County	\$13,602	\$16,985	24.9%
Marion County	\$14,472	\$18,445	27.5%
Nelson County	\$18,120	\$21,763	20.1%
Shelby County	\$20,195	\$27,593	36.6%
Washington County	\$15,722	\$20,873	32.8%
Woodford County	\$22,839	\$28,501	24.8%
Kentucky	\$18,093	\$22,515	24.4%
U.S.	\$21,587	\$27,334	26.6%

Source: U.S. Census Bureau, 2000 Decennial Census

U.S. Census Bureau, 2006-2010 American Community Survey

The US Census Bureau estimates that the personal per capita income for Mercer County increased to \$23,444 in 2000. This is a 61.6% change from 1990. The Deskbook also estimates that the per capita income for the state overall increased to \$24,085 or 55.5% from 1990. Although Mercer County had a lower per capita income than most of the counties in the labor market in 1990, the county had one of the highest percentages of increase (61.6%) of all counties in the labor market area. In addition, this percentage increase exceeded that for Kentucky and the U.S. In the labor market area, Washington County had the highest percentage increase at 74.4% of personal per capita income.

Poverty Rate

Poverty level is considered to be the minimum level of monetary income adequate for families of different sizes in consideration of American consumption patterns. These levels are determined by comparing individual or family income with annual income thresholds. The poverty levels are adjusted annually by the U.S. Government. The poverty rate is the percentage of individuals or families with incomes below the poverty level. Table 3-11 shows the poverty rates for Mercer County for 1989 and 1999 as compared to the rates for the Kentucky and the labor market area. The poverty rate in Mercer County is higher than the majority of counties in the labor market but lower than the state overall. In addition, the county's poverty rate decreased at a greater rate (-22.8%) than most counties in the labor market and Kentucky.

TABLE 3-11 POVERTY RATES

	1999	2010	Percent Change
Mercer County	10.0%	8.2%	-1.8%
Anderson County	4.8%	7.9%	3.1%
Boyle County	9.1%	14.8%	5.7%
Casey County	20.7%	21.8%	1.1%
Fayette County	8.2%	11.1%	2.9%
Franklin County	6.9%	11.6%	4.7%
Garrard County	11.6%	13.1%	1.5%
Jessamine County	8.4%	11.9%	3.5%
Lincoln County	16.4%	15.3%	-1.1%
Marion County	15.8%	12.5%	-3.3%
Nelson County	10.0%	10.5%	0.5%
Shelby County	6.5%	8.4%	1.9%
Washington County	10.3%	10.0%	-0.3%
Woodford County	5.2%	7.8%	2.6%
Kentucky	12.7%	13.5%	0.8%

Source: U.S. Census Bureau, 2000 Decennial Census U.S. Census Bureau, 2006-2010 American Community Survey

Current Economic Development Activities

Mercer County Industrial Development Authority Prior to January 1989, Mercer County had a private, non-profit industrial foundation. However, in 1989 the Harrodsburg-Mercer County Industrial Development Authority was established as a government entity in accordance with KRS 154.50-301 to 154.50-346. The industrial development authority is governed by six (6) appointees. Three (3) people are appointed by the Mercer County Judge/ Executive and three (3) are appointed by the Mayor of Harrodsburg. The industrial authority was formed for the purpose of acquiring property, developing land for industrial use, and recruiting new industries. For this reason, the Harrodsburg Mercer County Industrial Development Authority actively supports local and regional projects that promote the economic growth of Central Kentucky and the competitiveness of the State of Kentucky at the national and global level. In order to promote the healthy economic growth of Harrodsburg and Mercer County, the authority coordinates economic development programs and the development of incentive packages with the Kentucky Cabinet for Economic Development and the Kentucky Industrial Development Council.

The Harrodsburg Mercer County Industrial Authority owns the Gene C. Royalty Industrial Park located in the northwestern portion of the City of Harrodsburg which is served by a paved access road allowing convenient access to U.S. 127. Primary industries in the park are Wausau Paper, Toyota Bushoku, and CDR Manufacturing. Major industries located on the exterior of the park include Hitachi Astemo, and Corning. In Fall of 2001, the Harrodsburg/Mercer County Industrial Development Authority initiated the development of the *Quality of Life/Partners in Progress Plan* which outlines the authority's mission statement and strategic economic development plan. The plan addresses quality of life,

goods, services and employee retention issues within the county. Important tasks for the Industrial Development Authority identified during the planning process, as contained in the plan, include:

DEFINING OUR OBJECTIVES

- The authority learned about the client, Major Industry, and Community Hosted an interactive Business and Idea Exchange for Business and Industry.
- Hosted an interactive Industry Day in Concert with Mercer County Youth Leadership.
- Commenced an informative, educational publishing about today's industry to Major Industry and our Community.
- Commenced a quarterly, educational publishing through local media featuring Major Industry.
- Met individually with Major Industry, defining individual internal objectives.
- Met with State and Economic Cabinet members to establish ongoing, regulated contact.
- Created partnership, Partners In Progress, between Major Industry, Our Community, the Industrial Authority.

TECHNICAL PREPARATION

- Completed building analysis and recommendations for area underutilized property, i.e. Createc, Keystone, Hallmack, Cricketeer.
- Land evaluation and market comps for available industrial property.
- Researched existing commercial business serving Major Industry, our Community.
- Researched individual growth patterns of existing major industry, i.e. structural, business employment patterns and processes.

IDENTIFIED THE MISSION/STRATEGIC PLAN-PARTNERS IN PROGRESS - QUALITY OF LIFE - PHASE I

- Established out Mission Statement focused upon retaining current and attracting new industry - Partners in Progress-Quality of Life-Phase I
- Reported our mission to the City and County Leadership, Major Industry, and out Community through public advertising and individual sessions.

ACTING UPON THE MISSION

Pioneered the first Employee Retention Summit with Major Industry encompassing:

- State Incentive Needs
- Structural Expansion
- Employee Growth
- Business Line/Product Growth
- Health Care/Health Care Consortium
- Training requirements, permanent and temporary to permanent
- Quality of Life Goods and Services
- Communications Broadband, Satellite
- Regular State and Industrial Authority contact incentive updates and requirements from Major Industry.

- Direct Dialog/contact with U.S. Congressional Leaders and political representatives.
- Regionalism -- multi-county efforts to drive and meeting the business needs of our Community and Major Industry.

INSPIRED, INNOVATED PRODUCTS/SUCCESS OF OUR EMPLOYEE RETENTION SUMMIT

- Solid business relationships by and between Major Industry and the Industrial Authority.
- Independent interactive relationships by and between Major Industry Senior and Middle management.
- A mutual effort toward a Health Care Consortium at multi-county level.
- A premier, round-table session with Ephraim McDowell resulting in one primary contact to serve and assist our Major Industrial Portfolio, and a commitment to interact hospital services and programs.
- Development of a Technical Village, web based tool for advanced skilled, professional employees at a multi-county level.
- Connecting major industry to local real estate relocation services for their employees and families.
- Constant availability of the Industrial Authority to Major Industry addressing specific internal business needs.

THE SUCCESS OF COMBINED EXPERTISE - MAJOR INDUSTRY, THE INDUSTRIAL AUTHORITY, AREA PROFESSIONALS

- Industrial Authority submitted substantive research and information working with our Community in the UK Study for Comprehensive Planning
- The Industrial Authority submitted to major industry market analysis, infrastructure study and recommendations directly impacting a once pending decision to relocate substantial square footage/employees to an alternate facility beyond our State Line.
- Partnered with City Commissioner Kevin Perkins in a comprehensive study of City Public Works, including building, employee, and space analysis driven to improve a suitable central working environment and structure for City Employees
- Provided building analysis, structural improvement, demolition estimates and recommendations for redevelopment of the underutilized Cricketeer site to the City of Harrodsburg
- Achieved full contribution and unanimous support from our Fiscal Court in Mercer County toward our continued success with our Partner in Progress/Quality of Life Mission.
- Providing expertise in building structure and space analysis to the Harrodsburg Technical Center.
- Participation in steering sessions toward program expansion and physical expansion of the Harrodsburg Technical Center.
- Partnering with privately owned industrial land owners and the Economic Cabinet to effectively market viable industrial land.
- Participation in the Regional Program "The Heartland Coalition", Chairing Marketing and Promotion of economic unity, growth among 19 Central Kentucky locations.

• Expertise in building analysis, research in refurbishment, redevelopment, structural improvements, secured interior/exterior improvement, demolition and commercial redevelopment recommendations for underutilized property and acreage.

TASKS AT HAND

- Driving the Health Care Consortium to multi-county, State, and Federal level.
- Facilitating individual industry expansion and retention needs.
- Developing a five (5) year Performa, collective, and by individual industry addressing communication and infrastructure needs.
- Completing and implementing the development strategy for privately owned and authority owned industrial land.
- Sustaining consistent availability to address each and every issue, concern and business requirement of major industries in Harrodsburg/Mercer County.
- Pursuing State and Federal funding allowing for independent, daily, cost effective business operation of the Industrial Authority and related projects.
- Facilitating the creation of the Technical Village/Advanced Skilled Professionals web based site.
- All projects and innovations evolving from ongoing Employee Retention Summits.
- Developing an inter-park professional employee development and training center serving Harrodsburg/Mercer County's collective billion dollar industrial portfolio.
- Improving the communication with the state regarding industrial prospects.
- Providing expertise and assistance in the development of goods and services serving major industry and the Mercer County School System.

Harrodsburg/Mercer County Tourism Commission

In 1979, the Harrodsburg City Commission and the Mercer County Fiscal Court established the Harrodsburg/Mercer County Tourist Commission pursuant to KRS 91A.350. A three percent (3%) transient room tax solely funds the operations of the commissionThere are currently eight (8) hotels/motels/inns, four (4) bed and breakfasts, three (3) lake rentals and one (1) river cottage in Harrodsburg and Mercer County, which provide a total of approximately 417 lodging rooms.

The Tourist Commission Board of Directors is comprised of seven (7) members, five (5) of which are appointed by the County Judge Executive, based on recommendations by the Harrodsburg Hotel/Motel Association, the Harrodsburg Restaurant Association, and the Mercer Chamber of Commerce. The Judge Executive also appoints one (1) individual to serve as the Mercer County representative; and the Harrodsburg Mayor appoints one (1) person to serve as the City of Harrodsburg representative. The Harrodsburg/Mercer County Tourist Commission office serves as the Visitor Information Center and is located at 124 South Main Street in the downtown historic district.

Since 1979, the Harrodsburg/Mercer County Tourist Commission's primary goal has been to enhance the city and county's economy through tourism development - to promote and sell Harrodsburg as a destination for leisure, group and business travel. The collection of transient room tax provides the resources to promote the area to the best of the agency's

financial ability. An extensive marketing plan promotes "Historic Harrodsburg" as Kentucky's First Settlement and entices travelers to visit the variety of historic attractions offered. Due to the Commission's marketing efforts for over twenty (20) years, the tourist attractions of Mercer County are well known throughout the state and national tourism industry.

Tourist attractions promoted include: Shaker Village of Pleasant Hill, Dixie Belle Riverboat, Old Fort Harrod State Park, and Olde Towne Tours. Points of interest promoted include: Beaumont Inn, Downtown Historic District, Historic Harrodsburg Walking/Driving Tour, Morgan Row (Harrodsburg Historical Society headquarters), and Olde Towne Park. Recreational amenities marketed include: Anderson/Dean Community Park, Big Red Stables, Bright Leaf Golf Resort, Herrington Lake and Kentucky River (camping, boating, fishing), Pin Oak Driving Range, Hiking and Horseback Trails at Shaker Village. The tourism commission also publicizes the area's entertainment venues (Ragged Edge Community Theater, Summer Entertainment Series, etc.), restaurants, antique, craft and retail shops. A variety of activities and promotional efforts are carried out by the Commission in order to stimulate the tourism market on a local, regional, state and national level. The Commission interfaces with the tourism industry through professional affiliations, consumer travel shows, group motorcoach marketplaces, direct mail, Internet and personal contact.

In addition to encouraging visitors to the area, the Harrodsburg/Mercer County Tourist Commission works to fulfill customer needs and enhance their satisfaction with the community's tourism products and services. Through cooperative efforts with city and county governments, trade and civic organizations, hotels, motels, bed and breakfasts, restaurants, and area attractions, the Commission works to increase the appeal of Harrodsburg and Mercer County to tourists. Separate visitation numbers are kept for Shaker Village and the Dixie Belle Sternwheeler ride on the Kentucky River which leaves from Shaker Landing. Table 3-12, located on the following page, compares visitation rates in 1991 to those in 2001.

TABLE 3-12

ANNUAL ATTRACTION VISITATION RATES

	1991	2001	% CHG
Old Fort Harrod	40,000	29,913	-25.2%
Shaker Village	144,000	97,573**	-66.8%
Dixie Belle	49,703		

^{**} Shaker Village recently combined the visitation rates for the Dixie Belle stearnwheeler with Shaker Village overall.

Chapter Four - Environment

The physical geography of an area affects the amount, type, and direction of development. Natural factors such as climate, topography, geology, hydrology, and soils are important because they influence the costs of development and determine the suitability of an area for a given use. The purpose of this section of the comprehensive plan is the identification

of environmental resources and the assessment of developmental impacts on these resources.

Rapid growth and development can have dramatic and long-term adverse effects on the physical and social environment. As Mercer County and the City of Harrodsburg continue to grow, many environmental issues will continue to arise. Issues such as water quality, air quality, noise and light pollution, increased storm water runoff and decreased open space can combine to effect the overall quality of life for residents. The depletion of natural features such as wooded hillsides, scenic valleys, rivers, creeks, and open fields will become increasingly important as residents realize that these elements contribute to the unique character of the area and are unrecoverable once a parcel of land is developed. In addition, these types of amenities also provide less visible qualities, such as cleaner air, recreational areas and wildlife habitat that are equally important to the community.

Location

Mercer County is located southwest of Lexington in central Kentucky in the Outer Bluegrass physiographic region. Mercer County was the sixth county in order of formation and has a land area of 250 square miles. The county was formed on December 15, 1785 from a portion of Lincoln County and was named in honor of General Hugh Mercer, a Scotsman who was killed in the Battle of Princeton in the Revolutionary War.

Harrodsburg, the first permanent pioneer settlement in Kentucky, is the largest city and county seat. Harrodsburg is a fourth class city. It was founded June 16, 1774 by James Harrod and thirty-one (31) other men. Harrodsburg is located in south central Mercer County at the intersection of U.S. 127 and U.S. 68. Burgin, the only other city in the county, is located east of Harrodsburg in southeast Mercer County. Burgin is a fifth class city.

Climate

Mercer County has a temperate and humid climate. Southerly winds predominate bringing moist warm air. The most common severe weather conditions are in the form of mild droughts or thunderstorms. Tornadoes are the most devastating severe weather which occurs in the area. Tornadoes can occur almost anywhere in Kentucky and in any terrain, hilltop or valley bottom. Severe storms can occur in any month but are most frequent from March to July. Long term climatological data is available for the Danville weather station. The following discussion is based upon the period between the years 1933 – 1995 for extremes and the years 1961 - 1990 for averages. The coldest days occur in January when the monthly average temperature is 30.8° F. The warmest days occur in July with a monthly average temperature of 75.4° F. During the period from June to September, an average of 26.7 days will have a maximum temperature of 90° F or higher. The minimum temperature is expected to be 32° F or less an average of 98.6 days from October through April. The coldest temperature on record for the period is -20° F on January 20, 1994. The hottest recorded temperature was 107° F on July 9, 1988 and June 29, 1936.

Precipitation averages 47.56 inches annually. Records indicate that July and May tend to be the wettest months and October and January the driest. Precipitation in general is

evenly distributed throughout the year. An average of seven (7) days per month will have precipitation of .10 inches or more.

Air Quality

Air quality is monitored by the Division of Air Quality Control of the Kentucky Natural Resources and Environmental Protection Cabinet, Department for Environmental Protection. The "Kentucky Ambient Air Quality Report" which is produced by the Technical Services Branch of the Kentucky Division of Air Quality is issued annually. The last report issued summarizes statistical results of monitoring conducted during the year 2002 to measure outdoor concentrations of air pollutants in the Commonwealth. The primary source of data for the report is the Air Quality Surveillance Network operated by the Kentucky Division for Air Quality which has operated an air quality monitoring network since July 1967. The 2002 network included 117 monitors in 33 counties (this total includes monitors operated by the Louisville Metro Air Pollution Control District and the National Parks Service at Mammoth Cave).

The monitoring station locations are selected with U.S. Environmental Protection Agency guidance and, in general, are established near high population areas or air pollution sources. Each year the sites are reviewed to ensure that adequate coverage is being provided. In the year 2002, the closest Kentucky Air Monitoring Sites to Mercer County were located in Fayette and Jessamine Counties. Overall, the division monitors compliance of six (6) criteria pollutants including carbon monoxide, sulfur oxides, nitrogen dioxide, lead, ozone, and particulate matter. However, different sites monitor for different pollutants. In Fayette County, several sites monitored carbon monoxide, sulfur dioxide, nitrogen dioxide, ozone and particulate matter. The one (1) monitoring site in Jessamine County monitors for ozone attainment. In 2002, all Kentucky Counties were in attainment for carbon monoxide, sulfur dioxide, nitrogen dioxide, and ozone. There were three (3) exceedances of particulate matter standards. All three (3) occurrences were located in Louisville in 2002.

According to the U.S. EPA's *Aerometric Information Retrieval System* (AIRS), there are seven (7) facilities in Mercer County that produce and release air pollutants: Corning Incorporated, Createc (now closed), Hitachi Astemo Americas, Kentucky Utilities Company, Mago Construction, and Mercer Stone Company. Of these facilities, EPA has only reported formal enforcement action against the Kentucky Utilities Company.

Noise

High noise levels can impact the health and safety of residents. Excess noise can cause impacts ranging from the nuisance of interrupting a conversation to causing physical and psychological harm. The primary consideration for noise in terms of new development is the community noise level. According to "The Noise Guidebook" issued by the Department of Housing and Urban Development, the main contributors to a community noise problem are transportation sources such as highways, railroads, and airports. These sources are the most pervasive and continuing of the noise sources. The main issues involved in any noise analysis are how much noise a site is exposed to, what types of activities are affected, and what design or attenuation measures can be used to keep noise to an acceptable level.

Outdoor noise levels are of greatest concern in residential areas especially at night when sleep is disrupted. The easiest way to mitigate noise is to separate noise sources from noise receptors. This can be accomplished by requiring buffer zones around airports and establishing minimum setbacks from major highways and railroads. For example, HUD recommends that no occupiable buildings be constructed within 100 feet of a railroad due to the impact of noise and vibration. Noise levels can also be attenuated by noise barriers, site design, and soundproofing of buildings. It is recommended that a noise analysis be conducted when noise sensitive uses such as residential development or hospitals are proposed near railroads, airports or highways with considerable truck traffic. In Mercer County, the major facilities of concern are the Norfolk-Southern Railroad and U.S. 127 within the Harrodsburg central business district along the by-pass. It is important to note that the county has an ordinance that establishes acceptable decible levels for noise in the community.

Physiography & Geology

Mercer County is located in the Bluegrass physiographic region with most of the county in the Inner Bluegrass. The county is underlain by rocks of Middle Ordovician age which are some of the oldest exposed rocks in Kentucky. The three (3) formations that predominate are the Cynthiana Formation, the Lexington Group, and the High Bridge Group.

The Cynthiana Formation is exposed in the western half of Mercer County. This formation consists of thin to thick bedded limestone with some interblended thin shale. The Lexington Group is exposed mostly in the eastern half of the county. It consists of thin to medium beds of limestone with varying degrees of interblended shale. The High Bridge Group is found along the Dix River which forms Herrington Lake and the eastern boundary Mercer County, and along the Kentucky River which borders the county to the north-east. The High Bridge Group consists of mostly massive limestone. The rocks of this group are more resistant to erosion than other rocks in central Kentucky. These rocks are responsible for the rugged topography of the gorge which forms the Kentucky River palisades and some of its tributaries including the Dix River. There are no major fault lines in Mercer County. Limestone is the most significant mineral source in the county with one (1) crushed stone quarry located just east of Harrodsburg.

The topography in most of Mercer County is gently to moderately rolling upland with broad, flat valleys. The area in the vicinity of the Kentucky and Dix Rivers is characterized by steep slopes and high cliffs along relatively flat, broad valley floors. Elevations range from 483 feet in the north end of the county at the downstream end of the Kentucky River to almost 950 feet on hilltops to the southwest. The county is drained generally to the north by the Chaplin River, Salt River, Dix River, and Kentucky River. There is some underground drainage where limestone predominates. The county spans crosses three (3) watersheds, the Lower Kentucky (to the east); Salt River watershed (central portion of the county); and Rolling Fork to the west. Although the geology of Mercer County is varied, it consists of mostly limestone bedrock. The most sensitive geology to ground water pollution is found on the eastern edge of the county. In these areas, surface water more quickly penetrates the soil and impacts the water quality of lakes and streams.

Karst Topography

Karst topography describes an area which is underlain by limestone which has been dissolved by groundwater percolation through rock forming solution channels. These channels increase in size over extended periods of time to form caves and other cavities. As these cavities expand, it is common for them to form depressions known as sinkholes at the surface. An area with karst topography is characterized by the extensive development of sinkholes, underground drainage, lack of surface streams, caverns, solution sculptured rock, and large springs. Karst topography is common in Mercer County due to the underlying limestone. According to *Caves and Karst of Kentucky*, published in 1985 by the Kentucky Geological Survey, there are thirty-seven (37) known caves in Mercer County with four (4) of them mapped.

The major concerns with karst topography in developed areas are sinkhole flooding, overburden collapses, and groundwater contamination. Sinkhole flooding occurs when stormwater runoff exceeds the drainage capacity of the sinkhole. Flooding problems may increase when sinkholes are filled in with debris or soil when an area is graded. Development in a sinkhole drainage area which increases the amount of impervious surface such as roofs or paving can result in increased rates of runoff which then results in flooding problems. While overburden collapses are sometimes caused by blasting or construction over a cavity, groundwater fluctuations are a more common cause. In karst areas, the water table provides buoyant support for overburden arches. Droughts, high volume groundwater pumping and sometimes land use changes which affect water storage can result in a lowered water table and overburden or slumping or collapse. Groundwater contamination is also of particular concern in karst areas. Surface water normally percolates slowly through the soil before entering the groundwater allowing removal or containment of contaminants. However, in karst areas, surface water may become groundwater in a matter of minutes. Underground streams may flow as much as five (5) miles per day. This can cause rapid and extensive contamination of wells and springs which may be a water supply source for homes and livestock.

Steep Slopes

Land uses vary in their sensitivity to slope. Virtually flat land can be used for intensive activity, while slopes in excess of 20% present limitations so great that development is not feasible, both practically and financially. Residential development can take place on small scattered sites utilizing land that industrial development, with its more expansive land requirements must bypass. In addition, the location and concentration of slopes in the forms of hills, ridges, valleys and plains can force development into large clusters or break it up into dispersed patterns. Visual indications of unstable slopes include previous slides or slumps; cracking of the top of the slope; tilting of fences, retaining walls, utility poles or trees; new cracks in foundations and sidewalks; and slowly developing and widening cracks in the ground or paved areas.

Development on steep slopes can accelerate erosion, increase runoff, and decrease the volume of water absorbed and filtered as groundwater. Damage to buildings and other man-made structures can occur on unstable slopes. Commercial and industrial development should be restricted on slopes steeper than 12%. Developers of residential

property on such slopes should be required to prove that the construction techniques employed can overcome a site's limitations. In certain instances, the county may consider requiring a submittal of a geotechnical report prior to providing services to a new development or subdivision in order to ensure the safety of those utilizing the building being constructed. The suitability of different degrees of slope for development is show in Table 4-1.

TABLE 4-1

SLOPE SUITABILITY FOR URBAN DEVELOPMENT

Limitations	Suitability	Residential	Commercial	Industrial Park
Slight	Optimum	0-6%	0-6%	0-2%
Moderate	Satisfactory	6-12%	6-12%	2-6%
Severe	Marginal	12-18%	12-18%	6-12%
Very Severe	Unsatisfactory	18%+	18%+	12%+

Figure 4-1 is a generalized map showing the slopes in Mercer County. Steep slopes (greater than 12%) are found along the Kentucky River to the east and in the western third of the county. The western portion of the county is mostly moderately sloping (6 to 12% slopes). The remainder of the county is predominately gently rolling (slopes less than 6%) with some moderately sloping areas. Most development in Mercer County has occurred on land with a slope of 6% or less. Both Harrodsburg and Burgin were developed in areas of gently rolling land.

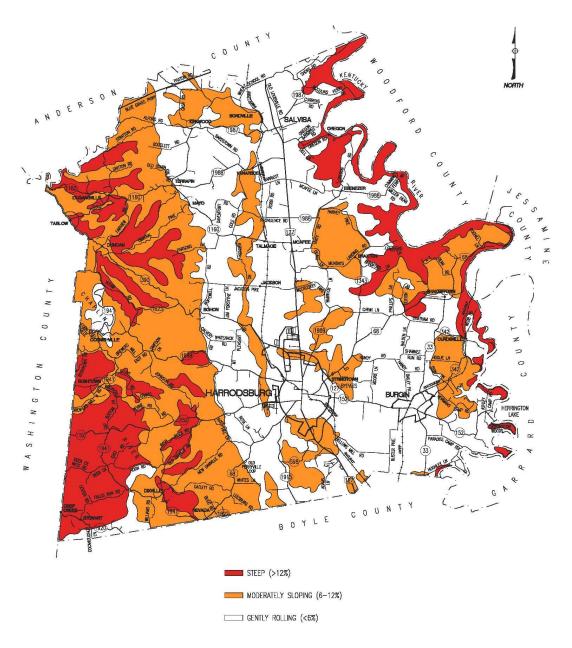
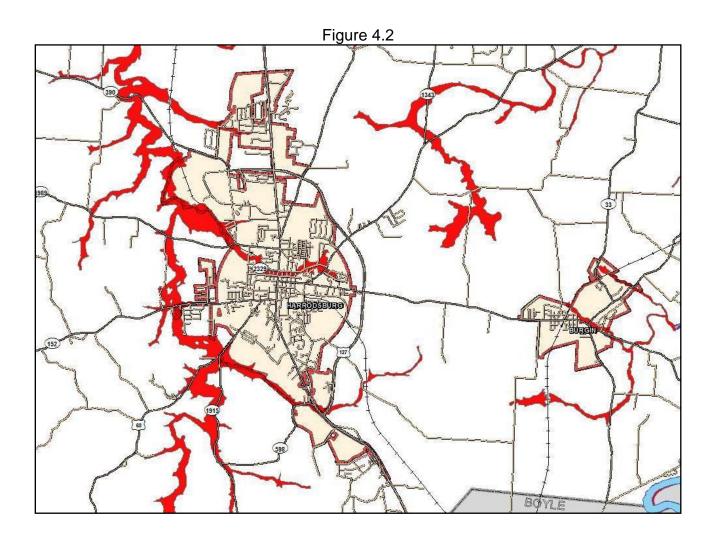


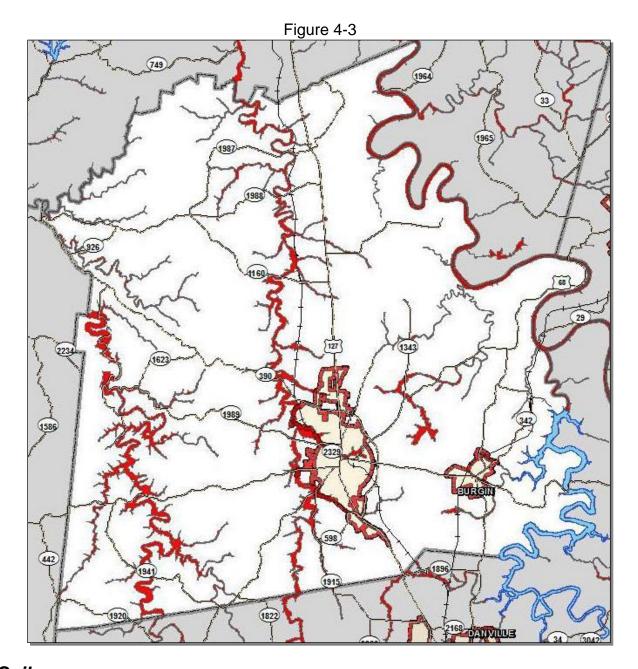
Figure 4.1

Floodplains

Floodplains are low lying areas that are susceptible to flooding. Development must be restricted or prohibited in floodplains to prevent property damage. Floodplain maps have been prepared for Mercer County, Harrodsburg and Burgin by the Federal Emergency Management Agency (FEMA). In 2008, FEMA implemented the Map Modernization project, providing new and updated Flood Insurance Rate Maps (FIRM) for the entire county. This resulted in the digitizing of the FIRMS and allow for better determinations as to where the special areas of concern are located. In Harrodsburg, the area along Town Creek in the north end of the city is identified as being in the 100 year floodplain. Town Creek is a tributary to Salt River. Flood hazard areas in the vicinity of Harrodsburg & Burgin are shown in Figure 4-2. In Burgin, areas along Water Street and Cane Run, a tributary to the Dix

River, are identified as flood hazard areas. For the remainder of Mercer County, areas subject to flooding have been identified along Kentucky River, Dix River, Lake Herrington, Salt River, Chaplin River, Cane Run, Town Creek, Dry Fork, Deep Creek, Thompson Creek and Lyons Branch. Figure 4-3 is a generalized map showing the larger floodplain areas in Mercer County. It is important to note that FEMA maps should be consulted when reviewing development proposals in flood prone areas.





Soils

Detailed soil information and soil maps can be found in the *Soil Survey of Boyle and Mercer Counties*, *Kentucky* published by the U.S. Department of Agriculture, Soil Conservation Service. The general soils map found in the soil survey shows that there are seven (7) soil associations in Mercer County. Soil associations are generalized groupings of similar soils with common relief and drainage patterns. While specific soil information must be consulted to determine the suitability of a particular site for various land uses, soil associations can provide information for general planning purposes. Table 4-2 shows the major soil associations and their suitability for development.

TABLE 4-2 MERCER COUNTY SOIL ASSOCIATIONS

ASSOCIATION	GENERAL DESCRIPTION
Eden	Steep to sloping, well drained, moderately deep soils that have a clayey subsoil. Found in western Mercer County. Poorly suited to urban uses due to steep slopes and high clay content.
Lowell-Faywood-Eden	Gently sloping to moderately steep, well drained, deep and moderately deep soils that have a clayey subsoil. Found in west-central Mercer County. Poorly suited to urban uses due to high clay content, steepness of slope and depth to bedrock.
Maury-McAfee-Fairmount	Nearly level to very steep, well drained, deep to shallow soils that have a clayey subsoil. Found in the central part of Mercer County. Poorly suited to urban uses due to high clay content, depth to bedrock, rock outcrops, and steep slopes.
Fairmount-McAfee-Maury	Very steep to nearly level, well drained, shallow to deep soils that have a clayey subsoil. Found in eastern Mercer County. Poorly suited to urban uses due to high clay content, depth to bedrock, rock outcrops, and steep slopes.
Chenault-Fairmount-McAfee	Gently sloping to very steep, well drained, deep, shallow and moderately deep soils that have a loamy or clayey subsoil. Found in scattered areas along the eastern end of Mercer County. Are suited to urban uses except in some areas where clay content, steepness of slope, rock outcrops, and bedrock are limitations.
Maury-Caleast	Nearly level to sloping, well drained, deep soils that have a clayey subsoil. Found in the southeast corner of Mercer County. Are suited to urban uses except in some areas where clay content, steepness of slope, rock outcrops and bedrock are limitations.
McAfee-Caleast-Fairmount	Gently sloping to very steep, well drained, moderately deep, deep and shallow soils that have a clayey subsoil. Found in the southeast corner of Mercer County. Poorly suited to urban uses due to high clay content, steepness of slope, rock

outcrops, limestone fragments, and depth to bedrock.

Hydric Soils

Hydric soils are those soils which are saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper layers. The presence of hydric soils is an indication that wetlands may exist in an area. Under currently accepted definitions, an area is considered a wetland if it has hydric soils, hydrophytic vegetation (plants that are adapted to growing in wet conditions), and wetlands hydrology. Wetlands hydrology means that the area is either permanently or periodically inundated or the soil is saturated to the surface at some time during the growing season. The only hydric soil in Mercer County is Dunning silty clay loam. It is hydric due to saturation. Four (4) other soil types, Boonesboro silt loam, McGary silt loam, Newark silt loam, and Nolin silt loam may have inclusions of hydric soils. This means that areas mapped as these soil types may include small areas of hydric soils in poorly drained low spots. In Mercer County, these hydric soils support or would have supported woody vegetation under natural conditions except those identified as swamp or ponded places.

Dunning silty clay loam is found only in limited locations in Mercer County. These areas include Shaker Creek near Shakertown, an unnamed tributary to Salt River near McAfee, a karst area just east of Stringtown, Cane Run near Burgin, and Salt River south of Harrodsburg. Wetlands or wet soils where wetland vegetation is missing may be a limiting factor for development in these areas of Mercer County.

Prime Farmland Soils

According to the U.S. Department of Agriculture, Soil Conservation Service, prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. Prime farmland can be cropland, pastureland, rangeland, forest land or other land but not urban built-up land or water. Prime farmland has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed according to acceptable farming methods. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time. They either do not flood frequently or are protected from flooding.

The following soils found in Mercer County are considered to be potential prime farmlands.

Bo- Boonesboro silt loam, 2 to 6% slopes

CaB- Caleast silt loam, 2 to 6% slopes

CgB- Carpenter gravelly silt loam, 2 to 6% slopes

CmB- Chenault gravelly silt loam, 2 to 6% slopes

Du- Dunning silty clay loam (**1,2)

EkA- Elk silt loam, 0 to 2% slopes

EkB- Elk silt loam, 2 to 6% slopes

LoB- Lowell silt loam, 2 to 6% slopes

MaA- Maury silt loam, 0 to 2% slopes

MaB- Maury silt loam, 2 to 6% slopes

McB- McAfee silt loam, 2 to 6% slopes

Mg- McGary silt loam (**1,2)

Ne- Newark silt loam (**1,2)

NtB- Nicholson silt loam, 2 to 6% slopes

No- Nolin silt loam (**1)

Se- Sensabaugh gravelly silt loam (**1)

TIA- Tilst silt loam, 0 to 2% slopes

TIB- Tilst silt loam, 2 to 6% slopes

TpB- Trappist silt loam, 6 to 12% slopes

** 1. Areas of this soil that are subject to flooding during the growing season more frequently than once in two years are not considered to be prime farmland.
2. Areas of this soil lacking adequate drainage to a sufficient depth during the cropping season allow cultivated crops common to the area to be grown are not considered prime farmland.

In addition to prime farmland, the Soil Conservation Service has also identified farmlands of statewide importance. This is land other than prime farmland that is of statewide importance for the production of food, feed, fiber, forage, and oilseed crops. Generally, farmlands of statewide importance include those that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce as high a yield as prime farmlands if conditions are favorable.

The following soils found in Mercer County may be farmland of statewide importance:

CaC- Caleast silt loam, 6 to 12% slopes

CgC- Carpenter gravelly silt loam, 6 to 12% slopes

CmC- Chenault gravelly silt loam, 6 to 12% slopes

FdC- Faywood silt loam, 6 to 12% slopes

LoC- Lowell silt loam, 6 to 12% slopes

MaC- Maury silt loam, 6 to 12% slopes

McC- McAfee silt loam, 6 to 12% slopes

TpC- Trappist silt loam, 6 to 12% slopes

VeC- Vertrees silt loam, 6 to 12% slopes

While specific determinations as to the location of prime farmlands and farmlands of statewide importance must be made on a site-by-site basis, the majority of these soils are found in six (6) of the general soil map units. These map units are Lowell-Faywood-Eden, Maury-Caleast, McAfee-Caleast-Fairmount, Caleast-McAfee-Maury, and Tilst-Trappist. The recurring pattern of the conversion of the best agricultural land to other land uses not only eliminates this land as a potential source of income to both the farmer and county, but also encourages agricultural use of less productive land which could better be engaged in another activity. This type of trade off can force land which might possess severe environmental limitations such as steep slopes and high erosion hazards to be used for agricultural purposes. Unfortunately, land which is best suited to crop land or pasture land usually also offers the fewest limitations to urban type development.

It is critical for Mercer County to balance the appropriate uses of the land. Nearly 40,000 acres (34%) of Mercer County's land meets the USDA soil requirements for "prime farmland" with most fertile soils located in the east-central portion of the county. The crops grown on this land account for approximately one fourth of the county's total agricultural income. As population grows and the demand for space increases, invariably prime agricultural land will be converted to an urban type of use. A point of equilibrium must be reached which will allow the best use of all land required to meet both the urban and agricultural needs of Mercer County.

Decisions involving this type of transfer should be carefully considered by the planning commission and elected officials to ensure that a sound agricultural economic base will continue to be maintained in Mercer County.

Endangered Species

The primary concern for the impacts of development on plant and animal life are the effects on rare and endangered species. There are four (4) animal species of potential concern in Mercer County according to the Kentucky Department of Fish & Wildlife Resources. A listing and a brief description of each species follows:

TABLE 4-3 SPECIES OF CONCERN

CO	MMO	Ν	NA	ME
	_	_		

Alabama Shad Bewick's Wren Blackside dace

Bobolink

SPECIES

Alosa alabamae Thryomanes Bewickii Phoxinus Cumberlandensis

Dolichonyx oryzivorus

STATUS

State endangered
State special concern
Federal listed threatened
State threatened

State special concern



The Alabama Shad is an elongated, silvery fish with 50-60 scales in the lateral series and 15-17 rays in the dorsal fins. This species is state endangered due to the degradation of its habitat caused by siltation and pollutants.



Bewick's Wren is a 13 -centimeter long bird with a long sideways fitting tail edged with white spots. Declines probably related to interspecific competition, habitat changes, inclement weather, and predators.



The Blackside Dace is a small bony fish similar to a minnow. Threatened status is primarily due to the impacts of siltation from coal mining, silviculture, agriculture, construction, and impacts of unregulated acid mine drainage and impoundments. Additional threats include channelization and non-point source pollution.



The Bobolink is small 18 cm long bird with a stout, relatively short, pointed bill and sharply pointed tail feathers. The bird is still widespread and fairly common, but declining due to changing agricultural practices.

While there are currently no state or local regulations protecting endangered species, projects which are federally funded or require significant federal actions (such as permits), must ensure that the proposed project does not negatively impact federally protected species.

Chapter Five – Housing & Historic

The quality of life in any region is integrally related to the quality of its housing stock. Goals for the improvement of housing must focus simultaneously on issues of supply and demand. Demand factors include population growth, demographic patterns of household formation, income factors, and economic opportunities in the county and region. Additional local factors affecting demand include transportation, education, commercial and recreational facilities and proximity to jobs. Housing supply factors include the availability of land, capital, financing, and appropriate infrastructure including road access and required utilities. In a market economy, the role of government in housing may not be well understood. Housing supply is typically considered a market matter, except where housing for the economically disadvantaged is concerned. However, government provision or withholding of designated areas for residential development or services, such as water and sewer availability, can affect housing supply in an area. On the demand side, homebuyers' perceptions of local and regional amenities influence private decisions to locate in an area. Government actions affecting the transportation system, schools, parks, recreational facilities, and other local amenities can affect these perceptions and, in turn, the desirability of an area as a place to live.

Housing decisions, whether a result of deliberate policy orientation or an accumulation of private choices, in turn carry long-term consequences affecting community growth patterns and lifestyles. The potential benefits to the county of a concerted, coordinated housing policy should therefore be clear. In Mercer County, moderate population growth has been experienced and is projected to continue and increase. Housing construction will have to keep pace if decent, safe, and sanitary housing is to be made available to the expanded population. The county must be concerned with the housing needs of the current and projected population in terms of location and affordability. In addition, an appropriate mix of housing types must be encouraged and maintained to ensure that local fiscal revenues will be sufficient to provide necessary services to the population. These two sides of the housing equation must be kept in balance if the county is to maintain a decent standard of public health, safety, and welfare for its citizens. Apart from the use of public money to build or rehabilitate low and moderate income housing or to subsidize housing costs, the major tools that local governments have to influence the quantity, quality, type and location of housing are (1) direct regulatory means such as building code enforcement, zoning, and aesthetic regulations, and (2) indirect means such as provision of services and amenities.

Housing Tenure

Mercer County's housing stock grew by 1.32% between 2010 and 2015 from 9,905 to 10,038 units. The City of Harrodsburg accounts for 37.8% of the total number of housing units in the county with Burgin accounting for 5.8% of the housing stock. Of the 8,824 occupied housing units in Mercer County, 71.4% were owner occupied, and 28.7% were renter occupied. Harrodsburg had a total of 3,794 housing units in 2015. Of the units that were occupied, 53.7% were owner occupied and 46.3% were renter occupied. Burgin has a total of 586 units with 62.7% being owner occupied and 37.3% renter occupied. Homeownership was greater in the unincorporated areas of the county with 85.2% of the housing units being owner occupied and 14.8% being renter occupied.

The overall vacancy rate for Mercer County in 2015 was 12.1%, lower than 14.5% in 2010. The vacancy rates for Burgin increased between 2010 and 2015 from 6.9% to 10.8%. Harrodsburg's vacancy rate decreased from 2010 to 2015 from 14.9% to 7.6%. The vacancy rate for the unincorporated areas of the county increased in the same five year period from 12.4% in 2010 to 15.2% in 2015. It is important to note that vacancy rates of four to five percent (4-5%) are considered necessary to provide choice and mobility in the housing market and meet short term increases in demand. Too many vacancies reduce the demand for new units while too few vacancies will often force housing costs to increase as demand is generated for new units. An adequate supply of both rental and owner occupied housing units is also necessary to foster growth and meet the demands of new families moving into the area.

Housing Characteristics

Information on housing characteristics for Mercer County is available from U.S. Census Data. Single family residences are the predominate type of housing in the county and both cities. In the unincorporated areas of the county, single family residences account for 87.2% of the housing stock. In Harrodsburg the number of single family residences is 2,500 or 65.9% of the housing stock. The percentage of single family homes in Burgin is 78.5%. For the most part, multi-unit structures are concentrated in the City of Harrodsburg due to the availability of public utilities. Mobile homes are found in the greatest numbers in the unincorporated areas of the county where they account for 10.2% of the housing stock. The number of mobile homes in the City of Burgin has increased significantly from 2010 to 2015 with an increased from 3.2% of the total housing stock to 8.4%. The number of mobile homes in Harrodsburg has decreased only slightly from 138, 2010, to 130, in 2015. Recent housing trends regarding housing unit types can be examined by comparing housing census data from 2010 to 2015.

According to the 2010 and 2015 Census', the most significant changes in the housing stock has been the development of mobile housing. Between 2010 and 2015, molbile housing increase across the county, with the exception of Harrodsburg, which saw a reduction by 5.8%. Burgin saw the largest increase in mobile housing, with an increase of of 73.5%. The percentage of three (3) to four (4) family units also significantly increased significantly in Harrodsburg and Burgin, with 34.6% and 69.7% respectively. In Harrodsburg, the number of single family homes has decreased (-18.7%) while the number of single family homes increased by 22.4% in Burgin.

Current Housing Trends

Housing trends since the 2010 Census can be analyzed by examining building permit information for Mercer County. This permit information was obtained from the U.S. Census Bureau which conducts a monthly Building Permits Survey. Building permit statistics are summarized for the U.S., by Census Regions, Census Divisions, Metropolitan areas, and counties. Data are also available for individual permit offices. The survey collects the number of housing units and the valuation of construction for new single family and multifamily structures. For additions, alterations, renovations, and major replacements, the survey collects the number of total permits and total valuation for each month. Monthly data

are available January 2000 forward and annual data from 1990 forward. It is important to note that this information will not account for housing units that may have been demolished or otherwise removed from the housing supply since 2000. It is also important to note that mobile or manufactured homes are not included as part of the survey as the Census Bureau considers them to be a movable or portable dwelling constructed to be towed on its own chassis. These units are also excluded from the census as they are built under HUD Code, which means that they are inspected at the factory and are exempt from local government building inspections.

In Mercer County there were a total of 170 building permits issued for a total of 173 new housing units constructed between the years 2012 to 2016. The majority of structures constructed were single-family homes which accounted for 79.7% of the units constructed during this time period. Two-family units accounted for 3.5% of building permits issued and mobile home units 16.8%. No building permits were issued for structures containing three to four, or five (5) or more dwelling units. The number of permits issued between 2000 and 2003 is fairly consistent with an average of 116 permits being issued annually. The number of units constructed is also fairly consistent with an average of 126 housing units be constructed annually. It is important to note city specific data was not available from the Census Bureau for the Cities of Harrodsburg and Burgin.

Future Housing Trends

An estimate of the number of additional housing units needed in the future can be made using population projections and some assumptions based upon demographic trends. Since the number of persons per household is expected to slightly decline in the future, the persons per household for the county and cities will reflect this trend. Although Mercer County had 2.42 persons per household in 2015, this number will be assumed to be 2.4 in the future. The number of persons per household for Harrodsburg and Burgin will be assumed to be 2.35 in the future.

In 2015, there were 152 persons living in group quarters in Mercer County representing .71% of the population. This compares to 2.9% for the State of Kentucky overall for the same period. The number living in group quarters in the city limits of Harrodsburg is 152 representing 1.8% of the population. Burgin did not have any persons living in group quarters. Those living in group quarters in Harrodsburg are assumed to be in a nursing home (s) as they are reported as being "non-institutionalized" group quarters.

For housing projection purposes, the group quarters rate will be assumed to be 1% for Mercer County and 2% for the City of Harrodsburg as the number of elderly persons residing in group quarters can be expected to increase somewhat in the future. Although the City of Burgin does not currently have any group housing units, the need for group quarters may increase slightly in the future due to an aging population. For this reason it is assumed that .1% of the population will reside in group quarters by the year 2020. Assuming a 2015 population of 21,342 (as projected by the Kentucky State Data Center), a 12.1% vacancy rate, a 1% group quarters rate, and 2.4 persons per household, 10,038 housing units will be the minimum needed in Mercer County by the year 2020. As there were 9,905 units in 2010 with an additional 133 units constructed since then, a minimum of

430 additional housing units will be needed by the year 2020. In the year 2020, it is anticipated that Mercer County will need a total of 10,793 housing units, meaning a minimum of 994 additional units. A similar analysis can be conducted by city. However, it is less meaningful as city limits may change over time due to annexations. It is also not known how many new units were constructed within city limits from 2000 to 2003. For Harrodsburg with a 2015 estimated population of 8,380, a 7.6% vacancy rate, 1.8% group quarters rate, and 2.4 persons per household; a total of 4,291 units will be needed by the year 2020, As there were 3,794 units in 2015, this indicates a need for an additional 582 units. In the City of Burgin, it is assumed that the population will be 789 in the year 2010. With the city, having a 10.8% vacancy rate, a .0% group quarters rate and 2.4 persons per household, only 371 housing units will be needed which is less than the total number of units existing in the city as of the 2000 Census. Therefore, due to an anticipated decline in population and continued vacancy rates, it is not anticipated that construction of additional housing units will be necessary. However, it is highly recommended that the city consider redevelopment of blighted housing areas in order rehabilitate, and/or demolish and rebuild dilapidated homes. Projects of this type will assist the city to retain existing residents and attract new ones, thus stabilizing the population of the city.

As it can be assumed that some existing units will be demolished or deteriorate beyond use, some will be destroyed by fire and others may be converted to other uses, these numbers should be treated as minimums. As current population projections show that the population will increase somewhat beyond the year 2010, these numbers represent a minimum number of housing units needed unless population trends change. Communities do not normally need to take action to provide housing for middle or upper income persons. These groups can usually purchase or build adequate housing. However, the cities of Harrodsburg and Burgin need to ensure that regulations encourage quality development and that adequate land zoned for various types of residential use is available for development in the future. Communities may need to assist lower income persons and some elderly or handicapped persons in finding adequate, decent, safe, and sanitary affordable housing. Methods of assistance to these types of households are discussed in the "Publicly Assisted Housing" section of this chapter. In addition, as mentioned above, the City of Burgin may consider applying for grant funds to redevelop existing residential areas.

Housing Conditions

Housing conditions can be evaluated by analysis of selected census data measures and by visual surveys. Census data indicators of substandard housing include the age of the housing stock, structures lacking complete plumbing facilities, and overcrowding. Those units lacking complete plumbing facilities are considered to be substandard. A housing unit is considered to have complete plumbing facilities if it has hot and cold piped water, a flush toilet and a bathtub or shower. A unit is considered to lack complete plumbing facilities if any of the three (3) are not present.

Housing units constructed prior to 1940 are considered to be potentially substandard. Overcrowding is considered to exist if there is more than one (1) person per room in a household. In Kentucky, homes that lack a heat source or use coal or wood as the primary heat source are also an indication of potentially substandard housing. Houses lacking

complete plumbing facilities in unincorperated areas comprise 2.9% of the housing stock in this area. Houses lacking complete plumbing in Harrodsburg and Burgin comprise 17.9% and 9.0% respectively. The highest number of units using wood or coal as a primary heating source, (5.3%) are also located in the unincorporated areas of the county. Most homes in Harrodsburg appear to have adequate plumbing and heating. Overcrowding is generally not a problem in Harrodsburg, Burgin, or other parts of the county. A moderate number of homes in both Harrodsburg and Mercer County were constructed prior to 1940. Over 16.6% of the homes in Burgin were constructed prior to 1940. Again, the City of Burgin may want to consider applying for grant funds to rehabilitate and upgrade its existing housing stock.

Publicly Assisted Housing

A variety of financial assistance is available to help low income elderly, handicapped persons, and families find decent, safe, and sanitary housing. Assistance may be unitspecific or household specific. In unit specific housing, the housing subsidy stays with the housing unit for a contract period or indefinitely as is the case with public housing. Household-specific assistance is committed to participating households. These households may relocate from one (1) housing unit to another while continuing to receive the housing subsidy. Assisted rental housing units in Harrodsburg fall under a variety of programs. Public housing programs serve low and very low income families, with rents based on income. Eligible tenants must pay the higher of either 30% of their adjusted gross income or 10% of their gross income. The Section 8 program helps low and very low income people pay their rent, with rents based on the same formula used for public housing assistance. Many Section 8 apartments, but not all, are reserved for elderly people. Some are also specifically designed for handicapped persons. The Section 236 program assists applicants 62 years of age or older and/or individuals with a disability. These units are designed for elderly or disabled persons. Some supportive services may be available on the premises.

The former Farmers Home Administration (FmHA) program, now known as the Rural Development (RD) program, serves low and moderate income people in rural areas. Low-income senior citizens or families paying rents of more than 30% of their adjusted annual incomes can qualify for rental assistance. In properties not offering rental assistance, tenants pay the greater of 30% of adjusted income or the base rent. Low interest rate loans are made to owners to reduce the rents (including utilities) paid by low-income tenants. The Section 8 program helps low and very low income people pay their rent, with rents based upon the same formulas used for public housing assistance. Household specific assisted rental units are available under the Section 8 Existing and Section 8 Housing Voucher programs. These rental units are allocated in groups by the U.S. Department of Housing and Urban Development for a specific area which may cover more than one county. The type of assistance available is the same as that outlined for the Section 8 program. Tenants served under these programs locate rental housing of their choice in the geographic area. The housing unit may be an apartment, mobile home, duplex or house, and must meet HUD housing quality standards.

A total of 308 assisted rental units, an increase of 3.5% since 1997, are currently available in Mercer County. This includes 96 elderly units, 15 handicapped units, and 197 other units. All of these units are located in Harrodsburg. There are a variety of other forms of financial assistance available to low to moderate income persons for housing assistance. Assistance is available through both public and private non-profit groups. As these programs frequently change, current information on the types of assistance available should be obtained from the Kentucky Housing Corporation in Frankfort, Kentucky.

It is important to note that the Kentucky Housing Corporation, in conjunction with the University of Louisville, recently conducted a Kentucky Housing Needs Assessment. This assessment was completed in October 2017. County level information is included in the report. In Mercer County, the study estimates that there were 898 low income renter households in Mercer County in the year 2000. Of these, KHC estimated that 441 or 49.1% are low income renter households which have not been assisted. Also noted in the study is the number of renters who have received homeownership assistance from KHC through the KHC Home Loan Program. From the years 1973-1990, a total of 39 loans were processed for this program. From 1991-2000, the number of loans increased to 74.

Historic Resources

The historic preservation movement and restoration activities did not begin in the United States until the early nineteenth century. In the movement's beginning, the primary objective of historic preservation was to establish a national identity for the American culture and was implemented to celebrate the accomplishments and deeds of our forefathers. However, at the end of the nineteenth century, the preservation movement began to shift its focus to the historical and architectural merit of the structures themselves. Today, the importance of maintaining historic resources focuses on the great accomplishments and history of a community as well as architectural style. Both are integral to the community's values and local character.

Mercer County contains the historic areas of downtown Harrodsburg and the Shaker Village at Pleasant Hill. Both Mercer County and the City of Harrodsburg were named after military officers. Captain James Harrod, founded Fort Harrod on June 16, 1774. This settlement was the first permanent English settlement west of the Alleghenies and became Kentucky's oldest town. Mercer County was named for General Hugh Mercer, a Revolutionary War officer, who perished at the Battle of Princeton. Unlike Captain Harrod, General Mercer never visited this area. Mercer County, Harrodsburg, and Shakertown contain an abundance of historic resources.

These resources document the early beginning of the county and serve as a reminder of the community's heritage and tradition. The master list of historic survey sites maintained by the Kentucky Heritage Council list a total of 479 registered and inventory sites in Mercer County. Of the 272 sites listed for unincorporated Mercer County, thirty-five (35) are on the National Register, nine (9) meet National Register Criteria, three (3) are pending, and one (1) has been determined to be eligible. Of the sites listed, twenty-two (22) have been demolished. There are a total of 192 sites listed in Harrodsburg. Of this number, 130 are within a National Register Historic District, and ten (10) are separately listed on the National Register. Three (3) of the listed sites have been demolished.

There are currently five (5) identified Historic Districts recognized by the National Register; Shaker Village at Pleasant Hill, the Harrodsburg Commercial District, Beaumont Avenue, College Street and Lexington Avenue. Figure 5-1 shows the location of each district in relation to the areas covered by Historic District Zoning and the Harrodsburg Board of Architectural Review. In addition, the pages following the Chapter 5 text, obtained from the Kentucky Heritage Council in November 2003, document each historic site in Mercer County.

Shaker Village at Pleasant Hill

The Shakers came to central Kentucky in 1805 and established a village they named Pleasant Hill on a plateau above Kentucky River northeast of the City of Harrodsburg (off of US 68 at the junction of KY 33). This village was the third largest community established by the United Society of Believers in Christ's Second Appearing commonly called "Shakers" because of their ritualistic religious dances. Pleasant Hill is the largest of all restored Shaker Villages and has been documented by the Historic American Building Survey. By the mid nineteenth century the community was thriving with as many as 500 residents and more than 4000 acres of land. However, the changing social climate and industrial revolution were catalysts for the decline of the village which was closed in 1910. For the next fifty (50) years, Pleasant Hill existed as a small farm community, and in 1961, a nonprofit group was formed to preserve its heritage. Since that time, 33 original buildings have been restored and 2700 acres of farmland preserved. Today, the Shaker Village of Pleasant Hill, also known as Shakertown, is a model for historic preservation. Much of the architecture is a simplified Shaker Interpretation of Federal and Greek Revival Styles. Structures are characterized by stone, brick, and frame construction and were built between 1809 and 1859.

Currently, the Shaker Village of Pleasant Hill is owned and operated by Shakertown at Pleasant Hill, Kentucky, Inc., a private nonprofit 501 (c) (3) educational corporation. The entire acreage of the village is listed on the National Register of Historic Places and has been declared a National Historic Landmark by the U.S. Department of Interior. This is the only such designation in the State of Kentucky and is the only site of its kind where visitor services are provided in original buildings.

National Register Historic Districts

In addition to the Shaker Village at Pleasant Hill, there are four (4) other historic districts in Mercer County. These districts are located in the City of Harrodsburg and include the Harrodsburg Commercial District, Beaumont Avenue Historic District, and College Street Historic District. The Harrodsburg Commercial District is comprised of commercial, governmental, and religious structures encompassing three blocks of South Main Street from Lexington Avenue to the merger of Beaumont and Mooreland Avenues, the south side of the 100 block of West Poplar Street and the north side of Short Street. The Harrodsburg Commercial District includes fifty-seven (57) buildings. Only seven (7) of these are newly constructed. Notable structures and areas in this district include:

Mercer County Courthouse Square Passmore Hotel

"Lawyers Row" Benjamin Passmore House St. Philip's Episcopal Church Cardwellton Dr. A.D Price House Woodsland Main Street Alexandria "Blue Front Building" Courtview Harrodsburg Christian Church Matherly-Armstrong House Harrodsburg Baptist Church Daniel Curry House United Presbyterian Church Burford Hill "The Academy" Oddfellows Lodge and City Hall Complex St. Andrew Catholic Church Office Old Mercer County Jail and Jailer's Residence Morgan Row (United) Methodist Church Methodist Parsonage White Hall St. Peter's African Methodist Episcopal Church

Located two blocks southeast of the Harrodsburg Commercial District is the Beaumont Avenue District, which originally served as Harrodsburg-Danville Pike. This district, which is comprised of residences dating between 1850 and 1930 is confined to the west side of Beaumont Avenue. Most of the homes were built in the 1880's to 1890's. Notable homes in the district include:

The Magoffin-Gaither House
The Tabler and Poteet Houses
The G.A. Curry House
The Dedman and G.L. Curry Houses
Aspen Hall ("The Shannon House")
Greystone
Beaumont Inn
Honeysuckle Hill ("Fair Oaks")

The College Street Historic District, originally known as Warwick, begins on College Street and extends eastward to North Main Street, including three (3) properties on Broadway and East Street. The name of the district was changed when Bacon College was established in the area. The district contains twenty-seven (27) residences and one (1) commercial building. The most prominent architectural style in the district is Greek Revival. Notable residences in this district include;

Diamond Point, Doricham, Forest Pillars, Rykon, The Maples, and Clay Hill.

The Lexington and Cane Run Historic District extends east along two of the earliest and most important transportation routes in the town: The Lexington, Harrodsburg and Perryville Turnpike (Lexington Road/US 68), and the Lexington to Cane Run Turnpike

(Cane Run Street). This is primarily a residential district covering some 64 acres. It includes the south side of Lexington Streets and both sides of Cane Run.

Archeological and Natural Resources

In addition to significant architectural sources, Mercer County has natural and archeological resources. Most resources of this type are fragile and irreplaceable. For the most part, many damaged or aged architectural structures can be restored while archeological resources cannot. Since all are sensitive to the development that occurs around them, it is important to take precautionary measures when considering this type of preservation. Areas of concern should be identified and mapped during the development process.

Historic Preservation

Much of Mercer County's heritage and character is defined by its role as the first settlement west of the Alleghenies, local historic structures, and events. The county's unique historic character contributes to the quality of life of the county but also contributes to the region's current and future potential as a tourist destination. Continued efforts to restore and promote historical, archeological and natural sites will enhance both the historic features of the county while at the same time encourage new development. The challenge will be to balance the preservation of Mercer County's historic character with growth and development without detriment to either. There are several ways to encourage preservation of historic sites at the local level.

First it is necessary to educate citizens about community resources and their significance to the community. Considerable efforts have been made in this area by the Harrodsburg/Mercer Landmark Association and Harrodsburg Historical Society with assistance of the Kentucky Heritage Council The following paragraphs describe other effective methods of historic resource management.

Historic Resource Management

As defined in the county's goals and objectives, the overall goals are to recognize and preserve the unique historic and cultural resources of Mercer County. Objectives include the identification and maintenance of historic features while also informing residents and visitors of the unique resources of the county. To attain these goals in the future, the planning commission has a variety of options. Each option is briefly described in the following paragraphs.

National Register Designation

While there are a number of historic sites and districts in Mercer County, this does little to insure their preservation. The first and most obvious part of historic resource management is to identify suitable sites. Since Mercer County has done an excellent job identifying sites, it is suggested that efforts of this nature be continued. In addition, it is important to note that an environmental assessment must be prepared for any project that involves significant federal action. While this usually means federal funding is involved, an assessment may also be necessary, for example, if a federal permit is required. During the environmental assessment, the potential impact of the project on properties either on or eligible for the

National Register of Historic Places must be determined. If there is a potential negative impact, mitigation measures are required. This may range from restoring a building in conformance with the Secretary of Interior's Standards to simply preparing detailed documentation about a site prior to demolition. No assessment of potential impact is generally required if the project is funded with state or local funds.

Local Historic District Designation

Another way to preserve cultural resources is to designate local historic districts. These districts, when designated as such, can include special zoning provisions.

Currently, the City of Harrodsburg has one designated Historic District in the Zoning Ordinance. There are two (2) areas within city limits that are designated as a historic district under the ordinance. The first district includes all property included in the Ft. Harrod State Park. The second historic district includes several properties on Short Street, West Poplar Street and West Office Street as shown on Figure 5-1.

In addition to establishing local historic district zoning, "overlay" zones can be created which consist of requirements in addition to those in the underlying zoning for the area (commercial or residential for example). An overlay zone should be tailored to the area of concern and can include a variety of provisions to encourage design for new development which is compatible with the historic character of adjacent properties. Regulations include special setback lines to conform to existing buildings, sign regulations, restrictions on the demolition or modification to existing buildings, and additional restrictions on appropriate land uses, etc. An "overlay" district would be recommended for areas within the Renaissance Kentucky District as well as for the Scenic KY 68 corridor and US 127 By-Pass area in order to preserve the historic character of the area and significant viewsheds.

Architectural Review Board

Architectural Review Boards are typically established in conjunction with designating a local historic and/or "overlay" district. The function of the board is to review proposed development projects and their impact upon local historic resources. Members appointed to the board should include persons with historic knowledge as well as building and design experience who can review projects and make a determination whether or not a project or development proposal is compatible with existing land uses. The board may also have the responsibility to identify and nominate historic sites, recommend local historic designations, develop design guidelines, advise persons interested in historic preservation and regulate building alterations and other construction activities in designated districts. The power of such a board can range from a voluntary program where advisory recommendations are made to include veto power and approval of various design elements.

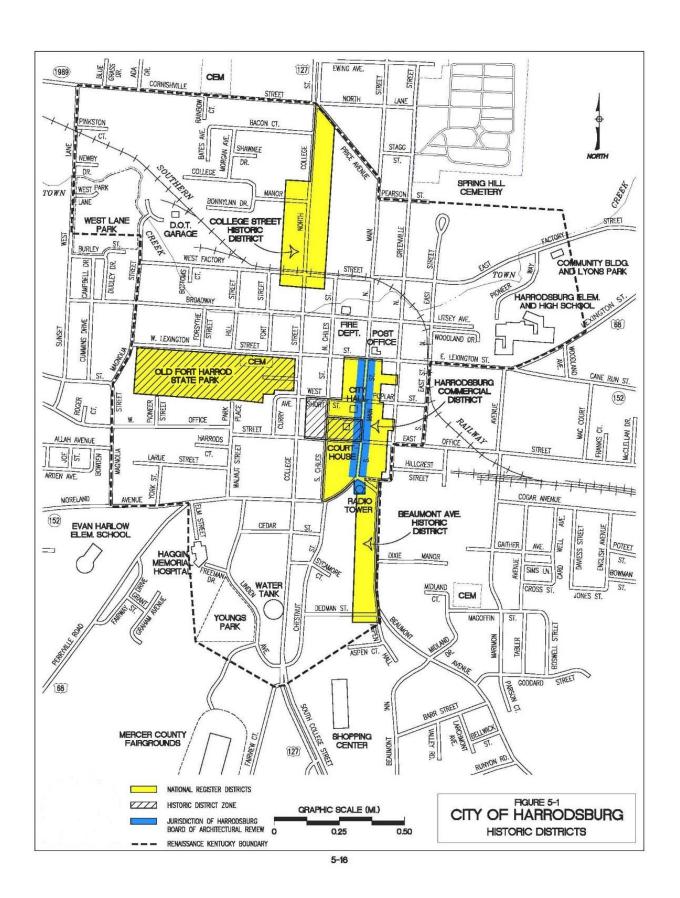
In July 2001, the City of Harrodsburg established the Harrodsburg Board of Architectural Review in order to preserve the distinctive architecture which is vitally important to the local economy and historic character of the community. The five (5) member board is appointed by the Harrodsburg City Commission and meets the first Monday of every month. In addition to making recommendations regarding the designation of local historic districts and landmarks, the board also assists property owners with the preservation and rehabilitation

of their historic buildings through the review of designs for proposed exterior changes, new construction, and demolition. As of December 2003, the Harrodsburg Architectural Review Board had drafted a set of Design Guidelines and delineated the boundaries of their review district, held a public hearing and was going through the approval process to establish these guidelines. The Design Guidelines establish requirements and a review process for the demolition, relocation and rehabilitation of existing structures. In addition the guidelines address new construction and infill development in existing historic areas. It is important to note that design review is required for changes to the exterior of a building which is visible from any public right-of-way.

Examples listed in the guidelines, include but are not limited to the following:

- Repointing brick or stone
- Cleaning brick or stone
- Painting unpainted masonry
- Installing: mechanical equipment on the exterior of the building, new siding, steps, windows, doors, skylights or awnings
- Replacing: windows or doors, roof, porch
- Constructing a: new building, room addition, roof dormer, fence, sign, parking lot
- Demolishing a building or building addition

The guidelines also outline a design review process which begins when a property owner proposes to make alterations to the exterior appearance of a property located within the designated district as shown on Figure 5-1. Before beginning work, the owner must obtain a form called a Certificate of Appropriateness (COA) from the Board of Architectural Review. Only staff review is necessary for items determined to be routine maintenance. The board will then meet to review applications for Certificates of Appropriateness. Notice of the proposed alteration is sent to property owners within 200 feet of the property under consideration so that they can attend the public meeting. In order to issue a Certificate of Appropriateness, the Board of Architectural Review must determine that the request for exterior modifications of a structure is compatible with the design, scale, and character of the historic district where the property is located. Once approved, the Certificate of Appropriateness with any conditions issued by the Board of Architectural Review is issued to the property owner. The application for the proposed work is also reviewed by the city building inspection staff for compliance with building and zoning code regulations. The Board of Architectural Review then conducts site visits to determine that the work complies with the provisions described in the Certificate of Appropriateness. The following are general rehabilitation guidelines as established by the Board of Architectural Review.



General Guidelines that apply to all rehabilitation work:

- Avoid removing or altering historic material or distinctive architectural features. If the element is original and in fairly good shape, every reasonable effort should be made to keep it.
- Repair rather than replace whenever possible. If replacing, replicate the original one rather than trying to invent something new.
- Be sensitive to distinct stylistic features and examples of skilled craftsmanship which come from the era in which the building was constructed. It is not desirable to make the building look older than it really is.
- Uncover original design features that may be buried under layers of improvements. It takes detective work, but there may be evidence of original elements. Research may turn up pictures of the original appearance of a house or building.
- New additions should be consistent with the original architectural style. They should be compatible with the building and its relationship with adjacent structures.
- Give consideration to a later addition or alteration, even though it is not part of the original building. An addition made at a later time may have gained significance on its own.
- Surface cleaning should be done by the least damaging means possible.
 Sandblasting or the use of abrasive cleaning methods can destroy brick and shorten the life of the building.

In addition, the Design Guidelines list specific guidelines that apply to all buildings, whether residential, commercial, or institutional:

- Original architectural materials such as brick and stone, wood siding and trim, cast and wrought iron, and sheet metal, should be repaired, restored, and reused whenever possible. Original materials should not be removed or covered. Where necessary, missing or deteriorated material should be replaced with appropriate recycled or new materials that match the original as closely as possible.
- Existing architectural features that give buildings historic character, including columns, brackets, cornices, decorative, brickwork, and terra cotta, should be preserved.
- The addition of inappropriate and out of character features should be avoided.
- Existing architectural elements or portion of the original features should be retained, repaired, or replicated.
- If an original detail, such as a cornice, is deteriorated beyond repair or missing, it should be replaced with a newly designed detail sympathetic in scale, material, and proportion to the original one. A simplified design may be used.

As the Board of Architectural Review Design Guidelines and District has been approved, it is recommended that the Board consider expanding the boundaries of their jurisdiction to include all areas in Harrodsburg National Register Districts.

In addition, an overlay district should be established to address adjacent areas where development has the potential to negatively impact these historic resources.

Additional Options

Beyond nominating structures for the National Register of creating different districts or architectural review boards, a community can implement a variety of other initiatives to encourage preservation of these resources. One way to do this is to encourage greater local participation and control in the designation and regulation of significant sites by working with various property owners and the Mercer County Historical Society. Another option is the provision of information and educational materials to citizens and tourists by utilizing local and state newspapers as well as generating brochures on various sites. To date, this has been done extremely well in Mercer County through the efforts of the Historic Society, Harrodsburg First, and Tourism Commission. It is recommended that the materials be continually updated and distributed. Finally, it is important to coordinate historic preservation activities with the legislative bodies so that any proposed improvement projects will be sensitive to adjacent historic resources.

Chapter Six – Community Facilities

Community facilities and services is a collective term used to describe a variety of essential activities that sustain and enhance the quality of life for residents within a community. The provision of utilities, public safety programs, and facilities for public health, safety, education, and recreation are all issues that increasingly challenge local governments. Planning is essential to ensure that the provision of these services and facilities meets the future needs of the community. The provision of community facilities and services can also be used to guide future development. One example of this might be the decision to extend water and sewer service to an area targeted for development. As an economic development tool, the adequacy of facilities and services is also an important consideration. Industrial prospects making a decision to locate in a specific community will examine the quality of resources and services of an area. On the other hand, the limited provision of utilities and other services only within incorporated areas or an "urban services boundary" can enable the community to restrict growth to certain areas where provision of these services are cost effective and promote responsible development.

Planning for the future development of facilities and services must incorporate all of the aforementioned elements. Prioritizing community facilities and services can only be accomplished by careful analysis of the existing levels of provision and projecting future needs. Decisions of who gets what, when, and where are among the most critical issues facing service providers with limited revenue and increasing costs. This chapter addresses the following community facilities and services within the Mercer County planning area; education (schools and libraries), recreation, public health and safety (fire, police, EMS, solid waste, health), and utilities (water, wastewater).

Education

The residents of Mercer County are served by two (2) public school districts: Mercer County School District, and Burgin Independent School District. In 2006, the Mercer County School District and the Harrodsburg Independent School District merged into a single school district.

Mercer County School District

The Mercer County School District includes all areas of the county with the exception of Burgin City Limits and areas specifically identified as part of the Burgin Independent School District. Schools in the Mercer County School District include the following: Mercer County Elementary School (Pk-2), Mercer County Intermediate School(3-5), Kenneth D. King Middle School(6-8), Mercer County Senior High School(9-12) and Mercer Central School. Mercer Central School encompasses an alternative high school for students(9-12), a virtual/online school(6-12) and a day treatment program(6-12. High school aged students enrolled in the Mercer County School District are also eligible to attend the Trailblazer Early College and Career Academy (9-12). Enrollment in the Mercer County School System has decreased by 176 students over the last five (5) years from 2725.47 students in the 14-15 school year to 2549.11 in the 18-19 school year. The average daily attendance during this five year period is 95% attendance. On the 18-19 School Report Card for Mercer County School District, it is reported that the district has a 95% attendance rate. The dropout rate

for the district is 0.1% and much lower than the state reported dropout rate of 1.4%. The student to teacher ratio is 14:1. The student to computer ratio is 5:1. The 18-19 school year four year cohort graduation rate for the Mercer County School District was 99.5%. Of those graduating during the 18-19 school year, 31.9% went to college, 1.9% went into the military, 35.71% went to work, 1.43% had vocational or technical training, and 16.19% worked and went to school.

Burgin Independent School District

The Burgin Independent School District has a long tradition of academic excellance and has been at its present location since 1895. All schools are located in the same building at 440 East Main St. Burgin Schools are divided into three (3) individual levels: Elementary (K-5th Grade), Middle (6th - 8th Grades), and High School (9th - 12 th Grades). The schools are located in separate area of the main building and have their own distinct bell schedule, lunch and programs. Burgin operates a Preschool program for 3 and 4 year olds that is located in the Early Childhood Center. Burgin School employs an alternative calendar for its operation.

School typically begins in early August. At the end of each nine (9) week grading period, a two (2) week break is scheduled. The breaks usually occur in early October (two weeks), Christmas (two weeks), and late March (two weeks). In partenrship with Campbellsville University, an after-school enrichment program four days a week is housed at the school. Enrollment in the Burgin Independent School District has increased every year and in 2018, the district recorded a record enrollment of 515 students. On the 2017-2018 Report Card for the Burgin Independent School District, it is reported that the district has a 95.2% attendance rate which is higher than the state average of 94.3%. In 2019, the graduation rate for the district was 100%. The ratio of students to teachers is 11:1, less than the state average of 15:1.

Launched in 2018, Burgin Independent is proud to be a partner in the regional Trailblazer Early College and Career Academy located four miles away in Harrodsburg. Trailblazer provides students the opportunity to gain career certifications, collaborate with students across five area schools, and position them for immediate acceleration into highly-sought after competitive careers in healthcare, technology, engineering, and more. The Trailblazer provides 15+ career pathways and over 30+ of dual credit opportunities. Trailblazer was born out of a national JP Morgan Chase funded grant. As one of the smallest districts in Kentucky, the elementary, middle and high school recently all earned 4-Star status from the Kentucky Department of Education's 5-Star rating system. The district is 1 of only 7 districts in Kentucky that placed all of their schools in the 4-Star or better category!

Burgin is committed to the philosophy that students are best served in a small, structured, community laced environment. The district has been recognized by U.S. News & World Report, the Southern Association of Colleges and Schools, and as a High-Performance College and Career Ready district. Burgin has seen many changes over the years but the community atmosphere, tailored instruction by an outstanding staff, and high student achievement is the foundation that makes the school great.

Area Colleges & Universities

Campbellsvile University has developed a presence in Harrodsburg and is currently offering several degree and certificate programs, including School of Chiropractic Medicine, HVAC & Welding Technology. They are also offering Nursing programs and Health & Beauty Certificate programs. They are currently expanding their classroom space in Mercer County. There are thirty-nine (39) places of higher education within sixty (60) miles of the county. The next closest facility, located only ten (10) miles away, is Centre College in Danville. Centre College, founded in 1819, is a small private, co-educational, 4-year liberal arts college, which confers Bachelor of Arts and Bachelor of Science degrees.

Kentucky Technical Schools within 60 Miles of Harrodsburg

There are a total of twenty (20) vocational/technical schools within sixty (60) miles of Harrodsburg. The closest of which is Harrodsburg ATC, a Kentucky Tech secondary school (Sec), called Trailblazer Early College & Career Academy operated nby Mercer OCunty Schools. Bluegrass Community Technical College has campuses around the Commonwealth with the closest campus located in Danville, KY 15 miles away.

Mercer County Library Service

The City of Harrodsburg and Mercer County are served by one (1) public library. The Mercer County Public Library has been located on Lexington Street in downtown Harrodsburg since the early 1970's and in 1991 underwent extensive renovation and remodeling. In January 2011 the library completed an expansion and complete renovation, increasing the facility to 22,000 sf. The hours of operation are currently 9:00 am-7:30 pm Monday, Tuesday and Thursday; 9:00am-5:30pm Wednesday; 9:00 am - 5:00 pm Friday and Saturday, and 1:00 pm - 5:00 pm on Sunday. The library's collection size, as of June 30, 2019, was 109,945 volumes, with circulation for the 2018-2019 fiscal year being 130,375. In November 1995, the library initiated an automated system for cataloging and circulation This system allows patrons to search the OPAC (online public access catalog) by title, author, subject, keyword, or Dewey Decimal classification number for all material owned by the Mercer County Public Library. A new cataloging and circulation system was purchased in May 2019. Through the library's affiliation with OCLC (Online Computer Library Center in Dublin, Ohio) and the Interlibrary Loan system, the library is able to borrow materials via computer from public, academic, and special libraries across the U.S. The library has an extensive genealogical reference library with family histories, census reports, cemetery records, marriage bonds, vital statistics, church histories, and military records. A collection of donated yearbooks from Harrodsburg High School, and Mercer County High School, Burgin, and other community schools that are no longer in existence is housed at the library. The library also has a complete collection of Draper Manuscripts on microfilm. A variety of programming is offered for children, teens and adults. Children's programs include story times for toddlers, pre-schoolers and kindergartners during the school year. A Summer Reading program is offered for preschoolers, children, and teens. The children's librarian also conducts an outreach program to daycare centers, public and private schools, and other community events.

Adults can participate in a variety of programs such as book discussion clubs, genealogy research sessions, and one-on-one computer help. The library hosts special events such

as National Library Week activities, Christmas at the Library, and exhibits. Additional services include the provision of large print books, books on tape, ebooks from Kentucky Libraries Unbound, as well as an extensive Kentucky collection. There is a Bookmobile Service that travels the county year round on a two-week schedule with community, school, and individual stops. The library also has exhibit areas available for a variety of displays, and meeting rooms available for community groups. In 2016 the library acquired adjoining property for the purpose of expansion when feasible The library developed a revised long range plan in 2016 and will soon revise that planning at current trends and anticipated needs within the community, so that library services can be tailored to meet those needs.

Recreational Facilities

Leisure and recreation are increasingly important elements contributing to the overall quality of life in a community. Unlike other community facilities discussed in this chapter, the provision of recreational facilities and programs is not always viewed as essential. Therefore securing public funds can often be difficult. However, the citizens of Mercer County have a variety of opportunities for recreation. In addition the county is rich in natural resources that have recreation potential. According to the Legacy Plan: A Vision for the Future of Mercer County, a study conducted by the Department of Landscape Architecture at the University of Kentucky, the county is doing well with 12.2 acres of open space per 1,000 people, since the national average is 10.5 acres per 1000 people. However, when compared to the National Parks and Recreation and Association Areas and Facilities Standards (NRPA), Mercer County needs to expand its trail systems, basketball courts, tennis courts, and playgrounds. The plan compares county facilities with NRPA standards and makes recommendations for the development of various recreational facilities. In conjunction with this study, it is recommended that the county develop a recreational master plan in the near future and incorporate/require the provision of recreational facilities as development proposals are submitted to the planning commission.

Existing recreational opportunities are listed below.

Public

Anderson/Dean Park
Creative Playground
Lion's Club Park
Old Fort Harrod State Park
Olde Towne Park
Salt River Park
Young's Park
West Lane Park

Schools

Burgin High School and Elementary School Harrodsburg Evan Harlow Elementary Mercer County Elementary School Mercer County High School King Middle School

Campbellsville University

Private/Open

Bid Spring Park (adjacent to Lions Park Community Center on Factory St)

Bright Leaf Golf Course

Dix River Boat Dock

Cane Run Fishing Marina

Chimney Rock Marina

Pandora Marina

Royalty's Fishing Camp

Chimney Rock RV Park

Mercer Fish & Game Farm

Walker's Mid-Lake Marina

Cummins Ferry Campground & Marina

Bluegrass Fitness Center

Harrodsburg Baptist Church Recreational Outreach Center

Most notable is Anderson-Dean Park which is located north of the city limits of Harrodsburg on U.S. 127. The park, still under construction, contains over 200 acres and currently houses an office, outdoor swimming pool, baseball complex, four (4) soccer fields, three (3) softball fields, two (2) full-size basketball courts, two (2) volleyball courts (sand), and a 2.5 mile walking track and shelter house. In addition, the park houses the Mercer Count Senior Facility which was moved from its former location on East Broadway Street. The current master plan for the park shows the following facilities to be available once the facility is complete:

Aquatic Center

Senior League Field

Major League Field

Minor League Field

Tee Ball Field

Softball Fields (3)

Batting Cages (2) Lighted

Regulation Soccer Field and three (3) soccer fields for those aged 4 to 16

Football Field

Basketball Courts

Tennis Courts

Amphitheater

Future Indoor Recreation Complex

Picnic Shelter

Playgrounds (4)

Kendyl & Friends Playground (All Inclusive)

Sand Volleyball Court

18 Hole Disc Golf Course

Horseshoe Pits

Croquet

Reservoir
Lions Club Pavilion
Senior Citizen Center
Hitachi Shelter
Walking/Bicycle Trails
Concession Stands and Restrooms
Small pond
Central Maintenance Facility
Park Office - Thomas Logan House

It is important to note that the Anderson/Dean Park is currently overseen by the Anderson Dean Park Board. The board was formed in 1994 and is comprised of nine (9) members. Four (4) of these members are appointed by the Mercer County Fiscal Court, four (4) are appointed by the City of Harrodsburg, and one (1) is appointed by the City of Burgin. Although, this committee was formed for the sole purpose of administering activity concerning the park, it is recommended that this committee expand its area of responsibility to include all recreational facilities within the county and cities. Activities would include inventorying all existing facilities, creating a recreational improvement program and linkages between facilities. In addition, it is important to note that Mercer County plays host to the Fair and Horse Show each July. It is one of largest and oldest continually held county fairs in Kentucky. A parade, beauty contest, horse show and livestock judging are just a few of the activities featured at the Mercer County Fair and Horse Show.

Herrington Lake

Herrington Lake, located near Harrodsburg, was developed and is owned by Kentucky Utilities Company in 1925. The Dix River Dam near Pleasant Hill is located on the 3,600 acre lake and includes facilities for fishing, boating, and swimming. In addition, several camping and fishing facilities are available near the City of Harrodsburg.

Campgrounds and Marinas

There are three (3) campgrounds and six (6) marinas in Mercer County. The names and locations of the campgrounds and marinas are as follows:

Cane Run Fishing Marina- 326 Cane Run Camp Road
Chimney Rock Campground and Marina - 250 Chimney Rock Road
Cummins Ferry Campground and Marina- KY Hwy 1988
Pandora Marina - KY 152
Royalty's Marina- 940 Norm's Camp Road
Mid-Lake Marina- 238 Cedar Lane

Bright Leaf Resort

Bright Leaf Resort, located at 1742 Danville Road along U.S. 127, features a thirty-six (36) hole golf course, a nine (9) hole par three (3) course, pro shop, restaurant, villas, and a health spa.

Recreational Opportunities in Harrodsburg

There are numerous parks and recreational facilities available in the City of Harrodsburg. Mercer Area Family Education and Wellness Inc. (MAFEW), formerly the YMCA is located in the S.E. Cooke Building at the corner of College and Broadway Streets. This building, owned by the City of Harrodsburg, houses their offices, Afterschol Childcare Program and gymnasium as well as the Epharim McDowell Wellness Center. MAFEW also coordinates youth league basketball, and women's volleyball league with games being played at the facility. In addition, MAFEW offers pre-school programs and an after school childcare location. Future plans include the provision of aerobic and fitness classes in the next year. MAFEW programs include Biddy Sports (flag football, basketball, soccer and t-ball), Youth Basketball, Adult Volleyball, and Dance (ballet and tap)

In addition to the MAFEW, facilities and services listed above; there are several parks within city limits. The most prominent is Old Fort Harrod State Park which consists of twenty-eight (28) acres and features a full-scale reproduction of the original Fort Harrod. The park also contains the log cabin where Abraham Lincoln's parents were wed, the Mansion Museum, the pioneer's cemetery, and a monument dedicated to the pioneers.

City parks include Lion's Park, Young's Park, West Lane Park, and Olde Towne Park. Facilities at Lion's Park include the Harrodsburg Community Center which has conference and meeting room areas accommodating up to 300 people. In addition to the meeting room, there are three (3) lighted tennis courts. The recreational facilities at Young Park include a picnic area with tables and grills, a shelter house which can be rented by the public and a creative playground. The facilities available at West Lane Park include a soccer field, a lighted softball field and community meeting rooms. Olde Towne Park is one of the city's newest parks and features a sculptured 14 x 32 foot cascading fountain. Another facility which provides a shelter house and picnic areas is Salt River Park. Other public and recreational facilities in Harrodsburg include an aquatic facility, several tot lots, two (2) tennis courts, and three (3) baseball diamonds located at public schools. Private recreational facilities within the city include several swimming pools, a golf course, and driving range.

School Recreational Facilities

There are a variety of recreational activities available at various schools within Mercer County. The Mercer County School District has a total of one (1) gymnasium, one (1) football field, one (1) soccer field, a band practice field, and several additional fields used for a variety of activities. One (1) football/soccer field, two (2) tennis courts, and one (1) practice field. In addition, there is a gym, two (2) playgrounds and one (1) basketball court at Evan Harlow School Complex. The Burgin Independent School District has one (1) gymnasium, one (1) basketball court, one (1) softball field, one (1) baseball field, a playground and walking trail.

Public Protection

Law Enforcement

Police protection for residents of Mercer County, Harrodsburg and Burgin is provided by four (4) agencies: the Kentucky State Police, Mercer County Sheriff's Office, Harrodsburg Police Department, and Burgin Police Department.

Kentucky State Police

Post 7 of the Kentucky State Police, located in Richmond, KY at 699 Eastern Bypass, currently serves Mercer County. Post 7 is one (1) of sixteen (16) posts in the Commonwealth and serves the eleven (11) counties to include Boyle, Clark, Estill, Garrard, Jackson, Jessamine, Lincoln, Lee, Madison, Mercer, and Owsley. The Kentucky State Police is a full service agency which enforces motor vehicle and traffic laws, performs criminal and complaint investigations, as well as coordinating the collection of information with local and federal law enforcement agencies. In addition to the twenty-nine (29) troopers assigned to this post, Post 7 has nine (9) detectives, one (1) arson investigator, and eight (8) sworn supervisors. Mercer County is routinely served by seven (7) Kentucky State Police Troopers who patrol the county. However, in emergency situations the county would be assigned additional officers and resources.

Mercer County Sheriff's Department

The Mercer County Sheriff's Department, located at 207 West Lexingrton Street in Harrodsburg, employs one (1) sheriff, eight (8) full-time deputies one (1) part-time deputies and two (2) full-time office clerks. Department hours are from 8:00 am to 4:30 pm on weekdays; however, either the Sheriff or Sheriff's deputies are on call twenty-four (24) hours a day, seven (7) days per week. The Sheriff's office currently utilizes eleven (11) patrol cars. At the present time, the Sheriff's office does not have any plans for expansion or renovation of their existing building. In addition to its law enforcement activities, the Mercer County Sheriff's Department also has two (2) K-9 units which are utilized in law enforcement activities. The K-9 units also work with all the schools in Mercer County for Drug Education Programs. These programs have the same mission as goals as the D.A.R.E. program which is to provide information on the dangers of drugs and ways for our youth to avoid drugs and to to find alternatives to the use of drugs.

Harrodsburg Police Department

The Harrodsburg Police Department, located at 1300 Louisville Road, is currently allotted twenty-two 22 police officers, with 6 positions currently open, and currently has sixteen (16) patrol vehicles, with more to be purchased in FY 20-21. The schedules of the officers are staggered so that the city has at least two officers on duty at all times. The countywide dispatching office is located at 411 North Greenville Street. The office is open twenty-four (24) hours a day to dispatch all state, county, and city police, as well as the fire and services. In addition to law enforcement activities, the Harrodsburg Police Department facilitates transportation and shelter for transients in the county. The department also administers the DARE Program, Safety Quest (with student drivers), Neighborhood Watch,

Crimestoppers, and has a School Resource Officer program which puts at least one certified, uniformed officer in the school system.

Burgin Police Department

The Burgin Police Department is located at 117 South Maple Street in the Burgin Municipal Building. There is currently one (1) police officer on duty. Available equipment includes one (1) police cruiser.

Fire Protection

Adequate fire protection is an essential service within any community, often saving lives and property. Manpower, equipment, and a good emergency response system are important considerations, not only for county residents but also for prospective residents and businesses. Fire insurance ratings and the associated insurance premiums are calculated according to the level of operation of each fire department. In Mercer County, fire protection is provided by ten (10) county stations and two (2) city departments as shown in Figure 6-3. The Mercer County Fire Protection District is a special taxing district which covers all unincorporated areas of the county. This district is served by ten (10) fire stations. All fire departments are voluntary with the exception of Harrodsburg which has paid firefighters. It is important to note that the county has signed Mutual and Automatic Aid Agreements with the state to provide or receive assistance from other counties in the event of an emergency. The following is a listing of fire district available equipment.

Mercer County Fire Protection District

The Mercer County Fire Department was established in 1954. 9 more stations were added through the years. At this time the district has 8 stations, 2 sub-stations and another station under construction. The departments were modified into a special taxing district in 1987 and stations were combined into one department under the Kentucky Fire Commission in 2006. The Fire District maintains 13 fire engines, 7 tankers, 7 squads, 2 rescue/heavy rescue trucks, 3 boats, 4 all-terrain vehicles, 6 utility trucks and supplemental service trailers for hazardous materials and supplied air provision. There are 140 members at this time of varying training and experience. All firefighters are required to obtain certification through the Kentucky Fire Commission at the 150 hour level. Approximately 30% of the department is trained at the EMT-b level or higher. Under the Public Protection Class rating system through ISO the county has obtained a class split rating of 5/10. The fire district responds to a variety of fire, rescue, medical and hazardous materials runs averaging 700 incidents per year.

Harrodsburg Fire Department

The Harrodsburg Fire Department, the sole department for the city, has seventeen (17) paid firefighters and twenty five (25) volunteers. The equipment inventory of the Harrodsburg Fire Department includes: 1-105 Aerial Ladder truck utilizing a 1, 250 gallon per minute pump; 1-1,500 gallon per minute Pumper truck with 750 gallons of water; 1-1,250 gallon Pumper truck with 1,000 gallons of water and a 50 gallon foam tank; 1-1,250 gallon per minute Pumper truck with a fifty-four (54) foot "telesquirt" boom; and 1-1,000 gallon per minute Pumper truck with 750 gallons of water, which is equipped for Hazardous Materials Response. Additionally, the department has a rescue truck (including cascade

system, rescue tools and the jaws of life); 1 – Brush truck and 2- command officer's vehicles. The Harrodsburg Fire Department holds a Class 4 ISO rating. In 2006, the department responded to 742 calls. They have acquired and constructed a new fire station on Pinehurst Way in partnership with the Harrodsburg Poice Department to improve response times north of the train tracks on College St that can impact response time.

Burgin Volunteer Fire Department

The Burgin Volunteer Fire Department has twenty-seven (27) volunteer firefighters, ten (10) of which are certified EMT's and six (6) paramedics. Due to the city's close proximity to Lake Herrington, the fire department also operates a rescue unit which includes trained divers. There are two (2) stations collocated in Burgin. One is a city station and the other a county station. The ISO Rating for the City of Burgin Fire Department is Class 4. The total number of runs for 2019 was 190. Of this number, sixty (60) runs were fire related. Equipment available to each department is shown below:

Burgin City Fire Department County Fire Department

2 - 1,250 gpm engines 1 - 1,250 gpm engine

1 - 1,800 gallon tanker1 - rescue truck1 - utility truck

Enhanced 911

Mercer County implemented the Enhanced 911 system in 1994. Currently, there is one (1) part time employee in the office for Enhanced 911 which is located at the City Hall Annex. The primary responsibility of the Enhanced 911 Coordinator is to ensure that all residential, commercial, and industrial structures within the county are properly addressed with numbers displayed. Addressing efforts involve coordination with the post office and Bluegrass Area Development District. A county ordinance requires each residence to have an address posted on the structure or entrance of the driveway. All posted numbers must be readable from the road.

Mercer County Emergency Medical Services

The Mercer County Emergency Medical Services is located at '130 Commercial Drive in Harrodsburg. The service is privately owned and contracted to provide service to the county and cities. It is an advanced life support service (paramedic staffed) and is currently operating four (4) ambulances and one (1) emergency chase vehicle. In addition to providing medical services to the community, the ambulance service performs a variety of educational services. Personnel also speak to various community organizations and offer CPR, First-Aid and Emergency Medical Technician classes. The Mercer County Emergency Medical Services employs Six (6) paramedics and Ten (10) Emergency Medical Technicians (EMTs) and One (1) Advanced Emergency Medical Technician.

Mercer County Emergency Management (EM)

The Mercer County Emergency Management office is located in the Mercer County Courthouse. The Emergency Management Agency employs one (1) part time person and has three (3) volunteers. This department provides a variety of services to the community including disaster planning, public education for civic groups and schools, promotes

weather safety and serves as the advisor to the county's Emergency Planning Committee. The County's Emergency Management Planning Committee consists of twenty-two (22) people in all areas of business and government. However, the senior officials in the county (Judge/Executive and Mayors) are in charge of establishing an Emergency Operations Center and all decision making in the event of an emergency or natural disaster. Although not a primary response agency, Mercer County's EM officer coordinates the actions of the emergency response community. In 2003, Mercer County received two (2) Homeland Security Grants. The first grant was for \$24,404 and was used to purchase a radio repeater system for fire and police services, gas masks for the ambulance service, and escape hoods for local law enforcement agencies. A second grant was applied for and approved for \$60,000. No equipment has been purchased as a budget for the grant has not yet been developed. Future plans for the Mercer County Emergency Management Agency includes building a separate Emergency Operations Center (EOC) which will house the Emergency Management office and EOC staff. The county's current EOC is located in the Mercer County Courthouse. A site has not been selected for the new building at this time.

Health Facilities

Ephraim McDowell - James B. Haggin Memorial Hospital

The James B. Haggin Hospital, owned and operated by the Ephraim McDowell Health (EMH) system since December 1, 2017, is located on Linden Avenue and is the primary healthcare facility located in and serving Harrodsburg and Mercer County. The original hospital was established in 1912, located on Greenville Street. In 1915, the hospital was named A. D. Price Memorial Hospital located on College Street. The Mercer General Hospital opened at Haggin's present location in 1949. The name of the hospital changed from the Mercer General Hospital to the James B. Haggin Memorial Hospital in 1953. This change was made in honor of James B. Haggin whose family was closely intertwined with the early history of the county.

Haggin was designated as a Critical Access Hospital (CAH) in 2001, licensed for 25 beds or less. The 25 bed capacity includes acute and swing. The CAH designation is designed to reduce the financial vulnerability of rural hospitals and improve access to healthcare by keeping essential services in rural communities. To accomplish this goal, CAHs receive certain benefits, such as cost-based reimbursement for Medicare services. There are seven healthcare clinics under the umbrella of the Haggin Hospital. The hospital employs 189 Associates excluding the staff at the clinics.

The patient care teams of the hospital treat a wide variety of illnesses and injuries. In addition to family and general practice, the medical staff includes specialists in the following areas: cardiology, gastroenterology, general surgery, internal medicine, orthopedics, oncology, oral and maxillofacial surgery, otolaryngology, pathology, pediatrics, podiatry, radiology, urology, and wound services. EMH opened a wellness center in 2018 in Harrodsburg and a durable medical equipment service, Medsource, in 2019 in order to better serve the residents of Mercer County.

The Associates of Haggin are dedicated to the patient experience. The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) is a patient satisfaction survey required by the Centers of Medicare and Medicaid Services for all hospitals in the United States. For the question "Would Recommend" patients who received care at Haggin ranked the hospital 88.9%. The Kentucky state average in this area is 66.8%. Haggin has a strong positive economic impact on Mercer County. Haggin's mission is a commitment to helping people live healthier through quality healthcare, trusting relationships, and providing value to those served.

Mercer County Health Department

Harrodsburg and Mercer County are served by the Mercer County Health Department which is located at 900 North College Street in Harrodsburg. The health department, originally established in 1938 on East Office Street, moved to North Greenville Street until May 1996 when it relocated to its present location. The Mercer County Health Department serves as a preventive medical clinic and is staffed by three (3) full time clerks, two (2) registered nurses, one (1) clinical nutritionist, one (1) part-time advanced registered nurse practitioner, and two (2) full-time environmentalist. The administrative staff consists of one (1) director and two (2) administrative assistants. The department's current building houses an auditorium, seven (7) examining rooms/nurse offices, and two (2) sanitation (environmentalist) offices.

The health department offers a variety of general services, women's services, children's services (well child exams, vaccinations), tuberculosis screening, vital statistics, sexually transmitted diseases, H.A.N.D.S. (home visiting program), and a Women, Infants, and Children (WIC) Program which is federally funded. The health department offers Harm Reduction Syringe Exchange Program (HRSEP) which includes HIV/HCV testing, treatment referral, etc. In addition, they offer some environmental programs such as public food services, on-site waste disposal, rodent and varmint control, rabies and nuisance control, radon testing, and private water supply testing.

Public Utilities

Water Services

Harrodsburg and Mercer County are served by four (4) public water distribution systems: the Harrodsburg Municipal Water Department, the North Mercer Water District, Lake Village Water Association, and Burgin Water Department. Only Harrodsburg operates a water treatment facility. North Mercer Water District, Lake Village Water Association, and City of Burgin purchase treated water from Harrodsburg. Figure 6-4 shows the location of rural water lines in Mercer County.

Harrodsburg Water Department

The City of Harrodsburg is a regional water supplier which provides water service to all of Harrodsburg and Mercer County (including the City of Burgin, North Mercer Water District and Lake Village Water Association). The city's 6.0 MGD water treatment plant is located on the Kentucky River approximately seven (7) miles east of town.

The City of Harrodsburg has three elevated storage tanks to include North Main Tank (1968), Baywest Tank (1999) and East Office Tank (2005) for a total of 2.75 MG of water.

The City of Harrodsburg uses the Kentucky River as its source of raw water supply for its existing 6.0 MGD water treatment plant. At the present time, it is estimated that the Kentucky River provides Harrodsburg with an unrestricted water supply. However, it is important to note that the river does experience occasional periods of less than optimum raw water quality (periods of high turbidity after significant rainfall events, periods of higher than normal organic loadings, and rare but occasional "spill events". The city's current average daily water production is approximately 3.55 MGD, peak month production is 3.83 MGD +/- and peak day production is 4.94 MGD +/-. The city has recently conducted a two (2) phase water system improvement program. Phase I of the program was completed in 2003 and addressed the city's most critical needs for water treatment, transmission, and storage. The Phase II Water Treatment Plant Expansion/Upgrade (4.0 MGD to 6.0 MGD) was completed in 2013. A review of historical water production data indicates that average daily and peak daily production have both increased by approximately 1 MGD during the time period of 1990 – 2000, and nearly 1 MGD during the time period of 2000-2020. From review of this data, it has been suggested that the City of Harrodsburg should plan for expansion/upgrade of its existing water treatment plant (from 4.0 MGD to 6.0 MGD) in the next five (5) +/- years.

Improvements completed as a part of the **Phase I** (2002/2003) improvements program include the following:

Water Plant Upgrading Improvements

- Replacement of existing gravel support media, and anthracite filter media in four (4) existing filters.
- Installation of a new EPDM membrane roof on the existing water plant filter building.
- Repair/replacement of existing settling basin baffles.
- Replacement of existing motor starters for 2 -400 H.P. raw water pumps and 2 -200 H.P. high service pumps.
- Construction of an additional earthen backwash/solids handling sludge lagoons.

Water Transmission/Storage Improvements

- Construction of a 25,300 L.F. "By-Pass 20-inch transmission main to provide a looping reinforcing main on the north, east, and south sides of the city. The proposed main will tie the existing 12" and 20" treated water transmission mains from the water treatment plant to the existing storage facilities on the north side of the City of Harrodsburg as well as the proposed new tank which is to be constructed on the south side of the City of Harrodsburg.
- Construction of a 7,000 L.F. "Southern Loop" 12" transmission main to provide looping reinforcing connections to tie the proposed "Bypass" transmission main to the existing 8" mains on the south side of the city.
- Construction of a 2,000 L.F. "Cornishville Road Loop" 8" transmission main to eliminate an existing hydraulic bottleneck in the city's existing distribution system

- which is also a master meter feed point for one of the city's wholesale customers (North Mercer Water District).
- Construction of a new 1.0 MG elevated water storage tank on the south side of the City of Harrodsburg.

The existing dual 12" and 16" raw water mains and the existing dual 12" and 20" dual treated water transmission mains which deliver treated water to Harrodsburg are adequately sized to convey to proposed expanded water plant capacity of 6.0 MGD. The water treatment plant expansion from 4.0 MGD to 6.0 MGD will address current and anticipated regulatory changes in drinking water standards. Based upon future trends and projections, the City of Harrodsburg will need to expand its existing raw water mains (existing 12" and 16") from the intake to the treatment plant, and from the treatment plant to the city distribution system (existing 12" and 20") roughly in the next twenty (20) +/- years, if the same rate of economic growth and water demand occurs.

Improvements completed as a part of the **Phase II** (2012/2013) improvements program included the following:

Raw Water Intake Pumping Improvements - Completed

- New 6.0 MGD Low Service (Submersible) Pumps & Motor Starters
- New 6.0 MGD Raw Water Second Stage (Vertical Turbine) Pumps
- Second Stage Pumping Station Valve Improvements (New pump control valves, new surge control valves).
- Raw Water Pump Well Sludge Removal Improvements

Plant Expansion/Upgrade (4.0 MGD to 6.0 MGD) - Completed

- New Chemical Feed Facilities
- New Chemical Mix Basin
- New 6.0 MGD Ballasted Flocculation/Sedimentation Basins (Actiflo)
- Upgrade "Old" Settling Basins to Second Stage Settling
- Expand Filter Building, Construct two (2) New Filters
- Upgrade Four (4) Existing Filters (valve operators, rate controllers, head loss gauges)
- Add Baffles to Existing Clearwell Capacity
- Construct Additional Clearwell Capacity 600,000 gallons
- Upgrade High Service Pumps (Pump Control Valves & Surge Relief Valves).
- Upgrade Plant Instrumentation
- Upgrade/Expand Solids Processing/Disposal Facilities

North Mercer Water District

The North Mercer Water District, which obtains water from the City of Harrodsburg, was formed in November of 1965. The office for the North Mercer Water District can be found in Salvisa at 108 Main Street off of Old U.S. 127. The water district currently employs two (2) state certified Class II-D operators and serves four (4) counties: Mercer, Washington, Anderson, and Boyle. Since commencing operation, the district has grown over 400

percent with more than ninety eight percent (98%) of the roads within the district's service area having water service. At the end of 2006, the district had approximately 330 miles of water line. The Mercer County portion of the water district includes about eighty percent (80%) of the unincorporated areas. The district's boundaries extend north with the Salt River and are adjacent to Harrodsburg on the west and north sides following a line parallel to and one (1) mile north of Lexington Road (U.S. 68) to the Kentucky River. Areas receiving North Mercer Water District service are shown in Figure 6-4. The district's 4,332 customers are listed as follows:

Table 6-6

Customer Type	Mercer	Washington	Anderson	Boyle	Totals
Residential	3,897	272	16	17	4,202
Commercial	75	2	0	0	77
Industrial	2	0	0	0	2
Other	47	2	1	1	51
Totals	4,021	276	17	18	4332

Presently the water district has six (6) tanks with various capacities. One (1) tank is located about one (1) mile south of Salvisa on the eastern side of U.S. 127, another is located in Mayo, the third tank is located on the southern side of McCroskey Pike approximately three quarters of a miles east of U.S. 127, the tank located in Rose Hill has been replaced with a tank of greater capacity, and the fifth tank is on Cardwell Road. The sixth tank is located in Dixville and was constructed in 2007.

The North Mercer Water District purchased an average of 679,719 gallons of water per day from Harrodsburg in 2019. When new development occurs in the North Mercer County Water District, the district will extend the equivalent of fifty (50) feet of water line per customer at no charge, however, beyond this point, the individual or developer must pay for the full cost of extending the lines. Tap-on fees in the district are \$650.

Lake Village Water Association

In 1971, the Lake Village Water Association began its service to customers in south Mercer and northern Boyle Counties. The Lake Village Water Association Office is located north of Burgin on U.S. 33 and employs two (2) Class II-D State Certified Operators. Locations in Mercer County served by the Lake Village Water Association include Bright Leaf, Bushtown, Curdsville, Paradise Camp, Lakeview Point, Herrington Woods, Chimney Rock, Hagers Camp, Kingfish Camp, Rose Camp, Dry Branch Road, Buster Pike, Ison Lane, Trails End, Cane Run Camp Road, Shawnee Run Road, Curdsville Road, and Webb Road.

When the Water Association was first established they only had a single standpipe on Shakertown Road. However, the Water Association completed the erection of a second 250,000 gallon elevated water storage tank on Montgomery Lane in 1994 and a third 200,000 gallon water storage tank on Lake Village Drive in 1997. The Water Association's seven (7) metering points are as follows:

Supplier Location

Danville U.S. 127 one mile north of Danville Bypass
Danville KY33 @ Danville Bypass
Danville Water Works Road
Danville Intersection of Bluegrass Parkway and Lockland Lane
Harrodsburg Moore Lane @ Handy Pike
Harrodsburg Near the Harrodsburg Water Treatment Plant
Harrodsburg U.S. 68 & Dry Branch Road

In 2016, the Lake Village Water Association purchased water daily from Danville and Harrodsburg. As of May 2016, the rates in effect for water service are as follows:

First 2,000 gallons per month \$26.40 minimum bill

Next 1,000 gallons per month \$ 10.25 per 1,000 gallons

Next 1,000 gallons per month \$ 10.24 per 1,000 gallons

Next 2,000 gallons per month \$ 20.50 per 1,000 gallons

Next 24,000 gallons per month \$ 226.21 per 1,000 gallons

Source: Bluegrass Area Development District Rate Book (October 2017)

The Lake Village Water Association has just completed the extension of approximately one (1) mile of water line along U.S. 68 from Phillips Lane West. This improvement, funded by the Mercer County Fiscal Court, is complete with the exception of the issuance of permits from the Division of Water and Encroachment Permits from the Department of Transportation. The Water Association has also applied for funding of another water line extension from the Harrodsburg Water Plant on KY 33 cross country to Shaker Village. This extension, expected to be complete in Fall 2004, will also follow U.S. 68 from Shaker Village to A.T. Dean Road, Caanan Road, and Coghill Lane. The project has been divided into two (2) phases with a total estimated project cost of \$1,355,000. Of this amount, \$450,000 will be funded with Phase I Tobacco Settlement money with the remaining \$905,000 in funds being provided by Rural Development.

Burgin Water System

According to the Mercer County Water and Sewer Plan, the City of Burgin utilized a spring-fed water supply and had its own water treatment facilities and storage until the year 1958. In this year, the city began to purchase treated water from the Harrodsburg system. Burgin's master meter is located near the intersection of Handy Road with Bailey Lane. At this location Burgin ties into both of Harrodsburg's water supply lines with a single eight (8) inch in diameter line to connect to the Harrodsburg Water Treatment Plant on Ky 33. The two (2) Harrodsburg water lines to which Burgin connects are a twelve (12) and twenty (20) inches in diameter. Even though the Lake Village Water Association water system surrounds the city water system, there are no connections to Burgin. The Burgin water distribution and storage components were upgraded in 1990 when they received a \$434,000 HUD Grant and FmHA loan financing to erect a 200,000 gallon elevated water storage tank. Since 1990, many additions and improvements have been made and Burgin no longer relies solely upon Harrodsburg's pumping or water storage to provide pressure for the water system.

Wastewater

Harrodsburg's water and sewer utilities operate as a direct function of city government, which is of the mayor/commission form. One of four (4) city commissioners serves as the water/sewer commissioner and has a leadership function in respect to these utilities. However, the commissioner's actions are subject to the approval by the full City Commission.

The City of Harrodsburg owns and operates a 2.68 MGD Wastewater Treatment Plant which has a wet weather capacity of 5.32 MGD. The plant is currently operating at an average dry day flow of 1.079 MGD, and an average wet weather flow of 1.679 MGD. The peak daily flow recorded from January 1998 to June 1999 was 3.8 MGD. The Harrodsburg Wastewater Treatment Plant, operating under NPDES Permit No. KY 0027421, is located on the northwest side of the city, north of Cornishville Road. The thirty (30) acre site is situated near the confluence of Town Creek with the Salt River. All sewage from the city flows to the northwest through a 27" diameter pipeline before going into the Wastewater Treatment Plant. Originally constructed in the early 1980's the plant provides preliminary, primary, secondary, tertiary, disinfection, dechlorination, postaeration, and sludge handling treatment processes. The City of Harrodsburg has a staff of five (5) to operate and maintain the wastewater plant and collection system.

In addition to the city's Wastewater Treatment Plant (WWTP), there eleven (11) package treatment plants which are permitted under the KPDES Kentucky Pollutant Discharge Elimination System Branch of the Division of Water, Natural Resources and Environmental Protection Cabinet. The package treatment plants in Mercer County are as follows:

Package Treatment Plants

Location	KPDES No.	Design Capacity (MGD)*	
Ben Dor LLC Grocery/ Restaurant	KY0100595	0.01	
Burgin Independent School District	KY0040231	0.008	
Chimney Rock Camp	KY0092631	0.015	
Paradise Condo. Co.	KY0086550	0.026	
Shakertown Pleasant Hill	KY0040151	0.04	
Village Inn Restaurant	KY0027499	0.001	

^{*}Average Daily Flow could not be found – substituted Design Capacity (MGD)

Source: https://wris.ky.gov/portal/SysData.aspx

Wastewater disposal for all other residents and businesses within the Planning Area is handled by individual septic tank and drain field systems, with several different forms of treatment being used. These are an estimated 400 households within the sewer planning area that utilize on-site wastewater treatment systems. It has been observed that these are failing or are inadequate. County officials suspect that there are a number of straight-line pipe discharges as well. There are no definite numbers of these situations but the study estimates as many as 40 to 60 on-site systems are inadequate, and that approximately 50 to 75 homes have straight-pipe discharges.

It is important to note that the City of Harrodsburg maintains an Industrial Pretreatment Program regulated by the State of Kentucky. The City has six (6) permitted dischargers: Essity, Corning Glass, Hitachi, Hallmack Site, County Landfill Leachate, and the old Modine Climate Systems facility. The Harrodsburg Wastewater System has zero (0) industrial dischargers that directly utilize their collection system. All Industrial flow is required to be pre-treated, then received final treatment at the Harrodsburg Wastewater Treatment Plant. In January 2000, a Wastewater Facilities Plan Update was conducted for the City of Harrodsburg by GRW Engineers. The purpose of this study was to evaluate the planning area's wastewater treatment needs. The planning area's original Facility Plan was more than twenty (20) years old and an updated document was needed. In addition, the study was necessary in order for the city to address chronic overflow problems throughout the main collection system. At the time of the update, the city was under an Agreed Order by the Division of Water to accomplish major improvements to the system in order to eliminate the overflows. This study investigated and analyzed the projected flows and alternatives for collecting and treating those flows while accomplishing the elimination of overflow occurrences.

For the purpose of the study, the Harrodsburg Planning Area encompasses approximately 39,700 acres. This boundary was determined by a committee which consisted of the Mayor of Harrodsburg, Mercer County Judge/Executive, City Commissioners, Health Department Officials and Citizens. The committee worked with GRW Engineers, Inc. and the Planning Section in the Facilities Construction Branch of the Division of Water during the planning process. Factors that affected the determination of the planning area boundaries included: the physical and topographical barriers imposed by the river and terrain; the projected land use and development plans; existing development in the area; and the planning committee's estimates of location and timing of development. The original planning area boundary encompassed the cities of Harrodsburg and Burgin as well as numerous unincorporated communities. The revised boundary has been extended to the east and north to include existing or planned development. The eleven (11) package treatment plants which are located in the planning area are estimated to be eliminated within the twenty (20) year planning period. Current plans are to serve the City of Burgin and surrounding areas by pumping sewage to the Harrodsburg Wastewater Treatment Plant. This project is included in the 11-20 year phase. Projected wastewater flows from the Harrodsburg Planning Area were based on the City of Harrodsburg and Mercer County Land Use Plans and on the estimated future population of the area. Residential flows were calculated based on the Land Use designation of light to high density in designated areas. Commercial and industrial flows were estimated according to the Future Land Use designations. The rates of development for the various phases were estimated by assuming a percentage of development of the total acreage of each service area. Wet weather flows were estimated by assuming a reduction in I/I upon completion of the system rehabilitation, and then an increase over the next years.

Harrodsburg Planning Area Projected Wastewater Flows (MGD)

	Existing	Total 0-2 yrs.	Total 3-10 yrs.	Total 11-20 yrs.
Residential	0.91	1.32	3.13	4.50
Commercial		1.14	0.64	0.75
Industrial	0.17	0.18	0.33	0.40
Average Dry Weather	1.08	1.64	4.10	5.65
Wet Weather	2.70	2.40	2.80	2.80
Peak Flow	3.61	4.10	10.25	14.13

Future alternatives for serving the planning area were evaluated on the basis of environmental impact, implementability, and the cost analysis of each. The selected alternatives for the planning area are as follows:

Collection System

The selected alternative for the remediation of the collection system is to install a new interceptor and regional pump station and extend gravity collectors to eliminate pump stations. This alternative has a slightly higher present worth cost, but ranks the best for environmental impact and implementation capability. This alternative fulfills the immediate needs of the existing service area while providing for expansion of the system. It will enhance the planning area by providing service to existing on-site sewage systems and future areas of development.

Mercer County Sanitation District

The Mercer County Sanitation District (MCSD) was created by the Mercer Fiscal Court in 2005. The MCSD commissioned Strand Associates, Inc. (SAI) to complete a Regional Wastewater Facility Plan (RWWFP) to evaluate wastewater conveyance and treatment needs for the 20-year period ending in 2026. The planning area includes all of Mercer County except the City of Harrodsburg planning area.

The Regional Wastewater Facilities Plan was completed and presented to the Mercer County Fiscal Court in November of 2006. It is a comprehensive document which includes information on the existing environment, existing wastewater facilities, planning area descriptions, wasteload & flow forecasts, evaluations and ratings of existing facilities, collection & conveyance, wastewater treatment alternatives and a recommended plan.

As the RWWFP is a 20 year planning document, and the focus of the Harrodsburg – Mercer County Comprehensive Plan is a 5 year planning document, we will focus on the 0-5 year planning phase of the project. The service areas that have been designated as the areas for highest need for planning purposes in the next 5 years are the Bright Leaf Service Area, Burgin Service Area and a portion of the McAfee Service Area. As of the writing of this section, easements have been obtained for the Bright leaf and Burgin service areas and construction has been completed.

Solid Waste Management

An effective system of solid waste management is imperative to protect the public health and environment in Mercer County. Solid waste is generated by households, businesses, industries, and institutions. As the number of generators increases, the task of planning for pickup and disposal becomes more difficult. In consideration of the potential growth and development in Mercer County, careful proactive planning on solid waste issues must come to the forefront. Mercer County was designated as a Solid Waste Management Area by the action of the Natural Resources and Environmental Protection Cabinet in May of 1991 and was empowered to create a Waste Management District in accordance with KRS 109.115. The Waste Management District includes the Cities of Harrodsburg, Burgin and all other incorporated areas of Mercer County.

The Mercer County Fiscal Court is responsible for implementing the Solid Waste Management Plan and various components of the plan. This plan is updated every five (5) years. The last plan was updated and approved in 2018 and establishes the county's solid waste management policies and implementation schedule through 2022. The county currently has a full-time solid waste coordinator. Mercer County has a municipal universal solid waste collection system, established by ordinance. Residents have door-to-door collection and access to recycling facilities. All waste haulers must have a permit to operate and must file quarterly reports to the county in order for the solid waste coordinator to verify that solid waste is being disposed of in a permitted landfill. This information is also used to complete annual reports that must be submitted to the Division of Waste Management. Solid waste is currently disposed of at three (3) contained landfills: Tri-K Landfill in Stanford, Benson Valley in Frankfort, and Blue Ridge in Irvine.

The Mercer County Transfer Station is located at the Convenience Center on Moberly Road. Contractors and individuals can bring household garbage and building materials directly to the transfer station. There is a charge for the service depending on the type and amount of trash delivered. The county also provides a manned recycling center at the Convenience Center and is operated six (6) days per week.

Chapter Seven - Transportation

Increased mobility, accessibility, and efficiency of a region's transportation system can be a stimulant to population growth, residential development, and have a pronounced effect on the location of industrial and commercial land uses. For this reason, it is important that a study of the county's transportation system be included in the Harrodsburg-Mercer County Comprehensive Plan. As roadways are the predominate means of transportation in Mercer County, roads will be discussed first, followed by rail, air, bike, public transportation, and waterway facilities.

Mercer County Roadways

Trucking Classifications

Mercer County's road system consists of federal and state roads maintained by the state, county roads maintained by the Mercer County Road Department, and city roads maintained by the City of Harrodsburg. State maintained roads are classified by truck weight capacity. Kentucky Revised Statute (KRS) 189.222 requires the Kentucky Transportation Cabinet to establish weight limits on the state-maintained highway system. To implement this statute, Kentucky Administrative Regulations (KAR) designating these weight limits are promulgated and updated frequently. The last such update occurred on December 18, 2003. Designated "AAA" trucking highways have an 80,000 pound permitted gross load limit, while "AA" highways have a 62,000 pound gross load limit. All other state maintained roads are designated as Class "A" trucking highways with a 44,000 pound gross load limit. Figure 7-1 shows the trucking classifications for roads in Mercer County. As previously stated, these classifications were updated on December 18, 2003.

Bluegrass Parkway, U.S. 127, U.S. 127 By-pass, and U.S. 68 have a weight classification of "AAA". Bluegrass Parkway is a four-lane, principal arterial route that connects Mercer County with Lexington to the east. U.S. 127 has a multi- lane segment that extends from the Bluegrass Parkway, 16 miles north of Harrodsburg to Danville. The U.S. 127 by-pass is located on the eastern side of Harrodsburg and is used to divert through traffic from the central business district.

U.S. 68 runs in a southwest to northeast direction across the county. It is a two lane roadway with a generally curving path with its primary route to Shakertown. "AA" Highways in Mercer County include KY 390, KY 33, KY 342, and KY 52. With the exception of KY 33, these are the primary east to west routes in the County. The remainder of state maintained roads in Mercer County are classified as "A" Highways. Roads not maintained by the state or county are maintained by the Mercer County Road Department or the City of Harrodsburg (within city limits).

Functional Classification Systems

The analysis of existing roadway systems includes the assessment of the function performed by individual facilities within the system. Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service that they are intended to provide. As established by the Kentucky

Transportation Cabinet, and shown on Figures 7-2 and 7-3, the functional roadway classifications for Mercer County and the City of Harrodsburg.

The functional classification system for Mercer County is as follows:

Rural Principal Arterial - The rural principal arterial system consists of a connected rural network of continuous routes having the following characteristics: 1) Serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel; 2) Serve all, or virtually all, urban areas of 50,000 and over in population and a large majority of those with populations of 25,000 or over; 3) Provide an integrated network without stub connections except where unusual geographic or traffic flow conditions dictate otherwise.

Rural Minor Arterial - Rural minor arterial roads, in conjunction with the principal arterial system, form a rural road network having the following characteristics: 1) Link cities and larger towns (and other traffic generators, such as major resort areas, that are capable of attracting travel over similarly long distances) and form an integrated network providing interstate and intercounty service; 2) Be spaced at such intervals, consistent with population density, so that all developed areas of the state are within a reasonable distance of an arterial highway; 3) Provide (because of the two characteristics defined previously) service to corridors with trip lengths and travel density greater than those predominately served by rural collector or local systems. Minor arterials therefore constitute routes whose design should be expected to provide for relatively high overall travel speeds, with minimum interference to through movement.

Rural Collector Roads-Rural collector roads generally serve intracounty traffic where travel distances are shorter than those on arterial routes. On average, more moderate speeds occur on these roads. There are two (2) types of rural collector routes, characterized as follows:

Major Collector - These routes typically: 1) provide service to the county seat not on an arterial route and to other traffic generators of equivalent intracounty importance, such as consolidated schools, shipping points, county parks, etc.; 2) link these places with nearby larger towns or cities, or with routes of higher classification; and 3) serve the more important intracounty travel corridors.

Minor Collector - These routes are; 1) spaced at intervals, consistent with population density, to collect traffic from local roads in order to bring all developed areas within a reasonable distance of a collector road; 2) provide service to the remaining smaller communities; and 3) link the locally important traffic generators with rural areas.

Rural Local Roads - Roads within this classification have the following characteristics: 1) Serve primarily to provide access to adjacent land; and 2) provide service to travel over relatively short distances as compared to collectors or other higher road classifications. Local roads account for the remainder of roadways not classified as a principal arterial, minor arterial, or collector systems.

According to the Kentucky Transportation Cabinet, the Bluegrass Parkway, U.S. 127, and U.S. 127 by-pass are classified as "Rural Principal Arterials". Only one (1) road, U.S. 68 east of Harrodsburg city limits, is classified as a "Rural Minor Arterial". Roads classified as "Rural Major Collectors" include KY 390, U.S. 68 west of city limits, KY 152, and KY 33. "Rural Minor Collectors" include KY 1987, KY 1160, KY 926, KY 1988, KY 1989, KY 1343, KY 1491, KY 1920, KY 1915, and KY 598. The remaining roads in Mercer County are considered to be state maintained rural local roads.

The Kentucky Transportation Cabinet uses a separate classification system for incorporated or urban areas. Therefore, the classification for streets within the City of Harrodsburg differs slightly from those in the County as shown on Figure 7-

3. Classifications for more urban areas are as follows:

Urban Principal Arterial - This system of streets and highways serve the major centers of activity of a metropolitan area, the highest traffic volume corridors, the longest trips, and should carry a high proportion of the total urban area travel on a minimum of mileage. These roads should be integrated both internally and externally between major rural connections.

Urban Minor Arterial - These roadways interconnect with and augment the urban arterial system and provide service to trips of moderate length at a lower level of travel mobility than principal arterial routes.

Urban Collector Streets - The collector street system provides both land access service and traffic circulation within residential neighborhoods, commercial, and industrial areas. These roads differ from arterials as they penetrate residential neighborhoods distributing trips from arterials to the ultimate destination. The collector street also collects traffic from local streets in residential areas and channels it to the arterial road system. In the central business district, the collector system includes the street grid to facilitate traffic circulation.

Urban Local Streets - The local street system comprises all roads not placed in higher classifications. These streets primarily provide direct access to abutting land and access to the higher street classifications. These streets offer the lowest level of mobility. Service to through traffic movement is typically discouraged.

Within city limits, U.S. 127 and U.S. 68 (northeast of city limits) are the only two (2) roads classified as a "Urban Principal Arterials". "Urban Minor Arterial" routes in Harrodsburg are, U.S. 68 (southwest of city limits), KY 152, and KY 1989. Roads classified as "Urban Collector Streets" include Tapp Road, Moberly Road, Price Avenue, East Factory Street, West Lane, East and West Broadway, North Magnolia Street, East and West Office Street, North and South Main Street, Mooreland Avenue and Beaumont Avenue. Roads categorized as "Local Access" include state supplemental roads and other local roads used solely for internal traffic circulation within residential, commercial or industrial developments.

Traffic Volume

Traffic volume on roadways is measured by average daily traffic counts. These counts are periodically performed on major state maintained highways by the Kentucky Transportation Cabinet, Division of Planning. Figures 7-4 and 7-5 are Kentucky Transportation Cabinet Traffic Count Maps (released October 2002). These maps show the average daily traffic counts for major state maintained roads within Mercer County and the City of Harrodsburg. The majority of traffic counts were taken between the years 1999 and 2002. As can be seen from reviewing the maps, the most highly traveled routes in Mercer County are Bluegrass Parkway and U.S. 127. It is surprising to note that the traffic counts on U.S. 127 are comparable to the parkway. Least traveled routes are KY 1941 and KY 598. In the City of Harrodsburg, the U.S. 127 by-pass, KY 152, and U.S. 68 carry the most traffic. In conjunction with functional classification system, the data provided in Figures 7-4 and 7-5 can assist the county and city in assessing the adequacy of major roadways for development and gives sufficient background data to request traffic impact studies on development proposals as part of a review process.

Traffic Analysis

Another important facet of transportation planning is the analysis of travel patterns in relation to existing land use. This analysis assists the county to assess the existing road network, determine future travel projections, and address deficiencies that must be improved to meet future demand. In turn, it becomes necessary to recognize that the amount of traffic in Mercer County and Harrodsburg depends upon a number of factors. These include population, the amount and location of industrial, commercial, public facility and higher density residential uses, and the degree to which automobiles are used.

The most useful method in determining travel patterns is to differentiate between the types of trips that are taken. These trips can be classified into one (1) of three (3) main categories:

- 1. **Internal Trips:** Both the origin and destination of the trip are within the planning area.
- 2. **External Trips:** Either the origin or the destination of the trip is within the planning area while the other is in another town or county.
- 3. **Through Trips:** Both the origin and destination of the trip are outside the planning area.

Information needed to determine the types of trips taken in the county is readily available by reviewing the commuting patterns of Mercer County residents which can be obtained from the U.S. Census Bureau. This data is more closely examined in the *Existing Economic Conditions* portion of the plan, but generally shows that of the number of persons working in Mercer County, only 36.2% come from other areas with the majority (63.8%) of workers being Mercer County residents. Therefore, the commuting patterns of the county can be generalized as being mostly internal. The land uses that generate the heaviest traffic volumes are as follows:

Hitachi Astemo Americas, Toyota Bushoku, Corning Incorporated, Essity, Mercer Stone Company, Harrodsburg Central Business District, Anderson Dean Park, Mercer County and Harrodsburg Independent School District. External trips to the county would include the commuting patterns of workers into the county, and visits to Ft. Harrod, the Harrodsburg Central Business District, and Shakertown. External trips from the county occur along U.S. 127 and Bluegrass Parkway predominately to the counties of Fayette, Boyle, Anderson, Franklin, Woodford, and Jessamine Counties. Through trips to the county occur along the Bluegrass Parkway and U.S. 127 as these roadways are designed to carry large volumes of traffic, the greatest distance with little interruption or access to abutting properties.

Planned Road Improvements

Traffic in Mercer County is expected to continue to steadily increase. The completion of the U.S. 127 by-pass and improvements to U.S. 68 make the county more accessible and increase traffic volumes in these areas. Some traffic congestion continues to occur in Harrodsburg's Central Business District due to the various railroad crossings and number of access points for a high concentration of commercial operations. In addition, as employment and industrial opportunities grow in the county, some additional truck traffic should be anticipated along the U.S. 127 by-pass, U.S. 68, KY 390, KY 152, KY 33, Tapp and Moberly Roads.

It is important that the planning commission monitor traffic volumes in these areas and require traffic impact studies when large, higher density land uses are proposed along these routes in order to ensure that the roadways continue to operate within their design capacity. In addition, the planning commission may want to consider implementing more stringent access management techniques on these roadways, especially in the Harrodsburg Central Business District.

As Mercer County is not within a Metropolitan Planning Area and funding for major road improvements generally comes from federal and state sources, the Kentucky Transportation Cabinet takes the lead role in planning for transportation improvements in Mercer County. Planned improvements for Mercer County are identified in the Kentucky Transportation Cabinet's Six Year Plan (2020-2026).

Roadway Maintenance and Improvements

In addition to constructing new roadways, it is important for a county and city to maintain their existing transportation system in an operationally safe and efficient condition. The county, city and state share the responsibility of maintaining the transportation system within Mercer County. The county is responsible for maintaining county roadways, while the state maintains state highways or routes. At the present time the county does not have a systematic method of inventorying conditions on the county-maintained road system and schedules needed improvements and maintenance on an annual or as-needed basis. Therefore, it is recommended that the County develop a County Road Management Plan that includes the following:

1. Regularly updated inventory of road conditions.

- 2. Establishment of criteria for prioritizing road improvement projects and routine maintenance. Examples of relevant criteria would include functional characteristics of the roadway, total traffic volume, and severity of conditions or deterioration.
- 3. Integration of road improvement projects into a multi-year capital improvements program administered in conjunction with state improvements contained in the Six Year Plan.
- 4. Yearly review of prioritized road improvement projects and scheduled maintenance work.
- 5. A plan to redesign and realign county roads.
- 6. Explore intermodal activities to enhance tourism and increase access to community facilities, such as the Anderson-Dean Park. Facilitating multi-modal transportation options would not only enhance tourism but would alleviate traffic congestion by providing pedestrian and bicycle alternatives. Not to mention the health benefits of promoting Active Living in the community.

It is important to note that the City of Harrodsburg has recently completed an inventory of streets maintained by the city. Over the next several months, the city plans to assess road conditions and develop a long term maintenance plan for these roadways.

Access Management

Roadways serve a dual function of facilitating traffic movement and providing access to abutting properties. Where those two functions conflict, roadway design capacity will not be achieved resulting in congestion and an increase in traffic accidents. Therefore, it is important to mention another category of roadway improvements referred to as access management guidelines. The implementation of access management guidelines enhance the overall transportation system by ensuring that each roadway continues to function at its capacity level. Although access to local streets is regulated solely by local government, the Kentucky Transportation Cabinet must authorize new access points (or curb cuts) onto state-maintained roadways from abutting properties. However, the Cabinet's standards are, in effect, minimum standards since local governments may deny access that was approved by the state. Local governments may establish and enforce their own access standards, which may be more stringent, through zoning and subdivision regulations.

Access management guidelines help to assure that a roadway will operate at its design capacity by identifying factors that need to be considered when access points from individual properties to a roadway are approved. Along arterials and major collectors, for example, driveways should be kept at a minimum. Measures that should be considered as part of access management include provision for:

- Parallel service roads
- Frontage roads
- Interconnected parking lots
- Shared driveways
- Limitation on turning movements (especially left turns)
- Limitations on new access points (including numerous cul-de-sacs) for subdivisions.

Locally Identified Projects

Other projects which are not a part of the Kentucky Transportation Cabinet's Six Year Plan but have been identified by Mercer County residents as needed and desired include:

- 1. The improvement of circulation in the Harrodsburg Central Business District.
- 2. Norfolk Southern Railroad crossings in downtown Harrodsburg.
- 3. Installation of turning lanes on U.S. 27 in Salvisa for access to Dory Drive in order to improve traffic safety in this area.
- 4. Realignment of U.S. 68 using Paris Pike as an example.

The most critical transportation needs in the present and foreseeable future concerns the traffic handling capacity in the Harrodsburg Central Business District. Traffic congestion in this area is caused by U.S. 127 and numerous access points for commercial development. Although traffic volumes in these areas have been reduced by the completion of the U.S. 127 by-pass, not all problems have been mitigated.

Another continuing concern is the Norfolk Southern Railway crossing in Harrodsburg near Factory Street. As train volume continues to increase in this area, the congestions and delays only become worse. Trains often obstruct traffic for several minutes within long trains blocking several crossings at a time thus eliminating alternate routes.

It is recommended that other improvements and alternative routes be considered to mitigate congestion and access problems. This could be achieved through minor widening, operational and intersection improvements to improve traffic flow. This approach is termed Traffic System Management (TSM) and could include improvements such as:

- 1) limitation or prohibition of turning movements;
- 2) provision of left or right turn lanes;
- 3) limitation or prohibition of trucks and on-street parking;
- 4) installation or adjustment of traffic signs and signals; and
- 5) widening of intersection approaches and widths.

Rail Service

Main line rail service is provided to Harrodsburg by the Norfolk Southern Railroad Corporation. The Norfolk Southern Railroad parallels U.S. 127 through Mercer County, crossing diagonally through Harrodsburg from northwest to southeast. It crosses U.S. 127 in Harrodsburg. One section of the rail service runs from North to South in Mercer County and the second section bisects the towns of Burgin and Curdsville. Only commercial rail services are available as there is no passenger service available in the county. The nearest multi-modal facilities are located in Georgetown, Kentucky, approximately fifty (50) miles northeast of Harrodsburg.

The level of rail service within the planning period should be sufficient to cover any additional demand brought by future industrial expansion. Rail sidings can be provided to new industries, since industrial sites in the county lie near or directly along the railroad routes.

Air Service

For many years, air transportation was provided in Mercer County by the Harrodsburg-Mercer County Airport located on the east side of U.S. 127 approximately one (1) mile north of the city limits (presently the site of the Anderson-Dean Park). However, airport facilities are no longer at this location. Currently the closest airport that is easily accessible is Stuart Powell Field near the City of Danville, located thirteen (13) miles southeast of Harrodsburg. The airfield consists of two runways, 2,400 and 5,000 feet in length and a taxiway. Both runways are lighted from dusk to dawn with hangar and tie downs available.

Scheduled commercial and passenger service is available near Lexington at the Bluegrass Airport. This airport is located thirty-two (32) miles northeast of Harrodsburg on U.S. 60. Airlines serving the airport include ATA Connection, Continental Express, Delta Airlines, Northwest Airlink, United Express, and US Airways Express. All major services, lighting, and control are available. In addition, the airport houses the "Aviation Museum of Kentucky". It is also important to note that the airport is currently in the process of updating its master plan (last completed in 1995). This plan will provide the Airport Board with a comprehensive overview of the airport's needs over the next twenty (20) years.

Bikes and Bikeway Transportation

Over the past several years, the use of bicycles as a viable means of transportation have substantially increased. This overall trend has been accepted as a very desirable addition to most communities as it increases the quality of life for residents and provides linkages to recreational or institutional facilities. Bikeway and pedestrian routes typically involve usage by all ages for recreational and educational purposes as well as providing a means of transportation to and from work. Accompanying increased usage for such routes, is the desire for improved bikeway and pedestrian facilities in order to make trips along these routes as safe as possible. This is especially important since some trips occur within existing road rights-of-way.

For the most part, there are two (2) major categories of bicycle facilities:

(1) on road, and (2) separate. The most common type of bikeway is located along existing roadways. This enables the cyclists to travel to almost any destination. Separate bike paths and multipurpose trails are designed specifically for the purpose of facilitating non-motorized means of transportation. In addition, trails and greenways can serve both recreation and transportation needs while creating linkages with other areas of the community.

The guide to bicycle routes in the state is titled *Kentucky Bicycle Tours* and was published jointly by the Kentucky Transportation Cabinet's Division of Multimodal Programs and the Kentucky Department of Travel Development. The routes in the guide crisscross the state to provide as many opportunities for cyclists as possible. All routes except the TransAmerican Trail were designated by state cycling experts working with the Kentucky Transportation Cabinet's Division of Multimodal Programs and the Kentucky Bicycle and Bikeways Commission. For the most part, the seven (7) recommended routes are along less traveled roads so as to avoid interstates, parkways, and major thoroughfares. In addition to the KY TransAmerica Trail, the routes listed and mapped in the guide are as

follows: Ramblin' River Tour, Midland Kentucky Tour, Southern Lakes Tour, Central Heartlands Tour, Mammoth Cave Tour, Bluegrass Tour, and Mississippi River Trail.

The guide on Kentucky Bicycle Tours identifies two (2) bikeways in Mercer County. The first bikeway route, referred to as the Kentucky TransAmerican Bike Trail, traverses the county from east to west through the City of Harrodsburg along KY 152. The second tour is identified as the Midland Kentucky Tour which takes a cyclist from west to east across the center of Kentucky. The tour begins at Land Between The Lakes goes through Cadiz, Pennyrile Forest State Park, Lake Malone, Bowling Green, Mammoth Cave National Park, Horse Cave, Lancaster, Danville, Berea, Red River Gorge, Prestonsburg, and Paintsville. Only a short distance of the tour is located in Mercer County, north along KY 33 to Burgin then follows KY 152 (also the TransAmerican Bike Trail) across Herrington Lake. It is also important to note that the "Bike Trek to Shakertown" is an annual event scheduled in late September. Figure 7-7 shows the location of Mercer County Bicycle Routes and Scenic Byway located along U.S. 68.

In the future, it is recommended that the planning commission encourage the development of multi-modal facilities such a pedestrian and bikeways as development occurs in order to mitigate traffic congestion and to promote active living in the community. Recommended areas for the provision of multi-modal transportation in Mercer County are identified in Exhibit III in the Land Use Chapter of the plan. These areas were identified as part of the Legacy Plan: A Vision for the Future of Mercer County by the Department of Landscape Architecture at the University of Kentucky in 2002.

Generally, the most effective approaches to enhance existing multi-modal systems and encouraging the development of effective and efficient alternative modes of travel are to:

- Expand facilities that enable these modes of transportation to be used safely. This may require the reduction of interaction with motorized vehicles through the development of alternative ways, trails, or additional sidewalk construction.
- Increase the connectivity between these facilities and other community and recreational facilities in the county.
- Create safe intersections or crossings where these types of facilities meet existing roadways.
- Require the provision of such facilities as properties are developed or during major roadway projects where lanes or striping can be added.

If additional bikeway or alternative pedestrian routes are developed for the county, it is important that the routes are carefully coordinated with the existing road network and traffic volumes to provide safe facilities for the biker, pedestrian, and motorist. The safest bikeway is a bicycle trail that is separated from the roadway and is devoted solely to bike travel. Separate bike trails should be used where traffic along existing roadways is heavy and in locations where there are a large number of cyclists expected to travel. Other possible facilities are bicycle lanes and shared roadways. Bicycle lanes are located adjacent to an existing lane or curb, while cyclists occupy the existing roadway on a shared bikeway system. These two methods should ideally be used in areas of low traffic volumes in order

to prevent hazardous conditions to the cyclists and motorists. In addition, the availability of usable rights-of-way for bikeways should also be considered, especially as areas are development adjacent to the U.S. 127 by-pass.

Public Transportation

The Kentucky Transportation Cabinet describes the Kentucky public transportation system as having several components which provide statewide comprehensive services. These services can be broken down into four (4) classifications which are: (1) intercity and interstate buses which move passengers and freight, (2) rural public transportation vehicles for the elderly and disabled which meet the special needs of their users, and (4) bus/transit systems in the cities which provide scheduled passenger service.

At the present time, the Senior Citizens Center located at Anderson-Dean Park has two (2) vans to provide public transportation to elderly persons in Mercer County; however, there is not a fixed route bus/transit system, interstate bus station or terminal, or a rural public transportation service. In addition, there are not any private or publicly owned mass transit facilities serving the citizens of Mercer County. At the present time taxi service is available in Mercer County through the Mercer County Cab Company which is located in Harrodsburg. Other taxi services in the area are located in Bardstown and Danville.

Waterways

Mercer County is bounded by the Kentucky River on the northeast. The Kentucky River is a navigable waterway and has a fully operational lock system. However, there are not currently any commercial uses occurring on this segment of the river. The closest commercial use is the Valley View Ferry which continues KY 129 across the river in Fayette, Jessamine, and Madison Counties.

Although the river is not used for commercial activities in Mercer County, it is used for recreational boating and tourism. At the present time, there are numerous campgrounds and marinas that offer facilities for canoes, pontoon boats, runabouts, and fishing boats. In addition, Shaker Village operates a sternwheeler, the Dixie Belle for tours along the river.

Summary

The transportation system of an area can influence the structure of a community in many ways. The construction of roads, by their nature, serves to form entrances into a community, create pathways for communication, and largely establish the visual perception of an area. A street, bikeway, or pedestrian pathway can enhance the functionality of the existing transportation system and compliment the character of the community or it can be destructive to the quality of life. However, through careful planning, the negative impacts of a community's transportation system can be avoided.

The following general recommendations are made (in addition to the transportation goals and objectives) in order to maintain the character of the community while increasing efficiency of the overall transportation system:

• Ensure that roadways are functioning at (not above) their design capacity in order to accommodate growth and development while mitigating congestion.

- Promote the creation of additional bike and walking paths through the county by asking developers to install these alternative transportation systems where identified by the county in Exhibit III and especially along the U.S. 127 By-pass.
- Strictly employ access management techniques on new and existing roadways in order to avoid unnecessary traffic congestion.
- Noise assessments should be conducted where developers propose to locate residential areas next to railroads, major transportation corridors, and commercial or industrial areas. An assessment and potential abatement should also be required should large commercial or industrial developments be proposed adjacent to residential uses.
- Coordinate all transportation improvements with the appropriate public utility companies so that it may be possible for utilities to be buried or upgraded at the same time.

Chapter Eight – Land Use

The land use plan is a guide for the physical development of the City of Harrodsburg and unincorporated areas within Mercer County. It is based upon goals outlined during the preparation of the plan and policy recommendations developed to achieve them. The goals establish a vision of the city and county and should be representative of how citizens and governing officials would like life in Mercer County to be in the future. It is the duty of the planning commission, governing bodies and citizens to edit, refine, adopt, enlarge and alter these previously stated goals in order to develop policy recommendations for future development. Policy recommendations are included in this chapter as development and growth guidelines.

They represent procedures to be followed if the city and adjacent unincorporated areas in Mercer County are to develop in accordance with the stated goals. The land use plan is presented as one of the final chapters of the comprehensive plan because it utilizes the findings and recommendations of all of the preceding chapters. Specific application of the guidelines to new development in the city and county will occur through amended zoning, subdivision regulations and through the day-to-day development decisions of the planning commission and legislative bodies. The process of developing land use policy guidelines includes an analysis of present land use patterns, assessment of the problems associated with these land use trends, and recommendations for future land use. A general evaluation of existing land use patterns is discussed first and is based upon generalized existing land use maps prepared during the planning process. Next, a future land use map for the city and unincorporated areas within Mercer County are presented along with policy recommendations to guide future land use decisions. It is important to note that although land use data are reported relative to political boundaries, land use trends do not respect such boundaries. Land use activities occurring at the edge of one political subdivision influence the demand for similar activities on the opposite side of the boundary in another political subdivision. Therefore, development activities occurring in Harrodsburg portend change in the unincorporated areas of Mercer County. The same is true for areas of other adjacent counties.

Before developing a plan for future land use, it is necessary to understand existing land use patterns, trends and relationships as well as problem areas. This will be the basis from which recommendations for future land use are developed. Overall settlement patterns will be summarized, followed by a discussion of the existing land use patterns of Mercer County and the City of Harrodsburg. For both the existing and future land use discussions, the general land use classifications described in the following paragraphs will be used.

Land Use Categories

Residential Land Uses - Existing residential land uses are grouped into three categories: low density, medium density and high density. Low density residential includes newer single family development on lots larger than the smaller traditional lots developed within the city. The medium density residential category typically accounts for subdivisions and single family dwellings developed on smaller lots. This category may also include small concentrations of duplex development.

High density residential includes large duplex developments, multi-family units and mobile home parks. Large lot rural estate developments, typically, associated with agricultural operations are accounted for under agricultural and open space land uses. It is important to note that it is not the intention of this plan to automatically allow development to occur at the upper end of density ranges in consideration of future residential development. Rather, the density of development should be determined by the residential development policies contained in the future land use section of this plan. The land use categories used in this plan are purposefully broad. The density ranges for residential development are intended to communicate that proposed development within each density range must also be consistent with the planning commission's goals and objectives, residential development policies, and appropriately served with adequate infrastructure. The specific listing of uses permitted and their densities in residential districts are determined by the Greater Harrodsburg-Mercer County Planning Commission, Harrodsburg City Council, and Mercer County Fiscal Court in the adopted Zoning Ordinances.

General Commercial Land Uses - All existing commercial land uses fall into this category and are described as follows:

Retail commercial land use consists of those types of establishments, their attendant buildings and lot areas which are used in the retail sale of merchandise for personal, household or farm consumption and the rendering of services which are incidental to that sale.

Office commercial land use is comprised of those types of establishments, their attendant buildings, and lot areas which contain businesses primarily engaged in rendering financial, insurance, real estate and specialized professional services. Examples are banking establishments, real estate offices, law offices and the like.

Service commercial land uses generally consist of those types of establishments, their attendant buildings and lot areas which contain businesses primarily engaged in the rendering of all personal business, repair and amusement services not otherwise included in the office category and not involving the sale of specific merchandise (except incidentally). Examples are barber and beauty shops, dry cleaning establishments, appliance repair shops, and commercial amusement services.

Wholesale commercial land use generally consists of those types of establishments, their attendant buildings and lot areas which contain businesses primarily engaged in the selling of merchandise in large quantities to retail commercial operations; to industrial or professional users; or to other wholesalers or acting agents in buying merchandise for or selling merchandise to such users.

Neighborhood Shopping Centers - The purpose of this land use classification is to identify existing shopping centers as well designate areas that would be suitable for this type of large scale commercial development. Areas within this designation must have

appropriate access to major transportation routes and utilities. An example of this type of development is Beaumont Shopping Center.

Industrial Land Uses - An industrial land use is that type of establishment, its attendant buildings and lot area which is primarily engaged in the mechanical or chemical transformation of organic or inorganic substances into new products whether the products are sold back into the manufacturing process or sold wholesale or retail. Uses primarily engaged in the warehousing storage of commodities and landfilling, recycling and other primary waste handling facilities are also included in the industrial classification.

Public/Institutional/Recreational Land Uses - Public and semi-public land uses are defined here to include three categories of uses: (1) all enterprises engaged in providing transportation services, communication services or utilities; (2) public buildings and lands, including government buildings, public schools and public park and recreational facilities; (3) semi-public land uses that serve the public but are not government owned, including churches, private schools, hospitals, cemeteries, charitable and social service organizations. Semipublic uses are typically scattered throughout the city and planning area.

Agricultural & Open Space Land Uses - All land which is used agriculturally (including residential structures) or is undeveloped is included in this category. Within the City of Harrodsburg, there are not many areas devoted to active or inactive agricultural uses. For this reason, most areas in city limits under this classification are typically shown as residential on the future land use map. It is also important note that some of the undeveloped land in the county is steep with slopes of 12-20 percent or more. These lands are not well suited to urban-type development, though potential uses for these lands may include passive recreation or very large lot single family or estate development.

Mercer County Existing Land Use

As described in the environmental section of the Comprehensive Plan, the county is located southwest of Lexington in central Kentucky in the Outer Bluegrass Physiographic region and has a land area of 250 square miles. The land use pattern in Mercer County is structured by topography and location of the transportation network, Harrodsburg, Burgin and unincorporated small rural communities. The most intensive land development has occurred in and around the population centers where the greatest demand for non-agricultural uses typically occur and on properties suitable for development where infrastructure (roads and utilities) are available.

There are a number of small rural communities which have been developed in Salvisa, Mayo, Terrapin, Ebenezer, Tablow, Dugansville, Cornishville, McAfee, Duncan, Bohon, Kirkwood, Nevada, Stewart, and Dixville. In addition, resort related development has occurred in the southeast portion of the county along Herrington Lake.

Agricultural Use - The majority of land in Mercer County is devoted to active and inactive agricultural uses. The importance of agricultural uses to the economy is demonstrated by Mercer County ranking tenth (10th) out of 120 Kentucky counties for alfalfa hay production

and fourteenth (14th) for tobacco. Cash receipts for agriculture in the year 2001 were 24.6 million dollars which places the county 47th in the state. Mercer County's tobacco production significantly contributes to Kentucky being the leading burley tobacco producing state in the nation. In addition, it is important to note that there are numerous properties designated under the PACE (Purchase of Agricultural Conservation Easements) Program or as Agricultural Districts.

The most significant changes of agricultural land have occurred with the development of residential subdivisions near the city limits of Harrodsburg along existing county roadways where adequate infrastructure (water and sewer) are available as shown by the expansion and annexation of Brentwood Subdivision. Other newer residential development has occurred in Salvisa (Deer Run Estates and Salvisa Heights), Rainey Estates in Talmage, and expansion of Bright Leaf Estates located south of city limits.

Residential Use - As described above, the conversion of agricultural land into residential land uses has resulted in development adjacent to the city limits of Harrodsburg or strip commercial development along existing roadways. This type of development ranges from modest single family mobile homes and stick built houses to larger estate homes. Newer subdivision development containing moderately to upper scale housing has also occurred in the county as a result of the minimum acreage requirement being reduced from 5 acres to 2.5 acres. This development pattern, while offering a desirable rural or estate lifestyle at low densities, poses service delivery, traffic safety, and environmental problems at greater densities; especially, where septic tanks are utilized in large concentrations. For these reasons, rural growth patterns and their consequences should be examined in greater detail as the sewer services are extended in the future. Residential development located on Herrington Lake is predominately resort oriented.

Commercial Use - The low density residential character of Mercer County, outside of Harrodsburg and Burgin, does not create sufficient demand or justify the enhancement of sizable commercial operations. Therefore, most commercial operations in the county consist of small gas stations, and convenience/grocery stores to serve the needs of a limited number of people. The majority of residents in rural Mercer County rely upon the Harrodsburg downtown area and commercial district to provide retail services.

Public/Institutional/Recreational Uses - There are five (5) major public, institutional, and recreational land uses in the county outside of the incorporated areas. The most notable recreational/institutional use is Shakertown located in the eastern part of the county. Anderson-Dean Park is the newest and largest recreational facility in the county. Lake Herrington also provides a great deal of recreational opportunities with several marinas, and campgrounds being available.

In addition, Bright Leaf Golf Course on the southern most tip of the county provides golfing and lodging. The main public institutions within the county are Mercer County schools located directly adjacent to Harrodsburg. Other public and semi-public uses, especially churches, are located throughout the county.

Industrial Uses - The majority of industrial uses located in Mercer County are located in the city limits of Harrodsburg. However, there are some industrial uses outside of city limits. The most visible industrial use is the Mercer Stone Company quarry located just east of Harrodsburg city limits. The second major industrial use is Kentucky Utilities Power Plant located on Lake Herrington.

U.S. 127 By-Pass Land Use - The majority of land adjacent to the by-pass is currently open space or being used for agricultural purposes with some scattered residential development. In addition, there are two (2) industrial developments adjacent to the by-pass. The first is Mercer Stone Company located on KY 152. The second industrial development, the Harrodsburg/Mercer County Industrial Park, is located on the spur of the by-pass, west of U.S. 127. Corning and Hitachi are also in close proximity to this area on the eastern side of the US 27 Bypass.

Harrodsburg Existing Land Use

Harrodsburg, the county's largest city and county seat, is located in the south-central area of the county and is approximately four (4) miles north of the Boyle County line. The city began with the development of the older central business district with clusters of residential housing. In recent years this district has expanded to include most areas on U.S. 127. Many older homes along this corridor have been replaced with or converted to businesses. Development along this corridor without the use of frontage roads and access management techniques has resulted in a highly congested area.

The City of Harrodsburg has experienced continued growth over the past sixty (60) years with no periods of decline. However, it is important to note that there has been a moratorium in effect for Harrodsburg that has restricted wastewater tap-ins over the past several years. For this reason, more development has occurred in the county with growth being stunted in the city. With the lift of the moratorium there will be an increase in development pressure in areas in or adjacent to the city (where public water and sewer services are available) and along the U.S. 127 by-pass adjacent to city limits.

Agricultural Uses - There are a few scattered areas of agricultural use within the city limits. The City Zoning Ordinance does not identify any agricultural areas, but they do exist and are currently zoned for residential use. It is assumed that these areas will slowly transition into more urban uses as the development pressures increase.

Residential Uses - Residential development originally occurred near the commercial center of Harrodsburg. However, with the steady growth of the city, new subdivision development has occurred on the northern most portion of the incorporated area. Although the city has annexed some of these areas, a moderate amount of residential development has occurred just beyond city limits to the north along US 127 and to the south along KY 152. There are several mobile home parks within city limits which are mostly concentrated near the railroad tracks on the west side of Harrodsburg.

Commercial Uses - Commercial development began in Harrodsburg's historic central business district which still remains a vital part of the city. This central business district

consists of government buildings, banking institutions, legal offices, and specialty shops. However, in recent years, strip commercial development has extended to include most of US 127 and continues beyond city limits. Development in these areas consists of gas stations, fast food restaurants, two large strip malls containing big box retailers grocery stores and shops. Some residences along the US 127 corridor have been converted to commercial uses or home businesses.

Public/Institutional/Recreational Uses - Public land uses in the city limits include the Mercer County Courthouse (and County Annex), City Hall (and City Annex), Police Department, Fire Department, Road Maintenance Garage, and the Humane Society. The Mercer County library is located in the heart of the Harrodsburg downtown area. Park facilities include Ft. Harrod State Park, Mercer Area Family Education & Wellness facility (MAFEW), Mercer County Fairgrounds, Lion's Park, Old Towne Park and Veteran's Park. Each school also has recreational facilities available.

Industrial Uses - Harrodsburg has the largest concentration of industrial development in the county. This industrial development begins at the north westerly tip of the city limits and extends diagonally across the Norfolk Southern railroad tracks. Major industrial development includes the Harrodsburg/Mercer County Industrial Park on Moberly Road.

Future Land Use Introduction

The Future Land Use Plan is intended as a guide for the physical development of the Mercer County. The plan includes proposals for the amount and location of land that will be needed as growth and development continues. Its purpose is to serve as a basis for creating an environment or pattern of development where the various uses of land compliment rather than conflict with each other.

The future land use plan includes both the future land use map and the associated text. It is important to note that the map and text should be used together when making land use decisions. Exhibit I and II located as the last pages of the plan are the future land use maps for Mercer County and the City of Harrodsburg. Exhibit III is the Comprehensive Open Space Map that is to be used in conjunction with the land use maps when reviewing development proposals in areas identified for future open space and recreational opportunities. In some areas the map shows that little or no change from the existing land use pattern is anticipated.

In other areas, significant change is anticipated, though this change may occur at various rates or not at all in the next five (5) to ten (10) years due to unpredictable economic trends and other factors such as the extension of water and wastewater services. Rezoning of various areas consistent with future land use designations may therefore become appropriate at various times throughout or beyond the five (5) to ten (10) year planning period as conditions warrant. Nevertheless, the maps indicate areas deemed most suited to future urban development when it occurs.

The second major element of the future land use plan are the land use policy recommendations included in the text. These policies supplement the maps by providing a

framework for managing and directing the changes that will occur during the planning period. Application of policy guidelines will help determine when an area is ready for the changes anticipated on the land use map. At times, application of the policy guidelines may indicate the appropriateness of changes not anticipated on the land use map, thus necessitating an amendment to the zoning map prior to granting a development request.

In addition to determining the appropriate location and intensity of various land uses, the policy guidelines provide a framework for reviewing and ensuring the quality of new development. They also assist the planning commission in regulating the impacts of new development on surrounding uses, the environment and existing public service delivery systems. These policies will be implemented through amendment of the Zoning Ordinances and Subdivision Regulations, and review of subdivision and site plan development proposals.

Basic Assumptions

Basic assumptions about future social and economic conditions in the county and city underlie the formulation of goals, objectives and policies upon which this plan is based. These basic assumptions, some of which have been stated or implied in previous chapters are as follows:

- 1. Economic growth will continue in the county as a result of infrastructure improvements and existing development pressures. Current growth rates are likely to slow, as national and regional growth rates slow.
- 2. Population growth will continue in response to economic opportunities, location near transportation routes and cost-of-living factors. Some of this growth will result from a natural increase in population with most population shifts resulting from in-migration. In the near term, population growth may continue to outpace economic growth unless there are major changes in the economy. No major natural or economic catastrophes are anticipated during the planning period.
- 3. The major transportation mode in the county and city will continue to be the private automobile, with supplemental publicly funded transportation becoming more widely available. Therefore, the provision of a functional, efficient, multi-modal transportation system will become increasingly important to the planning area.
- 4. The topography and environmentally sensitive areas of the county will continue to be a major factor in determining appropriate and economically feasible development patterns, including type and intensity throughout the county.
- 5. As a result of new and continuing federal and state initiatives, environmental protections will become a significant aspect of the development process; especially in terms of storm water runoff. This factor, combined with economic and topographic constraints may affect the type, intensity, location, timing or cost of new development.

- 6. Projected national and regional demographic trends show a decline in the number of workers and children in relation to total population by the end of the next decade. At the same time, quality of life aspects of community living are becoming more important to workers and their families. Maintaining and improving quality of life factors will therefore be critical to attracting and retaining jobs and workers in the future.
- 7. Future growth in and adjacent to Harrodsburg will be contingent upon the adequate resolution of inflow and infiltration into the wastewater treatment system.
- 8. Pressure for residential and commercial development will continue in conjunction with regional economic development, transportation and infrastructure improvements. The quality of these developments will continue to be a major issue as the community strives to maintain its unique character and heritage.

Mercer County Future Land Use

Exhibit I, located in the back of the plan, is the Future Land Use Map for the unincorporated areas of Mercer County. As discussed in the existing land use section of this plan, agriculture is an important sector of the economy in Mercer County. In order for the county to continue to benefit from an agricultural economy, land must be reserved for this use and be protected from encroachment of urban and indiscriminate residential uses. This is important especially for those areas that consist of prime farmland or designated as PACE or Agricultural Districts. In addition, many of these areas are historic or contribute to the scenic qualities of Mercer County. Therefore, it is important to implement regulations which preserve the character and integrity of these resources. Preservation of these areas can also enhance tourism. On the future land use map areas that should remain agricultural are shown in white.

It is also recommended that land use controls be implemented which preserve agricultural land outside of the city limits and areas where urban services will be available in the near future. Two exceptions with this development policy would be the rural community areas and those areas, especially adjacent to the U.S. 127 by-pass, which can be adequately served with water and sewer in the future. Development of the existing rural communities and areas adjacent to the U.S. 127 bypass are addressed more specifically in the *Location Principles* and *Policies for Future Land Uses* Section of this plan.

In consideration of the population projections for the county and analysis of future housing needs, the predominate type development for Mercer County is expected to remain residential in nature. Assuming a 2010 population of 22,549 (as projected by the Kentucky State Data Center), a 9% vacancy rate, a 1% group quarters rate, and 2.4 persons per household, 10,229 housing units will be the minimum needed in Mercer County by the year 2010. As there were 9,289 units in 2000 with an additional 510 units constructed since then, a minimum of 430 additional units will be needed by 2010. It is important to note that these figures were developed for the entire county including incorporated areas, so not all of these units are likely to develop outside of the urban services area. Areas for consideration of residential development include those areas between the by-pass and Harrodsburg city limits and those areas near existing rural settlements.

With the lifting of sewer sanctions, the pressure for intensive commercial or industrial development is likely. This type of development should only be permitted in areas defined on the future land use map, where appropriate infrastructure is available, and applicable overlay guidelines can be followed. In addition, open space areas identified on Exhibit III, should be incorporated into the design of development proposals with improvements being made or additional easements or right-of-way being dedicated prior to final approval of the planning commission.

Future Land Use Objectives

The principle objective of the Land Use Plan for Mercer County is to contain urban development into areas where urban services are either presently existing or to areas where such services can easily be extended without undue cost. Urban development includes, but is not limited to industrial, commercial, high density residential and concentrated single family uses. It generally does not include agricultural uses and their related housing. This objective accomplishes two (2) basic purposes:

- 1. Future development will have minimal impact upon the direct and indirect costs of providing government services and will thereby enable government to provide a high standard of service to current and future residents.
- 2. Prime agricultural and scenic areas will be protected from residential and commercial urban sprawl.

Harrodsburg Future Land Use

Exhibit II depicts the Future Land Use Map for Harrodsburg and the immediate surrounding area. Land use in the city and adjacent planning area has the potential to be significantly impacted by the lifting of sewer sanctions for the first time since the U.S. 127 by-pass was completed. Therefore, there will be increasing pressure for the city to extend water and sewer services along the by-pass and gateway areas in order to accommodate additional residential, commercial, and industrial development. These changes, if not properly managed, could significantly impact not only existing land uses adjacent to the U.S. 127 bypass, but also downtown Harrodsburg. If current development policies are not changed to specifically regulate development in this area, it is likely that strip or stand alone commercial development will occur. This type of development will not only detract from downtown Harrodsburg, aesthetically and economically, but also results in poor land use planning. Without the use of proper access management techniques, appropriate signage, landscaping, and design requirements, it is almost certain to result in a "linear carnival" atmosphere where additional traffic congestion which could possibly impede the functionality of the by-pass as a roadway which is designed to carry traffic at higher rates of speed. In short, development without implementation of an overlay district in the by-pass area has the potential to provide a poor entrance into the community and give visitors the impression that gas stations and fast food are the only amenities offered by the City of Harrodsburg. In addition to impending development pressures along the U.S. 127 by-pass, appropriate infill development in the city's historic and Renaissance Kentucky District and redevelopment of other existing uses will be primary future land use issues.

For this reason, future land use development policies have been developed to specifically address these areas as described in the following *Location Principles and Policies*. In addition, it is also important to note that open space areas identified on Exhibit III, should be incorporated into the design of development proposals with improvements being made or additional easements or right-of-way being dedicated prior to final approval of the planning commission.

Location Principles & Policies

General principles relating to the location of urban land uses provide a reference for the planning commission in the development of a Land Use Plan and other tools to promote orderly and systematic growth within Mercer County. Principles for the major types of land uses are provided below as guidelines for the consideration of zone change requests. These policies and the land use map should be utilized together in consideration of these requests. The map should provide the planning commission with the preferred land use for a site, while the written development policies serve as guidelines by which to review the development plan to ensure conformance with the comprehensive plan and determine the appropriate district classification.

General principles for all new development

- 1. All new development shall meet all applicable federal, state and local standards regulating the impact of development on land, air, water, historic resources or natural areas in the county.
- 2. Development should be contiguous to already built-up areas to minimize costs of public facilities such as water, sewer, police and fire services. Provision of these services should be contingent upon these areas being annexed into the City of Harrodsburg.
- 3. No lot shall be created by any subdivision of property that will result in a failure of any lot, existing structure or activity on land to conform to any applicable city or county regulations.
- 4. Where land conditions are in doubt, it shall be the responsibility of the developer to prove the feasibility of development upon the land in compliance with federal, state and local regulations and/or standards.
- 5. All development shall utilize and retain natural topography and vegetation in the development design and layout to the extent practicable. Where required, additional land shall be dedicated (or developed) within designated areas as shown on Exhibit III.
- 6. Development of hillside areas at flat land densities and standards create problems of unstable cuts and fills due to excessive grading. In general, development of this type creates potential problems of erosion, slippage, street design, storm water drainage, sewage disposal, water supply and access for firefighting. In order to reduce these problems, the over development of slope areas should be avoided unless specific evidence or a geotechnical report is issued to the contrary. In addition, no principal structure should

be proposed or constructed on a hillside fill area unless such areas meet compaction standards.

- 7. No development should be allowed to be built in designated 100-year floodplain areas, sinkholes or other environmentally sensitive areas.
- 8. The protection of structures and sites that have historical value is encouraged during rehabilitation activities and infill development.
- 9. Areas of critical environmental importance, areas of high ecological sensitivity, and areas containing unique features shall be preserved in the development process, especially in the area identified as the Kentucky River Conservation Area on Exhibit III.
- 10. Compatibility standards as specified in the following land use development policies and zoning ordinance shall be followed. These standards shall require more intensive uses locating next to less intense uses to provide buffering to protect the less intense use from the impacts of noise, glare, dust, vibration, odors, and traffic or other vehicular use and visual appearance. Acceptable buffers may include any combination of fencing, deciduous and/or evergreen plantings, open space, earthen mounding, etc. as accepted and approved by the planning commission in the development plan process.

Agricultural Development Policies

In recent years, especially since the minimum lot size has been decreased in agricultural areas, an increasing amount of land has been subdivided into lots for residential use in the unincorporated areas of the county under current agricultural zoning. This type of residential development has two (2) major disadvantages.

First, it makes inefficient use of the land, creating subdivisions with lots one (1) acre in size which are difficult for homeowners to maintain. In addition, groundwater contamination is likely to occur with the concentrated use of septic systems, especially in karst areas. Second, it threatens the viability of prime agricultural lands, as conflicts arise with residential uses.

There are several alternatives to this type of development which should be considered by Mercer County. The first would be to increase the minimum lot size. The advantages of this would be to reduce residential development in areas used for agricultural purposes and maintain larger lot sizes more suitable for agricultural use. It is generally accepted that a minimum of ten (10) acres is needed for most agricultural enterprises to be economically viable. The disadvantages of this option are that it greatly increases development and housing costs.

A second alternative to five (5) to ten (10) acre lots would be Conservation or Cluster zoning for residential subdivisions. In this scenario, a concentrated area of housing is permitted in exchange for set aside open areas. Instead of twenty (20) houses scattered over twenty (20), five (5) acre lots, twenty (20) houses could be placed on five (5) to ten (10) acres with smaller lots. The remaining ninety (90) acres would then be used for open

space, agricultural or recreational use. This type of subdivision accommodates residential development while preserving open space.

The disadvantages are that more complicated legal mechanisms must be used to insure that open areas are not developed and providing alternative wastewater disposal methods.

A third solution is to only permit residential development which is adjacent to city limits and can adequately be served with urban services. However, the solution to current development trends in agricultural areas may be a combination of options. Recommendations should be developed as part of an overall review of current zoning regulations. County officials should be directly involved in such a study as the Mercer County Fiscal Court will ultimately have to approve any changes to the zoning ordinance.

The following criteria should be considered when development in agricultural areas is proposed:

1. Soils. Soils considered to be prime farmland by the U.S. Department of Agriculture are of major importance in providing food and fiber. They have properties favorable for economic production of high yields of crops with minimal inputs of economic resources. Farming these soils results in the least damage to the environment.

Deterring urban development from areas with prime soils should be encouraged to be consistent with the goals related to agriculture. Many areas exist within the Mercer County planning area where prime soils are not located. Development of a residential nature in these areas will not greatly impact agricultural production.

- **2. Previous Land Use.** A good method for determining which lands are no longer agriculturally viable is by looking at when the land was most recently farmed. Land currently being farmed or farmed within the last year may still be economically productive while land not farmed for the last five (5) years may have lost its utility.
- **3. Surrounding Land Use.** Reducing conflict between various land uses is a central concern especially in those areas located adjacent to existing PACE or Agricultural Districts. Farming requires use of heavy noisy machinery and produces dust that can be disturbing to non-farm rural residents. On the other hand, farmers may be disturbed by vandalism to crops and fences that may occur when large numbers of people live near their operations. Residential developments should be discouraged in areas where little previous residential development has occurred and in areas directly adjacent to PACE and Agricultural Districts.
- **4. Availability of Urban Services.** This indicator is concerned with the costs of providing additional public services to previously undeveloped areas. Development in areas located great distances from existing city services, police and fire protection is not only inefficient but cause the cost of providing the services to increase. As the minimum acreage was decreased from five (5) acres to one (1) acre numerous residential developments have

occurred in the unincorporated areas of the county where wastewater services are currently unavailable. This type of subdivision development should be discouraged.

5. Type and Width of Road. This is another indicator of public service costs. New development on narrow, unpaved roads will eventually require road improvements. An orderly plan for road improvements is the most desirable and cost efficient method of managing public road systems. Consequently, rural residential development should be located near or along already improved roads. Although, lots for residential development should not front directly on collector or arterial roads.

Existing Rural Settlement Development Strategy

Throughout the rural areas of Mercer County, there exist small settlements or communities that possess a strong historical, physical, and social identity. These settlements, as designated on the Mercer County Future Land Use Map, are characterized by public recognition of their existence, limited urban services, low density of development and a desire of the residents to maintain the identity of their community.

In order for these settlements to continue to exist, provisions must be made for limited, low density residential expansion. This allows young people in the community to form new households and permits the replacement of housing that has become physically unsound. Where such settlements exist and where fire protection, a public water supply, electrical service and environmental conditions are conducive to the safe and effective operation of septic systems are available, it is proposed that limited and controlled residential rehabilitation, redevelopment, and expansion be permitted and encouraged.

Residential Development Policies

The following are general principles that apply to all residential development:

- 1. The increase or decrease of density can function as a transition between incompatible land uses.
- 2. Residential development should be of a very low density and rural in character in areas where urban services (especially public sewers) cannot economically be provided and are not anticipated to be provided within the planning period.
- 3. Permitted residential densities shall be calculated on the basis of net developable land, excluding street rights-of-way, steeped sloped areas, other public land dedication and shall be compatible with adjacent land uses.
- 4. In areas where residential development occurs along ridge tops or valleys with adjacent steep sloped areas, lot frontages should be wide enough to prevent the formation of long narrow lots with little room between houses. This piano key type of development should be avoided as it results in higher densities of housing than planned for the area.
- 5. Residential areas shall generally be located away from incompatible land uses such as large commercial or industrial sites, railroad tracks or other uses characterized by high

traffic volumes, odor, noise, dust or dirt, inappropriately intense lighting and any other nuisance created by these types of uses.

- 6. Residential subdivisions at densities greater than one (1) unit per two (2) acres must be served by central water and public sanitary sewer systems.
- 7. Within the range of allowable residential densities (as specified in the Mercer County and Harrodsburg Zoning Ordinances) for a given residential zone, the maximum permitted density for a zone change request shall be determined by referring to the Comprehensive Plan Future Land Use Map and by using the following criteria:

Soils and Slope Assessment

- Acreage in different soil groups.
- Acreage in slopes if varying degrees
- Other physical limitations of the site (floodplain, karst topography,etc.)

Characteristics of road network serving the development

- Distance from the nearest state or federal highway with available capacity to absorb projected increases in traffic due to proposed new development. Traffic analysis is suggested for higher density developments and should be provided by the developer upon request from the planning commission prior to the approval of the development proposal.
- Distance from a publicly maintained road of at least eighteen (18) feet in width with available capacity to absorb the projected increases in traffic due to the proposed development.

Characteristics of the access road:

- a. Hard surfaced, state maintained road
- b. Hard surfaced, city/county maintained road
- c. Gravel surfaced, city/county maintained through road
- d. Gravel surfaced, city/county maintained dead-end road
- e. Public or private road not publicly maintained

Community Services/Public Facilities Assessment

- · Percent of adjacent and surrounding area developed
- · Distance to nearest development within an unincorporated area
- Compatibility with adjacent or surrounding development, in terms of type, intensity and nature or existing or planned land uses.
- · Access to central water supply with available capacity to serve the proposed development
- Access to central wastewater treatment facility with available capacity to serve the proposed development
- · Distance to 1) a fire department and/or 2) a fire hydrant.
- Distance to a public school facility with capacity to accommodate additional students at the projected date of project completion.
- Distance to nearest neighborhood shopping center

Design

- Residential units should not be located facing directly on or have access directly to arterial or major collector roads.
- · Adequate buffering and/or building setbacks shall be required where residential uses abut arterial or major collector roads or existing industrial or commercial uses.
- Each residential area or neighborhood should be served internally only by minor streets that discourage through traffic. These minor streets should channel local traffic into collector streets that serve to connect several neighborhoods with major thoroughfares.
- Residential developments should offer amenities in the form of green space/recreation areas, varied topography, attractive vegetation and good views, avoiding sites that are low, poorly drained or with slopes exceeding 12 percent.
- All residential development shall be required to provide adequate off-street parking, street lighting, sidewalks (or other alternative pedestrian routes).
- · Infill housing development should be compatible (in size, design, construction materials, etc.) with existing homes and neighborhoods.
- Open Space/Recreational areas should be developed or dedicated as part of residential development in designated locations as shown in Exhibit III.

Commercial/Professional Office Development Policies

- 1. Existing commercial activities, which are presently located in areas that are not desirable for commercial development or expansion, should either be redeveloped or stabilized (not expanded).
- 2. Commercial areas should be accessible to major traffic arteries; however, new curb-cuts should be kept to a minimum by requiring commercial facilities to share frontage roads, service access areas or parking lots.
- 3. Concentrated clusters of stores, as opposed to linear developments, along major thoroughfares should be encouraged, as they are more convenient and tend to protect overall property values.
- 4. Buffering or screening shall be required when a commercial area is proposed next to existing residential areas. Trees, landscaping, benches and other site amenities should be incorporated into the design.
- 5. Commercial development should be designed to include sidewalks or other alternative routes for pedestrians, bicycles and disabled people. Open Space/Recreational areas should be developed or dedicated as part of commercial/professional office development in designated locations as shown in Exhibit III.
- 6. Commercial signs should not be a visual nuisance or safety hazard to vehicular traffic.
- 7. Commercial design shall include adequate parking facilities with entrances and exits from major streets that minimize interference with traffic flow.

- 8. Limited mixing of commercial and residential uses is encouraged as part of a Planned Unit Development or instances such as second floor apartments are desirable above first floor commercial uses. However, such mixing should be well planned and regulated as part of the planning commission's review process.
- 9. All commercial development proposals shall include an assessment of impacts on the environment, on existing service systems, traffic patterns and on adjacent properties.

Neighborhood Shopping Center Development Policies

In addition to the general commercial development policies, the following issues should be addressed in the development of neighborhood shopping centers:

- 1. Development of neighborhood shopping centers should be allowed when it can be proved that the need clearly exists. Redevelopment of existing shopping centers should occur (where there are vacancies) prior to developing new shopping centers.
- 2. There should be a smooth transition between the commercial area and adjacent land uses. This transition should reflect existing architectural and residential character.
- 3. Neighborhood shopping centers should be developed according to appropriate shopping center standards in order to ensure attractive, stable, convenient places to shop and to permit maximum benefit and support of shopping centers from compatible uses and community facilities. Appropriate standards include the following:
- a. Internal traffic circulation and adequate parking. Large parking lots shall be adequately landscaped. Where possible, parking areas should be dispersed throughout the site and/or located to the rear and side of the development with minimal view to the motoring public.
- b. Screened loading and unloading areas that cannot be viewed by the motoring public or adjacent residential areas.
- c. Pedestrian circulation within the proposed development and between the commercial area and adjacent neighborhoods and other public facilities. Open Space/Recreational areas should be developed or dedicated as part of neighborhood shopping center development in designated locations as shown in Exhibit III.
- d. Buffering from less intense adjacent uses
- e. Adequate setback from the street right-of-way.
- f. Where adjacent to residential areas, lighting and loud speaker systems (where allowed) should be non-obtrusive.

Harrodsburg Central Business District Development Policies

The central business district of each city typically functions as the historic focal point of the community as well as serving a variety of functions including retailing, entertainment, administration and government. In addition to the general commercial development policies, development policies for the central business district in Harrodsburg should encourage:

- 1. An efficient and compact place in which to move about and conduct business. The central business district functions more efficiently if shopping and other activities are oriented to the pedestrian. Convenient parking lots and sidewalks are a necessity. Therefore, any development or redevelopment of properties in this area shall provide adequate sidewalks and parking facilities. Parking facilities should be provided to the rear and side of lots in order to minimize the visual impact of these uses.
- 2. The central business district should be an attractive place in which to shop in order to provide shoppers with facilities that are pleasant and convenient. The development of a safe and attractive pedestrian environment in the Harrodsburg central business district shall be encouraged.
- 3. Infill development or redevelopment of an area within the central business district should be compatible with the historic context of the area and consistent with existing structures in scale, mass, design and streetscape. Any plans for development or redevelopment should focus on the preservation and revitalization of the area, keeping a similar mixture of land uses. In addition, improvements in the central business district should be consistent with the goals established for the city's Renaissance Kentucky District. Encroachment of commercial or industrial uses into established residential neighborhoods is discouraged.
- 4. The development of a variety of activities within the central business district shall be encouraged to enhance its appeal for human interaction.

Additional Recommendations:

It is recommended that the planning commission conduct a study to: 1) determine the unique characteristics of the Harrodsburg Central Business District;

2) establish design guidelines in order to maintain the area's scale, streetscape, building orientation and mass; 3) create ways in which to increase the diversity of commercial activities and services in order to encourage use of the downtown at times other than standard business hours; and 4) expand the jurisdiction of the Harrodsburg Architectural Review Board to regulate demolition, rehabilitation, and infill development in this area.

Historic District Recommendations & Development Policies

It is recommended that the planning commission establish Historic District zoning or overlay districts for each of the areas identified in the Housing and Historic Preservation Chapter of the plan in order to regulate land use changes and proposals for infill development. Requirements for these areas should be based upon studies to: 1) determine the unique characteristics and potential historic resources in each neighborhood; 2) establish design guidelines in order to maintain the neighborhood's scale, streetscape, orientation and mass; 3) establish the types of uses that are permissible in each overlay without being detrimental to the character of the neighborhood. Until specific overlay guidelines can be established for these areas, general development policies are as follows:

1. Conversion of structures from residential to commercial or other uses shall be discouraged and only allowed where the proposed use is compatible (for example: home offices, small service related businesses) with existing residences.

Auto-related businesses and other highway commercial uses are not appropriate in these areas.

- 2. Development proposals that include the demolition or significant alteration of existing structures, especially those historic in nature or architecturally significant to the character of the neighborhood, shall be discouraged in order to preserve the integrity of these overlay areas.
- 3. Parking areas shall be placed to the rear or side of buildings and appropriately landscaped in order to minimize the visual impact of land use changes.
- 4. Signage shall be minimal and aesthetically pleasing for any proposed use in the overlay areas in order to minimize impacts to the character and integrity of these neighborhoods.
- 5. Development proposals that include alteration of existing buildings or construction of new buildings (infill development) shall ensure that the design is compatible with existing structures, take into consideration the overall character of the neighborhood, and the site's original use. More specifically, infill development or building alterations must be designed to be compatible with the following: 1) setbacks of existing structures in the neighborhood, 2) overall streetscape, 3) building height, 4) massing and roof pitch, 5) materials used, and 6) fenestration (window opening, scale and pattern).

Industrial Development Policies

All future industrial development should be located in the planned industrial areas, as defined by the Mercer County Industrial Authority in Harrodsburg. Additional industrial development in unincorporated areas of Mercer County, especially areas not served by public utilities, is not encouraged. Sufficient high quality industrial site and facilities exist in Harrodsburg. It is anticipated that the industrial park and other designated industrial areas are sufficient to meet the needs of new Mercer County industries for the planning period. New industrially zoned land should be located adjacent to the existing industrial park, or in the general vicinity. All new sites should be evaluated against the Urban Land Use Location Principles for industry described in the previous section of this chapter.

Some small industrial-type home occupations and agricultural accessory uses should be permitted in agricultural districts as conditional uses. These small industries should include services related to agricultural activities such as farm implement repair, ham curing, limited warehousing, etc. Home occupations in agricultural districts should be flexible but moderately restrictive. The following are specific industrial development policies:

- 1. Existing industrial activities, which are presently located in areas that are not desirable for industrial development or expansion, should either be redeveloped or stabilized (not expanded).
- 2. Industries should be located in planned industrial parks or adjacent to an existing industry to form industrial clusters.

- 3. Land, which can be most advantageously used for industrial purposes, should be identified and reserved for industrial use and encouraged to be exclusively used for such purposes. Small pockets of light industrial uses may be desirable in areas where existing commercial activities have a similar impact to adjacent uses.
- 4. Industrial sites should have good access to highways and when required, rail facilities.
- 5. Industrial areas should be located in areas served by or capable of being served by water, public sewer, gas and electricity within the planning period. The availability and sufficient size must be a prerequisite for an industrial use.
- 6. Industrial developments shall provide adequate buffering between proposed uses and adjacent existing or zoned commercial and residential uses. These sites should also be separated from other areas by such buffers as major highways, railroad lines, parks, greenways or natural geological features. In addition, landscaping and beautification of all industrial sites shall be required. Open Space/Recreational areas should be developed or dedicated as part of industrial development in designated locations as shown in Exhibit III.
- 7. Enough land should be provided for industrial operations, future expansions, off-street parking, loading and unloading.
- 8. All applications for new or expanded industrial development shall include an assessment of impacts on the environment, existing service systems and adjacent properties. This assessment shall include:
- a. Impacts on land, air quality, surface and ground water, historic resources and natural areas.
- b. Impacts on community service systems, including water, wastewater, traffic, schools, police, fire and recreation.
- c. Impacts on adjacent land uses, including noise, traffic, glare, dust, odors, vibrations and visual appearance at the property line of the proposed use.

Public & Semi-Public Development Policies

Public facilities such as schools, city and/or county administrative buildings, fire stations, etc. should be designed so as to compliment the areas in which they are located. They should be convenient to the population served while at the same time creating the least possible conflict with adjoining uses. Particular importance is attached, therefore, to adequate site size to accommodate future as well as existing needs. Buildings should be properly related to parking and service areas and the streets must have adequate capacity to handle the circulation requirements of the facility.

Utility development policies are an important part of a land use plan. These policies can be used to control and guide development by encouraging development where utility services are available. Due to extreme topographical conditions, sparse population, and/or remoteness of many areas of the county, it is often cost prohibitive and impractical to extend public utilities to those areas. The following policies are recommended to guide future utility extensions:

- 1. Adequate utilities should be extended on a priority basis to all areas within the planning area that are urban in character (and within the service areas of the respective utility providers). Those sites within the city that are currently un-served shall be the first priority. The utilities extended into urban or urbanizing areas should meet health and safety standards, including firefighting capability.
- 2. All new developments whether they are residential, commercial, industrial, or recreational in character should have the proper utilities installed by the developer whether private or public.
- 3. The extension of utilities of proper capacity in designated growth areas should precede development or be installed at the time development occurs.
- 4. The use of underground utilities should be encouraged where feasible.
- 5. When utility construction equipment, materials or hardware are stored out of doors, the site shall be screened and landscaped in such a manner as not to detract from the surrounding area.

U.S. 127 By-Pass Future Land Use & Development Policies

A U.S. 127 By-Pass Committee was formed in February of 1995 to comprehensively examine the by-pass and make recommendations to the planning commission and legislative bodies on the future development of the area. Since the study is too voluminous to be included in the comprehensive plan, the Harrodsburg U.S. By-Pass study should be referred to for more detailed information regarding future land use around the by-pass. The recommendations contained in the plan establish the primary development policies for this area. The recommendations of this committee which specifically address future land use and development policies are summarized as follows:

- 1. Annexation by the City of Harrodsburg to the outer by-pass right-of-way.
- 2. Creation of Gateways into the City of Harrodsburg.
- 3. Development of a greenway and Scenic U.S. 68 overlay districts (as shown on the Harrodsburg Future Land Use Map).
- 4. Pursuit of funding for the development of pedestrian ways and bikepaths.
- 5. Adoption of requirements for the installation of buffers and landscaping in all development in the county and the city, especially in the by-pass area.
- 6. Require the use of street trees for developments which intersect the by-pass.
- 7. Creation of a more stringent sign ordinance for the county and the city that requires the use of centralized signage around the by-pass.
- 8. Limitation on new street intersections with the by-pass with the use of shared service and frontage roads with requirements for the extension of existing streets.
- 9. Encourage innovative subdivision design by incorporating the concepts of Planned Unit Development (PUD) and Cluster or Conservation Subdivisions into city and county ordinances.

- 10. Any development that occurs surrounding the by-pass shall be connected to city services (water and sewer) subject to the economic feasibility of the city providing these services.
- 11. Permit limited residential development on the inside of the by-pass first where city services can be efficiently extended.
- 12. Allow limited and aesthetically pleasing commercial development at designated bypass intersections. These commercial developments should be clustered and should meet stringent access, setback, signage and landscaping requirements. Commercial development on U.S. 68 shall be compatible with the Harrodsburg Historic and Renaissance Kentucky Districts.

Upon further study by the planning commission it was determined that alternative and more flexible zoning provisions should be established for this area in order to prevent indiscriminate development while also giving the planning commission greater flexibility as market conditions change along the by-pass and areas adjacent to the by-pass. For this reason, it is reason it is recommended that all properties adjacent to the by-pass (as shown on the Harrodsburg Future Land Use Map) be delineated as the By-Pass Development District (BPD) in the city and county zoning ordinances.

The purpose and intent of this district is the following:

- 1. The provision of a permissive and alternative zoning procedure for innovative, mixed use, residential, commercial, industrial or other type of development.
- 2. To implement the coordination of transportation planning and development in order to maintain the functionality of the U.S. 127 By-Pass.
- 3. To facilitate the planned development of the area consistent and compatible with local and regional demographic/socioeconomic trends, existing land uses as well as to enhance the city's economic and service capacity.
- 4. To require the preservation of scenic and historic corridors in order to minimize the visual impact of development upon view sheds from the public roadway.
- 5. To encourage a more useful pattern of open space by facilitating developments that incorporate linkages with existing parks, schools, and residential areas into their design.
- 6. Allow the planning commission flexibility to determine the types and location of uses that are compatible in the by-pass area as market conditions change.

Since the By-Pass Development District (BPD) would be implemented as an overlay zone, there are always underlying zones that serve as a reference point to determine principally permitted uses, accessory and conditional uses. However, if certain uses, not normally permitted in an underlying zone, are compatible, the By-Pass District may be flexible to allow these uses. When uses not normally allowed in the underlying zone are permitted, the planning commission shall establish and enforce design guidelines for these developments. Specific community impacts for development shall also be addressed. The development shall be capable of proving substantial value to the community over what would be conventionally permitted. The following general development guidelines shall be established for this area:

- 1. The development shall generally conform to the adopted Comprehensive Plan with respect to type, character, and intensity of use and impact on public facilities, services, and road network. All development shall be concentrated on portions of the site which do not directly abut the U.S. 127 by-pass. Deviation from the Comprehensive Plan is dependent upon whether the site is part of an urban service area for public infrastructure and upon provision of public facilities and services. The applicant/developer must also mitigate the impact of the proposed development on these infrastructure systems.
- 2. A greenway shall be required for any development adjacent to the by-pass. The planning commission will establish and enforce a performance standard which will require the screening of the development from the view of the motoring public. This screening may consist of natural features, existing vegetation, planted vegetation or landscaping features. Where such screening features cannot be feasibly be provided due to topography, additional setbacks may be required. Open Space/Recreational areas should be developed or dedicated as part of development in designated locations as shown in Exhibit III.
- 3. The planned development shall be compatible or made to be compatible (buffering, landscaping, architecturally, etc.) with existing land uses.
- 4. The planned development shall be located in an area in which transportation, police, fire protection, other public facilities (including sanitary sewer) are provided, or will be available and adequate for the uses proposed. The developer shall make provisions for such facilities or utilities which are not presently available or shall construct such facilities for the eventual connection to a public system.
- 5. The development may not contaminate the air, surface or ground water, or contribute to storm water runoff problems.
- 6. Any commercial or industrial uses that create objectionable noise (blasting), glare or odors shall be discouraged unless these negative impacts can be mitigated through buffering or other means.
- 7. A site inventory shall be conducted prior to submittal of a site development plan.
- 8. The inventory shall include text and map information indicating soil types and their locations and development limitations; existing drainage features including watercourses, natural vegetative cover, including tree stands and the general type and size of trees, any existing utilities on site; identification and location of any existing structures, historic sites, any existing easements and other significant site features.

Mixed Use Development Policies

The intent of this land use designation is to provide a permissive, flexible and alternative classification for innovative, mixed use developments only if they are designed properly and community impacts are addressed. This land use designation allows for the combination of differing uses not normally located near each other under conventional land use planning, but would permit these combinations of uses if design standards or controls are in place to make the uses compatible. In addition, it is the purpose of this district to eliminate sprawling strip commercial development by creating compatible clusters of commercial, office, and

residential uses while also facilitating multi-modal transportation and convenience to those residing in the development.

Mixed Use Developments shall be located in areas designated on the Comprehensive Plan Future Land Use Map and consistent with the General Development and Design Policies as listed below. Overall approval criteria should consider whether the site is part of an urban service area for public infrastructure and upon the provision of public facilities, services, and roads by the applicant to mitigate the impact of the proposed development on these infrastructure systems.

General Development Policies

- 1. Mixed Land Use Developments shall efficiently utilize the site, and shall protect and preserve the scenic assets and natural features by incorporating existing trees, streams, and topographic features into the site design. The development shall include the provision that designated natural areas, scenic areas (views/vistas), and developmentally sensitive areas as identified in the Comprehensive Plan will constitute permanent open space or be dedicated to public or semipublic organizations for recreational use.
- 2. Mixed Use Developments must provide interconnected open spaces, recreational areas, and opportunities for multi-modal transportation (i.e. sidewalks, walking trails, bicycle trails, etc.), especially in areas identified in Exhibit III. The installation of open/space recreational improvements should occur as part of the development process.
- 3. Prior to zone change approval, each developer or applicant should define in detail the type of residential and commercial uses proposed for the site. Commercial, office, and indoor/outdoor recreational uses should be allowed only if they appear on a neighborhood scale and are oriented toward conveniently serving the commercial, office, and indoor/outdoor recreational needs of the residents.
- 4. A variety of housing types is encouraged. However, where there is a mixture of densities within one development, housing shall be clustered by density type. In no case should there be a mixing of densities within a residential cluster. For example, single family homes shall not be sited directly adjacent to duplexes, apartment complexes, etc. within the same cluster.
- 5. Mixed Use Developments shall not hinder nor deter development or surrounding undeveloped properties in accordance with the adopted Comprehensive Plan. Where different land uses or development densities exist adjacent to or within the site, substantial buffers and transitions between the mixed use development and the adjacent use must be provided.
- 6. The Mixed Use Development shall be located in an area in which transportation, police, and fire protection, other public facilities and utilities, including sanitary sewerage are provided, or will be available and adequate for the uses proposed. The applicant shall make provision for such facilities or utilities which are not presently available or shall construct such facilities for the eventual connection into a public system.

- 7. The development will not have an adverse impact on the surrounding area and will be harmonious and compatible with adjacent uses. The term compatibility refers to, but is not limited to, size, scale, mass, architectural design, and landscaping.
- 8. The Mixed Use Development fully complies with the minimum requirements contained in the Zoning Ordinance and Subdivision Regulations.
- 9. The mixed use development must not adversely affect the public health, safety, and welfare.

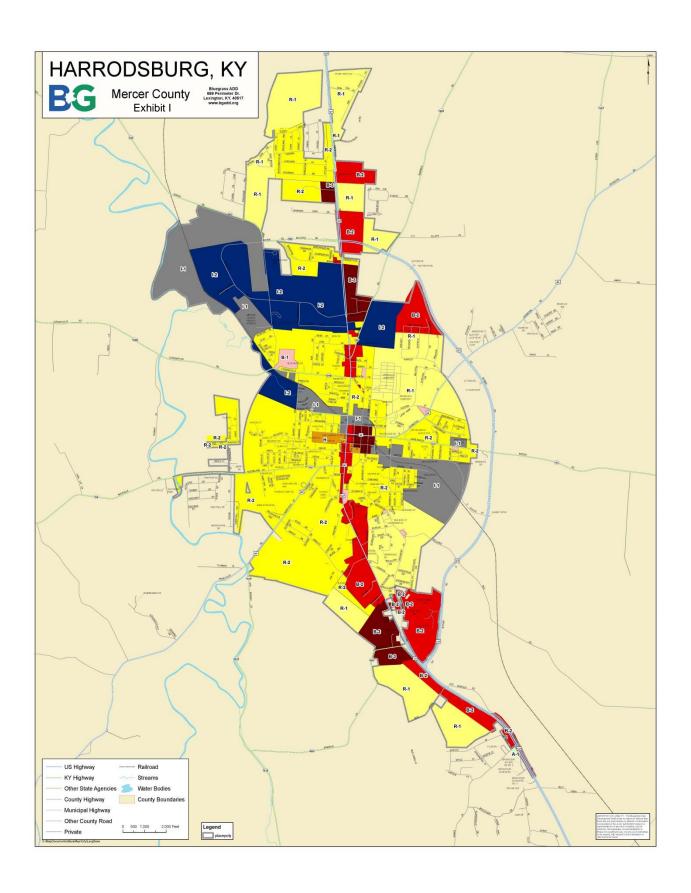
Design Policies for Mixed Use Developments

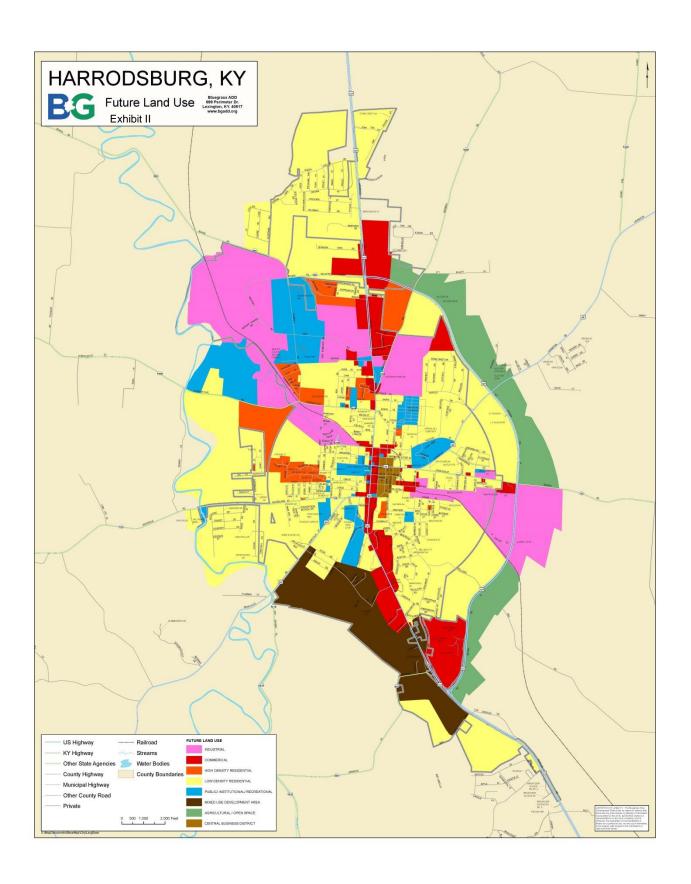
Mixed Use Developments shall be assessed in terms of the design standards contained specified below:

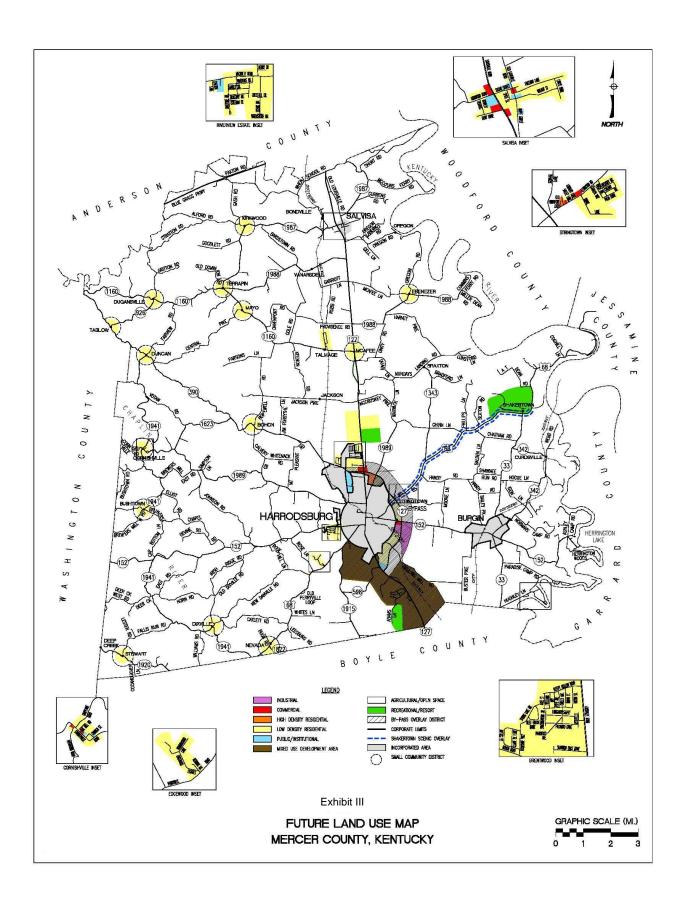
- 1. **Height:** the height of any structure shall be compatible with the existing buildings in the area, and proposed structures within the project site;
- 2. Placement or location of buildings: Consideration should be given to the most appropriate location of buildings based upon access and direct visibility. The location of any building should not interrupt a continuous visual pattern from public view or a public street. Building location should be planned to accomplish a transition with the landscaped, pedestrian, and parking areas. Building setbacks can vary in order to allow appropriate building location. The setback on the perimeter of the Mixed Use Development shall be large enough to protect the privacy and amenity of adjoining uses both existing and anticipated.
- 3. **Preliminary Building Design or Architecture:** Buildings should be designed in the same architectural style as if part of a large commercial, residential, or office center. Individual buildings not part of the larger development should be compatible with surrounding structures. The architectural theme shall also relate to existing structures on the project site and adjacent sites, especially if such existing structures are historic. The use of architectural guidelines is required for multi-phased projects.
- 4. **Scale:** Consideration shall be given to the scale of each building and architectural detail; which relates to the size of an individual and the natural environment. In general, Mixed Use Developments shall have a pedestrian scale and orientation. In rendering a zone change decision, emphasis shall be placed on mass and how it relates to open space.
- 5. **Elevation:** The elevation of any site or structure should be determined by the grade of any existing or proposed public road. Consideration should be given to the relationship between the width and height of the front, side, and rear elevations of any building from a public road. Exposed foundations from a public street should be minimized.

- 6. **Historic and Prehistoric Features:** Historic features on the project site shall be retained, utilized and incorporated into the overall project design if physically and economically feasible.
- 7. **Streetscape:** The streetscape of a Mixed Use Development should be designed in detail specifying lighting, placement of street trees, and street furniture (benches, wastebaskets, etc.).
- 8. **Focal Point:** Any opportunity for a strong, central focus should be studied and developed. These central places are usually a key to establishing community identity.
- 9. **Paved Surfaces:** Emphasis should be placed on preserving at a reasonable rate the amount of open space. The interior road system, sidewalk system, and parking lot should be designed with this in mind. Paved surface refers to cement, brick pavement, asphalt, cobblestone, or other similar type surfaces. Parking areas should be treated with decorative elements, fence or wall extensions, plantings, and berms as other means to screen parking areas from public view or soften their visual impact. Although it is recommended that parking areas be dispersed throughout the site and located to the rear of structures, all large parking lots shall be designed with landscaped islands. Parking lots and driveway aisles should be either asphalt or concrete. Landscaped entrances with trees and bushes should be encouraged near the entrances of the development.
- 10. **Fences, Walls, and Landscaped Berms:** Consideration should be given to brick walls, fences, and landscaped berms, which would produce a continuous cohesive wall of enclosure on a lot line or adjacent to a road. These fences and walls shall be designed and maintained in relationship with the character of the surrounding land uses and structures.
- 11. Landscaping: Consideration should be given to the predominance of a quality and quantity of landscaping and an emphasis shall be given to streetscape areas, buffer zones, and the provision of significant landscaping (in terms of the size of landscaped areas, and quantity and quality of landscape materials) within the proposed developed portions of the site. Landscaping details will be evaluated on the entire site and surrounding any proposed structure and shall be reviewed in relation to adjacent properties. A special attempt should be made to preserve the existing vegetation and scenic areas, if any and encourage additional open space for the public's benefit. Existing topography, significant tree cover, and water courses/bodies shall be largely preserved and incorporated into the project design, where appropriate, and should be consistent with the remainder of these regulations. Plantings should be used to soften the impact of parking and loading areas. Plant material should be selected on the basis of texture and color and for its ultimate growth to provide a visual screen for the public.
- 12. **Grading.** All mature vegetation, prime agricultural soils, floodplains, wetlands, and steep slopes shall be protected from excessive clearing, grading, filling and construction activities. In addition, new construction on prominent hilltops or ridges is discouraged.

- 13. **Open Space and Recreational Uses.** Planned Unit Developments shall make a provision for preserving open space and devoting an appropriate portion of the site to meet the recreational needs of the residential population and required in Exhibit III areas.
- 14. **Signage:** Signage should be designed to protect the visual order of any site and to minimize the impact of adjacent properties. Consideration should be given to the number, location, size, and height of any building mounted sign or freestanding sign. A consistent signage theme shall be provided within the Mixed Use Development.
- 15. **Utilities:** All utility service lines to the building and possible main lines to or within the site shall be located and installed underground where feasible.
- 16. **Detention/Retention Ponds or Lakes:** Large detention/retention ponds or lakes should be discouraged in the front yard or in an area viewed from a public street if not used for both stormwater management and aesthetic purposes. Smaller detention/retention ponds or lakes appropriately designed and landscaped should be encouraged and distributed throughout the site and may appear in the front yard or in an area viewed from a public street. Surface drainage and floodwater retention shall be planned to not adversely impact the adjoining properties.
- 17. **Transportation Design:** Principal vehicular access shall be from major streets and access points shall be designed to encourage smooth traffic flow with controlled turning movements and minimum hazards to vehicular or pedestrian traffic. Maximum separation of vehicular traffic on major roads from pedestrian and recreational areas shall occur. The provision of transportation connections (street connections, pedestrian paths and sidewalks, bicycle facilities) shall be provided in all Mixed Use Developments unless physically unfeasible or undesirable due to land use characteristics. Rural roadside character shall be preserved by avoiding development fronting directly into existing public roads. Buffer zones shall be established along scenic corridors and roadways.
- 18. **Multi-Modal Transportation System:** Mixed Use Developments shall incorporate multi-modal transportation elements in the development, depending on the foreseeable needs of future residents and users of the site, and the relationship of the project site to the community at large especially in Exhibit III areas. Such multi-modal elements may include provisions for mass transit stops or stations, carpooling lots, pedestrian and bicycle paths and lanes, bicycle parking areas, etc. The proposed pedestrian circulation system should be designed to assure that pedestrians can walk safely and easily on the site, between properties and activities or special features within the open space system. All roadside footpaths should connect with off road trails, which in turn should link with potential other measures shall be taken to mitigate the impact of the uses upon each other.







Chapter Nine - Implementation

In developing this Comprehensive Plan, goals for land use in Mercer County and the City of Harrodsburg were established and recommendations made for their attainment. The recommendations are of little value, however, unless steps are taken to implement them. Planning is a continuous process, needing constant updating and refinement as conditions change. This plan is intended to cover a five to ten year period, while looking further ahead where possible. During the next five years the plan is intended to serve as a guide for public and private decisions, after which time a thorough re-evaluation should be made to determine its applicability for the next five years.

The existence of this plan, however, does not preclude a thorough examination of each recommended project or regulatory approach as it is developed to consider whether it continues to be in accordance with the planning program. Nor does the existence of the plan preclude changes to the goals, objectives, or standards in the document itself, through the public review process set out in KRS Chapter 100, where changed conditions warrant. A number of means are available to assist in the implementation of the plan.

Local Leadership

The public officials of Mercer County and the City of Harrodsburg bear the primary responsibility for the implementation of this plan. It is important that the public officials understand, support, and adopt the development policies. In addition, it is important that public and private agencies form partnerships to implement the plan. As the decision makers, the Mercer County Fiscal Court and Harrodsburg City Council have the power that is necessary to adopt policies and fulfill the goals of the city. These bodies should maintain a close relationship with the Greater Harrodsburg-Mercer County Planning Commission so that the planning process is properly coordinated. Because of their statutory role in planning and development review, the Planning Commission and its staff possess special expertise as well as an overview of development issues and needs within the county and city.

If properly utilized by local elected officials, the Planning Commission is very well positioned to act both as policy advisor and enforcer of local development policies. In addition, the public should be kept informed of community development plans to solicit input and support for the program. As development policies are changed, it is recommended that public charrettes and workshops are held in order to obtain meaningful input into the planning process.

Subdivision Regulations

The subdivision of land is the initial step in the process of building a community. Subdivision regulations are locally adopted regulations that serve to govern the conversion of raw land into building sites. The design and quality of the subdivisions determine the form and character of a community. Once land has been divided into blocks and lots, streets built, and utilities are installed, a development pattern is permanently established and unlikely to be changed. For generations the entire community and the individuals who live in the subdivision will be influenced by the quality and character of subdivision design.

Therefore, subdivision regulations applied in advance of development provide a community with its only opportunity to ensure that its new neighborhoods are properly designed.

Subdivision regulations play a crucial role in establishing development standards for new development. Appropriate standards help assure effective traffic patterns, adequate streets, adequate water pressure for domestic use and fire fighting capacity, adequate provision for sewerage, storm water drainage, appropriate spacing between buildings and between streets and buildings, adequate recreational facilities, and an aesthetically pleasing environment. It is recommended that the subdivision regulations be reviewed and updated as necessary after final adoption of the comprehensive plan. In addition, it is important that these regulations be uniformly and regularly enforced by the planning commission.

Without enforcement, the regulations have no merit and begin to lose meaning as precedents of non-conformance are established. In addition to regular enforcement, it is also recommended that all subdivisions and sites be inspected regularly in order to ensure that improvements are being installed in accordance with the subdivision regulations and approved plans. Specific areas that should be addressed in the Harrodsburg-Mercer County Subdivision Regulations are the implementation of better access management techniques, landscaping, tree planting, and performance standards to ensure that all new developments are aesthetically pleasing. Furthermore, the subdivision regulation should be revised to address minimum standards for the creation of open space, greenway corridors, and the inclusion of bike and pedestrian ways in order to provide linkages with local parks, especially in areas shown on Exhibit III.

In addition, the planning commission may want to consider implementing density bonuses (in the city and county zoning ordinances) for conservation/clustered subdivisions in order to make this type of development more attractive to developers.

Zoning

The zoning ordinance is considered to be one of the principal tools for implementing the land use plan. Zoning generally divides the community into exclusive use districts - agricultural, residential, commercial, and industrial - specifying the particular uses that will be allowed in each district. Standards are then set for each district which regulates permitted uses, density of structures, lot sizes, percent coverage of lots by buildings, building setbacks and off-street parking. The theory behind separation of uses through zoning is that of protecting property values by preventing incompatible uses from locating next to one another. Zoning implements the land use plan because the use districts are based upon the land development policies established in Chapter 8 of the plan.

Alternate approaches to strict use separation are also available. Performance standards may be developed to regulate permissible impacts of each land use on neighboring uses and on community services. In theory this would allow any mix of land uses within an area as long as negative impacts on neighboring uses could be controlled. Some of the methods that could be required to control potentially negative impacts could include buffering along property boundaries, special sound proofing of structures and altering traffic patterns on site. A combination of the above approaches is also possible. Such an approach could

include a separation of uses into broad categories, such as residential, commercial, industrial, and agricultural. Within these broad categories, standards could be provided to determine the appropriate type or density of development based on site factors (for example, soils, slope, and drainage characteristics), compatibility with neighboring uses, and availability of needed services (for example, road capacity, availability of central water or sewer, and school capacity). Upon final adoption of the comprehensive plan, the zoning regulations should be reviewed and updated as necessary to implement the comprehensive plan. Prior to the revision of the city and county ordinances, additional studies should be undertaken by the planning commission for the city's Renaissance Kentucky Area, historic districts, and U.S. 127 by-pass area so that modifications to the zoning ordinances reflect the stated goals for these programs and areas. In addition, the planning commission should consider the expansion of Historic Zoning and jurisdiction of the Harrodsburg Architectural Review Board to all National Register Historic Districts in the city in order to further protect these properties from demolition and inappropriate rehabilitation and infill development. The zoning ordinance should then be modified to create an overlay district along the U.S 68 corridor to Shakertown as a mechanism to preserve this historic resource with additional setbacks, landscaping, signage and design requirements.

In addition to increasing lot sizes in the Agricultural Districts, it is recommended that both zoning ordinances be modified to create density bonuses for conservation/clustered subdivisions in order to encourage this type of residential development in rural areas. Requirements to provide linkages to recreational areas, bikeway and pedestrian paths in areas identified in Exhibit III should also be considered as a prerequisite for development and integrated into the ordinances and subdivision regulations. Finally, more specific landscaping and buffering requirements should be incorporated into both ordinances for existing districts.

Site Plan Review

An important element of any zoning or development regulation ordinance is site plan review. While zoning specifies permitted uses of land, site plan review is the means by which the quality of new development is protected through evaluation of the proposed layout and design. It is also the means by which potentially negative impacts on neighboring uses are controlled. Where more intense uses abut less intense uses, for example a neighborhood shopping center next to a residential area, site plan review is the appropriate tool to evaluate potential noise and traffic impacts.

Code Enforcement

Codes are governmental requirements placed on private uses of land to protect the occupants from the hazards of living and working in unsound, unhealthy, or otherwise dangerous structures or conditions. Building, plumbing, electrical and fire codes provide minimum standards for the construction of both new buildings and alteration of existing structures. The housing code provides that existing dwellings must be maintained in a safe and sanitary manner. Structures that are considered unfit for human habitation may be condemned and removed.

Other regulations, such as health department regulations, provide minimum standards for on site septic installations. These codes apply to the community as a whole and are uniform in nature. In some cases the local government may establish its own standards, or the state may dictate a uniform or minimum set of standards for the commonwealth. In order for these codes to be useful an inspection system must be maintained with qualified inspectors enforcing the regulations in the code. Inspectors may be employed by the state to staff district offices or may be locally hired to enforce local codes. At the present time, code enforcement for new construction seems adequate. However, it is recommended that the planning commission review procedures and specifications for subdivision improvement inspection to insure uniform compliance with requirements.

In addition, the fiscal court and city council may want to consider the adoption of a property maintenance code to address dilapidated structures and littered lots.

Road Management Plan

The development of many of the recommended highway improvements in Mercer County is dependent primarily on the Kentucky Transportation Cabinet, Department of Highways. However, much responsibility rests on the local units of government. Local agencies must work among themselves and with the Department of Highways to resolve differences with respect to location and features of particular road improvements. Local groups must actively support highway improvements in their areas. They must also be prepared, when required, to provide rights-of-way, for example. The planning commission has the responsibility of helping to maintain the traffic-carrying capacity of major streets and roads by developing good local land use planning practices, subdivision regulations, and zoning ordinances.

Roads not maintained by the State Department of Highways are maintained by the fiscal court or the cities. The responsibility for making improvements to these roads also rests with local agencies. It is important that a systematic method of inventorying conditions on these roads and scheduling needed maintenance and improvements be established in the form of county and city road management plans. Scheduling should be based on established criteria, such as volume of traffic, severity of need, and the like. In addition, the plan should be integrated into a multi-year capital improvements program for the county and cities. At the present time, the City of Harrodsburg is in the process of developing a systematic road management plan.

Once this is formulated, it is recommended that the city continue to conduct and maintain an inventory of all roads and their structural conditions and develop a specific long term maintenance and improvement plan. Finally, it is recommended that the Mercer County Fiscal Court also inventory existing roads and establish a long term maintenance and improvement plan for county maintained roadways.

Public Improvements Program & Capital Budget

The capital improvements budget is a method used by governmental units for scheduling the financing of a part of the public improvements program which can be realized during a definite period of time, normally five to six years, on a systematic basis. This budget contains detailed improvement proposals including cost estimates. It should also be carefully coordinated with the financial resources and debt service structures of the community. The first year of a capital budget should be adopted by the governing body as a part of its annual budget. The capital budget should be reviewed annually and extended for one year with the first year being adopted as the current annual budget.

Public Participation

Community acceptance and cooperation is essential to the success of a comprehensive plan. The ideas and support of local civic clubs, neighborhoods groups and community clubs, private citizens, business and industrial leaders are needed to implement a successful community improvement project. A large part of achieving successful citizen participation is through a public education program designed to permit a two way flow if information between the citizens and the planning commission, county, and cities. Experience has shown that such a public information program provides a valuable sounding board from which valid suggestions and criticisms usually result.

As development policies, ordinances, regulations are revised it is recommended that various public workshops be held to obtain meaningful input into the planning process. In addition, it is recommended that the planning commission develop a website to facilitate public access to planning documents, applications, minutes, etc. Allowing the public access to forms and other documents also reduces the amount of time that planning staff spends answering general information questions. In addition, it is recommended that the planning commission consider participating in the Governor's Office of Technology (GOT) Kentucky Landscape Census Program as part of initiating a formal GIS mapping program for the county. This program, administered in conjunction with NASA, facilitates the satellite tracking of land cover and land use over time. Participating in this program would enable the planning commission to have access to property information on a site by site basis in order to determine site development feasibility and more accurately address storm water management issues which is of particular concern in karst areas.

In addition, it would enable the planning commission to track changes in land cover and land use over time to better assess land use trends in Mercer County and the City of Harrodsburg. The program also would assist the planning commission in providing egovernment services to the general public as this information would be available via GOT's website.

Land Acquisition

One means of implementing a comprehensive plan is the acquisition of rights in land. This may involve advance acquisition or options on land for use in the future, or acquisition of easements for use of certain features of land. Advance acquisition and options are presently most commonly used for industrial sites, but may also be used for future roads, school sites, and park lands. Easements are commonly used for utilities and roads, but can also be used to preserve scenic features, prevent use of floodways, and other purposes such as the development of interconnected bike and pedestrian ways.

State & Federal Assistance

State and federal grants and loans can be important sources of financing for public improvements projects, which can be difficult for a small town or county to undertake financially. A number of funding sources exist, although the trend is toward assembly of a financing package from multiple sources, including evidence of a substantial local commitment. It is important to be aware of possible funding sources and conditions of funding such as CDBG, HOME, LIHTC, TE, ARC Downtown Planning Grants, and financial assistance from the Heritage Council. In addition, to continued participation in the Renaissance Kentucky Program, it is recommended that the city pursue funding to implement projects as recommended by the University of Kentucky *Legacy Plan* such as those for the redevelopment of Broadway/U.S. 127, Beaumont Center, and revitalization of the West Broadway Neighborhood.