### **CHAPTER SEVEN**

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 Harrodburg 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 laned 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 travelled 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 travelled 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 Automotive Products, Trim Masters, Corning Incorporated, Bay West Paper Corporation, Modine Climate Systems, 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 (2002-2008). The locations of these improvements are shown on Figure 7-6 and are described as follows:

- 1. **Pavement Rehabilitation of Bluegrass Parkway.** Mago Construction Company was awarded the asphalt surface bid on December 12, 2001 with construction beginning on February 18, 2002. The total cost of construction was estimated at \$4,838,719.75. The project is 100% complete.
- 2. **Minor widening of U.S. 68** from Chinn Lane to Chatham Lane. The bid for this project was awarded to ASL Excavating, Inc. on May 29, 2003 with construction beginning on July 7, 2003. The contract amount for this project was \$1,306,154.56. The project is approximately 100% complete.
- 3. **Bush Creek Bridge Replacement on KY 1987.** Design for the project is scheduled for 2005, with construction and completion in 2008. This project will be funded through the Federal Bridge Replacement Program. The estimated cost of construction (not including design, utility relocation, etc.) is \$400,000.
- 4. **Salt River Bridge Replacement on Vanarsdell Road (KY 1988).** Funding for the design, right-of-way acquisition, and utility relocation was authorized in February 2002 with estimated completion in 2004. This project will be funded through the Federal Bridge Replacement Program. The estimated cost of construction (not in-

cluding design, utility relocation, etc.) is \$775,000.

- 5. **Town Branch Bridge Replacement on KY 1989.** Funding for the right-of-way acquisition was authorized in August 2001. Utility relocation and construction is estimated to begin in 2004. The estimated cost of construction (not including design, utility relocation, etc.) is \$300,000.
- 6. **Dry Fork Bridge Replacement on U.S. 68.** Funding for the design, right-of-way acquisition, and utility relocation was authorized in August 2003 with estimated completion in 2004. This project will be funded through the Federal Bridge Replacement Program. The estimated cost of construction (not including design, utility relocation, etc.) is \$398,426.
- 7. Cane Run Creek Bridge Replacement on KY 152. Garrison Construction Company, Inc. was awarded contract (total amount \$517,917.54) on March 4, 2003 with construction beginning on April 15, 2003. The project is 100% complete.

#### 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 transporta-



tion 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.
- 5. Ensure implementation of the U.S. 127 By-pass study through the amendment of current Zoning Ordinances and Subdivision Regulations.

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 only 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 tiedowns 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 Mississispipi 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 By-way 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.