



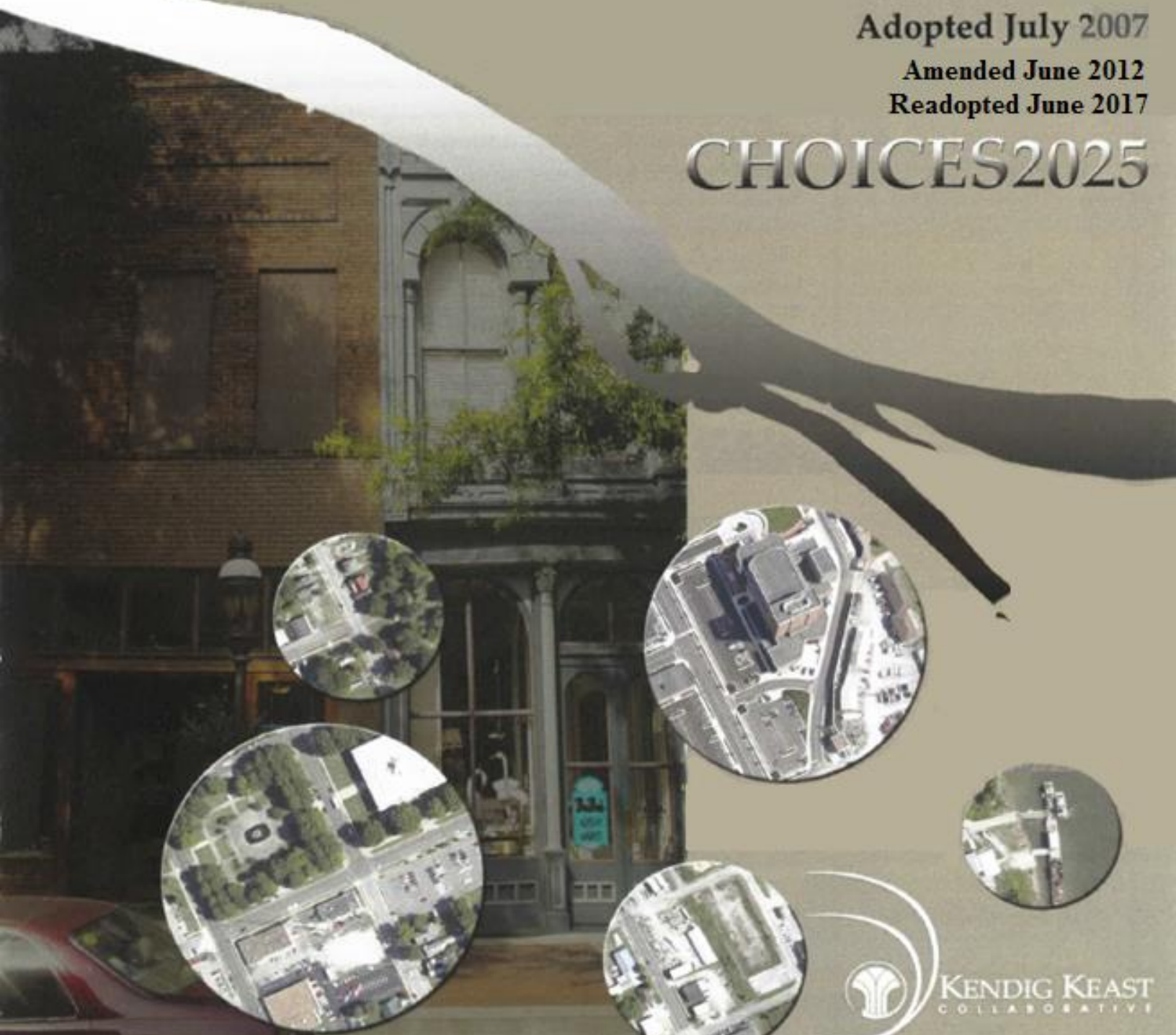
# COMPREHENSIVE PLAN for the CITY OF PADUCAH

Adopted July 2007

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## CHOICES2025



KENDIG KEAST  
COLLABORATIVE

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**CHAPTER 8: IMPLEMENTATION**

No figures or tables.

*This Comprehensive Plan is designed to serve as a blueprint to guide the individual and joint future planning decisions of Paducah and McCracken County. It is both purposeful in its direction and deliberate in its recommendations to forge a future that is well-planned, highly coordinated, and responsibly managed. Its focus is on the resolution of issues relating to the physical and economic development of the area, while establishing an overall vision and the policies to achieve it. The eye of this plan is fixed on implementation for, without it, the value of this mutual planning effort is lost.*

# Plan Context

## **1.1 OUR INTENT AND PURPOSE**

It is the intent of this plan to cast a vision for an economically healthy and physically sustainable future for Paducah and McCracken County. Together, we are undertaking this planning process in clear recognition of our mutual concerns and long-term interests, which overshadows our individual histories and agendas. We are committed, in light of our responsibility to the people of this City and County, to making joint decisions for the benefit of all. Our decisions must be well-studied, given suitable thought and consideration, and made in a fiscally responsible manner. We are prepared to establish policy, prepare realistic goals and objectives, and abide by the recommendations of this plan as a means to ensure its effective implementation.

The purpose of this planning effort is to address the question of how best to plan for the future of our community. While we have had and continue to experience great success, we are now confronted by a new era and a unique set of circumstances. These circumstances present both opportunity and a certain amount of uncertainty. Therefore, it was the foresight and preparedness of our leaders that led us to the decision to prepare a comprehensive plan. This plan will allow us to decide on a course of action that offers the greatest likelihood of continued success. As the City and County, we acknowledge that a shared vision of the preferred future is necessary to effectively guide us over the next two decades and beyond. This plan recognizes that cooperation and consensus-building among City and County jurisdictions, agencies, and stakeholders is essential to realize our envisioned future in the Year 2025.

The process of preparing this plan is designed to offer a unique opportunity for residents and leaders to come together and engage in a dialogue about the

### **CHOICES2025**

The theme of this plan is entitled **CHOICES2025** in recognition that we have a choice as to the methods and means by which our future will be determined. It is wholly in our hands as the City of Paducah and McCracken County to collectively seize our opportunities and act jointly according to the vision and recommendations of this plan. While some CHOICES may counter our ordinary views and challenge our leadership, they must, nonetheless, be made in the interest of achieving our broader vision. We must remain focused and be steadfast in guarding the principles and values that we, as a community, uphold as foundations of our identity and cherished way of life. Above all, we must be committed to implementing the plan and continuing to invest in our future.

“Community” is defined as a group of people living in general proximity of one another, people who have similarity and common interests. In this case, we use the term *community* to represent Paducah and McCracken County. We indeed share interests and a common goal of further enhancing our life styles and improving the livability of this place we call home.

future of our “community.” Again, our purpose is to create a vision for the future that reflects the hopes and aspirations of our residents and is based on a realistic understanding of the existing conditions and opportunities facing us. A clear mission of what we aspire to achieve is a first step to chart a path that addresses the complex set of issues facing this community in both the near and distant futures. Rather than simply reacting to events as they unfold, a shared vision will enable us to develop a proactive plan for approaching the ideal future imagined through this comprehensive planning process.

**1.2 IMPORTANCE OF THIS PLAN**

Developing the Paducah and McCracken County Comprehensive Plan (herein referred to as the plan) is a valuable undertaking because it means that City and County staff, elected and appointed officials, and citizens have agreed to collectively commit resources to reflect on, and ultimately plan for, the short- and long-term future of the community. Furthermore, it is significant because these individuals, who act on their own behalf or on the behalf of their respective organization, will form a constituency of the whole, meaning that these are the persons who will have a stake not only in the process but also, more importantly, in the outcomes of this process. It is these individuals who are the guardians of this plan and who will share in the responsibility to uphold its value and integrity.

The vision and mission statements contained within this plan describe the preferred and intended future of the City and County. In effect, these statements offer direction for the goals, objectives, and policies that provide an integrated framework for the future planning, development, and programmatic decisions over the 20-year horizon of this plan. Collectively, the vision and mission statements, together with the goals, objectives, and recommendations, provide the short-term and long-range strategic directions for Paducah and McCracken County. Joint planning allows for a coordinated approach to growth and development and, in turn, mutual gains and efficiencies.

The value of the plan is made clear by identifying what it accomplishes as an end product. In summary, the plan is intended to:

- ◆ Establish the policy directions for the future physical and economic development of the City and County, providing decision-making guidance to members of staff and the Fiscal Court, County Planning Commission, City Commission, and City Planning Commission;

- ◆ Identify both programmatic and capital improvement recommendations that will contribute to a phased, multi-year comprehensive program of work tasks for City and County departments and divisions;
- ◆ Identify and quantify needs and priorities, which may be used to guide annual budgeting and capital programming decisions;
- ◆ State the intentions of the City and County as to the coordination of ongoing and future development and the sequencing and timing of infrastructure investments, thereby managing the direction and pattern of development;
- ◆ Convey to citizens the type, pattern, and character of future development, thereby giving improved certainty as to the future adjacent and surrounding development and a means for mitigating its likely impacts;
- ◆ Coordinate infrastructure improvements with the sequencing of land development to ensure a fiscally responsible pattern of growth;
- ◆ Establish strategic directions to capitalize on the assets of the area and seek to maximize the economic potential of the City and County; and
- ◆ Provide a reliable source of information and a committed plan of action enabling our partners and other local, State, and Federal agencies to effectively plan for their provision of programs, services, and facilities.

*"The general plan is the official statement of a legislative body which sets forth its major policies concerning desirable future physical development; the published general plan document must include a single, unified general physical design for the community, and it must attempt to clarify the relationships between physical development policies and social and economic goals."*

- T.J. Kent, The Urban General Plan

### 1.3 VALUED CONSIDERATIONS

The decision to engage in a comprehensive planning process was done principally to exact control over the destiny of the area, rather than reacting to change. This plan is a deliberate stance taken to proactively manage future growth and development as opposed to responding to development proposals on a case-by-case basis without a balanced consideration of City and County issues and objectives. The Paducah Comprehensive Plan was last updated in 1988, although it has been readopted in compliance with State statutes. The McCracken County Comprehensive Plan was adopted in 1998, and its goals have also been readopted. It is now timely to prepare a joint Comprehensive Plan for the City and County.

As part of the plan development process, a series of stakeholder interviews was conducted to solicit the input of residents, which was invaluable toward understanding the underlying issues and needs of the area and, specifically, the values and priorities of those who know best – citizens, advisory board/commission members, neighborhood and civic organizations, community service organizations, business and industry leaders, major landowners and developers, and other leaders. There were several reasons identified by these persons as to why this plan is necessary, including to:

- ◆ better plan and coordinate the provision of services and improve their cost efficiency through mutual agreement and joint management and purchasing;
- ◆ streamline the development review and approval processes, expedite compliant applications, and reconcile the codes, standards, and technical criteria of the City and County;
- ◆ plan, well in advance of ensuing development, the timing of providing adequate facilities and services to serve development;
- ◆ empower residents to be involved in the decision-making process through their participation in crafting the vision and goals of this plan;
- ◆ capitalize on the value of the waterfront as a means for attracting visitors, new residents, and businesses;
- ◆ enhance the quality of development and improve the character and appearance of community entry ways, corridors, neighborhoods, and special districts, such as the mall area;
- ◆ seek redevelopment and compatible infill development within the “tired” areas of the community as a means to stabilize and increase the tax base, as well as enhance neighborhood integrity;
- ◆ provide suitable and affordable housing opportunities for all persons, including a variety of living options and homes in all price ranges;
- ◆ preserve sensitive lands and protect natural resources from irresponsible development practices;
- ◆ secure well-paying and stable employment for our residents, with opportunities for career development and advancement;
- ◆ efficiently transport people and goods via a good network of collector streets, arterial roads and highways, multi-modal terminals, and air services;
- ◆ preserve prime agricultural lands from premature, encroaching, incompatible development so as to sustain the surrounding rural character and protect this sector of our economy;
- ◆ make wise and fiscally-responsible decisions relating to the management of future development; and
- ◆ reach consensus on behalf of private and public interests as to the future vision of the City and County and the proactive steps necessary to achieve success.

**1.4 ABOUT THIS PROCESS**

The process required to develop this plan was as valuable to the City and County as is the plan itself, since this plan is only a snapshot in time. The planning process involves major decisions about how much and where

growth will occur, the nature of future growth, and whether we can afford to provide the necessary public services and facilities to support this growth. This led to pivotal discussions about what is "best" for the area and how everything from taxes to our livability will be affected.

This plan provides an opportunity for our elected and appointed officials to step back from the day-to-day issues and to clarify their ideas on the kind of community they are trying to create. The plan development process provides a chance to look broadly at programs for neighborhood revitalization and reinvestment; quality and affordable housing, economic development programs, directions, and incentives; provision and timing of adequate public infrastructure and services; open space, resource protection and environmental preservation; community character and appearance; and how these concerns relate to one another. This plan represents a "big picture" of the entire County, which can be related to the trends and interests of the broader region, as well as the State of Kentucky.

Local planning is often the most direct and efficient way to involve members of the public in describing the environment they desire as a place to live, work, and recreate. The process of plan preparation provides a rare opportunity for two-way communication between citizens and government officials as to their vision and the details of how it is to be achieved. This plan includes a series of goals, objectives, and actions that will guide the City and County Planning Commissions, the City Commission, and the Fiscal Court in administering development regulations; the location, financing, and sequencing of public improvements; and guidance for reinvestment and redevelopment efforts. This plan also provides a means of coordinating the actions of many different departments, divisions, and agencies.

## **1.5 PARTICIPATION IN PLAN DEVELOPMENT**

A public participation program was launched over the duration of the plan development process to garner valuable input and support of the citizenry. The program was specifically designed to include a range of participation approaches to allow broad and targeted input to ensure that the plan truly reflects the vision of the community, as well as the issues, concerns, interests, and insights of the County and the City.

The public participation program involved meetings with an Advisory Council, a County-wide Citizens' Congress, stakeholder interviews, presentations to groups and organizations, a variety of public outreach

activities, City Commission and Fiscal Court briefings, a “first-and-next-steps” implementation workshop, and public hearings. The following details each component of the involvement program.

Advisory Council

Key to the success of a truly participatory planning process was the establishment of an Advisory Council. The Council was made up of 24 members that represented different interests across the City and County, such as representatives of local business, tourism and economic development, downtown and the riverfront, property owners and developers, neighborhoods, and government officials. The role of the Advisory Council is to provide input into the development of the plan to ensure that it accurately reflects the values and priorities of Paducah and McCracken County. The vision, strengths, and weaknesses have had an initial discussion and will receive further work and prioritization. This input is valuable toward understanding the values and priorities of the citizenry and provides direction as to the emphasis of this plan. Each element of the plan was thoroughly reviewed by the Council, with specific input delivered to staff and the consultant regarding suggested additions, modifications, and changes. This collaborative and iterative process ensures that members of the Advisory Council – residents of Paducah and McCracken County – are involved and vested in planning for the future.

Citizens’ Congress

A County-wide Citizens’ Congress was held early in the planning process to engage citizens, business owners, and community leaders in dialogue about the community and its envisioned future. The objective of this public forum was to raise awareness about the development of the plan, identify its purpose, and explain the intentions as to how the plan will move toward adoption and eventual implementation. The primary objective, though, was to hear the public’s perception about what they consider to be the most significant issues and problems and to encourage identification of possible options and priorities for addressing them. The information obtained from the Citizens’ Congress was used to craft the vision and mission statements, which, in turn, led to the development of the plan’s goals, objectives, and recommended actions. Further to serving as a mechanism to raise awareness and gather information, the Citizens’ Congress is designed to build momentum and interest in the future of Paducah and McCracken County and, ultimately, to build a constituency of persons interested in partnering to ensure successful implementation of the adopted plan.

### Stakeholder Interviews

Stakeholder interviews were conducted to solicit input regarding economic development, the riverfront, land use, and other areas of interest related to the plan. This input is invaluable toward understanding the underlying issues and needs of the area and, specifically, the values and priorities of citizens, neighborhood and civic organizations, community service organizations, business and industry leaders, major landowners and developers, and others living and working in Paducah and McCracken County. The input gained through these small group meetings is used to supplement that solicited through the Citizens' Congress and other public input mechanisms toward development of a vision statement that truly reflects the community and its preferences for the future.

### Public Outreach Activities

A series of public outreach activities also took place to raise awareness about the plan and to encourage participation in the planning process. The City hosted information about the plan on a project website, detailing the project schedule, opportunities for public participation, and each of the draft and final elements of the plan as they became available. Articles in the local newspaper and coverage by the local television station were also helpful to broadcast information about the planning process. These efforts ensured that citizens were given multiple opportunities to become informed and participate in the plan development process. Speaking opportunities, such as a presentation to the Chamber of Commerce, were also integral to the citizen engagement process. These events provided opportunities to share information about the plan and, ultimately, to set the stage for long-term participation in the plan's implementation.

### "First-and-Next-Steps" Implementation Workshop

An implementation workshop was held in the latter stage of the planning process to engage the Fiscal Court and City Commission in an exercise to identify short- and long-term priorities for implementation. The workshop was designed to identify how these priorities could be actualized by assigning roles, responsibilities, and timelines for implementation. The identified priorities are outlined in the implementation chapter.

### Public Hearings

The final stage of the planning process included public hearings before the Planning Commissions, which provided yet another opportunity for community input into the final draft plan document. Comments received were considered and incorporated into the final adopted plan.

### **Kentucky Revised Statutes**

*According to **KRS 100.183***

### **Comprehensive plan required.**

*"The planning commission of each unit shall prepare a comprehensive plan, which shall serve as a guide for public and private actions and decisions to assure the development of public and private property in the most appropriate relationships.*

*Furthermore, in accordance with*

### **KRS 100.187, Contents of**

### **Comprehensive Plan, the**

*comprehensive plan shall*

*contain, as a minimum, the*

*following elements: goals and*

*objectives, land use,*

*transportation, and community*

*facilities, which may include any*

*additional elements such as,*

*without being limited to,*

*community renewal, housing,*

*flood control, pollution,*

*conservation, natural resources,*

*regional impact, historic*

*preservation, and other programs*

*which in the judgment of the*

*planning commission will further*

*serve the purposes of the*

*comprehensive plan."*



**1.6 WHAT WE ENVISION**

1.6.1 Our Vision

A vision statement identifies what a community strives to achieve in the future to meet the needs of its residents. It incorporates a shared understanding of the nature and purpose of the community and uses this understanding to move it toward a greater purpose.

The vision statement was developed through input from McCracken County and Paducah citizens. Input was obtained by way of the public participation program. The vision for McCracken County and Paducah is as follows:

The joint vision for Paducah and McCracken County has five major elements. These represent the collective vision for the future of the community.

- ◆ City and County have adhered to the Future Land Use Plan and followed the policies and principles set forth in the Plan. We have greatly enhanced the City’s riverfront, making it a destination for both City and County residents, as well as tourists. The appearance of the commercial areas, in particular, has been improved by better landscaping and strengthened sign regulations. Clustering is now the preferred mode of development in City and County, greatly enhancing the region as a place to live and work. This has had an impact on regional visitors who are now more likely to come downtown and visit the waterfront and other regional attractions, as well as for shopping. The rural areas of the County still have a strong, rural character.
- ◆ Paducah continues to develop plans for the revitalization of older neighborhoods. That has spired reinvestment by the private sector, restoring the attractive character these neighborhoods had in the past, and raised tax revenues that, in turn, increases tax revenues. Following the cluster and planned development options has created a variety of housing choices through innovative subdivision design. Our children and growing families are able to add on to their homes or construct new houses to meet their changing needs, and seniors have a variety of living options made easier by flexible regulations. For the first time, Paducah has residential neighborhoods that take advantage of the riverfront, which has added a new element to the housing market. Downtown is more vibrant, and residents and tourists alike find a variety of recreational, shopping, and cultural opportunities that enrich the quality of life.

- ◆ Transportation and access to the region have been greatly enhanced by interstate access, which has made Paducah a strong regional center. The rural farm-to-market roads are being improved, and better access is possible in the County. Sidewalks and an expanded trail system are greatly increasing the walkability of the community. An expanded port has provided new jobs for the area.
- ◆ Our infrastructure system was adequately sized to accommodate all our growth for the past 20 years. The growth strategy has succeeded in containing sprawl, and the City and County are only now starting the plan for limited extensions and a small expansion of the growth area. This has provided revenues that can be spent on amenities for the entire community. Rural communities that preserve farmland are now ensuring that, long into the future, the rural character of the surrounding area will be maintained, providing adequate facilities and services for new development. The extension of infrastructure has been timed and sequenced to ensure that we grow in a fiscally responsible manner, thereby leading, rather than following, development. Increased private investment, new jobs, and improved east-west access strengthens air service and increases ridership and numbers of flights.
- ◆ Economically, the effort has been to encourage existing businesses to expand and new small businesses to establish themselves. The stronger economy has provided plentiful employment opportunities so that many children are returning to the community and working in good jobs. The arts and tourism have continued to expand and flourish, making the City and County more competitive in seeking to attract new employers.

## 1.6.2 Our Mission

A mission statement is a more detailed statement of the vision. It states the role, or purpose, by which the community intends to serve its residents. The mission statement describes what the community does, who it serves, and what makes it unique. The mission statement for McCracken County and Paducah is as follows:

The City of Paducah and McCracken County will improve regulations controlling landscaping and signs and improve the zoning to better promote quality of life and a unique identity. Both will continue to invest in infrastructure, including long-term adequate provision of public facilities and services. Sprawl will be contained, making the investments more effective. The integrity of neighborhoods will be sustained through replacement of aging infrastructure, rehabilitation of “tired” structures, and empowerment of residents. There will be investment in historic neighborhoods, downtown,

and the riverfront. With new industries and business, plus expanded tourism, the community will maintain and strengthen its role as a regional center and improve its tax base. The City and County will increase investment in a first-class park and recreation system.

**1.7 FOCUS OF THIS PLAN**

**1.7.1 Discovery and Reconnaissance**

The first step in the planning process was to conduct a discovery and reconnaissance phase, which was intended to bring the most significant issues and concerns of the City and County – individually and collectively – into clear focus. This provides a basis for necessary refinement and revision of the plan’s scope and content, thereby ensuring that the most important issues are identified and thoroughly addressed, with adequate attention and direction to resolve them. Too often, the causes that are at the heart of the issues are not sufficiently discovered and, hence, not adequately dealt with in the plan. Unfortunately, such occurrence handicaps the ultimate implementation and success of the plan.

The discovery and reconnaissance phase of the process solicited the concerns of public officials and residents to gather relevant input and assemble an in-depth understanding of the key – and often underlying – issues. The result of this effort sharpened the focus of this plan, allowing attention to be directed toward the aspects that will most significantly affect the outcomes of the plan. While principal attention will be focused on the resolution of these issues, there are other issues that are also important and necessitate attention. These, too, will be addressed with guidance and recommendations, albeit not as comprehensively as those considered to be the primary issues.

**1.7.2 Issue Focus**

While meeting the requirements of KRS 100, the plan focuses on resolution of the key issues, providing more thorough research and recommendations in these areas, with less emphasis on the areas that have already been addressed or are not as relevant to this community and its plan. The primary issues are as follows:

**1**

Community Character and Land Use

*Protecting and Enhancing Community Character*

Paducah developed as an urban commercial community focused on the river. It was shaped by its location and the industries spawned as a result of its location. As the City grew, residential areas took on a suburban character of

Land Use

tree shaded streets and yards, which nested the home in greenery. In the 20th century, a new form of commercial use developed with a much different character, described best as auto-urban, where roads and parking occupy far more land than the building and there is little landscaping. Agriculture was traditionally a dominant land use in McCracken County, which established its rural character. Residential and increasingly more commercial development is spreading into the County. While the McCracken County zoning has a district entitled agriculture, it permits one-acre residential lots which encourages the loss of agricultural land. All the modern office and industrial uses have an auto-urban character. If land use planning is to be successful, it must be redirected to address community character first, then the use of land.

Land use is conventionally distinguished with general categories for residential, commercial, and industrial, which fails to address character. The most important element in commercial and residential development is to determine the character it is to have, whether it is urban, auto-urban, suburban, estate, or rural in nature. The juxtaposition of auto-urban and suburban character commonly creates land use conflicts. Therefore, this plan must address and help to resolve these issues.

The older residential areas of the City are highly attractive as a result of their large mature trees. This character, whether urban or suburban in nature, should be maintained. Many of the more recent subdivisions have fully cleared the land, contributing to a much different neighborhood character. Paducah's downtown area has an urban character that ends abruptly along the edges up and down river. This quality, urban center is the focus of tourism, a major industry in the City and County. How is the visitor greeted, be they tourist or a business seeking a new location? The entries to the City do not presently alert the visitor to the character of the City center or the community's residential neighborhoods. Instead of announcing a community of unique qualities, the entries lack character and identity. There are different approaches to land use that will form a character that may better express the unique image that the City promotes for tourism. The same holds true for the attraction of new businesses and industry. While nice industrial parks are important, the initial appearance of the City needs to set it apart from its competitors.

The basic planning needs of the City and County is to map out a long-term vision of the region's future. It must accommodate the most optimistic growth projections, while ensuring a quality lifestyle and encouraging people to visit and work in the area.

Infill and Redevelopment

The City has had great success in redevelopment with the artist relocation program in lower town and is planning to expand its redevelopment efforts into other neighborhoods. In a community with a modest overall growth rate, redevelopment and infill are essential. Each neighborhood will need to have its own redevelopment strategy; the artist relocation program cannot be expanded indefinitely. A critical issue is to maintain a program of upgrading existing neighborhoods and making them desirable places to live. It is important that people feel they can move up to better housing in the City, rather than escaping to greenfield development on the rural fringes. The comprehensive plan must identify target neighborhoods (Uppertown, Fountain Avenue, Northside, Rolandtown) and establish priorities. An economic reality is that not all areas can be redeveloped simultaneously. There may need to be individual neighborhood plans developed with specific public improvements and programs arranged with the residents, financial institutions, and government agencies to ensure that a viable strategy is developed to address the unique conditions in each neighborhood.

A second infill and redevelopment issue is the downtown area. Ultimately, there needs to be a much larger population within walking distance to foster continued economic health and promote improved business activity in this area. The plan for this will have to be developed to take advantage of the river without blocking access and remaining sensitive to the surrounding areas.

*Waterfront*

This area is predominantly a working environment. This was the economic engine that created Paducah and is an essential element in determining the area's future. The industrial waterfront remains vital; tourism - a significant portion of the area's economy - needs assistance from the waterfront. There is logic to the working waterfront being separated from the public waterfront where City residents and tourists come to enjoy the water. At the same time, the major question is how to relate tourism to the working waterfront, enhancing the tourist experience without hindering the waterfront businesses. While there are many good things happening with regard to the waterfront, there is too little exposure to the water and too limiting of an experience.

The public waterfront needs to be expanded. Currently, there is insufficient land to do much more than view the area, then return to the City. For area residents, opening up the waterfront for recreation is an important objective.

The opportunity for expansion is primarily down river as the land immediately up river from downtown is heavily used by water-related industries.

The current hotel and conference center are isolated from the rest of downtown and represent a significant barrier to waterfront access. The hotel is also unable to successfully compete for tourists due to its deteriorated condition and need for refurbishment, which will hopefully be accomplished by the new management. The City faces competition from Metropolis, Illinois, so quality is very important. The planned investment in the waterfront and hotel must be directed at making Paducah a far better choice with water taxi to the casino, while retaining the clear lead in experiencing the waterfront, downtown shopping, and cultural and heritage experiences. The timing of the waterfront plan and this plan did not match, but when completed this plan should be amended to include it.

Normal planning strategy is to envision a grand plan and work towards a goal. In this approach, a grand vision is considered essential to success. However, such visions have the highest costs and can be subject to perpetual debate, as illustrated by the number of previous riverfront studies. A different strategy operates on two separate tacks. First, a short-term strategy seeks a series of incremental improvements to enhance the experience at minimal cost and risk, while building the economy to finance a grander vision. In this approach, the funding of a docking and fueling area that enhances boating access and tourism is a good first step. The short-term planning should look for a series of small improvements that can be implemented quickly without creating roadblocks for future implementation.

The need to provide real public water access (a marina, fueling, and tour boat docking) is understood. Additional historic tourism opportunities warrant greater attention. Are there small tow boats that could become an attraction tied to the museum? Across the river in Illinois there is a fort; what about replicas of oar-powered riverboats before the age of steam? Can the training center have a tourist element? These are simply thoughts that have occurred up to this early point in the process, requiring further research and consideration of a wide range of other opportunities that could be added to the riverfront.

A potential that has not been exploited is whether it is possible to make the working waterfront a part of the tourist attractions of the City and blend this with historic aspects of the river. Can partnerships be developed between

existing, one-dimensional water-oriented businesses and the tourism industry?

Transportation **2**

Transportation Thoroughfare Planning

The City's transportation network is good, with excellent access to the interstate via a variety of radial roads. The interstate also serves to move circumferential traffic on the city's outer edge, but there is no similar road further out in the County. Many of the McCracken County roads are narrow and often have poor alignment, as shown in **Figure 1.1, Difficult Vertical Alignment**. While this has a certain charm, it represents a significant safety and long-term capacity problem as the area continues to develop. As rural roads with little traffic, these alignment problems pose less of a problem because traffic volumes are very low. To bridge the difference, a thoroughfare plan is needed to identify, in advance, the roads that will function as arterials or collectors, rather than as local roads. When this is done, it becomes possible to have proper right-of-way dedications and require improvements from large developments to upgrade these roads to handle larger volumes of traffic.

There needs to be an assessment of the long-term capacity of the rural roads. The residents of rural areas are use to level of service (LOS) A or B. Suburban residents seek no worse than LOS C. The narrow roads with obstructions on both sides and poor alignments mean limited capacities to handle growth. It also means that frequent driveways are both dangerous and a disruption in the flow of traffic. Once the capacity assessment is done, it must be determined whether this represents a desirable limiting factor or whether there needs to be a plan for improvements to radial roads.

Roadway cross sections are a problem; they are often too narrow to provide for a road and drainage, a problem that is worse when a stream parallels the road as shown in **Figure 1.2, Deep Ditch At Road Edge**. There is no room for sidewalks or bicycle lanes. Where the road is a radial road that provides access into the City, controlling access by limiting curb cuts to streets, not

Figure 1.1, Difficult Vertical Alignment



Figure 1.2, Deep Ditch at Road Edge



**Level of Service (LOS)** is a qualitative rating of the effectiveness of a roadway in serving traffic, in terms of operating conditions such as traffic flow, using an alphabetical scale from A to F with A being the best (free flow) and F being the worst (stopped traffic).

private drives, is a problem. A thoughtful plan is an appropriate vehicle to resolve these issues and guide road improvements.

The current plans call for an outer loop; the interstate serves as an inner loop. The need for generally east-west travel south of the interstate is valid. Land use and transportation are intimately linked. A circumferential road improvement will result in economic pressures to alter land use. To avoid the problems that other communities have faced from new circumferential roads a combination of access controls, zoning, and subdivision regulations will be needed to forstall undesirable commercial sprawl.

Other transportation problems identified are a lack of sidewalks and discontinuous sidewalks. This is a problem in both the City and County. It is most critical in the County; however, a combination of trails, road improvement, and sidewalks that provide a network for pedestrians and bicyclists is needed.

### Community Appearance

#### *Development Quality*

As indicated above, a significant portion of the community’s appearance has to do with planning for community character. If people desire a particular character and it is not delivered via ordinances and standards, there is an innate dissatisfaction. However, character only addresses an aspect of appearance. In any character type, it is possible to have good or poor appearance. The auto-urban areas of the City and County are most susceptible to a low-quality appearance. Currently, these areas are visually confusing and chaotic due to a past lack of sign control, landscaping, and corporate architecture that makes no pretense to providing an image of harmony. This is in contrast to the City’s urban area and some residential areas where efforts to create a visually pleasing environment are quite obvious – and successful.

A lack of vegetation, in particular, is a significant detraction to the appearance of areas and corridors, as displayed in **Figure 1.3, Auto-Urban (Strip) Commercial**. This view could be from almost any city in the nation, which does not express the uniqueness of Paducah or the impression desired. In contrast, the street view in front of Bob Noble Park that is shown in **Figure 1.4, Trees at the Road Edge**, illustrates the

3

Community Appearance

Figure 1.3, Auto-urban (Strip) Commercial





Figure 1.4, Trees at the Road Edge



impact of preserving the tree canopy. If canopy trees along the road can be preserved or restored, it would result in a very different visual character. Surveys of community preferences consistently show a preference for tree-sheltered streets in both commercial and residential areas.

Sign control is another area where community appearance could be improved. As Figure 1.3 illustrates, the number of signs clutters the visual environment. There is a wide range of sign heights, sizes and placements, leading to confusion; fewer signs in predictable locations would be better.

Along Route 60 East, riverfront industrial areas dominate, and there is a generally poor visual environment. Given the nature of the industries, there seems little reason to seek better architecture. Therefore, the use of camouflage with extensive street tree planting is a means to provide a pleasing corridor in a largely developed area.

Older areas of the City pose an appearance challenge. This is particularly relevant along the older commercial corridors where the buildings are not well adapted for modern commercial uses or where there is limited parking, thereby constraining reuse. In these areas, the problem is two-fold: finding appropriate users and upgrading the appearance through maintenance and rehabilitation. The City has made great strides in historical areas; however, as with any older area, this effort needs to continue.

Figure 1.5, Vegetated Neighborhoods



*Residential Development and Trees*

One of the most attractive aspects of Paducah's residential areas is the tree-lined streets and yards, as displayed in **Figure 1.5, Vegetated Neighborhoods**. Even in neighborhoods with modest 1950s housing, the neighborhood appearance is very desirable, due in large part to the attractiveness of the tree-shaded area. In new developments, street trees and landscaping are not required. The neighborhoods that lack trees are much less attractive than those where this amenity is present. While it takes time for trees to mature to the point of providing an improved character, the attractiveness of new development can be greatly improved.

### *Conflicting Uses*

In McCracken County, commercial uses are sprawling outward along the major highways, causing unsightly appearances and lessening the attractiveness of the pleasant rural setting. Additional development should not be permitted unless it is designed to greatly improve the visual character of these areas and serve a market requiring this location.

Buildings should respect their neighbors. Before zoning in the rural parts of the County, inappropriate juxtapositions of uses occurred that degraded the overall appearance of the area, in addition to being a potential nuisance. Even in zoned areas, the uses along zoning boundaries can create unappealing areas. Buffers of landscaping are an important means of mitigating such conflicts between incompatible uses.

### Growth Management

The issue in growth management is to provide land for reasonable business growth and population expansion, while maintaining the health of current commercial areas and the attractiveness of the City and County. Adopting a plan does little without effective growth management mechanisms – such as zoning or other controls – that direct growth to occur in desired areas. Development served by sewers needs to be concentrated in areas where the extension of services and improvement of roads can be afforded.

County roads have a limited capacity due to a number of factors, which will eventually limit the ability of the road to handle traffic. Major radial roads in the County may appear to be local access rural roads today because of the low traffic volumes; however, as growth continues, those roads must become arterials. Controlling access early, **Figure 1.6, Access to County Roads**, makes it easier to improve roads later and can avoid the residents on arterials demanding stop signs and speed bumps when traffic volumes exceed that needed for a pleasant residential street. There will need to be areas for large-lot residential served by septic and well, but there also needs to be areas for retaining the agricultural base so that planned extension of services to these low-density areas can be done. Permitting this development to go anywhere simply means that most will either not get service or road improvements or the improvements will

4

Growth Management

Figure 1.6, Access to County Roads



lag for years or even decades. McCracken County still can take action before it encounters the problems of other growing rural counties where resources are grossly inadequate to meet the needs.

The tools to manage growth have been used for decades. They are often controversial due to a fear of their potential limitations. Commonly, there is fear that growth controls will lower property values when, in fact, experience indicates this is not a valid concern.

The City and County face competition from Metropolis. In this competition, the allocation of resources is vital. Resources for government are scarce, and it will be important to focus on the focusing actions that enhance the character and competitiveness of the City and County. Having to use resources to respond to sprawling growth is counter productive. It is essential that the County determine where it can best serve the growth, rather than have to react to scattered development.

Competition is particularly relevant with respect to tourism, where the casino in Metropolis has the potential to shift the balance that is now in favor of Paducah. It is important that adequate resources be available to develop the waterfront and improve the City’s hotel/convention center complex and waterfront. Continued investment in the cultural, historic, and educational assets is, likewise, important.

A major growth management issue relates back to the infill issue discussed earlier. With limited growth, the revitalization of existing areas that are in decline is very important. Cities all across the nation face revitalization of older neighborhoods. Failure to address this has led to the decline of some cities, and such declines ultimately impact the counties of which they are a part.

Economic Development

**5**

Economic Development

For Paducah and McCracken County, the first decade of the 21st century is emerging as a time of great transition and opportunity as the community chooses the investments it will make to secure its economic health. As in Paducah, investing in life style amenities and encouraging diversity has become a centerpiece of economic development initiatives in communities throughout the U.S., in part because its place-making tenets appeal to people with a wide array of motivations. At the same time, however, the region also recognizes that it’s critical to tend to its traditional economic base.

Right now the regional system supporting economic development – public, private, and not-for-profit sectors with explicit community betterment agendas of all kinds – is engaging in a multi-pronged effort encompassing:

- ◆ An aggressive approach to economic development activities including business recruitment, which represents a significant commitment to ensuring ongoing replenishment of the region’s manufacturing employment base, even as the products become increasingly high-tech. Among other duties, the Greater Paducah Economic Development Commission (GPEDC) is charged with securing occupants for the region’s inventory of prepared industrial park sites, as shown in **Figure 1.7, Local Industry**. GPEDC is very clear about its mission, focusing exclusively on basic sector industrial, office, and distribution operations, while leaving retail, hotel, and tourism recruitment activities to other organizations. GPEDC represents a significant annual investment by both the City of Paducah and McCracken County; the recent decision to increase the payroll tax to help fund economic development demonstrates how seriously local leaders consider this priority.
- ◆ Renewed respect for historic fabric and the community character inherent in early commercial and residential built environment, as evidenced by the ongoing revitalization of downtown Paducah and the Lowertown neighborhood, the levee wall mural program, and other improvements. From an economic development standpoint, reinforcing character works as a means to:
  - generate economic activity through tourism;
  - increase its attractiveness for place-based investment decisions, and;
  - comport with the theories first advanced by Richard Florida, a Carnegie Mellon professor, whose popular book, *The Rise of the Creative Class*, postulates that quality of life – as defined by young, creative entrepreneurs, rather than middle class families – represents a more efficient growth engine for a vibrant economy than traditional economic development measures. The logic holds that creative workers who launch innovative fast-growing companies seek communities providing cultural offerings, recreational amenities, architectural character, and other interesting people as evidenced by the rise of places like Austin and Seattle during the boom years of the 1990s.



Figure 1.7, Local Industry

- ◆ Expanding the role the river plays as an economic development driver, finding ways to capitalize on its recreational, scenic, and tourism value, while protecting the existing river industries’ abilities to do business.
- ◆ Higher education resources with a commitment to continuous improvement, including the community college (with its affiliated Challenger Center leadership facility) and the Murray State branch. These institutions are successfully adapting their educational offerings to support the region’s economic engines, e.g. by establishing the Center for Arts, Tourism, Culinary, and Hospitality (CATCH) and the U-KY sponsored engineering program. The ability for people to earn college credit, while increasing their skills in historic preservation (brick repointing, window restoration, etc.), improves the City’s ability to restore its older neighborhoods. The American Justice School of Law (recruited by the economic development team) represents another regional educational asset for economic development.
- ◆ A tourism promotion strategy that seeks to balance leisure and business-motivated visitation.
- ◆ Formal and informal means of coordinating the elements of the economic development system, including cross-fertilization between boards and shared facilities.

With such a broad array of activities, assets, and needs, philosophical and practical issues inevitably arise. Moreover, in an intimate community like greater Paducah, where everyone knows each other, it can be difficult to confront issues directly since usually the people involved are good-hearted and well-intentioned. Chief among the economic development issues faced by Paducah and McCracken County today are:

- ◆ **Under-employment** – how to ensure that the region’s youth find opportunities within the local economy.
- ◆ **Large projects straining the system** – how to stabilize the Four Rivers Center and enable it to operate on a break-even basis and how to resolve the host of issues surrounding the convention center and its hotel and then re-establish Paducah as a meeting, trade show, and convention destination.
- ◆ **Protection for the assets required for economic development** – how to ensure that the public understands the need to avoid land use conflicts, including the sites needed by the barge companies for their container operations, the existing industrial parks where adjacent lands would also be attractive for subdivisions, and the means of providing a full-service marina for transient recreational boaters.

- ◆ **Heroic expectations leading to community misunderstandings** – how to manage assumptions about economic development must be tempered with realism. The community should not seek a quick fix through a “drop in” (i.e. a very large rare industrial opportunity, car plants, and chip plants) that will solve the region’s problems rapidly. Most such local efforts fail. In addition, speedy successes, like the Lowertown initiative, as shown in **Figure 1.8, Lowertown Success**, cannot automatically be replicated throughout the region with the same results.
- ◆ **Identification of shared vision for the future** – how to reach community consensus on the type of economy it wants and needs to ensure prosperity and quality of life, so that key choices can be implemented. With so many activities in place, it’s easy to spread resources too thin and leave any individual initiative vulnerable to sniping.
- ◆ **Improved regional economic development relationships** – how to foster understanding that if regional economic forces affect business success and location selection and if the benefits of local economic development accrue regionally, then it makes sense to pursue these activities on a multi-jurisdictional basis that reflects how the economy actually functions.
- ◆ **Increased use of the airport** – how to attract additional commercial flights, work with COMAIR, NAW and other operators, and finance a new terminal.
- ◆ **Expanded role for the river in downtown life** – as shown in **Figure 1.9, Riverfront Opportunities**, how to animate both the water and land sides to increase community enjoyment, appeal, and vitality.
- ◆ **Stabilized not-for-profit attractions** – how to determine whether institutions could be made stronger through strategic mergers.
- ◆ **Offset tourism seasonality** – how to extend shoulder seasons and ease visitor flow for lodging accommodations and other tourism-dependent businesses.
- ◆ **Augment capacity of boards and commissions** – with so many boards and commissions, how to



Figure 1.8, Lowertown Success



Figure 1.9, Riverfront Opportunities

ensure continued quality.

- ◆ **Established system for examining potential economic and fiscal impacts of decisions, policies, and results** – how to know whether a decision represents a wise use of resources.

For greater Paducah, failure to fully mobilize and leverage its many valuable natural, cultural, economic, institutional, human, and other resources for local and regional economic development purposes based on shared view about what constitutes a desirable future represents the greatest risk to future stability and quality of life. Integrating community, economic, and tourism development planning provides the mutual reinforcement needed to ensure effective strategy implementation.

Implementation

**6**

Implementation

Implementation requires intergovernmental cooperation. Paducah and McCracken County may be separate jurisdictions, but their success is closely linked. The City needs the County’s cooperation to ensure an overall plan and its implementation. The County’s economic health is tied to that of the City. The progress made in recent years has increased the ability of both to compete. However, the competition from Metropolis cannot be ignored. The City and County must work together to make themselves a more desired tourist destination. Attention to appearance will strengthen the ability to compete for new businesses and industry, as well as tourists.

One area that must be addressed is regulation. The City has a history of being a strong regulator, and the County, to date, has been reluctant to regulate. A lack of regulation has resulted in sprawl, which, as growth continues, will accelerate. Lack of regulation will not improve the appearance of the area, but, rather, will result in less appealing conditions.

The adoption of a joint plan is a positive first step in intergovernmental cooperation. Since regulations are needed to achieve many of the goals, the next logical step is a common land development code, so the regulations are identical everywhere. Another level of cooperation can be achieved by having independent authorities, such as the sewer authority, adopt the joint plan and follow it in the provision of services.

The City and County can look at ways to provide all the area’s citizens with services at the least possible cost by merging their services, revising service areas, and sharing resources. Another strategy is to make decisions on who provides specific services that benefit the entire community.

Natural Resources and Agriculture

The issues of natural resources and agriculture are important. A significant part of the area is within the floodplain. Paducah is situated in the floodplain, and marine industries must continue in such locations. Drainage and stormwater are critical issues because development can make flooding worse if not properly managed. Water quality is also an important related issue. The rest of the undeveloped land in McCracken County is currently in agriculture and forest, with scattered wetlands. Careful management of these resources is desired and essential to meet federal water quality efforts at controlling non-point pollution.

The development pattern can respect resources or endanger them. Sound planning should be such that development does not worsen flooding in built-up areas and avoids creation of new areas of flood damage. This is best done by a combination of prohibiting development in floodplains, protecting drainage courses, stormwater management, and sensitive design. Regulations are needed to accomplish these objectives. While individual ordinances address some issues, a more comprehensive approach to resource management is desirable.

Agriculture is still a viable use of the land. It is a difficult resource to address because the sale of land for development is far more lucrative than a sale for farming. Banks willingly loan on the development values of land, a practice that works against agriculture. Increased value for development prices land out of agriculture. Agriculture, while important as a land use and component of growth management, no longer plays a critical role in the area's economy providing only 1.1 percent of the County's employment is in farming, fishing, and forestry occupations. Further, only a handful of the farmers in the County can make a living in these pursuits. The supply of agricultural land, however, far exceeds the demand for development land over the next 50 years. Failure to address agriculture and forested lands permits scattered development and increases the cost of government.

The protection of natural resources or agriculture is complicated because there are two conflicting views of the land held by residents. Everybody can agree that protecting resources is important and makes the area a better place, in some cases reduces threats to health and safety, and provides needed habitat. The other view of the land is that it is a commodity to be bought and sold, with sale for the highest dollar value an objective. In protecting

**7**

Natural Resources and Agriculture

**Natural Resources**

Paducah and McCracken County have topography and environmental elements that are very important. They impact land use, community character, and appearance. In addition, flood control and drainage are important problems, which are directly related to the area's environment. Earthquakes are another environmental area of concern that has potentially large impacts. Good agricultural soils are a resource that is essential to agriculture.

While agriculture can be addressed as a land use or an incidental to growth management, there are many resources that are interrelated in complex environmental relationships. They are really a separate issue and should have a chapter devoted to them, rather than being a minor sub-category in another chapter that is integrated into a comprehensive plan element.



resources, these two views clash. Finding an implementation scheme that best protects the land, while recognizing property rights, will be important.

**1.7.3 Consultant Commentary**

The elements of the Paducah and McCracken County Comprehensive Plan include: land use, transportation, community appearance, growth issues, economic development, and implementation. While each of these areas is needed, it is important to understand the issues are of critical importance. The plan cannot simply be a group of chapters; the chapters need to be part of an integrated whole that can be implemented. Implementation is critical; there are hundreds of well-conceived plans that are gathering dust because they cannot be implemented. While there are many reasons for this, one stands above all the others – significant disagreement about implementation that was not adequately addressed by the plan. These issues either are repeatedly addressed, are not resolved, or are simply not faced, resulting in a failure to implement. Resolving issues that lie in the critical path of implementation is essential, and identification of these issues is the major purpose of this document.

Breaking a plan into chapters often results in the failure to develop a coordinated plan. There is not always nice order to parts of the plan that ensure coordination. Further, there are traditional elements of plans that fail to focus attention on critical issues. As used here, critical issues are ones that are on the critical path to implement the plan, where failure to address the issue either results in no implementation or, because there are diverse values in the community, results in the issue being debated many times over. For example, promoting infill development is very often a goal in plans, but failure of citizens to understand what this means results in opposition at every application for infill zoning or plan approval. The opposition often succeeds in stopping the project or lowering the density and, thus, fails to achieve the infill and reduction in sprawl goals of the plan. On the other hand, while there may be concern about curbs or sidewalks, any policy, or even periodic debate, does not create problems that derail major segments of the plan.

General Plan Organization

The plan is being organized, as required by the Kentucky Statues, into chapters on land use, transportation, community appearance, growth issues, economic development, and implementation. In meetings with citizens and officials, some areas of concern became apparent which reflect on the

structure and organization of the plan. The following discussions address some of these concerns.

Land Use and Community Appearance - Land use and community appearance are often considered to be two separate issues when, in fact, they need to be integrated. Individual land uses may be attractive or unattractive, as shown in **Figure 1.10, Standard Design**, and **Figure 1.11, Custom Design**. In Figure 1.10, the standard corporate fast food restaurant is shown, which is what will be used unless the community enacts design controls. Figure 1.11 shows a custom design used in a community that required higher quality and was sensitive to its appearance. These two illustrations show how community appearance is controlled by design. There is a great difference in the appearance of these two fast food restaurants. Since land use is identical, it is clear that design – not land use – is the important factor. The architecture of the buildings, signs, and colors are treated differently. There is another way to think about community appearance, referred to as community character.

**Figure 1.12, Auto-Urban Shopping Center**, and **Figure 1.13, Suburban Shopping Center**, show two shopping centers, both of which have about the same building design. Again, land use is a constant; however, Figure 1.13 illustrates what is known as Auto-Urban character. It uses nearly 100 percent of the site for the building and parking, with little and often no room for landscaping in the parking lot.

Figure 1.10, Standard Design



Figure 1.11, Custom Design



Figure 1.12, Auto-Urban Shopping Center



Figure 1.13, Suburban Shopping Center



The shopping center in Figure 1.13, Suburban Shopping Center, despite the nearly identical building design, has a Suburban character. The difference is the intensity is much lower since nearly 50 percent of the site was required to remain landscaped. The trees were preserved in this area, resulting in a very different character. There are three different community characters that can be achieved with this same use: urban, auto-urban, and suburban. Downtown Paducah, for instance, functions as a shopping center with an Urban Character. Here the buildings are built to the sidewalk line and most buildings are at least two or more stories in height.

These examples of land use being held constant while community character is varied provide a new way of looking at a community plan based on character. The land use map, which provides a backbone for most plans, is a poor surrogate for the character of a community. In contested zoning changes, the neighbors are always concerned about the character of the community being changed by the use. An important decision is whether to plan based on traditional land use categories or on community character.

Figures 1.10 and 1.11 illustrate how sign control, architectural design or style, and other design elements impact the quality of the buildings or the use's appearance. This is very different from community character, although high quality design will always

produce a better community character than poor design. Design is a matter of quality, not land use or type of character.

Inter-governmental Coordination and Implementation - Intergovernmental coordination is clearly a critical element of implementation. However, it is so important it should be segregated from other implementation issues. The coordination between City and County is a critical issue. A major failing all across the nation is the fact that cities and counties are often inadvertently or, in some cases, intentionally frustrating the plans of the other. Having committed to a joint planning process, it is critical that the plan address

implementation first from the coordination of two separate political jurisdictions and secondly from the general actions, such as regulations or fiscal planning.

**NOTE:** It is recommended that the land use chapter be reconsidered as a chapter on community character and land use. This will ensure that the plan map, which is often a critical element of the plan, really addresses character.

*This assessment of demographic and socioeconomic factors provides a snapshot of the area’s past conditions and present characteristics, which offers an understanding of what the future may hold for Paducah and McCracken County, Kentucky. The findings of these analyses set the stage for more detailed evaluations of possible trends and future planning considerations as this plan is assembled. This profile provides a basis for determining future land use requirements and demands for public facilities and services, but also allows advance planning to effectively guide future development in a desirable and fiscally responsible manner.*

## Area-wide Snapshot

### 2.1 LOCATION

Covering an area of 251 square miles, as shown in **Figure 2.1, Location of McCracken County**, McCracken County is situated in Western Kentucky, near the border with Illinois. Neighboring counties include Livingston County to the northeast, Lyon County to the east, Marshall County to the southeast, Graves County to the south, Carlisle County to the southwest, and Ballard County to the west.

Paducah, one of two incorporated communities in McCracken County, is located along the Ohio River below the mouth of the Tennessee River, as shown in **Figure 2.2, Location of Paducah**. The community is situated half way between St. Louis, Missouri and Nashville, Tennessee along U.S. 24 (I-24). In addition to I-24, Paducah and McCracken County are served by U.S. Highways 45, 60, and 62, as well as State routes KY 305/Cairo Road, KY 994/Old Mayfield Roads/16<sup>th</sup> Street, KY 998/Olivet Church Road, KY 1286/Friendship Road, KY 1954/John L. Puryear Drive, and KY 2187/Husbands Road.

Figure 2.1, Location of McCracken County



Figure 2.2, Location of Paducah



## 2.2 HISTORY

### 2.2.1 History of McCracken County and Paducah

McCracken County was originally part of Hickman County, but as population growth occurred, the territory was divided into Hickman, Graves, Calloway, and McCracken Counties. McCracken County was formed on January 15, 1825 and was named after Captain Virgil McCracken, who was killed at the Battle of the River Raisin during the War of 1812.<sup>1</sup> In 1832, Paducah became the county seat of McCracken County.

Paducah, originally known as Pekin, was settled around 1815. Settlers were attracted to the community due to its location at the confluence of the Ohio and Tennessee Rivers. The community was inhabited by a mix of Native Americans and Europeans who lived harmoniously, trading goods and services.

In 1827, William Clark, Superintendent of Indian Affairs for the Mississippi-Missouri River region, arrived in Pekin with a title deed to the land, which was issued by the United States Supreme Court. Clark asked the Chief and the settlers to relocate. The town was platted in the same year and renamed Paducah in honor of the Chief. The community was incorporated in 1830.

Paducah thrived due to its port facilities along the waterways that were used by steamboats. A factory that manufactured red bricks was established and a foundry for making rail and locomotive components was built, ultimately contributing to a river and rail industrial economy.

In 1856, Paducah was chartered as a city. The community continued to capitalize on its geographic location by becoming the site of dry dock facilities for steamboats and towboats and, in turn, headquarters for various bargeline companies. Paducah also became an important railway hub for the Illinois Central Railroad (ICRR) due to its proximity to the coal fields in Kentucky and Illinois.

In 1937, the Ohio River at Paducah rose over its 50-foot flood stage. The flood was considered to be the worst natural disaster in Paducah's history. As a result of the flood, the United States Army Corps of Engineers built a flood wall to replace the earthen levee that had once been in place.

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<sup>1</sup> Source: The Kentucky Encyclopedia, as found on the Kentucky Court of Justice website (<http://www.kycourts.net/Counties/McCracken.asp?County=McCracken#countyinfo>)

Other significant events in the community’s history include the selection of Paducah in 1948 for the development of a new Uranium Enrichment Plant, and the development of the Museum of the American Quilter’s Society (MAQS) in Paducah in 1991, which draws quilters from around the world.<sup>2</sup>

**2.3 HISTORIC POPULATION CHANGE**

Paducah’s population experienced a decline during the period between 1970 and 2000, as reflected in **Table 2.1, Historic Population, Paducah and McCracken County**. The largest population decline in Paducah was witnessed between 1970 and 1980 when the population experienced a negative 7.31 percent change. Between 1980 and 1990, a similar decline in population occurred, with a drop of roughly 50 percent between 1990 and 2000 when the population within the City declined by 3.60 percent.

Whereas Paducah’s population has been declining since 1970, by contrast, McCracken County has experienced positive growth during the same period. This shift in population largely indicates that residents within the City have relocated to properties outside of the City limits, thereby redistributing the population as opposed to seeing a real net increase in population within the County. As illustrated in *Table 2.1, Historic Population, Paducah and McCracken County*, the greatest increase in County population was between 1970 and 1980 when the population increased by 3,029 persons, or 5.20 percent. This is the same period for which the City experienced its greatest decline in population. Most recently, between 1990 and 2000, the County’s population increased by 4.19 percent, generally consistent with the decrease of the City’s population.



Source: Museum of American Quilters Society (MAQS)

**Table 2.1, Historic Population, Paducah and McCracken County**

Year	Paducah	% Change	McCracken Co.	% Change
1960	34,479	--	57,306	--
1970	31,627	-8.26%	58,281	1.70%
1980	29,315	-7.31%	61,310	5.20%
1990	27,256	-7.02%	62,879	2.56%
2000	26,275	-3.60%	65,514	4.19%

Source: U.S. Census Bureau and McCracken County

<sup>2</sup> Sources: Kentucky Atlas and Gazetteer), Wikipedia ([http://en.wikipedia.org/wiki/Paducah,\\_Kentucky#History](http://en.wikipedia.org/wiki/Paducah,_Kentucky#History))

## 2.4 POPULATION FORECASTS

### 2.4.1 Population Projection Scenario

Each year the Kentucky State Data Center (KSDC) at the Urban Studies Institute of the University of Louisville produces projections of population and the number of households for Kentucky, Area Development Districts, and Counties. The KSDC population projection methodology for Kentucky counties uses the cohort-component method. The KSDC projects Kentucky county populations based on assumptions of their future mortality, fertility, and likelihood of moving. Using the cohort-component model, future population growth was derived for six consecutive five-year intervals from 2000 to 2030. The launch population of the first interval projected (2000-2005) was obtained from the 2000 U.S. Census. The projected population was then used as the launch population of the next interval projected (2005-2010) and so on through to the Year 2030. Cohorts - males and females in five-year age groups through 85 years and above - were projected separately and summed to provide projections of total population for counties. Summing county population projections derived the State and Area Development Districts population projections.

In this method, components of change were estimated by applying the respective rates (mortality, fertility, or migration) to the population size of cohorts. The rates for components of change by age and sex were real cohort rates and represent the behavior of cohorts as they age over the five-year interval.<sup>3</sup>

### 2.4.2 McCracken County Population Projections

There are various methods used to project population, including the linear regression, exponential growth, and geometric methods. These statistical methods, including a projection from the KSDC, were used to compare alternative population forecasts to reflect the plan's 20-year horizon, as reflected by **Figure 2.3, Scenario Forecast of McCracken County**.

Linear projections involve a graphical projection of past historical trends into the future. In this case, linear techniques of choice were "simple linear regression" and "exponential growth." Linear regression forecasts are straight-line projections of historical population. In a linear growth scenario, the same absolute number of additional persons is added to the population

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<sup>3</sup> Source: Kentucky State Data Center  
([http://ksdc.louisville.edu/kpr/pro/hmk2004\\_methodology.doc](http://ksdc.louisville.edu/kpr/pro/hmk2004_methodology.doc))



each period. This results in a declining rate of growth over time since the same amount is added to an ever-expanding base. By contrast, exponential growth assumes a constant rate of growth in establishing a forecast. The geometric technique projects the future using a growth factor that is the average rate of growth over a historical period of time.

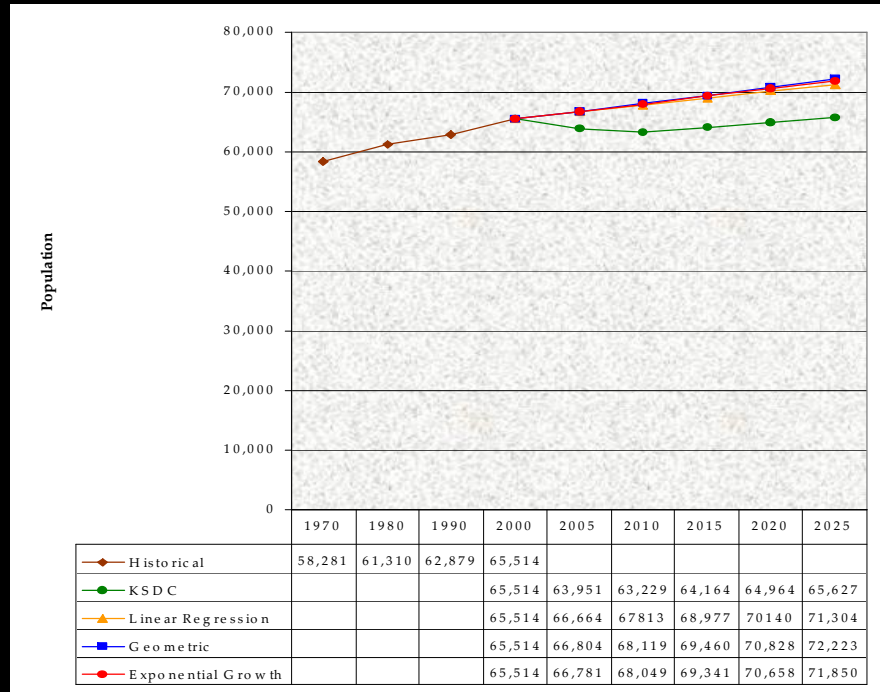
The population projections for McCracken County range from a low of 65,627 persons to a high of 72,223 persons in the Year 2025, compared to a Year 2000 U.S. Census population of 65,514 persons. Using a “curve fitting” approach to determine which projection is most likely based upon the historical trend since 1970, the Exponential Growth method offers a realistic scenario of 71,850 persons by the Year 2025. This conclusion is based on the fact that the KSDC projection is an outlier and the Exponential Growth projection is the mid-point between the Geometric and Linear Regression scenarios.

### 2.4.3 Paducah Population Projections

The simple linear regression, exponential growth, geometric, and step-down methods were used to project Paducah’s population and compare alternative population forecasts to reflect the plan’s 20-year horizon, as reflected by **Figure 2.4, Projected Population Scenarios of Paducah**. Further to the methods described in *Section 2.4.2, McCracken County Population Projections*, it is noted that the step-down technique is used to project the City’s population based upon a proportional share of the County’s future population.

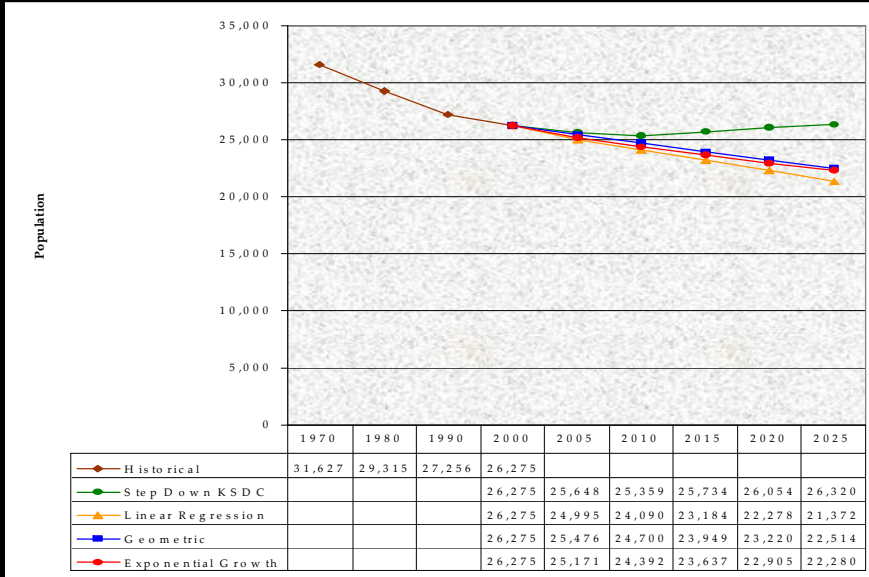
An analysis of Paducah and McCracken County reveals that the City’s proportionate share of the County’s population has decreased each decade from 1970 to 2000. Based upon current trends, it could be expected that in the Year 2025, Paducah’s population will represent 32.6 percent of McCracken

Figure 2.3, Scenario Forecast of McCracken County



Source: KSDC and Kendig Keast Collaborative

Figure 2.4, Projected Population Scenarios of Paducah



Source: Kendig Keast Collaborative

County’s population – a decrease from its proportionate share of 40.1 percent in the Year 2000. Without attention and deliberate action to address the declining population in the City, it is reasonable to assume that this trend will likely continue. As expressed in *Chapter 1, Plan Context*, a healthy City and County are important to the area’s growth and quality of life. One of the plan’s efforts should be to better manage future area-wide growth so as to reverse the decline of neighborhoods. The implications of such a growth pattern are discussed elsewhere in this plan.

As seen in *Figure 2.4, Projected Population Scenarios for Paducah*, the

projected population for Paducah in the Year 2025 ranges from 21,372 persons to 26,320 persons, which is based primarily on historic trends since 1970. Using a “curve fitting” approach to determine which projection is most likely based upon the downward trend since 1970, the Exponential Growth method (22,280 persons in 2025) offers the most likely scenario. Using the Step-Down scenario, which assumes a proportional allocation of the projected future County population, the City’s population will continue to decline for a period of time and then level off and begin to recover when the policies of this plan are implemented and are given time to have a positive effect. Therefore, the Step-Down scenario indicating a 2025 population of 26,320 persons will be used as the basis for quantifying necessary capacities and estimating future needs.

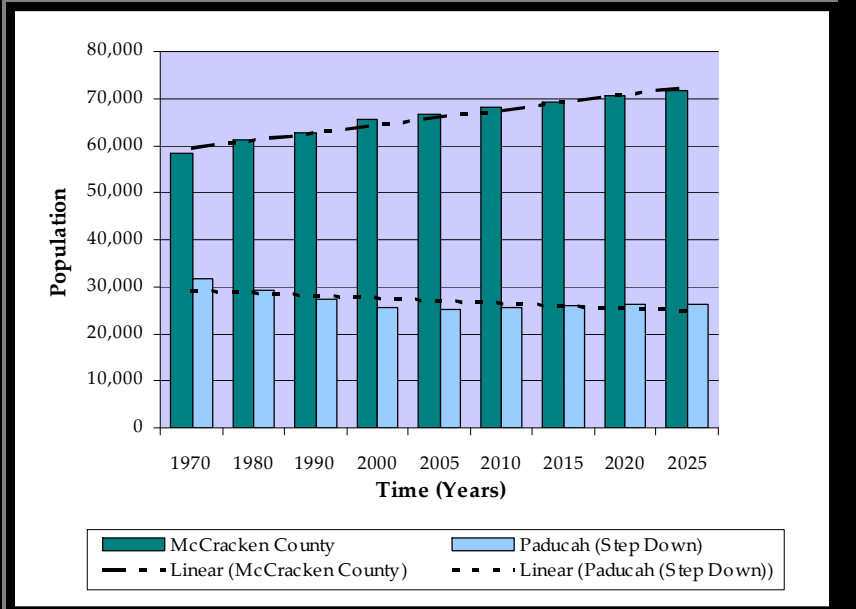
#### 2.4.4 Projection Implications

The population projections for Paducah and McCracken County, as illustrated in **Figure 2.5, Population Projections for Paducah and McCracken County**, and the associated shifts in socio-economic characteristics that are identified in this area-wide profile are used as a basis to formulate the City’s growth policies. In particular, the projected populations will help the City, County, and private business interests better evaluate the following:

- ◆ Demands for varying housing types, sizes, and prices;
- ◆ Housing policies and programs;

- ◆ Annexation policies;
- ◆ Employment for residents of Paducah and McCracken County;
- ◆ Changes in the median household income and the effective buying power of residents;
- ◆ Numbers of school-age children moving to the City and the County and the impact on demand for school facilities;
- ◆ Projected future traffic volumes, congestion, and demands for new roadway infrastructure and alternative modes of transportation;
- ◆ Use of local parks and recreation facilities and the demand for additional areas, facilities, and programs;
- ◆ Capacity requirements for water and wastewater service, storm drainage improvements, and the requisite capital investments; and
- ◆ Impact on the number of police, fire, and emergency medical service calls and their response times, service levels, and facility and staffing needs.

Figure 2.5, Population Projections for Paducah and McCracken County



Source: Kendig Keast Collaborative

The implications of the expected future population characteristics and the physical and economic growth of Paducah and McCracken County are reflected in other chapters of this plan, including **Chapter 3, Land Use**; **Chapter 4, Transportation**; and **Chapter 5, Economic Development**.

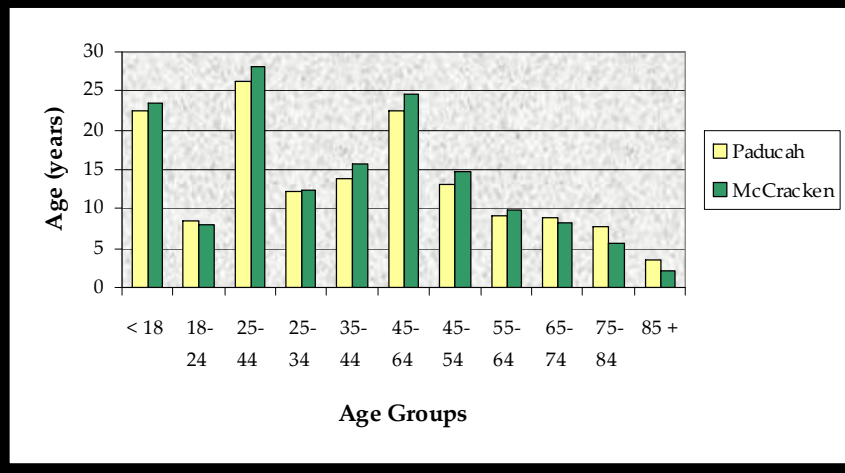
## 2.5 DEMOGRAPHIC PROFILE

### 2.5.1 Age and Gender

An analysis of the age composition in Paducah reveals that 45.48 percent of the population is comprised of males and 54.52 percent of the population is comprised of females. Similarly, McCracken County is comprised of more females than males, with 47.50 percent of the population being male and 52.50 percent female.

According to the U.S. Census Bureau (2000), the median age in Paducah is 39.9 years of age, which is only slightly higher than the median age of McCracken County of 39.2 years of age. Both Paducah and McCracken

Figure 2.6, Age Distribution



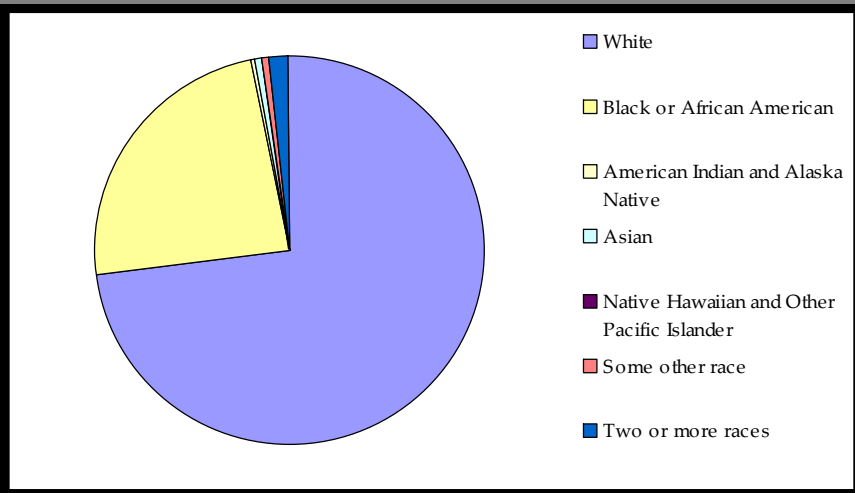
Source: U.S. Census Bureau

County have higher median ages than the State (35.9 years of age) and the nation (35.3 years of age).

As illustrated in **Figure 2.6, Age Distribution**, the 25-44 year age cohort represents the largest segments of both the Paducah and McCracken County populations (26.2 percent and 28.1 percent, respectively). The population under 18 years of age represents 22.5 percent of Paducah’s population. By contrast, 23.4 percent of McCracken County’s population and 24.6 percent of Kentucky’s population is under the age of 18 years.

It is interesting to note that the younger age cohorts are larger in McCracken County than in the City, while the older age cohorts – 65+ years of age – are less. This indicates that younger families are moving out of the City and into the County, while the mature population is moving inward where senior services are available and more accessible. The population 65 years and older represents 20.3 percent of Paducah’s population. A comparison against County and State demographics indicates that Paducah’s population is generally older, as evidenced by the fact that 15.9 percent of the County and 12.5 percent of the State population is 65 years and older.

Figure 2.7, Racial Composition of Paducah



Source: U.S. Census Bureau

2.5.2 Racial Composition

As displayed in **Figure 2.7, Racial Composition of Paducah**, a majority (72.8 percent) of the community’s population is comprised of persons for which their race is identified as White. This racial composition is similar to McCracken County and the State in that White is a majority for both. Comparatively, a smaller proportion of Paducah’s population is White, as

evidenced by the fact that 86.8 percent of the County and 90.1 percent of the State are comprised of persons who identified their race as White.

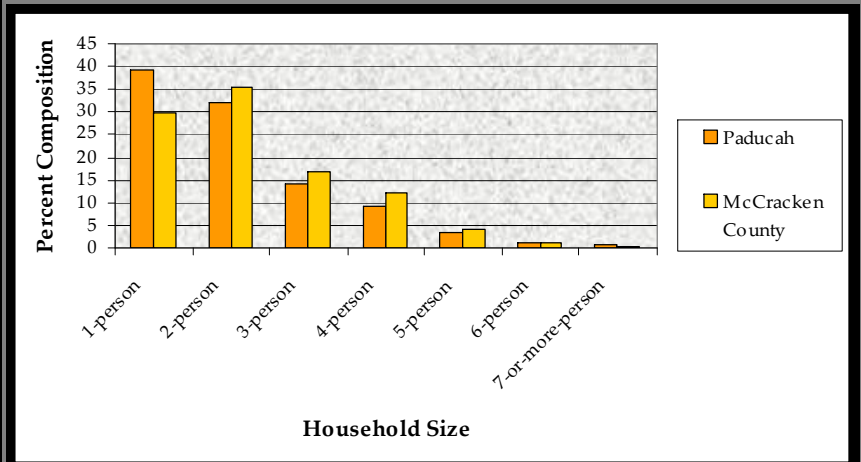
### 2.5.3 Household Type and Size

According to the U.S. Census Bureau, households are classified as either “family” or “non-family” units. Family units are generally defined as those with a married couple or a single head of household with or without children. Non-family households include those with one person living alone. An analysis of households in Paducah reveals that 56.2 percent are family households and 43.8 percent are non-family households. In McCracken County, the percentage of family households is higher than non-family households as compared to Paducah, with 66.5 percent of the County’s population comprised of family households and 33.5 percent as non-family households.

According to U.S. Census and as illustrated in **Figure 2.8, Household Size**, the majority of households in Paducah are one- (39.3 percent) or two-person (32.1 percent) households. In 1990, one-person households made up 36.2 percent of the population, indicating a rise between 1990 and 2000. By contrast, there has been a slight decrease in two-person households, as noted by 1990 data, which indicates that two-person households made up 32.3 percent of the population. Similar to Paducah, the most recent census data reveals that a majority of households in McCracken County are one- (39.3 percent) or two-person (35.5 percent) households. This represents an increase from 1990 data, which indicates that one- and two-person households made up 27.0 and 34.0 percent of the population, respectively.

A comparison of average household size, as displayed in **Table 2.2, Persons per Household**, reveals that Paducah has a smaller average household size. In fact, Paducah’s household size is the smallest relative to the County, State, and nation.

Figure 2.8, Household Size



Source: U.S. Census Bureau

Table 2.2, Persons per Household

Place	Persons per Household
Paducah	2.12
McCracken County	2.31
Kentucky	2.47
United States	2.59

Source: U.S. Census Bureau

As reflected by the age distribution, younger families with larger households tend to live in the County, while older, one-person households reside within the City. This is due, in part, to the college-age population attending local colleges and institutions, more events and activities for singles, and more one-person dwellings within the City. In addition, a majority of new home construction – many within an affordable range for first-time and younger home buyers – is occurring in the County. There are several other reasons for this circumstance such as the quality of schools and taxing structure.

#### 2.5.4 Income and Poverty Level

In 1999, the median household income in Paducah was \$26,137 and the mean household income was \$39,707. The former represents a 51.99 percent increase from the 1989 median household income of \$17,196. As illustrated in **Table 2.3, Median and Mean Household Incomes, 1999**, the median and mean household incomes in Paducah represent only 77.18 percent of

McCracken County’s median household income and 77.62 percent of Kentucky’s median household income. Similarly, the mean household incomes of McCracken County and Kentucky are higher than that of Paducah.

**Table 2.3, Median and Mean Household Incomes, 1999**

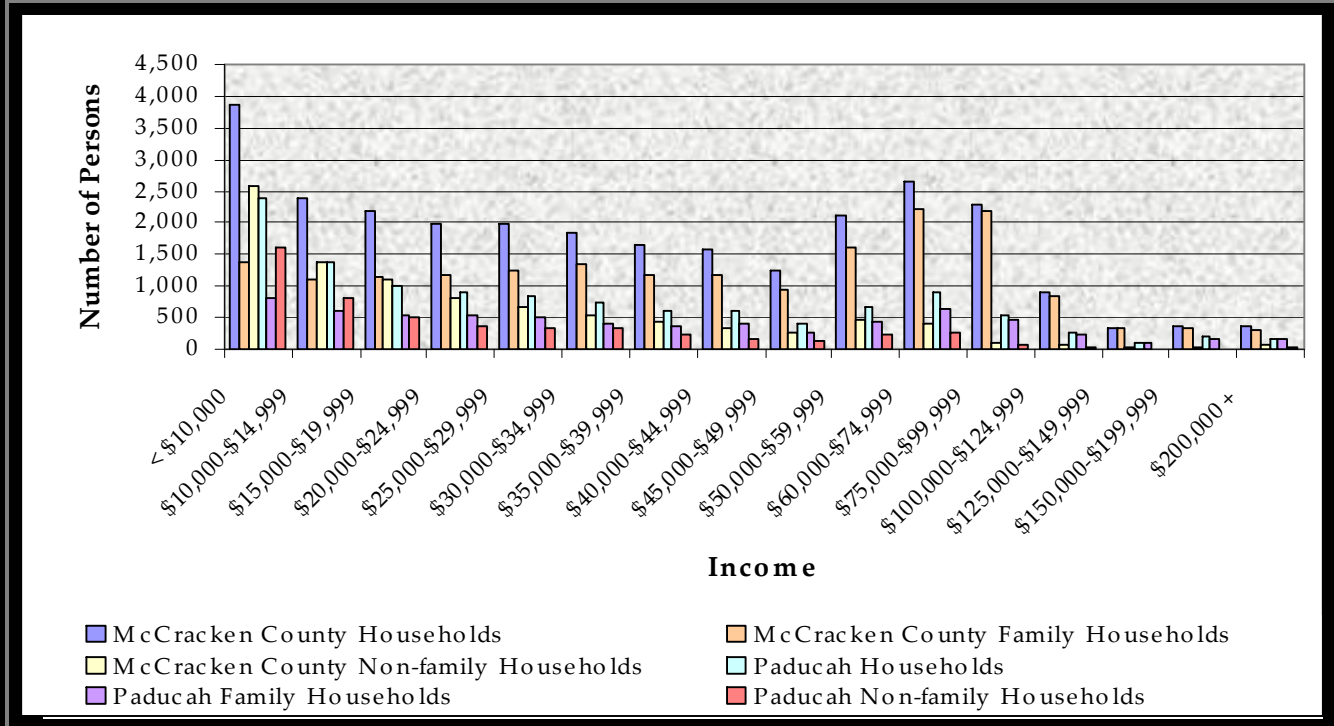
Location	Median Household Income	Mean Household Income
Paducah	\$26,137	\$39,707
McCracken County	\$33,865	\$45,476
Kentucky	\$33,672	\$45,246

Source: U.S. Census Bureau

As illustrated in **Figure 2.9, Income, 1999**, the highest proportion of both Paducah and McCracken County citizens earn a household income of less than \$10,000. A further analysis examining family and non-family households reveals that in Paducah, 12.2 percent of family households and 32.0 percent of non-family households earn an income of less than \$10,000. The second highest earning group for family households is the \$60,000 to \$74,999 range (9.5 percent). By contrast, persons in non-family households earn less than family households, as evidenced by the fact that the second highest earning group was in the \$10,000 to \$14,999 range (15.9 percent).

The U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is classified as poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level." As illustrated in **Table 2.4, Poverty Level**, Paducah exceeds McCracken County, the State, and the nation in terms of the proportion of its population who were determined to have poverty status in 1999. By

Figure 2.9, Income, 1999



Source: U.S. Census Bureau

comparison, the percentage of persons determined to have poverty status in McCracken County in the Year 1999 was close to that of the State. Nonetheless, compared to the nation, the County's population had a higher percentage of persons who were determined to have poverty status.

### 2.5.5 Housing Units, Occupancy, and Tenure

As illustrated in **Table 2.5, Total Housing Units**, there has been a less than one percent increase in the number of total housing units in Paducah between 1990 and 2000. McCracken County has experienced a greater increase in the number of total housing units in the same time period, equating to a 10.08 percent increase.

According to the most recent Census data, of the 13,221 total housing units in Paducah, 10.6 percent are vacant. A vacancy rate above ten percent is undesirable, whereas, generally, a five to seven percent vacancy rate is desirable. McCracken County has a lower vacancy rate than Paducah with 8.6 percent of its 30,361 total

Table 2.4, Poverty Level

Place	Percent Below Poverty Level
Paducah	22.4%
McCracken County	15.1%
Kentucky	15.8%
United States	12.4%

Source: U.S. Census Bureau

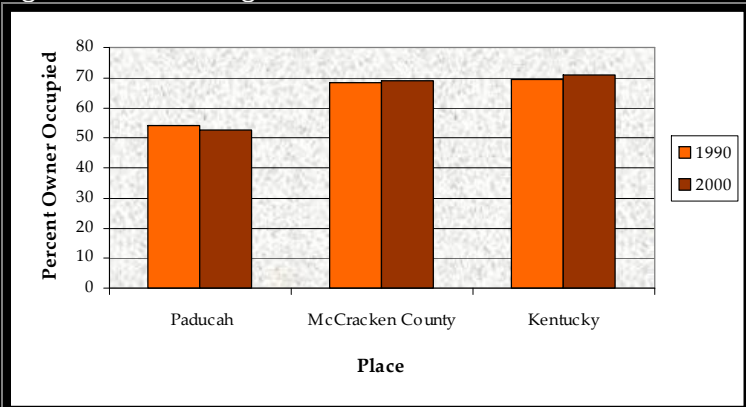
Table 2.5, Total Housing Units

Place	Total Housing Units		% Change
	1990	2000	
Paducah	13,150	13,221	0.54%
McCracken County	27,581	30,361	10.08%

Source: U.S. Census Bureau

## Area-wide Snapshot

Figure 2.10, Housing Tenure



Source: U.S. Census Bureau

housing units being vacant. However, similar to Paducah, although to a lesser degree, its vacancy rate is undesirable. When comparing Paducah and McCracken County vacancy rates to the State and the nation, it is determined that Paducah's vacancy rate is higher than the State (9.2 percent vacancy rate) and the nation (9.0 percent vacancy rate), whereas the County's vacancy rate is lower than both the State and the nation.

As illustrated in **Figure 2.10, Housing Tenure**, Paducah has the lowest percentage of owner occupied housing (52.9 percent) compared to McCracken County (69.7 percent), and Kentucky (70.8 percent). Between 1990 and 2000, Paducah's owner occupancy rate decreased from 54.4 percent to 52.9 percent. During this same time period, McCracken County's owner occupancy increased slightly from 68.2 percent to 68.7 percent. While this is a positive indicator, the overall percentage of owner occupied units in McCracken County is lower than the State.

Table 2.6, Housing Affordability, Paducah

% of Median Income	Household Income	Affordable Mortgage Payment
180	\$47,046.60	\$1,176.17
150	\$39,205.50	\$980.14
130	\$33,978.10	\$849.45
100	\$26,137.00	\$653.43
80	\$20,909.60	\$522.74
50	\$13,068.50	\$326.71
30	\$7,841.10	\$196.03

U. S. Census Bureau, 2000

### 2.5.6 Housing Affordability

Affordability is typically defined as a percent of household income. In other words, housing is considered affordable if no more than 30 percent of household income is devoted to housing costs. As depicted in **Table 2.6, Housing Affordability Paducah**, \$653.43 per month is an affordable mortgage payment for a median household income of \$26,137 (the median household income in Paducah). For households earning 30 percent of the median income, affordable housing means a monthly mortgage payment of \$196.03. As illustrated in **Table 2.7, Housing Affordability, McCracken County**, an affordable mortgage payment is higher in McCracken County than in Paducah

Table 2.7, Housing Affordability, McCracken County

% of Median Income	Household Income	Affordable Mortgage Payment
180	\$60,957.00	\$1,523.93
150	\$50,797.50	\$1,269.94
130	\$44,024.50	\$1,100.61
100	\$33,865.00	\$846.63
80	\$27,092.00	\$677.30
50	\$16,932.50	\$423.31
30	\$10,159.50	\$253.99

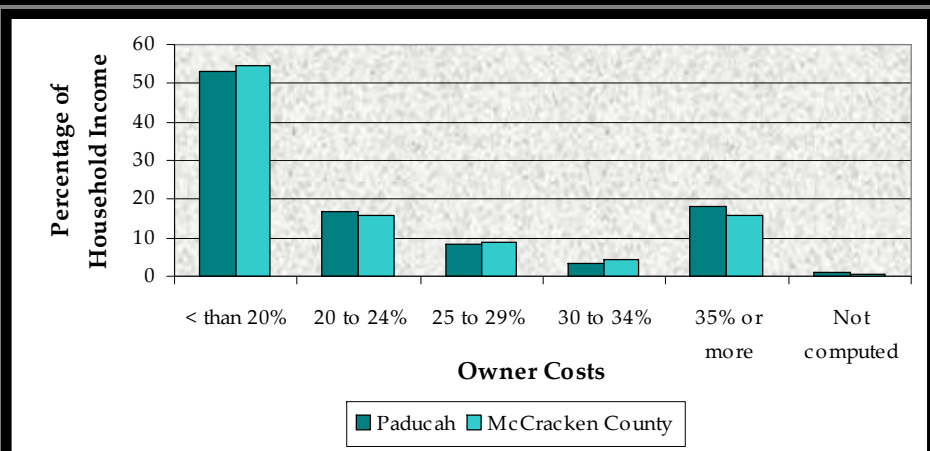
U. S. Census Bureau, 2000



given its higher median household income. A mortgage payment of \$846.63 per month is considered affordable for a median household income of \$33,865 (the median household income for McCracken County). For households earning 30 percent of the median income, affordable housing means a monthly mortgage payment of \$253.99.

As displayed in **Figure 2.11, Monthly Owner Costs as a Percentage of Household Income, 1999**, the percentage of owners in Paducah and McCracken County who have a mortgage that is 30 percent or more of their household income is 21.6 percent and 20.2 percent, respectively. Similarly, 21.6 percent of owners with a mortgage in the State spend 30 percent or more of their household income on their home. Therefore, both the City and County are on par with the State regarding housing affordability.

Figure 2.11, Monthly Owner Costs as a Percentage of Household Income, 1999

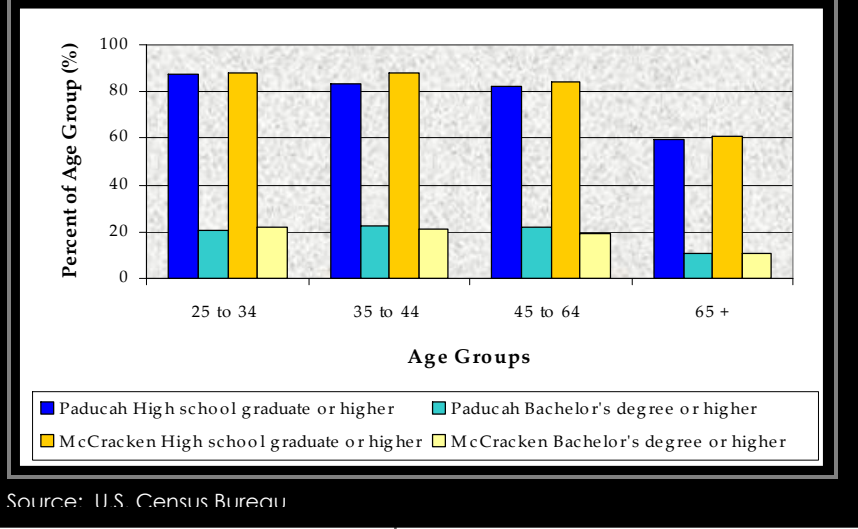


Source: U.S. Census Bureau

### 2.5.7 Educational Attainment

According to the U.S. Census Bureau, 31.1 percent of the population 25 years of age and older in Paducah have obtained their high school degree (or equivalent). An additional 5.8 percent earned an Associate degree, 11.0 percent earned a Bachelor’s degree, and 7.5 percent earned a Master’s degree, Professional degree, or Doctorate degree. Therefore, collectively 55.4 percent of the City’s population has a high school or advanced degree. The percent of the County’s population with a high school or advanced degree is slightly higher at 58.2 percent (33.3 percent with a high school degree, 6.9 percent earned an Associate degree, 11.3 percent earned a Bachelor’s degree, and 6.7 percent earned a Master’s degree, Professional degree, or Doctorate degree).

Figure 2.12, Educational Attainment in Paducah and McCracken County

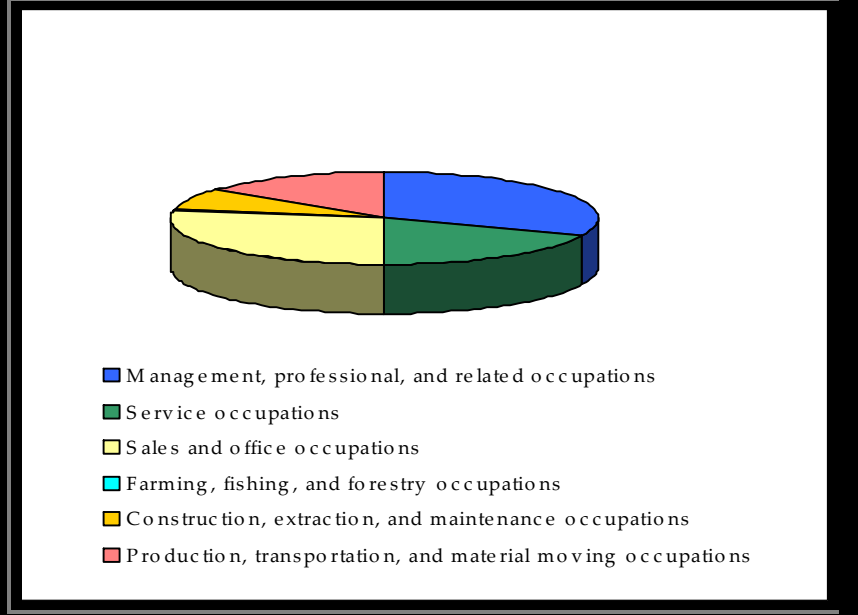


When examining educational attainment within age groups, there are no major differences in educational attainment between Paducah and McCracken County, as illustrated in **Figure 2.12, Educational Attainment in Paducah and McCracken County**, with the exception of the 35 to 44 year age group. In Paducah, 83.5 percent of this age group earned a high school diploma or higher, while in McCracken County, 88.1 percent of this same age group earned a high school diploma or higher.

Whereas the percentage of persons in Paducah who have earned a high school diploma or higher is highest in the youngest age group (25 to 34 years) and progressively declines toward the oldest age group, the same is not true in McCracken County.

As illustrated in *Figure 2.12, Educational Attainment in Paducah and McCracken County*, 88.3 percent of the 25 to 34 year age group and 88.1 percent of the 35 to 44 year age group earned a high school degree or higher.

Figure 2.13, Employment in Paducah



## 2.6 ECONOMIC CHARACTERISTICS

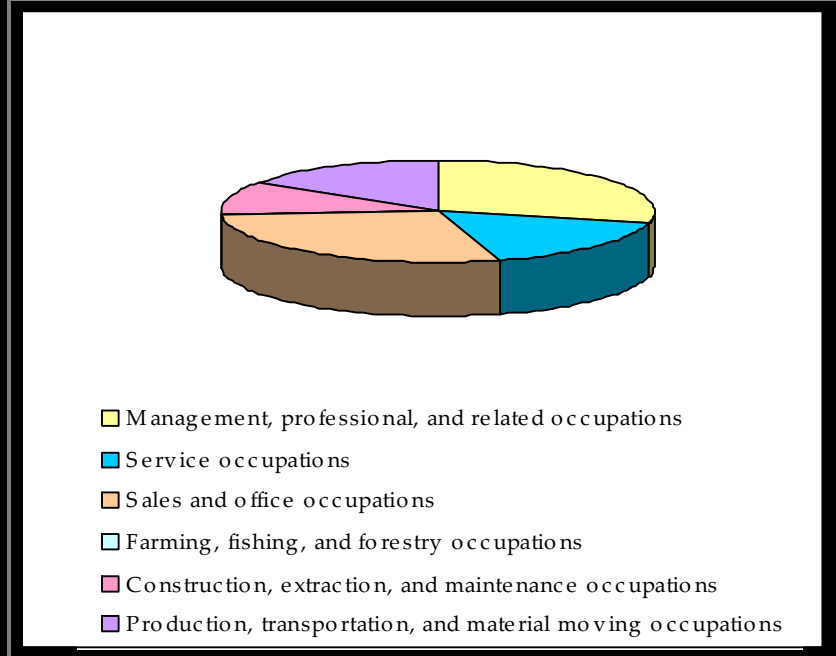
### 2.6.1 Employment

As illustrated in **Figure 2.13, Employment in Paducah**, 31.12 percent of the employed civilian population over the age of 16 years in Paducah is employed in Management, Professional, and Related Occupations. Within this occupational sector, the Professional and Related Occupations sub-sector ranks the highest in terms of number of persons employed (2,042 persons). Also within this sub-sector, the highest number of persons employed (665 persons) are health care practitioners and persons employed in

technical occupations. The second highest sector of employment in the community is in Sales and Office Occupations (27.89 percent).

Similar to Paducah, the highest sector of employment in McCracken County is in Management, Professional, and Related Occupations (29 percent), followed by Sales and Office Occupations (28.22 percent), as illustrated in **Figure 2.14, Employment in McCracken County**. Again, similar to Paducah, within the highest employment sector, the Professional and Related Occupations sub-sector ranks the highest in terms of number of persons employed (5,330 persons), and the highest number of persons employed (1,954 persons) are health care practitioners and persons employed in technical occupations.

Figure 2.14, Employment in McCracken County



Source: U.S. Census Bureau

The top employers in the Paducah area are listed in **Table 2.8, Top Employers in the Paducah Area**. The top employer in the area is Ingram Barge, which employs 2,400 persons. Ingram Barge is followed by Lourdes Hospital and Western Baptist Hospital who, together, employ 2,900 persons.

Table 2.8, Top Employers in the Paducah Area

Employers	No. of Employees
Ingram Barge	2,400
Lourdes Hospital	1,600
Western Baptist Hospital	1,300
United States Enrichment Corporation (USEC)	1,250
Seaboard Farms	1,000
Briggs & Stratton Corp.	780
McCracken County Public Schools	760
Westvaco Corp.	630

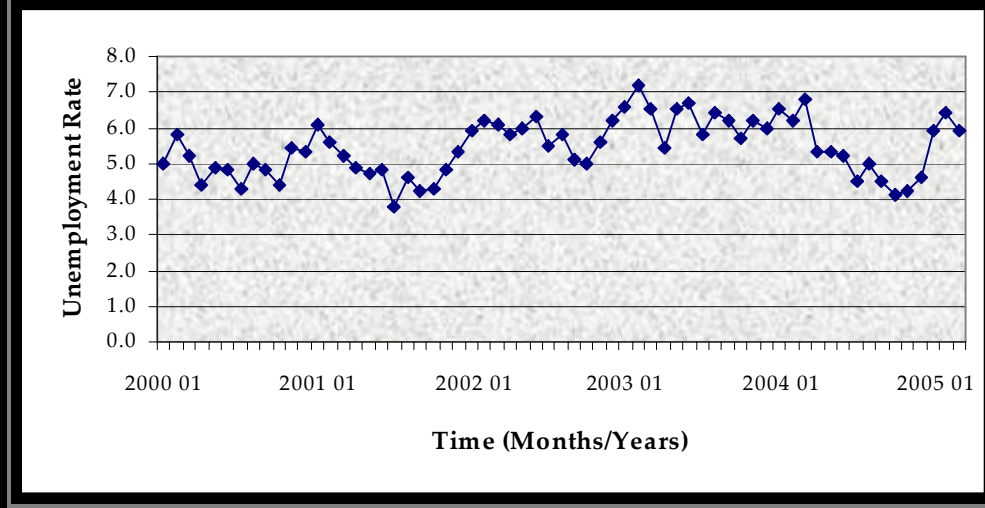
Source: Paducah Area Chamber of Commerce

### 2.6.2 Unemployment

As illustrated in **Figure 2.15, Unemployment Rate in Paducah**, the rate of unemployment in Paducah has stayed generally within the four to seven percent range during the period of January 2000 to March 2005. During this same time period, the lowest unemployment rate was in July 2001 (3.8 percent) and the highest unemployment rate was in February 2003 (7.2 percent). A general downward trend in 2004 is being followed by a rise in unemployment in 2005. The

## Area-wide Snapshot

Figure 2.15, Unemployment Rate in Paducah



Source: Economagic.com

closing of General Tire makes matters worse, as well as the reductions at USEC.

Trends in the unemployment rate for McCracken County and the Labor Market Area during the period 2000 to 2004 are illustrated in Table 2.9, Unemployment Rate in McCracken County and Labor Market Area.

Table 2.9, Unemployment Rate in McCracken County and Labor Market Area

Year	Unemployment Rate (%)	
	McCracken County	Labor Market Area
2000	4.4	5.4
2001	4.3	5.5
2002	5.5	6.0
2003	6.1	6.8
2004	4.8	6.2

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

The labor market area for McCracken County, as seen in Figure 2.16, Labor Market Area, is comprised of counties within a 60-minute drive of Paducah. All contiguous counties that meet this criterion are classified as part of the labor market area, with the exception of non-Kentucky contiguous counties. The information presented in the chart identifies that the unemployment rate is higher in the Labor Market Area compared to McCracken County. The latter experienced its highest rate of unemployment in 2003, when it reached an unemployment rate of 6.1 percent. By comparison, the Labor Market Area's highest rate of unemployment was 6.8 percent.

Figure 2.16, Labor Market Area



*This plan makes recommendations for the land use pattern that the City and County desire in the year 2025. These are only recommendations. The City of Paducah has no jurisdiction over land use decisions outside the City limits of Paducah. The use of land simply addresses whether it is residential, commercial, or manufacturing and the intensity or density of the development. Is the building five stories or one story in height? What is the lot size for a residential unit? The land use plan map in this chapter shows where these uses should be located. While many impacts are related to density or use, visually, the quality of the development is important in creating the desired image of the City. Residents and tourists alike continue to visit downtown Paducah because it is very attractive. People go to the mall due to a wide availability of products and they buy cars at auto dealerships because that is where cars are sold. However, there is no reason that these commercial uses have to be unattractive. Currently, residents do not take pride in the quality of the visual experience in the commercial areas other than downtown, and visitors come to these areas only to buy what they must and then leave. A more attractive appearance would open new marketing opportunities. This chapter sets the vision for Paducah and*

## **3.1 INTRODUCTION**

This Chapter and Chapter 6, Growth Management, illustrate current and future land use patterns and identify issues for analysis. The Growth Management chapter breaks the City and County into three basic areas with different development strategies - the developed area, the growth area, and the holding zone - and a resource protection area where development is not permitted. The land use policy for the three basic areas needs to respond to very different existing conditions: land use needs and types of development. It should be noted that the development strategies within in this chapter are recommendations. Official action by the City Commission & McCracken County Fiscal Court would be required before the strategies could be implemented.

### 3.1.1 Developed Area

The Developed Area is 75 percent developed into existing neighborhoods. The primary mode of development is infill on small properties where there is an existing pattern and character of development. Protection of the neighbors is a primary goal of the land use. In terms of use, the need ranges from large-lot residential (over an acre per lot) to the central business area where mixed

## **CHOICES2025**

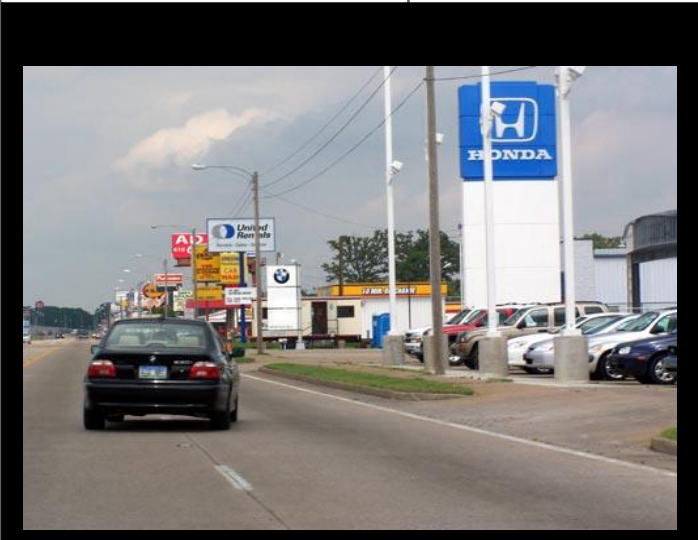
The land use and growth management chapters are key elements in determining the physical appearance of the City and County in 2025. Land use addresses the built-up and developing areas of the County; growth management addresses providing the infrastructure needed to support the growth and sets a basic pattern of developed area, growth area, and the holding zone of the County that is not intended to

uses are essential. There are residential, commercial, and manufacturing areas within the developed area.

A significant portion of the City was platted (divided into lots) prior to the adoption of zoning in the 1930s and its revision in 1968. Many of these lots do not conform to that zoning, either in lot size or in the setbacks of the buildings on these lots. This failure to conform is termed nonconformity and applies to both physical lot dimensional standards and to use. Pre-existing buildings can be nonconforming as to use, but so can buildings where the zoning has changed over the years, resulting in a legal use becoming nonconforming. Nonconforming conditions put limits on the use or ability to expand or improve a building and are a real problem in the developed area. The need for protection of existing neighborhoods and the need to address nonconforming situations determine the approach needed to land use.

Another problem within the developed area is some neighborhoods or uses that are obsolete. For manufacturing and commercial, they may even be largely abandoned. This can happen to residential, as well; however, for many residential areas, the characteristic is more likely to be disinvestment, rather than vacancy. Redevelopment is the needed response to disinvestment and obsolescence in parts of the developed area. The VMV Paducahbilt is a large-scale example of a manufacturing use that has declined with the loss of many of its employees so that buildings are unused or underutilized. Unless a way is found to reverse this trend, there will come a time when this site will need to be redeveloped. The need for redevelopment can apply to sites of less than one-quarter acre. The problem of what to do with these underutilized or vacant lots or buildings is a major land use issue for parts of the developed area.

Quality is also important in the developed area; however, because the buildings are permanent structures; the options available are fewer and less flexible than in the growth area. Commercial and manufacturing properties with low quality are likely to have terrible signage – one of the easier things to address. Other problems require retrofitting as illustrated in **Figure 3.1, Low-Quality Signage**. Landscaping can provide some camouflage, however, other forms of retrofitting, such as improving facades, quickly become very expensive. Some residential neighborhoods have a quality that should be improved to make them more desirable places to live. For both



quality and renewal, the problem is best addressed with incentives or programs that make reinvestment an attractive proposition to the landowners.

### 3.1.2 Growth Area

The Growth Area is largely vacant or agricultural today. While there are areas that may approach 60 percent developed, the area, as a whole, consists of about 70 percent vacant or agricultural land that is planned for development in the next 20 years. The need for protecting the character and quality of life in existing subdivisions within the growth area is every bit as important as it is in the developed area. However, there are opportunities and strategies that are available in the largely undeveloped growth area that are not feasible in the developed area. The primary issues are identifying where uses should be built, how they can be sited on a property, and what different levels of quality should be established.

A secondary issue is that the regulations in the City and County are different. This leads to awkward zoning situations when annexation takes place after development approval when the buildings are built using one set of regulations and will be governed by another in the future. In a small area, two sets of regulations mean more work for developers, engineers, and land planners when they must deal with developments that may be across the street from each other, but are under a different code.

The current zoning of the City and County breaks the land into eight different types of residential, commercial, and manufacturing use districts. Some are quite similar, i.e. City R-1 12,000 square feet versus 7,500 square feet per unit in the County's Urbanizing Residential. Both codes have districts that permit both single-family, as exemplified in **Figure 3.2, Small Single-Family Lots**, and attached or multi-family units at different densities. The different internal densities create tension in the district. The relatively small differences between districts encourage developers to seek rezoning to meet market conditions. When a rezoning makes sense and is approved, that creates quality issues for residents who see the new development as a threat to the character and quality of their subdivision.



Different intensities or uses have a different demand for infrastructure, roads, water, sewer, and other services. Commercial uses generate more traffic than residential uses. The density or intensity of the use means that more sewer infrastructure is required for an acre of manufacturing land than for a less intense use. The impact on infrastructure is not uniform. A commercial use generates more traffic than residential, but may require less water and sewer on a per acre basis. Industries can be tremendous users of water and sewer, but are moderate to low traffic generators. While total traffic per acre from a manufacturing area may be low, it contains a high percentage of truck traffic that has a different impact than automobiles in terms of noise and safety. Having a land use plan that is followed is important because it identifies the infrastructure needs. A plan that is frequently amended is a sign that the plan either is not being followed or missed the growth projections. When plans change in reaction to developers' demands, there is a high probability that infrastructure costs will rise and sprawl will occur.

The goal in the growth area is to have a blueprint for future land use, quality, and character that will guide development over the next 20 years. The plan is a guide, but zoning is the tool that actually regulates the development. The City and County together are processing about 12 zoning changes per year. What is the relationship of the plan to the zoning? There are two problems with the relationship. First, if the plan seeks to map each of the zoning districts in advance, this greatly hampers the development community in meeting markets and results in increased numbers of applications for rezoning. Second, if the plan uses broad terms like low, medium, or high density, it is possible to have multiple zoning categories in one land use category. The flexibility to use multiple categories is often seen by citizens as threatening the character of their neighborhood.

The rigidity of the zoning regulations is also a problem. Market needs often require landowners to seek rezoning because of the disconnection between land use plans (or zones) with the realities of the real estate market. When a business seeks to build, it has specific locational needs. Even though the plan and zoning have identified areas for each category, there may not be properties for sale that have the proper zoning when the prospective developer needs to build. The more districts a community has used to carve up its neighborhoods, the more likely the mismatch.

Developers would like a more flexible system where they do not have to rezone property or do planned unit developments (PUDs) that require



lengthy public hearings and uncertainty. The question is how this can best be provided, while also protecting the neighbors.

**3.2 HOLDING ZONE**

The Holding Zone is an area that is not needed for development until after 2025. Its purpose is to encourage agriculture to continue until such time that the land is really needed for development or to permanently preserve agricultural areas in the County. There will be landowners who want to develop or who must or want to sell their land for a future residential use. Chapter 6, Growth Management, provides for a variety of development options that are largely based on ensuring that premature development does not make it more expensive or difficult to expand infrastructure to serve growth areas after 2025. The Holding Zone is located entirely outside the city limits of Paducah. Fiscal Court action would be required before this strategy could be implemented. This is meant to be a recommendation only.

**3.3 DEVELOPED AREA**

**3.3.1 Older Residential Areas – Neighborhood Conservation (NC)**

As noted in the Introduction, this area is currently 75 percent developed. A primary need is to protect existing neighborhoods from uses that would adversely impact the character or quality of life in these neighborhoods. Since the land use pattern already exists, the land use plan is primarily the mapping of existing uses. The second element is mapping areas where the existing conditions require renewal or reinvestment.

Protecting the neighborhoods would imply that any vacant land or redevelopment fits into the neighborhood’s existing character. In much of the developed area, it is relatively easy to develop a plan that shows commercial, manufacturing, or residential land use categories that match what is on the ground. There are some older areas where different uses (residential, commercial, and manufacturing) are mixed together.

There is a problem with very broad land use categories when they apply to zoning. A significant portion of Paducah and smaller scattered areas of the County were built before zoning regulations or under regulations that have been superseded. Many buildings are nonconforming and would need to seek administrative relief in order to improve the existing buildings. This is a

barrier to reinvestment. A second related problem is nonresidential uses in residential areas that have been there for decades and were legal when built, but are now prohibited in the district. In both instances, theory of zoning suggests the elimination of the nonconforming use over time. In actual practice, the uses remain nonconforming for 50 or more years unless the land is so desirable that economic conditions force redevelopment.

Nonconformity should be viewed as undesirable. The only exception is when the desire is to have the use be discontinued because of its nuisance potential. First, nonconforming status is a burden on the landowner who may have difficulty getting loans to improve a nonconforming structure. Second, there are the costs and frustration of seeking relief. Third, it is a burden on staff and zoning boards to deal with requests for many variances that result when the conditions are common, as in a whole block. When areas are nonconforming, there is a tendency to grant variations even though they do not meet the statutory or legal standards for granting variations. There is no protection of the public health, safety, and welfare or any other benefit in having significant nonconforming areas.

In the developed area, the protection of neighborhoods means that zoning regulations must closely match what is on the ground and few uses should be nonconforming. Except where land values are so high and the neighborhood so desirable that the marketplace is forcing redevelopment, the fact is that nonconforming uses will remain so for many years. Only the most noxious uses should be nonconforming. The test should be whether the use is such a nuisance or so negative to the community that it needs to be eliminated.



Residential areas should not be zoned so they are nonconforming. It is clear that areas that are nonconforming are less likely to seek reinvestment than areas that are conforming. These older areas need every encouragement to reinvest in the homes and neighborhood. Areas that have a significant number of nonconforming lots include older portions of the City that were established before the adoption of Zoning in the City of Paducah.

In the County, lots stripped along road frontage prior to zoning were often as small as one-half acre even though served by septic tanks. The problem with zoning to ensure conformity is that it results either in a large number of districts or in districts where lots can be subdivided and character

changed. There is a simple way around this problem. It is a “neighborhood conservation (NC)” district that is designed to protect existing neighborhoods. If there are many lot sizes with single-family homes with frontages from 25 to 200 feet, they could all be in a district with the same list of permitted uses, but with an indicator that specifies the lot standards. Thus, NC2.5 means a 2,500 square foot lot, while NC5 indicates a 5,000 square foot lot. The system is flexible and meets a variety of different conditions. If, in one 5,000 square foot lot area, the houses were built within ten feet of the street before zoning and in another with a 20-foot front yard in conformance with zoning, an additional letter or number would create sub-classifications. With this system, it is easy to zone residential areas that are conforming without creating a huge list of districts. The ordinances would prohibit the use of these districts for use in the growth area.

A second type of nonconformity (in the City, but not in the County) is a situation common in areas that predate zoning is where there are businesses in what are generally residential areas. The standard practice has been to zone these areas residential, making all businesses nonconforming. This creates major problems for the businesses. They are prohibited from expanding, and there is a disincentive or an outright prohibition against making improvements that would benefit the surrounding neighborhoods. While some of these uses are marginal, many others are good businesses that should be allowed to continue since they are generally good neighbors. Even if a use is abandoned, the building may not easily be adapted to residential use. The old corner store does not easily convert to a residential use (Figure 3.3). The problem is much worse when the nonconforming use is healthy and well used. The small neighborhood store, restaurant, service business, or corner tavern may be a good neighbor and the nonconforming status a barrier to reinvestment.

Other commercial uses may front on busy streets where the likelihood of redevelopment as residential is unlikely. The cost of purchase, demolition, and construction of a residential use on a busy road provides an economic barrier. In these cases, the business cannot improve its appearance or expand and, at the same time, is unlikely to go away. By preventing reinvestment, there is a loss to the community’s tax base and any blighting influence of the existing use cannot be mitigated. The zoning in the developed area should provide a variety of options that are written to eliminate the nonconformity. Some communities illegally use spot zoning, but this is to be avoided because it sets bad precedent.



### 3.3.2 Central Business Area

Downtown Paducah and the nearby waterfront represent a major redevelopment area that has had significant redevelopment in recent years, but which represents a major untapped resource for residential development with water views or access, as shown by **Figure 3.4, Downtown Paducah**. This area needs substantially more residential uses that can provide a residential population that supports additional commercial activities. The ground floor of uses in this area should be devoted to commercial and service uses. A significant part of this will continue to be oriented to the tourist market, but a resident population, together with nearby residential areas, could support commercial

activities that serve the residents in their daily needs. The upper floors of buildings should be residential, tourist accommodations, and office uses. The buildings with vacant or underutilized upper floors need to be encouraged to restore the building to attract new tenants.

As in any healthy downtown, parking will be an issue to be addressed. There will need to be structured parking to avoid having large, at-grade parking areas that detract from the urban environment. This may need to be supported by the City to improve the feasibility of restoring the occupancy of the older buildings. There should also be alternative transportation accommodations in the central business district to ensure that shoppers, tourists, and employees can have adequate mobility. Incorporating bicycle amenities such as bicycle racks, bike paths, and bike lanes into new sites will offer an alternative to automobile transportation. Sidewalks should be universally accessible and businesses should be oriented to the sidewalk to encourage pedestrian accessibility. Transit and van-pooling options should include visible signage and provide any necessary street furniture.

There is a waterfront plan underway, and Paducah must capture the market for upper end condominiums that have water views and good access to the waterfront. At the same time, these uses cannot create a wall that separates the City center from the river. Those cities that have maintained an accessible waterfront are rewarded with an image that attracts development. The limited area available in the downtown area and waterfront means that the plan must seek to maximize the development intensity, while, at the same time, not creating a barrier.

### 3.3.3 General Commercial

There are numerous areas of general commercial that serve local, community, and regional needs. This includes strip shopping centers, auto dealerships, individual buildings, and the regional mall. While these areas all serve a range of commercial and have different needs, they should be looked at differently, and some uses should not be permitted everywhere in the district.

**Commercial Strips.** In older areas of Paducah, the general commercial is in strips, with small centers being the largest of commercial. There is little need for additional land. Many of the buildings are old and are often less than optimal for modern commercial uses. The land area currently zoned for commercial encourages the creation of new commercial on the edges of the community and along the interstate. Older areas of strip commercial will then struggle to find tenants that will maintain buildings and reinvest. The district should have its range of permitted uses expanded to include infill residential uses that are designed to function on a major road with commercial neighbors to ensure that these areas do not decline to the point of being a problem.

The regional shopping core, pictured in **Figure 3.5, Regional Commercial**, at U.S. 60 and I-24 should not be permitted to sprawl out in a long linear fashion. Every effort should be made to create a retail district that is compact, with a depth that creates a place or district, rather than a strip. The strip lowers the efficiency of the major roads with numerous turning movements. By creating an efficient area, the secondary roads can carry the movement of customers from one group of stores to another, rather than force each trip out to the major road. Land development regulations need to require connectivity and sharing of parking. Connectivity should be designed so that people making several stops within the area do not have to go onto the major road except to enter and leave the area. Sharing of parking can reduce the total amount of parking, particularly where uses



have different peak parking periods. This reduces the total land devoted to parking and allows it to be put to other uses.

Paducah has five interstate access points and is programmed to get a sixth. The purpose of these interchanges should be considered, as well as the level of general commercial permitted at each controlled interchange. The first interchange is at the north at Cairo Road and is designated as a truck and auto service oriented interchange. This can also serve manufacturing areas. At U.S. Route 60, the purpose is a regional shopping interchange and access to downtown Paducah. Higher intensities of use should be encouraged to keep the region serving uses concentrated at this interchange. The Blandville Road interchange is a mix of institutional (the technical college), office, and residential uses; general commercial should not be permitted. The proposed Old Mayfield Road interchange should be reserved for business park uses of office and high-quality manufacturing. The John Puryear interchange area has significant floodplain limitations and should provide light commercial and service uses on buildable land; residential uses should not be displaced. The last interchange at State Route 68 should be for business park uses.

The regional commercial district at U.S. Route 60 serves its business park and commercial functions well, but it does nothing to make the casual visitor aware that downtown Paducah is a special place. It has all the attributes of strip development anywhere in the United States – too many too tall signs, a lack of landscaping, uncontrolled corporate architecture, and no relationship to the regional heritage. This type of environment ranks very poorly in community preference surveys. It is unattractive and actually destroys one of Paducah’s and McCracken County’s attributes: large, tree-lined streets that soften the commercial environment. This is an area that needs a lot of work. The City has adopted controls in recent years that will improve matters over time. There is much remedial work that needs to be done. Street trees, if planted in all the rights-of-way, would eventually make a significant improvement as the trees begin to mature. One jurisdictional issue to overcome will be receiving permission to landscape the State highway rights-of-way.

### 3.3.4 Business Park

Business parks have replaced the old manufacturing park in modern development. The district permits industry, wholesale, office, and a range of commercial uses to be developed as a planned unit. These areas are not strips, but have internal street systems. They house a wide range of uses and

scales of buildings. Generally, a business park is started by a single developer; however, it is possible that they expand into additional sections, often by different developers. They are, generally, more attractive than the strip manufacturing areas. The CSI business park off Friedman Lane is an example of a quality park. Higher standards can be applied to these areas since there is a master developer involved.

Maximum flexibility would suggest that major institutional uses, such as Lourdes Hospital, Western Baptist Hospital, and the Western Kentucky Community Technical College, can be classified as business parks simply by ensuring that the district permits institutional uses. These large institutions build campus-like developments with multiple buildings that are similar to business parks except that they are institutional in character. The institutional uses often, like the two hospitals, build multi-story buildings, which should be encouraged for office uses and commercial lodging facilities and some manufacturing complexes.

### 3.3.5 Industry

The Coleman Road Industrial Park has a mixture of small and large-scale industries. There are several areas of industry primarily manufacturing in the developed area. Southeast along the river, there are river-oriented and other commercial uses; along Route 45 business north to the northwest of downtown, there are some scattered industrial uses mixed in with residential. The VMV PaducahBilt plant is a large manufacturing complex that needs to be planned for new use. All of these are older industrial areas that, with the exception of the VMV PaducahBilt and a few of the waterfront industries, are relatively small-scale uses on individual parcels of land. Nearly all of this land is along arterials and can, with few exceptions, be considered strip development.

Very few of the buildings in these areas can be said to be attractive. One of the programs needed for these industrial areas would be landscaping of the highway frontage. Street trees at 30-foot spacing are recommended. The close spacing allows trees that are smaller at planting to have a visual impact sooner due to close spacing and, over time, to transform the appearance of these strips. There is a fair amount of vacant or underutilized land in these areas, and new development or redevelopment should be encouraged. The standards for landscaping and signage in these areas should encourage much more attractive edges without requiring more expensive architecture. The City should participate in the process by paying for part or the entire street tree planting.

Landscaping along highway frontage is one of the projects that will have a very visible and immediate impact to improve the appearance of existing commercial and manufacturing facilities. It is recommended that street tree spacing along these

**3.4 GROWTH AREA**

As thoroughly discussed in Chapter 6, Growth Management, the growth area is in the process of being developed. It is intended to accommodate new uses and needs to be sensitive to the potential conflict between different land uses where there are district boundaries involved – whether the adjoining land is vacant or was previously developed. All uses eventually require full public facilities except for one type of residential.

**3.4.1 Residential Districts**

Three types of residential densities are needed to serve this area: low, moderate, and high density.

**Table 3.1, Growth Area Residential Development**

District	Development Type	Gross Density	Open Space Ratio	Average Lot Size	Incentive
Estate	Single-Family	0.75	0.10	1 acre	NA
Suburban	Single-Family	1.48	0.10	20,000 sf	-
	Cluster	1.79	0.25	12,500 sf.	21%
	Planned	2.20	0.35	8,000 sf.	49%
Urban	Single-Family	3.23	0.10	8,000 sf.	-
	Cluster	4.36	0.20	5,000 sf.	35%
	Planned	5.00	0.25	3,600 sf.	55%

Source: Kendig Keast Collaborative

**Low Density (Estate).** The low density is for estate-type living and is the only use type in the growth area that does not require public sewer. It does require full water service capable of supporting fire protection. It consists of single-family development of one-acre lots or larger. The areas planned for this should be identified where sewer extensions to serve areas further

out are not contemplated. While there is a market for this type of housing, it should be located in a manner that does not increase the cost of extending sewer service to outlying areas in the future.

The maximum density permitted in this district is 0.75 dwelling units per acre. **Table 3.1, Growth Area Residential Development,** provides information on the standards for this district and the other residential districts in the growth area. The area should have landscaping standards that include more than street trees in order to promote a very private environment in

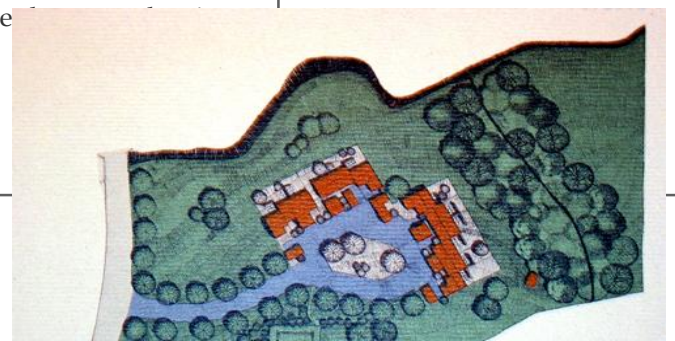
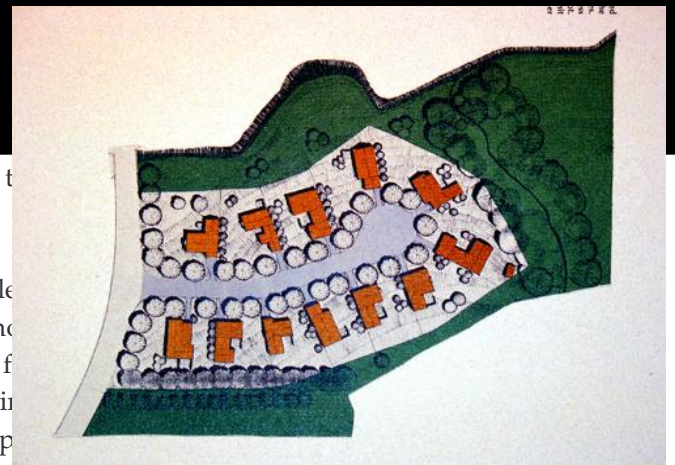
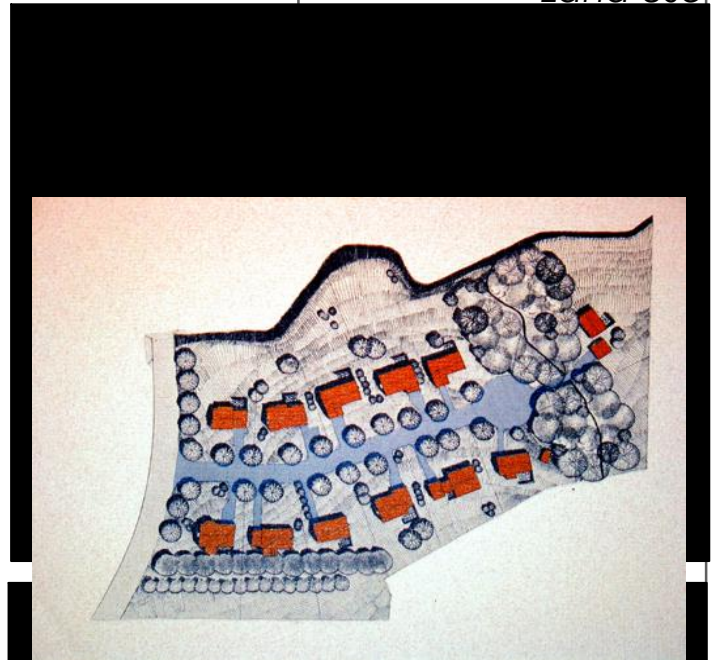


which even large homes are sheltered by the vegetation in the right-of-way and on the lot.

**Suburban.** This provides for a full range of suburban development of single-family to multi-family housing types at a modest density with similar character. It promotes diversity in housing, while ensuring a constant character regardless of the market the developer seeks to meet. Both a density control and an open space control are used to ensure the character. Unlike the current zoning, a broad range of housing types would be permitted in the district in a series of development options. The options permit development to address site planning issues such as protecting natural resources or ensuring that neighbors are protected. This is achieved through permitting several cluster options where minimum open space standards, in combination with maximum gross density, control the character. **Figures 3.6 to 3.8** illustrate how this combination of controls protects the character. Since all the development options have the same gross density, the change in housing type results in different open space ratios.

In **Figure 3.6, Standard Single-Family Lots**, the use is single-family and the entire site is used for lots. The plan uses 20,000 square foot lots which is the single-family suburban option in Table 3.1. Floodplains mean that the extra large because they are only partially buildable.

**Figure 3.7, Smaller Single-Family Lots**, also uses single-family housing, but with smaller lots. Since gross density does not allow for substantial open space available and the floodplain and floodplain edge of the site are left in a natural state. By clustering buildings, natural resources that add to the value of the site can be protected. Neighbors do not have to worry about smaller houses being built right next to them. As a result, a housing type that might normally be considered to be urban can be built with a very different character because the floodplain limits its character.



**Figure 3.8, Townhouse Lots**, uses townhouses at the same density. Because cluster regulations use both a minimum open space ratio and a maximum gross density, the gross density controls when more urban housing types are selected. As a result, the townhouse plan results in far more than the minimum amount of open space, so that the townhouse plan does not look anything like the townhouse projects residents visualize based on their experience.

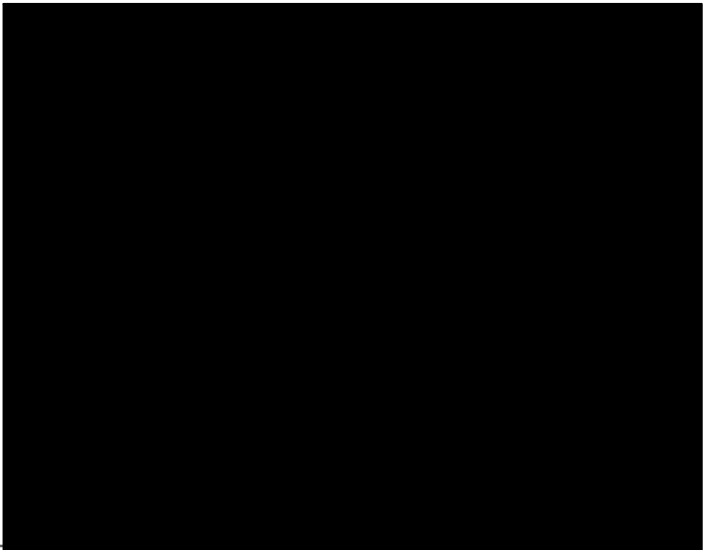
In actual use, the cluster regulations should provide a modest density incentive for developments that have open space. The open space enhances the character of the area and allows development that is more sensitive to the natural features on the site.

**Urban Density**

This land use is intended to be a mix of small, single-family housing types and attached and multi-family land use. It should be used near commercial areas, business parks, or along major roads where the higher density is important. The average gross density of this district is about 5.0 dwelling units per acre. There is a range of densities that can meet this general character, with the higher intensities having more common open space within them. The open space is intended to ensure a community character.

**3.4.2 Commercial Development**

The commercial development in the developing area would be the general commercial used in the developed area. Figure 3.5, shows a regional shopping center, which is part of the general commercial category along with highway service uses such a restaurants, hotels, and gas station. This district would allow a full range of use. There is substantial vacant commercial land in the developed area and in the growth area. Caution should be exercised in creating new commercial land in the growth area. Pressure should be placed on commercial areas to reinvest and modernize, rather than simply opening a new commercial area.



The boundaries of commercial with other land use areas, particularly residential areas, need to ensure that the residential neighborhoods are protected from nuisances that originate in the commercial areas. This is best achieved by requiring landscaped buffers between residential and commercial uses. The buffers can be designed to control visual impacts and even noise impacts. The visual impact is controlled by the degree to which the buffer is transparent (can be seen through) or opaque (cannot be seen through). There needs to be an assessment of the level of protection needed. Visually, opacities that range from 0.00 to 1.00 can determine the level of visual protection. With walls and berms, noise can be reduced, as well. In developing new zoning, the City and County will have to establish the level of protection to be afforded.

### 3.4.3 Business Park Development

What the real estate industry refers to as a business park is the primary attractor of new jobs offering good pay. The mix of land uses (office, wholesale, manufacturing, commercial lodging, and restaurant) is where much of the new business jobs are located across the nation. The business park is intended to provide locations for businesses that have pride in the setting where they locate. The Paducah-McCracken County Information Age Park (IAP) is only partially developed and will need expansion due to the amount of floodplain on the site. In addition to the traditional downtown, this expanded Park is the primary area where these types of businesses should be located. New areas that compete with this should not be permitted until the expanded area is filling and new areas are needed. The plan shows expansion of the IAP to the west, which will keep business park activity concentrated here in proximity to the airport. More jobs near the airport will encourage greater use of the airport. More enplanements at the airport will provide an incentive for more flights.

This district should permit buildings with floor area ratios of 0.60, which can only be achieved with structured parking and buildings of five stories. This permits major office developers to consider a compact building with an abundance of landscaped areas. The quality possible with this type of maximum development is much desired because it then serves as an attractor to other businesses. The more intensive development permitted, the higher the probability for higher utilization of this land, which is ideally located and already served with needed utilities.

### 3.4.4 Industrial Development

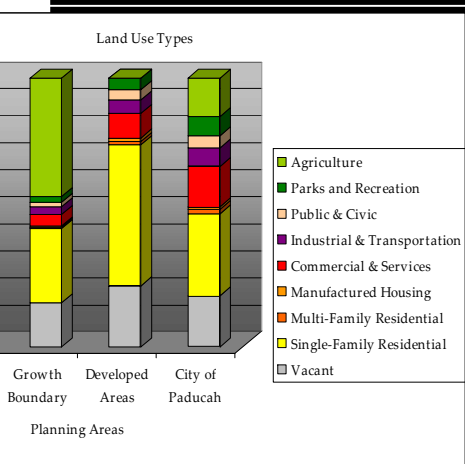
There are two major future industrial areas. The first is on the west side of the I-24 Bridge over the Ohio River. This site has water, rail, and interstate access. The intermodal opportunities and ability to provide needed water and sewer make this an excellent site for industry, warehousing, and manufacturing uses where river or rail access is critical. The second site is the United States Enrichment Corporation (USEC) land. While technically an existing or developed site, the nature of the site and its clean-up mean that it is a long-term possibility for manufacturing development that needs to be recognized.

There are also significant areas of redevelopable industrial land within the City. It does not make sense to plan for additional areas of industrial land. This is a shrinking portion of the nation’s economy. The multi-modal site is a

rational selection because such locations are rare in the country and because it is not dependent on heavy industry, but can capitalize on the movement of goods. It represents a site that has great potential and should be zoned properly and serviced so that there are no hurdles to clear if a prospective user comes to the City or County.

The USEC site must be cleaned up. It, too, has services available to it. The clean up is a Federal responsibility, so site preparation can largely be achieved by non-local funds. It has both road and rail access with nearly unlimited power readily available. While it is unlikely that this site would be available until the latter part of the planning period, it makes sense to plan for manufacturing development on the site.

Figure 3.9, Land Use Types



## 3.5 EXISTING CHARACTER

Map 3.2, **Existing Land Use and Floodplains**, is a map delineating the existing use of land within the City of Paducah and McCracken County. A detailed description of each future character type is provided in **Section 3.5, Future Character**. **Figure 3.9, Land Use Types**, illustrates a comparison of the land uses in each of the different planning areas. The land use information on the map is also displayed in bar chart format, but both assist in explaining the land use trends in the different planning areas.

In McCracken County, the predominant land uses are Agricultural (43 percent) and Single-Family Residential (12 percent). There are also found in much smaller quantities: Vacant (7 percent), Multi-Family Residential (<1 percent), Manufactured Housing (<1 percent), Commercial & Services (2 percent), Manufacturing & Transportation (2 percent), Public & Civic (2 percent), and Parks & Recreation (1 percent).

The area within the Growth Boundary changes from the predominantly rural character of McCracken County to a mix of rural and residential. The Growth Boundary area land uses consist of Agricultural (43 percent), Single-Family Residential (27 percent), and Vacant (16 percent). Other uses include: Multi-Family Residential (<1 percent), Manufactured Housing (<1 percent), Commercial & Services (4 percent), Manufacturing & Transportation (5 percent), Public & Civic (2 percent), and Parks & Recreation (2 percent).

Land uses within the Developed Area are notably different from the predominantly rural character of McCracken County and the projected Growth Area. This land use is a mix of all land uses. The Growth Boundary area land uses consist of Agricultural (43 percent), Single-Family Residential (27 percent), and Vacant (16 percent). Other uses include: Multi-Family Residential (<1 percent), Manufactured Housing (<1 percent), Commercial & Services (9 percent), Manufacturing & Transportation (5 percent), Public & Civic (4 percent), and Parks & Recreation (4 percent). A very small portion of the Developed Area land use is actually outside the Growth Boundary, as reflected in Map 3.2, Existing Land Use and Floodplain. These developments are already clustered in certain areas throughout the county and this inclusion in the Developed Areas category recognizes existing developing patterns. Figure 3.10, Developed Areas Land Use, shows that the Developed Areas outside the Growth Boundary are primarily residential in nature and, in fact, a very small portion of the Developed Area category.

The City of Paducah land use reflects the more urban character of McCracken County as a heterogeneous collection of Single-Family Residential (12 percent), Vacant (18 percent), and Agriculture and Forest (18 percent). The apparent forest category is mostly floodplain along the Ohio River and agriculture in the floodplain of the Information Age Park. Other land uses include: Multi-Family Residential (2 percent), Manufactured Housing (<1 percent), Commercial & Services (14 percent), Manufacturing & Transportation (6 percent), Public & Civic (5 percent), and Parks & Recreation (6 percent). This mix is typical of urban centers since it contains a higher

Figure 3.10, Developed Areas Land Use

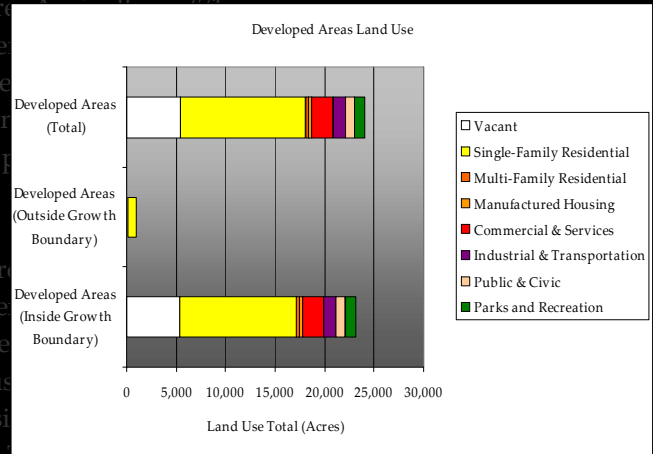
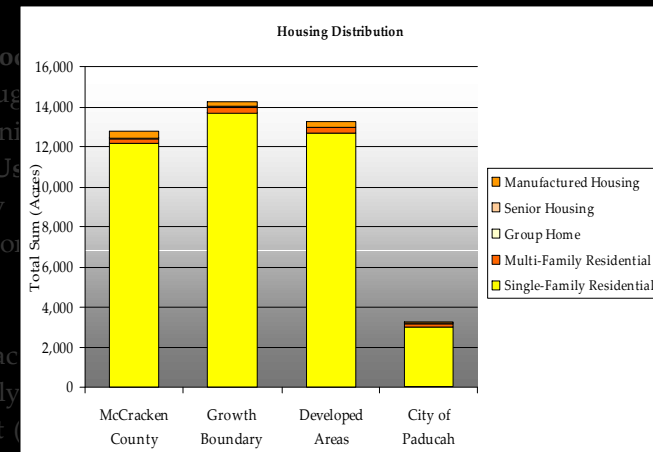
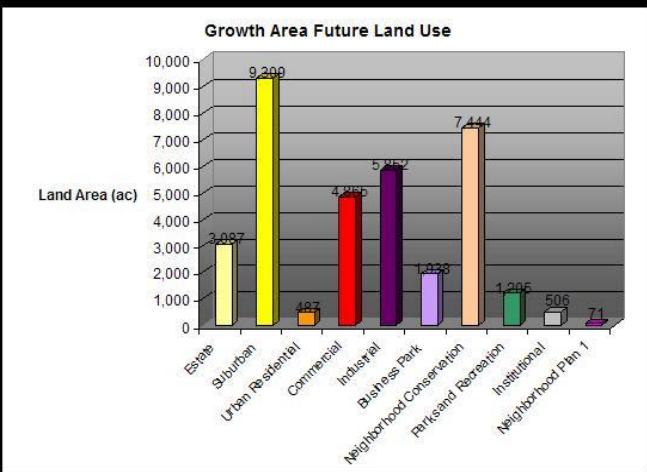


Figure 3.11, Housing Distribution



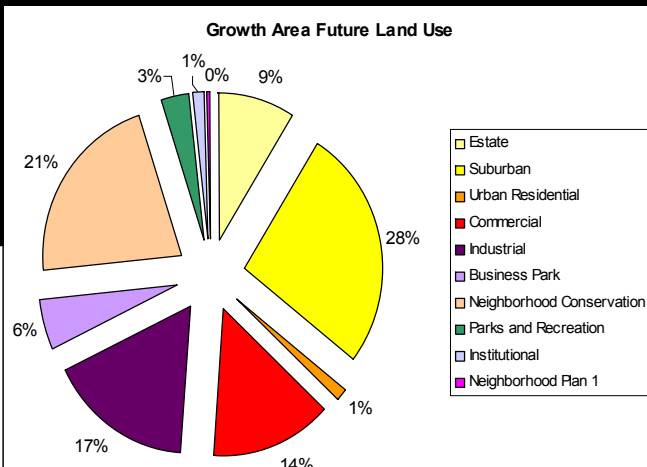
portion of businesses and denser residential areas. However, the abundance of vacant parcels (2,690 parcels) indicates both a challenge and an opportunity to the City of Paducah. **Figure 3.11, Housing Distribution**, illustrates two trends in McCracken County and Paducah: the presence of a predominant Single-Family Residential Land Use for housing unit choice and very low-density residential development within the County and Growth Areas. Although Paducah houses 41% of the population, it uses only a fraction of the available land area. This implies that areas of McCracken County outside the Paducah City limits are being populated by sprawling, low-density development over a very wide area.

Figure 3.12, Growth Area Future Land Use



**3.6 FUTURE CHARACTER**

The future character of Paducah and McCracken County is based upon estimates of land use changes within the urban services boundary. This future community character assumes that every parcel will eventually be developed in the next 20 years although this may not, in fact, be the case. As stated previously, there will be more land available for development than any future market demand and many areas within the future growth area may remain in an undeveloped state for many years. **Map 3.3, Growth Area Future Land Use Map**, illustrates the predicted community character of McCracken County and Paducah. **Map 3.4, Paducah and McCracken County Future Land Use**, focuses on the same community character data, but emphasizes the area within the growth boundary.



The future community character for the entire growth area will largely resemble the current land use conditions as charted in **Figure 3.12, Growth Area Future Land Use**. In both the existing and proposed potential uses will be the majority of the land area. In the future, this includes uses of 3,087 acres as Estate (9 percent), 9,309 acres as Suburban (28 percent), 487 acres as Urban Residential (1 percent), and 7,444 acres as Neighborhood Conservation (21 percent).

There will also be significant portions of Industrial and Commercial character types, as well as smaller areas devoted to Business Parks, Parks and Recreation, Institutional, and Neighborhood Plan 1. These land areas will include 4,865 acres as Commercial (14 percent), 5,852 acres as Industrial (17 percent), 1,938 acres as Business Park (6 percent), 506 acres as Institutional (1 percent), 1,205 acres as Parks & Recreation (3 percent), and 71 acres as Neighborhood Plan 1 (<1 percent).

## **3.7** IMPLEMENTATION

The land use and appearance portion of the plan relies very heavily on zoning and subdivision regulations. While there are some things that the City or County can do beyond adopting regulations, these are the primary tools. The land use and appearance is created, development by development, and regulations controlling appearance is needed to guide the various developers. Improving landscaping and getting better signage regulations are among the most important elements for non-residential areas. Greater flexibility and incentives to cluster are important for residential area.

### 3.7.1 Amend Zoning Map

The land use map shows the anticipated land use 20 years into the future. It is strongly influenced by the growth management element of the plan, which limits the growth area where most new development can be predicted to occur. There are two approaches to implementation. The first calls for rezoning the community in conformance with the land use plan. The second approach relies on the landowner to request rezoning.

The present Paducah zoning ordinance has 23 zoning districts. If land is planned and zoned for a future use, the landowner is given clear, unambiguous guidance on what is desired. If it is the landowner's responsibility to request a zoning change to conform to the plan, it is predictable that they will look to what they want to build. By comprehensive rezoning for 20 years growth, the need for zoning changes will be reduced. The number of districts in the City almost ensures that the majority of the rezonings will not follow the plan. There are seven business and commercial zones, in addition to the historic commercial area. A land use plan cannot successfully plan for seven areas; the land available for development at any time would not match the needs of the developer. Inevitably, the developers will look for the best available property and seek a zoning change. The

County code adds six more districts. These districts have different standards from the City code.

Within a year of adoption of this plan, it is a recommendation of this plan that the County should amend the zoning map and districts to implement the rural area portion of the land use map. Additionally the City and County should adopt a joint code to follow in 2008. This gives the best guidance and will best enable the City and County to follow the plan.

**3.7.2 Reduce the Number of Zoning Districts**

As previously discussed, there are 29 zoning districts in the two zoning ordinances. The Comprehensive Plan uses only 10 land use types. When

there are too many zoning districts, there is an incentive for private landowners to seek incremental zoning changes for residential development. If they can get zoned to a higher density, they increase the value of their property. The current level of districts in City and County combined is not too bad. Some consolidation is needed. The available districts should be very different in character so there is no incentive to seek incremental changes, but, rather, ones that result in different characters.

For nonresidential districts, the issue is whether the number of districts has any value. If a strip of highway has several different commercial zoning categories

along it, there is real question as to whether this does anything more that require landowners to seek zoning changes. The entire strip may back to residential areas, so bufferyards, rather than zoning designation, are needed

**Table 3.2, Planning and Zoning Districts**

Planning Area	Primary Use	Plan Districts	Existing Zoning Districts
<b>Developed Area</b>	Residential	Neighborhood Conservation	R1, R2, R3, R4, AG, RR, UR existing or nonconforming
		Suburban, Moderate	R1, R2, UR
		Urban	R3, R4, MR
	Commercial	Central Business District	B2
General Business		B1, B3, C	
Manufacturing	Manufacturing	M2, M3, MH	
	Business Park	M1, ML	
	Estate	AG, RR	
<b>Growth Area</b>	Residential	Suburban, Low	R1
		Suburban, Moderate	R2, UR
	Commercial	Neighborhood Conservation	R1, R2, R3, R4, AG, RR, UR existing or nonconforming
Central Business		B2	
General Business		B1, B3, C	
Manufacturing		M2, M3, MH	
<b>Holding Zone</b>	Residential	Business Park	M1, ML
		Rural	AG
	Neighborhood Conservation	AG nonconforming	

Source: Kenedig Keast Collaborative



to achieve the protection. There need be only two or three commercial districts – the CBD, general commercial, and, possibly, neighborhood commercial. Neighborhood commercial is intended to provide small-scale commercial that blends with the neighborhood.

In **Table 3.2, Planning and Zoning Districts**, the land use districts of this plan are listed, along with the current districts. Within the next year, the City and County should amend their zoning codes to bring them into conformance with this plan. There has been concern voiced that this should not be done until the City and County merge their planning and zoning. That is not true; it is possible to have a common zoning ordinance in which some districts are used only in the County and others only in the City. For those districts that are unique to County and City – rural and CBD, for example – the purpose statement of those districts would clearly prohibit their use in the other. The administrative section of the code can effectively deal with any procedural differences.

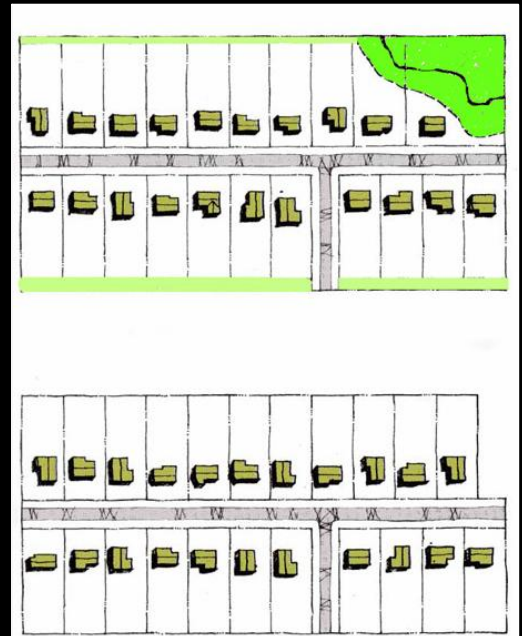
### 3.7.3 Joint City-County Planning

The City and County should ultimately merge the planning responsibilities, which would provide full-time planning staff for both. The use of zoning districts that implement the plan is essential to long-term ease of implementation and trivializes any development-related differences. The City and County are one community in terms of economics and economic development. Natural features, such as floodplains, are not affected by political jurisdiction lines. Actions taken in one community can have impacts on the adjoining residents in the other. For this reason, common implementation and enforcement of the zoning and subdivision regulations makes sense. Within the next five years, the administration of the codes should be combined.

### 3.7.4 Flexible Zoning

The zoning in both City and County is based on rigid lists of uses and a minimum lot area and dimensional requirement. The landowner/developer is interested in maximizing the value of the development. The government interest is in quality development and protecting the health and safety of its citizens. If a site has floodplains, the rigidity of zoning forces a loss of density if development is restricted in the floodplain. Much the same occurs

Figure 3.13, Standard Lot Design



if the site is irregularly shaped or is very small. The term inefficiency describes or measures the degree to which a development can reach the zoned density. As is shown in **Figure 3.13, Standard Lot Design**, it does not take much to create significant inefficiencies.

The bottom illustration shows 100 percent efficiency – each lot is exactly the minimum area and width. To provide a stub street, it was necessary to have an irregular shape or the end lot would have been larger than the minimum. If the site were 25 feet wider, each lot would be larger than the minimum, as shown in green on the top illustration, which made the site only 93 percent efficient. Add in floodplain, and the efficiency drops to 85 percent – a very significant reduction in density. Inefficiency puts economic pressure on the developer to ignore natural resources and destroy trees or other elements, assets that increase value, in order to maximize the number of units.

The rigidity for residential development can be eliminated by permitting clustering as a matter of right. The residential districts envisioned in this chapter depend on efficiency being promoted by making clustering a permitted use with specific standards. This avoids the uncertainty and administrative hassle of planned unit developments that make it costly to process. It also eliminates negotiation, which works to the disadvantage of government and results in less than optimal plans.

3.7.5 Landscaping

Figure 3.14, Mature Street Trees



The native landscape of McCracken County and western Kentucky is that of forested land, where trees have been re-grown or preserved. The developed areas of the City and County are very attractive. Trees that arch over streets or shelter homes are wonderful residential environments (Figure 3.14). The City has recently adopted landscape regulations; the County needs them, as well. Two types of residential landscape are needed – street trees and on-lot landscaping.

The street tree is very important, as can be seen in **Figure 3.14, Mature Street Trees**, along Jefferson Street. The mature trees between the curb and the sidewalk are far more effective than the young trees in the median. It is important to preserve existing trees in new development,

rather than clearing the site through mass grading. The City and County zoning ordinances' rigid minimum lot size and minimum frontage requirements create an economic pressure to clear the site. Since a new tree will take 30 or more years to reach a size that approaches that of a mature tree, it is much better to preserve existing trees. Clustering allows preservation without any economic penalty to the landowner or developer.

**Figure 3.15, No Street Trees**, and **Figure 3.16, Young Street Trees**, show a direct comparison between a street where large street trees are about 10 years old and a much older subdivision that lacks both street trees and sidewalks. The trees provide a far more suburban environment where houses and street are softened and put in scale by the landscaping. With houses enclosing the street (Figure 3.15), the character is more urban because the buildings define space, rather than vegetation. In Figure 3.16, Young Street Trees, the street trees define the street and screen the view of the upper half of the homes.

This can be further enhanced by landscaping the yards, especially the front yards. As houses have become larger (in 2000, they were more than double the size of homes in 1950), it becomes increasingly important to landscape both street and yard. The trees in Figure 3.16, Young Street Trees, have had about 10 years to reach their current height. These residential units are two-story units, while those in Figure 3.15, No Street Trees, are only one story in height. The sense of enclosure would be much greater if the units were two-story units, as is becoming increasingly common in Paducah and McCracken County.

The ability to preserve of one acre or more, preserving trees is far easier because the house, septic system, and driveway take up a smaller portion of the lot area. This leaves more room for preserving existing trees. Flexibility to use a building pad, rather than rigid setbacks, can also make it easier to preserve trees on large lots. In clustering smaller lots, more care is needed in the original design of the development to preserve trees. This allows open space with forest to be preserved so landscaping does not have to carry the

Figure 3.15, No Street Trees



Figure 3.16, Young Street Trees



burden. The mature tree has a far more powerful effect than landscaping for the character of the development.

In commercial, office, and manufacturing areas, street trees are every bit as important as they are in residential. Because nonresidential sites are all mass-graded, all one sees in most developments is parking and buildings. In the downtown, where the buildings are built to the sidewalk line, a true urban character is created, which is very important. However, even downtown appearances are affected when building mass is softened by the street trees that have recently been replanted.

Parking lots also need landscaping, which accomplishes two things. It breaks up the expanse of parking, making it more attractive, and modifies the heating effect of parking areas. It is possible to save large mature trees in nonresidential developments. It is easiest in office or business parks where the campus look is highly desired. However, as **Figure 3.17, Tree Screening of Commercial Site**, illustrates, even big boxes will protect trees that add to the character of the area if the local government insists. With the character of the County and City being heavily influenced by larger mature trees, the preservation of trees along the street and in front of commercial buildings would be an easy way to enhance the identity and unique character of the area. This would enhance the attractiveness of both the tourism and regional retail sectors.

Within a year of the adoption of this Plan, the City and County should conduct a review of existing landscape requirements and develop better, more comprehensive standards. It should be noted that the Urban Land Institute (*Value*) studied the impact of landscaping and design on commercial properties and indicated that the properties with the highest qualities of design and their tenants longer, were easier to get approved by local government. It is clear that design actually contributes to a development's

Figure 3.17, Tree Screening of Commercial Site



### 3.7.6 Signs

Uncontrolled signage, lighting, and corporate architecture contribute to a loss of character and identity. In many places in the City and County, the commercial areas look like strip commercial nearly anywhere in the country. **Figure 3.18, Existing Arterial Signage**, is a sample of the appearance of most arterial roads in the area. It is first important to note the trees in the background. If they were in the foreground, as in Figure 3.17, Tree Screening of Commercial Site, the character would be very different.

The City and County, working with the Greater Paducah Economic Development Corporation and the Chamber of Commerce, should develop a program for improving signage. It should provide for monument signs and controlled total sign area to reduce visual clutter and make it easier to find destinations. In addition, a readable address number should be required. The regulations should be accompanied with an amortization requirement with the City and County working with the businesses to take down nonconforming signs when the amortization period expires.

A joint program to make improvements would greatly enhance the area's character and should be developed within two years of adoption of the Plan. The amortization should be completed within ten years of adoption of the Plan.

Uncontrolled lighting fixtures not only deteriorate the experience in commercial areas, but the light and glare spillover into residential areas is a major land use conflict (**Figure 3.19, Light Spillover**) and one that is easy to correct. Nearly all lighting fixtures have shields that can be applied to direct the light to the desired areas. These can be retrofitted, and the standard should be no more than 0.1 foot candles on the property line, with shielding so that the light source is not visible off property. Because it is both a benefit to the residential areas and the general appearance of the commercial area, it is particularly important and should be done within one year after adoption of the Plan.

In the past several decades, the entire commercial building has become a sign, with standard colors and detailing. Again, this takes away from local and

Figure 3.19, Light Spillover



Land Use  
Figure 3.20, Home Depot



Figure 3.21, McDonald's



Figure 3.22, Different Facades



regional character. There are communities that have insisted that corporate buildings be built to fit into the context of the development as a whole or to the local or regional character. **Figure 3.20, Home Depot**, and **Figure 3.21, McDonald's**, show that both big boxes and chains with much smaller buildings can make their identity known to customers even when the architecture is unique. In Figure 3.20, Home Depot, the Home Depot uses a brick façade with articulations and some landscaping in the parking lot to create an identity that can fit the community. The customer can still read the store's name on the wall sign. In addition, a monument sign at the road would also make the use easy to find.

**Figure 3.21, McDonald's**, has an architecture that is totally different from any of the standard models. The trees also permit this use to more closely resemble the residential architecture of the surrounding community. Colors, shape, and even the signage are non-standard designs. This might be a good model for McCracken County and Paducah because the preservation of a couple of trees and landscaping would fit with the general community character. In **Figure 3.22, Different Facades**, the architecture is a standard model with different exterior architectural treatment of the facades and signage. This example demonstrates how the building is designed to match the shopping center's standards, which in turn, mimic the color of the surrounding rock formations. This is the shopping center or planned development approach where the center sets a high design standard with which all the tenants must comply. While the style is not one that would be desired, it demonstrates the power of requiring shopping centers to set design standards that give the center a unique identity. The signage and architecture are controlled by the center for both the main center and the buildings on the out parcels.

The City and County should, within two years of adoption of this plan, adopt regulations that control corporate architecture to enhance the character of the community. These should be flexible, allowing individual building design, local or regional architectural styles, and a combination of architecture and landscaping so that the uses are attractive buildings.

*Planning in advance for thoroughfare development is important for the City and County in preparing to meet future travel demands and ensuring safe and orderly movement of traffic within and through neighborhoods and throughout the region. It is also important in achieving economic development objectives to improve access to and from the area, whether by air, rail, bus, or interstate highways. A well-planned and regularly maintained transportation system also contributes to character and appearance, as well as to the quality of life of residents.*

# Transportation

## 4.1 INTRODUCTION

The transportation system is made up of a network of roads ranging from regional roads to local streets. Regional roads connect Paducah and McCracken County to their neighboring counties (Ballard, Carlisle, Graves and Marshall), the rest of Kentucky, and the multi-state region. Local streets provide access to collector and arterial roads that link neighborhoods with one another and to employment areas, business districts, schools, government buildings, community activity centers, and parks. Beyond the surface transportation system, transport is also provided via commercial and air cargo services, freight rail service, waterborne transport, and trails and sidewalks. Together, these individual modes form a comprehensive, interconnected urban and rural transportation system.

Primary roadway access to the County and City is by way of Interstate 24, which connects through Nashville to Chattanooga, Tennessee on the south and to Interstate 57 in southern Illinois. This interstate provides connections to I-65 and I-40 in Nashville, I-64 and I-57 in southern Illinois. Each of these interstate corridors extends throughout the eastern United States, eventually connecting to other interstates providing access across the country and to Canada and Mexico. In addition to I-24, there are numerous state routes providing local and regional access, including KY 305/Cairo Road, KY 994/Old Mayfield Road, KY 998/Olivet Church Road, KY 1286/Friendship Road, KY 1954/John L. Puryear Drive, and KY 218/Husbands Road.

A county wide transportation plan was completed in 2002. The transportation element of the Paducah and McCracken County

### Planning Factors

A set of broad objectives defined in Federal legislation to be considered in the planning process include:

- ◆ Support the economic vitality of the area;
- ◆ Increase the safety and security of the transportation system for motorized and non-motorized users;
- ◆ Increase the accessibility and mobility options available to people and freight;
- ◆ Protect and enhance the environment, promote energy conservation, and improve quality of life;
- ◆ Enhance the integration and connectivity across and between modes;
- ◆ Promote efficient system management and operation; and
- ◆ Emphasize the preservation of the existing system.



Comprehensive Plan establishes a system to accommodate local and regional travel demand through the Year 2020 and beyond and in the adoption of this plan the 2002 plan should formally be adopted. It is closely coordinated with each of the other elements of the plan to create a strong and successful area-wide transportation network. As a reflection of today's system of travel, the transportation element has emphasis on the street and highway system, yet also addresses air and freight transportation, bicycling, and walking. The principal aim of transportation planning is to ensure safe and efficient movement of people and goods. To achieve this end, this element includes a Thoroughfare Plan and goals, objectives, and actions to support it, which provides a long-term plan for developing an overall system of thoroughfares for the City and County. Particularly, this plan is to be used as a guide for securing needed rights-of-way and upgrading and extending the network of streets, roads, and highways in an orderly and timely fashion.

**4.2 FOCUS ON ISSUES**

The participation process described in *Section 1.5, Participation in Plan Development* contributed to the identification of important issues relating to the transportation system in the County and City. The approach began as an open-ended forum for identifying any and all problems or concerns about the local and regional transportation system. This was achieved through small group interviews, tours with County and City staff, professional observations of the consultant, and the Citizens' Congress. The individual issues articulated by those persons who participated in the involvement process

were organized into the followed broad issue areas. While the issues are generalized in this discussion, the recommendations relate to specific focuses of the broader issues.

**4.2.1 Comprehensive street network for improved urban/rural mobility**

The transportation system is made up of a network of highways, major and minor arterial roadways, collector roadways, and local streets, each designed to serve a functional role in the overall system. The classification of roadways distinguishes the design and functional capacities of individual road links for moving traffic within and around the County and City. Each roadway

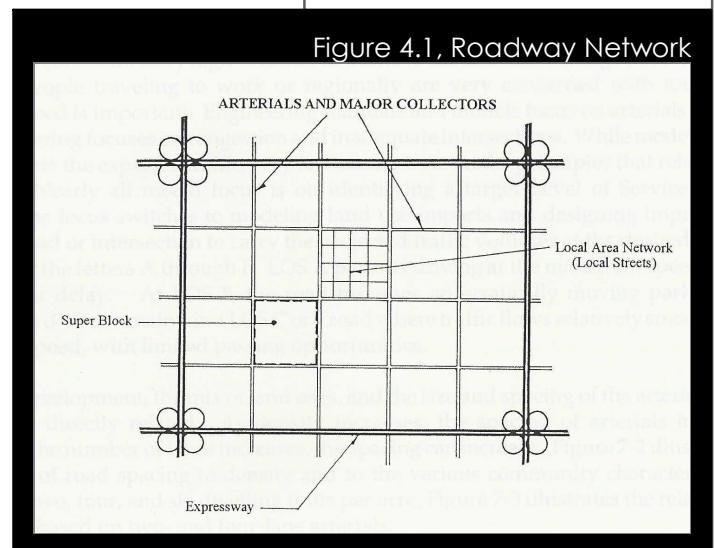
Residents who attended the Citizens' Congress contributed to identifying transportation issues.



connection contributes to the efficiency and effectiveness of the overall system, making each individual link important. Therefore, discontinuous and staggered roadways and those not yet extended or improved create an incomplete network, causing traffic to be re-routed onto roadways that are not designed to function at a higher capacity. This creates congested conditions and leads to increased accident rates and less than optimal travel times.

Within the urbanized area, the arterial street network is well established, particularly in the original town area where there is a traditional street grid. Federal and state roadways, such as KY 305//Cairo Road, U.S. 60, U.S. 62, U.S. 45, KY 994/Old Mayfield Road/16<sup>th</sup> Street, and KY 1954/John L. Puryear Drive, each extend radially from downtown and the riverfront, intersect I-24, and continue into and across the County. As a result of the traditional street grid, there is a dense network of streets forming a hierarchical thoroughfare system, collecting traffic from local residential streets and distributing it to collector and arterial roadways and onto the local and regional highway system.

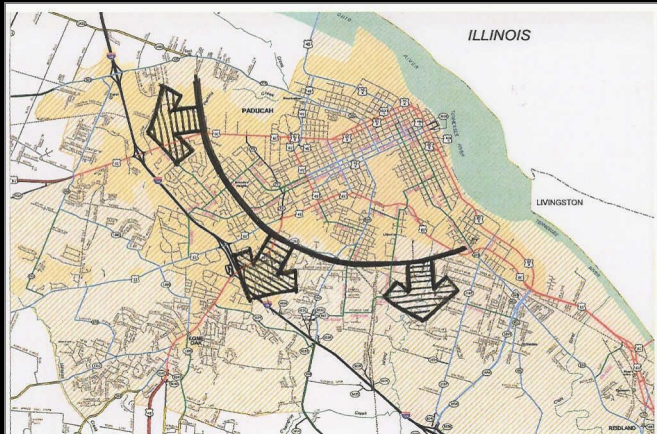
As shown in **Figure 4.1, Roadway Network**, the traditional approach to thoroughfare planning in much of the United States is to form a grid of roadways, with a hierarchy of functional service including expressways, arterials, collectors, and local streets. The highest level of functional service (expressways and interstates) is intended for high speed, uninterrupted regional travel with the greatest spacing between roadways. The only access to expressways is via controlled interchanges. The arterial street system commonly includes major and minor arterials, with design capacities, travel speed, and spacing commensurate with its intended functional role. Arterial roadways are intended for relatively uninterrupted, longer travel distances at higher speeds. To maintain this function it is essential for there to be access limitations to preserve the traffic carrying capacity of the roadway. Situations where there are too many property access points, together with local and collector street intersections (such as that around the Kentucky Oaks Mall), impede traffic flows, thereby creating congested conditions. Collector roadways are designed to collect traffic from local neighborhood streets and distribute it to the arterial street network. They, too, are intended to efficiently convey traffic



without significant interruptions. Driveway access, regular spacing of local streets, and major land uses with direct access serve to lessen their capacity and functional role in the thoroughfare system. The role of local streets is to provide access to individual properties. They are narrower in width and designed for slower speeds to ensure safe neighborhood traveling conditions.

The arterial street network forms superblocks, which contain a dense grid of local streets and collector roadways. A typical trip to work or the grocery store is assumed to begin on a local street leading to a collector roadway and on to the arterial street system. Therefore, a network works most efficiently when there is a high degree of connectivity. However, there are natural, historic, and man-made constraints to formation of a perfect grid. Examples include rivers, streams, and wetlands; railroads; existing development; and topographic considerations. In the case of McCracken County, the road pattern was a farm-to-market road system established when the area was settled in the early 1800s, and followed a meandering pattern that responded to topography and property ownership. That pattern represents constraints and forms barriers to creating an effective network. The City was laid out in a series of grids by surveyors, while the farm-to-market road pattern is apparent in the peripheral and outlying areas. The challenge is to convert the farm-to-market pattern to an effective urban system as growth moves into the County. In many instances, existing development or large ownership tracts limit or deny – without expensive and difficult decisions to acquire property for rights-of-way – opportunities for re-aligning and extending roads that are now functioning well beyond their design capacities. These roads are strained due to the amount of suburban fringe development and the associated volumes of traffic. This is critical for those roads forced to serve as collector and arterial roads.

Recent development outside of the original town area reflects a curvilinear street network.



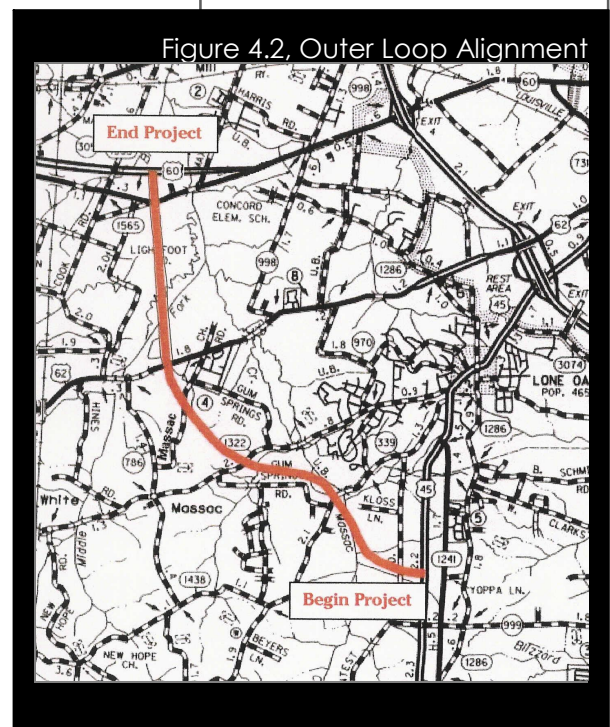
Of significance to an efficient system is the continuity of the street network. The continuity of the roadway network is well defined in the urbanized area – generally east of Interstate 24 - by nature of the arterial roads and dense grid of collector and local residential streets. This network is less defined, however, within the band of more recent developments that generally encircle the original town area and in the developing periphery where subdivisions are being designed with curvilinear street patterns, cul-de-sacs, and looping, discontinuous collector streets. To result in a functional thoroughfare system, it is essential for development to

occur in a well-planned manner, ensuring adequate roadway continuity, integration with the existing street network, and formation of a network grid.

The market for new homes has led to the design of subdivisions with curvilinear streets and cul-de-sacs, which is desirable due to less through-traffic, generally larger lots, and a sense of increased privacy. From the perspective of an efficient thoroughfare system, this street system is not fundamentally flawed as long as it is within a superblock framework. There are two components that are essential, the framework of arterial and collectors that create super blocks and connectivity within the super block. Maintaining and improving the arterial and collectors is one component that is critical, because breaking any links results in congestion. Maintaining connectivity within super blocks reduces pressure on the system. A trip to a friends house within the super block should not force people out to the collector or arterial system. Cul-de-sacs are fine internally, but not when they lead off the major roads. One thing to be avoided at all costs is gated communities. These breakdown connectivity as well as damage neighboring.

For the urbanized area, I-24 serves as a circumferential roadway that effectively conveys traffic around the periphery of the community. In the outlying developing area of the County, however, there are no circumferential roads directly connecting KY 305, U.S. 60, U.S. 62, and U.S. 45. The proposed outer loop project-Phase 1, displayed in **Figure 4.2, Outer Loop Alignment**, extending from U.S. 60 adjacent to the west of the Information Age Business Park south and east across U.S. 62, KY 1322, and KY 339 to U.S. 45 south of Lone Oak would accomplish this mobility objective for the County. If extended north to KY 305 and south back to I-24 connecting to KY 1954/John L. Puryear Drive, this would further improve mobility for County residents. The outer loop alone, however, will not solve the current mobility issues in the County. This roadway must be integrated into the existing roadway network, meaning existing roads must be re-aligned and/or extended to intersect the loop, thereby creating a series of superblocks. This will be a difficult task considering both fiscal and physical constraints.

### 4.2.2 Requisite coordination of land use and transportation plans



**Level of Service (LOS)** is a qualitative rating of the effectiveness of a roadway in serving traffic, in terms of operating conditions such as traffic flow, using an alphabetical scale from A to F with A being the best (free flow) and F being the worst (stopped traffic)

**Concurrency** requirements have been enacted by many local and state governments to ensure that public services and facilities are not overburdened by the impacts of new development. Concurrency requirements can cover any number of required public services or facilities, including roads, as well as police services, fire protection services, schools, parks, water and sewer services, and solid waste removal. By instituting concurrency requirements, there may be a more effective link of the approval of development applications to both long-term planning and the provision of public services and facilities. In this way, communities and new residents are protected against the potential that developments reach completion before adequate services and facilities are available.

The size and spacing of the collector and arterial road network is directly attributable to the use and character of land. As density increases, the spacing of roads must be closer and their functional role and capacity designed to convey the volume of traffic generated by the abutting land uses. Therefore, in densely developing and mixed-use areas, there must also be a dense grid of thoroughfares. Comparatively, the spacing and width of roadway pavement and right-of-way may be much less in areas planned for very low density, such as large lot residential estates, rural countryside development, and agricultural areas. Without a plan and implementing mechanism to effectively manage the use and character of development, it is difficult – if not impossible – to ensure an adequate thoroughfare system concurrent with new development.

Until recent Federal legislation recognized the inherent relationship between land use and transportation, thoroughfare planning considered land use only as a means for quantifying trip generation rates and volumes, as well as roadway level of service. Therefore, the design of the thoroughfare system generally neglected to consider any community objectives other than transportation. Developing a land use and future growth plan simultaneous with the transportation plan allows the thoroughfare network to be designed and rights-of-way identified commensurate with the traffic volumes generated by planned land uses. It also enables the City and County to program its capital improvements to occur concurrent with development within designated preferred growth areas. In effect, this allows design and construction of the road system to be timed and sequenced according to a regional growth plan.

The established and continuing pattern of land use is an increasing intensification of development outward from the urbanized area. In fact, since 1960, the County’s population has been increasing, while the population in the City has decreased from 34,479 persons in 1960 to 26,275 persons in 2000. This shift in population has also shifted local markets, causing commercial development to locate in closer proximity to the growing areas. The Kentucky Oaks Mall and its surrounding retail development, for instance, is now located more toward the center of the population base. Since commercial development is now more conveniently located for rural residents, it encourages the decision to relocate to the outlying areas. As more population continues to move farther out, there is increased demand for other conveniences, causing strip commercial development along many of the roadway corridors. This prevailing development pattern emphasizes the need

to reconcile the availability and adequacy of infrastructure with new development.

Thoroughfare system planning is the process to assure development of the most efficient and appropriate street system necessary to meet existing and future travel needs. The twin objective of a thoroughfare plan is to identify, in advance, major roads and to ensure that adequate right-of-way is preserved on appropriate alignments and of sufficient width to allow the orderly and efficient expansion and improvement of the thoroughfare system. Proposed alignments are shown for planned new roadways and roadway extensions, but actual alignments will vary depending on the design and layout of development and necessary amendments to and refinement of the thoroughfare plan. Requirements for rights-of-way dedication and construction of street improvements should apply to all subdivisions of land within both the City and County.

Developing an adequate thoroughfare network for the future urbanized area is solely dependent upon the pattern, type, and character of future development and the degree of control imposed to manage it. In many instances, the existing rural road network is incapable of safely supporting increased capacity without substantial improvements, including additional right-of-way acquisition, pavement surface widening, shoulder and drainage improvements, and resolving existing alignment issues. Along roadways that have not yet exceeded the capacity threshold, there is an increment of additional volume that can be safely supported. Development beyond this threshold, however, poses a circumstance of overburdening the traffic carrying capacity and safety of the roadway network. In other words, without a mechanism to manage land use in the outlying areas – other than imposition of the subdivision regulations – the infrastructure system will become increasingly burdened, thereby further stretching the fiscal resources of the County. If a growth plan is adopted, allowing for market flexibility and achievement of economic development objectives, existing capacity deficiencies may be resolved and future problems may be avoided.

The thoroughfare, land use, and growth plans must be closely coordinated. Significant variation of either will have bearing, with multiple variations having a collective impact necessitating amendment. These plans are not intended to be static, but, rather, to be reviewed regularly and amended to account for necessary adjustments. Such variations, though, must warrant change and accomplish other objectives.

**“Walkability** is the cornerstone and key to an urban area’s efficient ground transportation. Every trip begins and ends with walking. Walking remains the cheapest form of transport for all people, and the construction of a walkable community provides the most affordable transportation system any community can plan, design, construct and maintain. Walkable communities put urban environments back on a scale for sustainability of resources (both natural and economic) and lead to more social interaction, physical fitness and diminished crime and other social problems. Walkable communities are more liveable communities and lead to whole, happy, healthy lives for

The land use and thoroughfare plans are implemented by the zoning and subdivision regulations of the City and County. Consistent standards and application of these regulations will be essential in plan implementation.

Development without sidewalks creates unsafe walking conditions for pedestrians.



4.2.3 Planning for improved pedestrian and bicycle mobility

Planning for pedestrian and bicycle mobility involves more than simply requiring sidewalks as part of the subdivision development process. While this is an integral part of becoming a more “walkable” community, in fact, the pattern of land use and connectivity of the street system have significant influence on the propensity of this travel choice. In other words, sidewalks that end at the edge of a neighborhood, are intermittent within the development, or do not offer convenient access to desirable destinations do not lead to regular use. Instead,

pedestrians will most often choose to drive or, alternatively, walk along the edge of the street where there is a continuous hard surface for walking or bicycling.

Through the citizen involvement process conducted during the reconnaissance and discovery phase of this planning process, there were numerous comments articulated by residents regarding the availability – or lack thereof - of sidewalks and pedestrian pathways throughout the City and County. In particular, there were comments made about the maintenance of sidewalks in “tired” areas of the community, missing sections in both new and old neighborhoods, waivers of the sidewalk requirements within County subdivisions, and a lack of opportunities for bicycling throughout the area. Residents expressed their preferences to see sidewalks required and constructed on both sides of all streets within the City and County; reconstructed and repaired sidewalks in the older sections of town; more greenways and linear linkages tying neighborhoods together and connecting to schools, parks, and activity centers; bike paths constructed with all new roadway projects, such as the proposed outer loop; and improved shoulders along each of the rural roads to accommodate distance cycling.

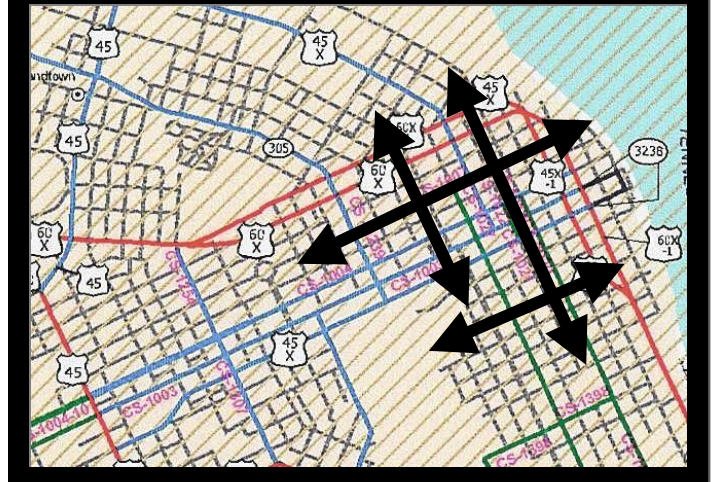
The City’s subdivision regulations require the subdivider to provide concrete sidewalks at least five feet wide and five inches thick on each side of the street

included with a plat submitted for approval, which must be within the right-of-way and constructed to the City's engineering standards. There are variance provisions in the case of an extreme hardship or due to peculiarities of the site where a departure from the regulations may be allowed by the Commission, as long as it does not destroy the intent of the requirement. The County's regulations also require sidewalks on both sides of streets, with the specifications of width and thickness of concrete dependent upon the type of development. The regulations allow for a waiver of the requirement by the Commission without any specified criteria. It was expressed by residents that waivers are commonly given for rural subdivisions. In addition to requirements for the construction of sidewalks, the regulations must include provisions for public access easements to provide connections to nearby sidewalks or trails. In this way, circuitous routes are not required to reach a sidewalk or trail adjacent to the next street.

The current County pattern of farm roads infilled with individual subdivision streets is difficult to tie together due to the physical separation and lack of linkages between subdivisions. As these areas begin to grow together, the system of sidewalks – where they exist - will begin to form a more complete pedestrian system. There will likely be missing links for periods of time where development either has occurred or will not occur for a myriad of reasons. An alternative growth pattern that results in a more compact form of development offers greater opportunity for connectivity and creation of a walkable community, consistent with the desires of those residents who participated in the involvement process.

Modern subdivision street patterns, such as those located west of Joe Clifton Drive and throughout the County, are auto-oriented compared to the community's older neighborhoods that have a traditional street grid pattern. The established neighborhoods accommodate cars, but offer enhanced mobility solutions for pedestrians. A grid pattern is dense and regular, allowing pedestrians several choices of routes to parks and other walking destinations. The older established neighborhoods offer a lesson toward creating walkable neighborhoods.

A traditional street grid is exemplified by the original town area within and around the Downtown.



**Traditional Neighborhood Development (TND)** includes a variety of housing types and land uses in a defined area. The variety of uses permits educational facilities, civic buildings, and commercial establishments to be located within walking distance of private homes. A TND is served by a network of paths, streets, and lanes suitable for

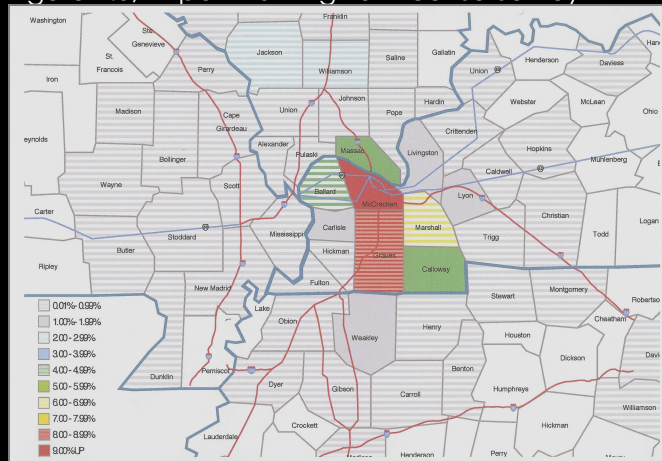


Traditional neighborhood development (TND), for instance, is a relatively new term that is returning the design of subdivisions to their traditional forms. Streets do not have to be on a rigid grid pattern; they do need to offer connectivity within super blocks and to local conveniences and destinations. Allowing a mixture of uses within a planned environment also leads to increased walking and bicycling. While curvilinear street patterns and cul-de-sacs provide interest and appeal to the homeowner, pedestrians have fewer choices of direct routes to destinations within or outside their subdivision. Rather, the pedestrian is left with the alternative of following streets that, at times, meander away from their destination. Similar to automobile traffic, pedestrians rely on a series of connecting paths to make their trips. These paths may include sidewalks, off-street trails and walkways, linear parks and connections, crosswalks, or any other form of linkage. Most importantly, the system of paths must be well-connected and continuous.

**4.2.4 Sustained and improved air transportation and cargo services**

Barkley Regional Airport is a significant contributor to the economy of Paducah and McCracken County. In fact, based on a recent study, it is estimated that the annual direct, indirect, and induced economic impacts generated by the airport total nearly \$26 million. This economic impact is the result of airline and general aviation passenger spending, employment of 160 persons with an annual payroll of \$3 million, and general aviation services such as aircraft servicing, maintenance, avionics, aircraft charter, flight instruction, and aircraft sales.

**Figure 4.3, Airport Parking Lot License Survey**



In addition to the local economic impact, the regional airport is also a valued asset for the region’s major employers. A recent survey revealed that roughly 60 percent of the largest employers utilize airline service as a part of their routine business functions. Additionally, 80 percent have customers or suppliers who use the airlines, and 50 percent use the air cargo and package express services for transporting business materials. Therefore, a reduction or loss of service would have a detrimental effect on the local and regional economies and employers.

Currently, there is one commercial airline provider, Northwest Airlinck connecting to Memphis, TN. and

AmericanConnection serving St. Louis, MO. Together these two airlines offer non-stop or one plane change service to 122 domestic and nine international destinations. Based on a survey, as shown in **Figure 4.3, Airport Parking Lot License Survey**, the market area of the airport reaches up to a 60-mile radius, representing a population of approximately 500,000 persons. This market area stretches an equal distance in each direction occupying portions of Illinois, Tennessee, Missouri, and Kentucky.

As with all regional airports, and especially during this time of uncertainty in the airline industry, there is a constant threat of reduced air service, loss of state and/or federal funding, and even possible closure. In fact, area cities that have lost all air service include Cairo, Sikeston, Murray, Union City, Dyersburg, Paris, Clarksville/Hopkinsville Ft. Campbell, and Bowling Green, among others. Since this plan started, American Airlines has stopped service to Barkley Regional Airport. Therefore, while increased service and reduced fares are desired by area residents and an objective for strengthening the economy,<sup>1</sup> an underlying goal – at least in the near- and mid-terms – is, at a minimum, to sustain a similar level of service. Of course, expansion or introduction of another commercial air provider with service to Detroit or another hub city location is preferred and continually being pursued.

With respect to the location of the airport, it is situated a sufficient distance from the City that encroachment by housing development has not emerged as an issue. However, if development patterns continue to move outward, this may become an increasing concern in the future. Particularly with the eventual construction of the outer loop, thereby improving mobility and travel times, development may begin to occur in closer proximity to the airport without a means for managing it.

The construction of the outer loop will generally improve access to the airport by way of a circumferential artery west of I-24. However, to aid better access, particularly for the residents of Graves, Marshall, and Calloway Counties to the south and east, there will need to be an improved, more direct route from the loop to the airport. There is roughly four miles

Figure 4.4, Current Airport Terminal



<sup>1</sup> Strategic Plan 2005 – 2010, March 2005

Paducah-McCracken County Riverport Authority



between the airport and the alignment of the loop.

Another issue that was cited by participants in the involvement process was the need for a new terminal building. The concerns expressed related to better and more efficient space, opportunities for expanded services and operations, and enhanced first impressions by visitors. As shown in **Figure 4.4, Current Airport Terminal**, the present terminal building was completed in 1953 and has been expanded on three separate occasions. The age of the structure alone signifies that it is nearing its useful life. Here again, though, is a limitation of funding for such a facility. It is estimated that a new terminal building and associated facilities would cost around \$17 million, with roughly \$8 million to \$10 million needed from local sources.

#### 4.2.5 Increasing multi-modal transportation opportunities

According to the City’s 2005 Policy Agenda, direction and land acquisition for a riverport container on barge facility is a high priority. It is also identified as a strategic planning principle to aid in the success of river-related businesses. Therefore, waterborne transportation is recognized as an economic development strategy, as well as for its importance to the local and regional multi-modal transportation system. From an economic perspective, Kentucky is the leading shipping state within the Ohio River Basin, with over 72 million tons of commodities worth over \$5.4 billion.<sup>2</sup>

The Paducah-McCracken County Riverport Authority is a full-service public terminal with on-site rail and truck service and capabilities for offloading, storage, packaging, or transport. As the nation’s northernmost ice-free riverport facility, movement of cargo can occur year-round. The port facility is located to provide easy access to I-24. It is served by 15 truck lines with nearby terminals and rail transport via CSX Transportation with support from Paducah & Louisville regional railroad. There are three dock facilities that can handle up to four barges. A variety of bulk, aggregate, and grain cargoes can be handled.

The port facility is located on the Tennessee River (between mile markers 1.3 and 2.1) and along Wayne Sullivan Drive in the southeastern quadrant of Paducah. It and other related and unrelated industrial activity areas are situated in reasonable near proximity to the downtown area. This location is generally necessary for exposure and access to the river, yet presents issues of

<sup>2</sup> Ohio River Navigation System, Outreach 2000

compatibility with downtown development. Increased development and expansion of this industrial area to accommodate container loading/off-loading and storage will heighten the issues concerning the compatibility of this intensive area with the use and character of downtown. Land use planning provisions will be necessary to mitigate environmental impacts.

Development of a riverport container on barge facility likely means increased barge traffic on the river, which may present conflict with recreational boat traffic. In fact, this issue was mentioned from the perspective of public safety and efficient barge and tug operations during the public participation process. Perhaps a competing objective is to expand the commercial and recreational focus of the downtown riverfront, meaning opportunity for more recreational boaters and infrastructure, such as a marina and docking facility. This is an issue that warrants more discussion and attention, with the outcomes to be determined in the Riverfront Masterplan.

A container port facility also likely means increased truck and rail traffic to both deliver and transport containers away from the terminal facility. Provisions for truck and hazardous materials routes will be necessary to ensure safe routing of industrial traffic. Since the materials transported by container are sometimes hazardous, there is a public safety perspective to be considered, as well. Handling of hazardous materials and chemicals may require additional training and possibly hazmat equipment and response vehicles. Here again, land use and transportation policy may be formulated to plan for and remedy the impacts of such industrial development.

**4.3 GOALS, OBJECTIVES, AND RECOMMENDATIONS**

The purpose of this section is to provide additional focus to the above issue statements in the form of goals, achievable objectives, and specific recommendations. The recommendations are a direct response to resolving the identified issues, including the general discussion above and more detailed interaction with City and County staff, City and County Planning Commissions, City Council, County Fiscal Court, and key stakeholders from throughout the County.

**GOAL 4.3.1 A transportation network for the City and County that allows safe and efficient movement of people and goods**

**Benefits of Thoroughfare Planning include:**

- Preserving adequate rights-of-way for future long-range transportation improvements.
- Minimizing the amount of land required for street and highway purposes.
- Identifying the functional role that each street should be designed to serve in order to promote and maintain the stability of traffic flow and land use patterns.
- Informing citizens of the streets that are intended to be developed as arterial and collector thoroughfares, so that private land use decisions can anticipate which streets will become major traffic facilities in the future.
- Providing information on thoroughfare improvement needs, which can be used to determine priorities and schedules in the Capital Improvement Program (CIP) and capital budget.
- Minimizing the negative impacts of street widening and construction on neighborhood areas by recognizing where future improvements may be needed and incorporating

**Table 4.1, Street Cross-Sections**

Classification	Right-of-Way	Pavement Width
<b>Arterial</b>		
- Principal	100'	48'
- Minor	80'	40'
<b>Collector</b>		
- Major	60'	40'
- Minor	60'	36'
- Rural	60'	32'
<b>Local Street</b>		
- Large lot	50'	24'
- Standard lot	50'	28'
- Rural	40'	20'

Source: Kendig Keast Collaborative

**Objective A:** Adopt a thoroughfare plan and roadway classifications to meet the current and projected future mobility needs of the City and County.

**Action 1:** Adopt and regularly reconsider and amend a thoroughfare plan for the City and the urbanizing portion of the County, which indicates a functional hierarchy of roadways. The classifications should include highways, principal and minor arterials, collectors, and local streets. A distinction may also be made for primary/major and secondary/minor collector roadways, as applicable. The thoroughfare plan will

show approximate alignments for planned new roadways and roadway extensions that must be considered in the platting of subdivisions, right-of-way preservation and dedication, and construction of collector and arterial roadways within the urbanizing area.

**Action 2:** Amend the right-of-way and pavement widths of the City and County subdivision regulations as shown in **Table 4.1, Street Cross-Sections**.

**Action 3:** Adopt a strict policy requiring collector/arterial roadway spacing to relate to density, as shown in **Table 4.2 Road Spacing and Density**. The actual spacing of the roads is subject to additional considerations. The presence of commercial use requires closer spacing. The spacing needs to be developed in this plan in coordination with land use. If areas are subject to change, closer road spacing should be used. One

problem that McCracken County faces that has caused problems across the nation is that most rural roads are classified as local streets because of very low traffic volumes and agricultural land uses. As the use changes, a local road converts to a collector or arterial. The thoroughfare plan must, therefore, envision 50 years of growth or build-out in designating the road classifications. Too often, communities create access and other problems that make collectors and arterials less functional because the road is treated as

**Table 4.2, Road Spacing and Density**

Lot Size	Gross Density	Road Spacing
One (1) acre	0.75 units/acre	1.75 miles
One-half (1/2) acre	1.38 units/acre	1.5 miles
One-third (1/3) acre	2.01 units/acre	1.0 mile
10,000 square feet	2.52 units/acre	0.7 mile
8,000 square feet	2.90 units/acre	0.5 mile
6,000 square feet	4.07 units/acre	0.4 mile

Source: Kendig Keast Collaborative

a local street. (Note: Conventional traffic analysis for level of service does not address the local residential street. During peak hours, one car per dwelling unit will be on a local street. At between 60 and 120 homes, the traffic becomes unacceptable to residents – one to two cars per minute.)

**Action 4:** Initiate a capital program of acquiring, by way of donation, dedication, or fee simple purchase, the necessary additional right-of-way along each roadway that is in non-compliance with the right-of-way standards adopted as part of the Comprehensive Plan. Such program should be prioritized using a volume to capacity (V/C) ratio. In this way, those roadway segments that are operating beyond their functional design capacity would be addressed as a high priority. It should be noted that the City of Paducah requires R-O-W dedication as part of the subdivision process. Subsequently, establish a capital improvement program (CIP) for widening and improving the priority road segments consistent with the adopted right-of-way and pavement standards. Alternatively, consider the use of traffic sheds to restrict development density commensurate with the existing roadway capacity. Refer to **Chapter Five, Growth Policies** for more information.

**Objective B:** Adopt consistent design standards for the City and County.

**Action 5:** Perform a comprehensive assessment and critique of the City and County subdivision regulations and engineering design standards to identify conflicts and differences. Subsequently, reconcile the two individual sets of standards into a single, unified land development code. Specifically, the standards should be substantially consistent within the urbanizing area. A distinction may be made to allow for rural development standards for the area beyond the defined urbanizing area, subject to appropriate development criteria and applicable zoning standards. Provisions that are particularly necessary to reconcile are the street cross-sections, access permits, required improvements, and plat submittal requirements.

**Action 6:** Adopt access management controls for the City and County, which should contain provisions for the number, location, and spacing of driveways; street intersections; medians and median openings; marginal access roads; turn lanes; and acceleration/deceleration lanes. Amend the subdivision regulations of the City and County, preferably within a unified code, to



Development clustering allows an estate setting with common points of access to adjacent roads.

**Preservation of right-of-way is important to:**

- Avoid costly acquisition of developed land and structures on planned alignments and, thereby, reduce commercial and residential displacements;
- Prevent the foreclosure of desirable location options;
- Prevent inconsistent development standards of thoroughfares;
- Reduce costs;
- Permit orderly project development; and
- Minimize or avoid environmental, social, and

include a requirement to plat “limits of no access” along all collector and arterial roads and highways.

**Action 7:** Amend the subdivision regulations to allow for and encourage, through incentives, alternative development types such as clustered, conservation (50% open space), and preservation (80% open space) subdivisions. Such subdivision designs allow alternative character types, while sharing a common access to a collector or arterial roadway. Therefore, a rural countryside or estate character can be maintained without individual lots fronting on the adjacent thoroughfare, each with separate points of access.

**Action 8:** Adopt strict access management standards for the planned outer loop. All property access points shall be from an intersecting collector or arterial roadway, marginal access road, or reverse frontage road. Furthermore, the spacing of intersecting streets should be planned, designed, and strictly adhered to. Full access points (allowing left and right hand turning movements) should be no closer than 1,320 feet; right-in/right-out access points with acceleration/ deceleration lanes, no closer than 660 feet apart.

**GOAL 4.3.2 Coordinate the City’s future growth concurrent with provision of adequate transportation infrastructure**

**Objective A: Reconcile the capacity of the roadway system with the density of development to ensure safe and efficient travel conditions.**

**Action 1:** Adopt the criteria reflected in Table 4.2, **Functional Classification Criteria**, concerning the functional role, spacing, access, and relationship, among other criterion. Such criteria may be used for land use and zoning decisions to ensure the proposed land use and its projected trip generation can be adequately accommodated on the thoroughfare network. This review and analysis may serve as a basis for acceptance or denial of a zoning amendment, requirement for street dedication or off-site improvements, impact fees, or modification and amendment of the Future Land Use and/or Thoroughfare Plans.

**Action 2:** Utilize a growth plan to determine the timing and sequencing of capital transportation improvements. Adopt decision criteria in prioritizing improvements, including consideration of the intended direction of new development. Alternatively, recommend to the County to amend zoning district designations and their applicable dimensional standards to better manage the density of development adjacent to under-improved rural roads. The latter approach would

Table 4.3, Functional Classification Criteria

Criterion	Regional	Principal Arterial	Minor Arterial	Collector	Local Street
Functional Role	Entirely through traffic movement with no direct access to property.	Mobility is primary, access is secondary. Connects Freeways and other Arterials.	Connects Freeways, Principal Arterials, and lower classification roadways. Access is secondary.	Collects traffic destined for the Arterial network. Connects Arterials to Local Streets. Also land access.	Access is primary. Little through movement.
Roadway Continuity	Inter-city, regional, and interstate	Connects Freeways to lower classification roadways. Connects major activity centers.	Connects Freeways and Principal Arterials to lower classification roadways.	Continuous between Arterials. May extend across Arterials.	Discontinuous. Connects to Collectors.
Roadway Length	Usually more than 5 miles	Usually more than 5 miles	Usually more than 3 miles	Varies from roughly one-half mile to 2 miles	Generally less than 1 mile
Traffic Volumes (VPD = vehicles per day)	40,000+ VPD	20,000 to 60,000 VPD	5,000 to 30,000 VPD	1,000 to 15,000 VPD	100 to 5,000 VPD
Desirable Spacing	5 miles or more	2 miles or more	Generally one-half to 2 miles	Generally one-quarter to one-half mile	Varies with block length (at least 125 feet between)
Posted Speed	55 to 70 mph	40 to 55 mph	30 to 45 mph	30 to 35 mph	20 to 30 mph
Access	Controlled access. Grade separated interchanges and frontage/service roads.	Intersects with Freeways, Arterials, Collectors, and Local Streets. Restricted driveway access.	Intersects with Freeways, Arterials, Collectors, and Local Streets. Restricted driveway access.	Intersects with Arterials and Local Streets. Driveways limited.	Intersects with Collectors and Arterials. Driveways permitted.
On-Street Parking	Prohibited	Restricted	Restricted	Normally permitted	Permitted
Community Relationship	Defines neighborhood boundaries	Defines neighborhood boundaries	Defines and traverses neighborhood boundaries	Internal and traverses neighborhood boundaries	Internal
Through Truck Routes	Yes	Yes	Permitted	No	No
Bikeways	No	Limited	Permitted	Yes	Yes
Sidewalks	No	Yes	Yes	Yes	Yes

Source: Kendig Keast Collaborative

require rezoning areas where one-acre zoning allows densities and associated trip volumes to exceed the design capacity of the roadways.

**Action 3:** Conduct a pavement management inventory throughout the urbanizing portion of the City and County to document and map current pavement widths, drainage system types, alignment issues, and encroachments and barriers to improvement. Also, map the accurate widths of right-of-way, as applicable. Such exercise will allow



determination of roadway design capacity and the available threshold capacity. Use this data in refinement of the growth plan and as a determinant for zoning approval.

**Objective B:** Manage future growth commensurate with the availability and adequacy of the roads to support increased traffic volumes.

**Action 4:** Utilize the Future Land Use Plan adopted as part of this Comprehensive Plan to make zoning decisions in compliance with KRS 100. This is important to effectively sequence development concurrent with the availability and adequacy of the transportation infrastructure, as well as to deter premature development of agricultural land. Prepare and incorporate zoning decision criteria into the zoning ordinances of the City and County regarding the consistency of the use with the Future Land Use and Thoroughfare Plans, existing trip volumes and travel conditions of the adjacent thoroughfare, and the timing of capital improvements sufficient to accommodate the proposed use.

**Action 5:** Use the Land Use Plan to identify the future high density and non-residential development areas to plan and coordinate the necessary street system to convey the projected traffic volumes to the thoroughfare system. Ensure adequate preservation and dedication of rights-of-way for collector and arterial roads, marginal access and reverse frontage roads, as applicable, concurrent with land development in the area. Amend the subdivision regulations of the City and County to require submittal and acceptance of a general development plan showing all site access points and integration of the internal circulation system with the adopted Thoroughfare Plan. This

will be essential around each of the interchanges with I-24, including those that exist and the planned new interchange at KY 994/Old Mayfield Road/16<sup>th</sup> Street.

In-lieu of sidewalks, trails are an effective means for meeting pedestrian mobility needs.



**GOAL 4.3.3 A community that is pedestrian- and bicycle-friendly, offering increased opportunities for non-motorized transportation**

**Objective A:** Achieve a comprehensive, continuous, and connected system of pathways and linkages.

**Action 1:** Amend the subdivision regulations to reconcile the differences in City and County sidewalk requirements and standards. Specifically, the required widths and standard for pavement depth should be consistent. Provisions should also be incorporated regarding requirements for rural versus

urban subdivisions, distinguished by the street section and gross density. Basing such provisions on lot size alone does not account for alternative development types, such as clustered subdivisions. In cases where the cluster development has a strong internal greenway, bicycle path, and walkway system, the requirement for sidewalks on both sides of all roads can be relaxed. Arterials and collectors require sidewalks and a provision for bicycles. Most other local streets can have them on one side only where an internal system directly serves the units. For subdivisions that do not exceed 0.33 units per acre, the requirement for an internal sidewalk system would be exempt, excluding that portion adjacent to collector and arterial streets. Incorporate into the regulations the criteria warranting waiver of the sidewalk requirements. Furthermore, require that all sidewalks, trails, and access easements be submitted with the preliminary plan for review and approval.

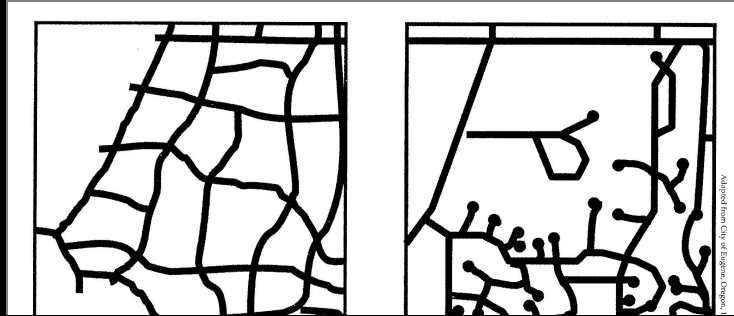
**Action 2:** Amend the subdivision regulations to account for increased connectivity. Among the varying options to accomplish this objective, at a minimum, limit block and cul-de-sac lengths shorter than the current standard and require public access easements to maximize pedestrian access to parks, existing or planned conveniences, and collector and arterial streets. At the more restrictive end of the spectrum, consider a point-based system with a required ratio of street nodes to links.

**Action 3:** Utilize a performance-based approach with density bonuses allowed for meeting mixed-use objectives and a specified connectivity index. In other words, there would be a range of development options available within a certain character-based residential district with incentives to enhance subdivision connectivity. Regardless of the option selected, the character of the district would be maintained by provisions for open space and gross density. Such approach may improve connectivity similar to traditional neighborhood designs.

**Objective B:** Invest and reinvest in sidewalks and other essential pedestrian improvements in both new and old areas of the City and County.

**Action 4:** Conduct an inventory and condition assessment of sidewalks within the City and all outlying subdivisions. Subsequently, map the inventory to identify areas that warrant priority attention. Sidewalks may either be required for installation and improvement by the property owner or, alternatively, funded by the City and/or County. If

The design of subdivisions is essential to create connections within and between neighborhoods. These graphics exhibit a typical subdivision versus one that accounts for connectivity.



the latter is chosen, prepare a prioritized improvement program and allocate annual funding. Concurrent with the inventory and improvement, curb cuts, crosswalks, and pedestrian signage must be installed. In locations around schools, parks, and other public buildings and facilities, warning lights, stop signs and reduced speed signs may be warranted.

**Action 5:** Develop a checklist of planning items to be inspected and confirmed prior to issuance of a certificate of occupancy. Among the items would be whether the sidewalk is installed to City/County standards and specifications. The City and County may consider forming an escrow account for sidewalks, paid into by the developer or individual homebuilders, which may be used to construct a complete sidewalk system when the subdivision reaches an established percent of build-out. Consideration may also be given to requiring or providing incentives for a home association, with a required portion of the association dues allocated for sidewalk and street maintenance.

**Objective C:** Seize opportunities for use of stream corridors, greenway linkages, and enhanced roadway corridors for leisure, sight-seeing, and recreational purposes.

**Action 6:** Continue implementation of the trail and greenway plan<sup>3</sup>, which is planned to extend from the Perkins Creek Nature Preserve along Stuart Nelson Park connecting to Bob Noble Park, past the Peck

Addition to the river levee leading to downtown. This linear linkage should be expanded to include a loop and complete network throughout the City. To do so, prepare a comprehensive bikeway and trail system plan, including both on- and off-street segments. Upon adoption of the plan, amend the subdivision regulations requiring dedication of right-of-way concurrent with subdivision approval. Consideration should be given to incentives in the form of density bonuses for connectivity to the trail and greenway plan.

**Action 7:** Incorporate provisions for adequate trail and bikeway rights-of-way within the street cross-sections. This is particularly important to be planned and designed for major new corridors, such as the Outer Loop. Along each of the County highways and arterials there should be consideration for adequate pavement

width to accommodate wide shoulder lanes for use by distance cyclists. The design of intersections and access points must also consider the

<sup>3</sup> Paducah – McCracken County Parks and Recreation Master Plan, November 2002.

Creation of an eventual loop and network of trails and greenways will greatly enhance pedestrian options.



safety of pedestrians and bicyclists, including controlling the number and spacing of access points, continuous sidewalks and trails, medians as refuges in wide street sections, curb cuts, crosswalks, and pedestrian and bicycle actuated traffic signals.

**GOAL 4.3.4 Sustained, expanded, and improved air transportation services**

**Objective A:** Promote increased utilization of the airport by employers and residents throughout an expanded market area.

**Action 1:** Conduct a special generator survey at Barkley Regional Airport (BRA) to gather information from and about those persons utilizing airport facilities. To get a valid sample, the survey should be conducted on two typical weekdays and two typical weekend days. By typical, it is intended that the survey would not be conducted during a peak or holiday period. The surveys should be conducted at two different times of the year to account for seasonal travel patterns and behaviors. A special survey should also be conducted on two peak days for comparison purposes. The survey should include travel surveys indicating arrival direction, vehicle type, time, and vehicle occupancy. In addition, intercept surveys should be conducted in the terminal to collect information regarding trip origin/destination, numbers and ages of travelers, travel frequency, variables in selecting travel mode and location, and household characteristics, among other questions.

**Action 2:** Utilize the findings of the special generator survey to develop a target marketing campaign with a focus for those areas represented by the survey. A complete marketing and advertising plan should be developed, including methods of distribution, advertising mediums, and measures of effectiveness. The campaign should be sustained on an ongoing basis to inform residents within the market area of their travel options, with favorable comparisons with other travel markets and flight choices.

**Action 3:** Conduct a survey of major employers throughout the immediate region and the larger market area to identify their needs for airline service, including commercial air, general aviation, charter services, and air cargo and package express services for shipping and receiving business materials. Design the survey to also serve as public information to educate businesses about the services available and their respective costs and benefits. Specifically, the survey should identify deficiencies and gaps in business-related services for which improvements may be made to increase utilization of the airport for

Northwest AirlinK serves the Barkley Regional Airport



these purposes. Regularly re-survey the employers to gauge the effectiveness of utilization and improvements.

**Action 4:** Continuously pursue expansion of air service by Northwest Airlink, and pursue a second and third commercial airline provider. The intent of the expansion is to improve travel options and directions for airport users, while introducing competition to possibly reduce fares. Terminal and other facility improvements will likely be necessary to accommodate or entice increased air service.

**Objective B:** Improve roadway access and infrastructure to support the airport and its surrounding development.

**Action 5:** In addition to the evaluation of siting a possible new terminal facility, prepare a complete feasibility study for a new main terminal building. The feasibility study should include, among other tasks, market area capture, projections of enplanements and deplanements, airport service and revenue projections, preliminary design schematic, an estimate of construction costs, and both probable and possible sources of funds. Specifically, the necessary local share needs to be identified to indicate the level of commitment necessary to replace the terminal and associated facilities.

**Action 6:** Coordinate with the Paducah-McCracken County Joint Sewer Agency (JSA) to extend public sewer service to the airport and the adjacent properties. Such infrastructure will be essential in the expansion of the airport, as well as to allow increased use of the area for commercial warehousing and industrial development. Other infrastructure improvements, such as natural gas, also are needed to support possible future development of an airport business park.

**Action 7:** Improve transportation access to the airport by extending the four-lane improvement of U.S. 60 to the airport entrance and beyond. Improved access from U.S. 62 from the south and the planned outer loop from the east will also be necessary in the future to enhance access from other directions. The improvements include roadway widening, intersection enhancements, traffic control, turn lanes, acceleration/deceleration lanes, and improved way-finding signage. Utilize the Thoroughfare Plan to ensure adequate preservation of rights-of-way concurrent with land development.

**Objective B:** Protect the long-term interests of the airport for expansion and business growth potential.

**Action 8:** Periodically re-file with the Administrator of the Kentucky Airport Zoning Commission<sup>4</sup> a map showing the airport and the area

<sup>4</sup> Kentucky Revised Statutes (KRS) 183.861, Establishment of Airport Zoning Commission

The **Kentucky Airport Zoning Commission** is empowered to issue orders, rules, and regulations pertaining to use of land within and around all public-use and state-licensed, private-use (with a paved runway greater than 2,000') airports to promote the public interest and protect and encourage the proper use of the airports

surrounding the airport used for approach and landing purposes. Upon completion of a new airport master plan – a recommendation of this Comprehensive Plan – it should also be submitted to the Administrator. For local planning purposes, the City and County should conduct a compatibility use study to define a boundary for an area of airport influence. Any requests for building permits or development within the defined area, whether or not within the authority of the zoning commission, should be subjected to a higher level of review to avoid encroachment of the airport. There is nothing in the state statutes preventing local government from adopting more stringent land use regulations and zoning standards.

**GOAL 4.3.5 Expand waterborne freight transportation access into and from the region**

**Objective A:** Plan for the long-term expansion of river transportation industries.

**Action 1:** Prepare a long-range land acquisition and development plan for the area around the Riverport. Such plan will identify specific parcels targeted for acquisition, necessary razing and redevelopment, infrastructure provision and relation, access and circulation patterns, possible new streets or right-of-way vacations, and mitigating improvements for any environmental impacts. An essential element of this plan will be compatible integration of container storage or other intensive industrial facilities and activities with the surrounding environment.

**Action 2:** Perform an internal assessment for development and expansion of a container port to identify potential impacts and their mitigating measures. Such impacts may include transport, handling, and storage of potentially harmful materials; increased rail and truck traffic; additional container barge traffic on the river; light and noise; air and water quality; and aesthetic impacts associated with stacked container storage.

**Objective B:** Provide the necessary infrastructure improvements and facilities to support the Riverport and related industries.

**Action 3:** Re-evaluate and designate both truck and material transport routes to ensure safe routing of industrial traffic. This will also include identifying and enforcing no truck zones. An important consideration with container transport may be bridge clearances and the heights of power lines and other potential transport obstructions. This may apply to both highway and railroad overpasses, which may warrant or

**Airport Compatible Land Use**

Noise and safety are the two fundamental compatibility concerns. In addressing noise concerns, consideration should also be given to the impacts of aircraft over flights in locations beyond the normally mapped noise contours. Safety compatibility policies should address both protection of people and property on the ground near airports and protection of airport airspace from obstructions and other hazards to flight. Compatibility plans should:

- ◆ Clearly indicate the scope of the plan, geographically and in terms of authority and purpose;
- ◆ Describe information about the airport and airport plans, which provide the basis for the compatibility plan;
- ◆ List compatibility policies and criteria;
- ◆ Include appropriate maps of the airport compatibility zones;
- ◆ Indicate the procedures to be used in conducting compatibility reviews; and
- ◆ Provide an assessment of the consistency between the Comprehensive Plan, City and County ordinances, and policies set forth in the

require new bridges. Special zoning provisions will also be necessary adjacent to the designated routes to minimize issues of incompatibility and to mitigate impacts on existing uses.

**Action 4:** Study whether any major improvements are necessary to support an increase in waterborne transportation, such as new rail lines or spurs, extended or widened roadways, modifications to the geometry of street intersections, traffic control, or new weight bearing bridges. Also, identify whether additional fire apparatus, fire fighting equipment or vehicles, and/or personnel training will be required to serve a container port facility. Coordinate with other agencies and jurisdictions, as necessary.

**4.4 TRANSPORTATION MODES**

Paducah and McCracken County currently possess each of the modes of transportation, which offer increased opportunities for expanding and improving the multi-modal options available to residents and businesses. The opportunities described above in the goals, objectives, and recommendations represent improvements to economic development, community recreation, the environment, and local quality of life.

The term “multi-modal” refers to the full range of transportation modes that together form the local and regional transportation system, including single and multiple occupant vehicles, waterborne transit, and walking and bicycling, as well as rail and air transportation. The existing improvements and services and the opportunities for enhancement are discussed below.

**Walking and Biking**

A true multi-modal transportation system includes a variety of transportation options, including those that are the most basic: walking and bicycling. In Paducah and McCracken County, similar to most other areas, the role of walking and biking has diminished over the years as dependence on the automobile has increased. In recent years, though, there has been a renewed interest in making communities more livable, which means making neighborhoods, commercial districts, and public spaces more pedestrian-friendly.

Over the last several decades, dependence upon the automobile as the preferred mode of transportation has become an increasing national trend. This trend is apparent in the City and County, denoted by ongoing investments in transportation infrastructure. Reliance on the automobile has

resulted in more choice for how and where to live, work, and play, leading to sprawling development patterns.

Dependence upon the automobile has not come without cost – a cost that is being realized in the form of increased taxes, reduced levels of public services, such as police and fire protection, less affordable housing, degradation of prime agricultural lands and environmentally sensitive areas, increased pollution of air and water, and many other well-documented costs. The automobile has changed development patterns, causing land uses to be segregated, setbacks to be increased, and nearby neighborhoods to become rural subdivisions outside the City limits. All of these occurrences have contributed to reduced accessibility and less walkable communities.

Not unlike most communities, the local transportation system is highly automobile-oriented. While much of this chapter addresses improved mobility that is focused on street and highway improvements, the importance of other transportation modes is not overlooked. Each travel mode plays a vital role in the overall transportation system.

### Pedestrian System Planning

Pedestrian trails, sidewalks, and crosswalks are part of the transportation system that serves the needs for pedestrian movement in residential neighborhoods, the downtown and other commercial districts, and around each of the schools, parks, and other public facilities. Safe and well-maintained pedestrian facilities are needed in the older neighborhoods where they were not originally installed or have fallen into disrepair, as well as in many of the more recent development around the fringe of the community. While the location and conditions of existing sidewalks have not been inventoried, consideration must be given to conducting such an assessment to ensure proper and timely maintenance of sidewalk facilities, implement compliance with the American’s with Disabilities Act (ADA), and establish sidewalks and other pedestrian-ways in all neighborhoods.

Eliminating barriers to pedestrian mobility is an important feature in planning and developing an effective pedestrian network. The I-24 corridor, in particular, as well as each of the other major arterial roadways, railroads, and creeks imposes barriers to pedestrian access and mobility. These barriers must be overcome by access improvements and other provisions made during the course of roadway and subdivision design. Fully integrating the concepts of neighborhood schools and parks, as well as neighborhood



convenience retail centers, contributes to less reliance on the automobile for short trips and, thus, improved opportunities for walking and bicycling.

Climate has an influence on the pedestrian system, as well. In terms of transportation and thoroughfare design, the design of the unoccupied public right-of-way becomes quintessential. Recommendations for street design considerations in a pedestrian-friendly community include:

- ◆ Cul-de-sac streets should be carefully managed to ensure they are not over utilized. Pedestrian linkages in the form of public access easements and walkways connecting parts of the neighborhood together and providing access to schools and parks should be required.
- ◆ Sidewalks and/or trails should be required in all new development, concurrent with street construction, and installed in areas where they are not currently available. Sidewalks should be provided on both sides of all streets. Trade-offs may be permitted in suburban estate developments to allow off-street trails in lieu of sidewalks, thereby meeting the needs of walkers and bicyclers.
- ◆ Mid-block connections in the form of public access easements and walkways should be required to provide linkages between blocks and, particularly, to common facilities, such as parks and open areas. This is particularly important with contemporarily-designed developments with a curvilinear street pattern.
- ◆ Streets, sidewalks, and other pedestrian connections and public gathering areas should be encouraged to create sheltered areas from inclement weather.
- ◆ Tree cover and other landscaping should be required along pedestrian paths for both aesthetic and environmental reasons. Trees break the wind and form a sense of enclosure around pedestrian paths. Other vegetation, such as flowers and shrubs, are also encouraged to further compliment the streetscape. To the extent practicable, native plant material that is more tolerant of local conditions should be used.

Pedestrian tunnels and other improvements are necessary to overcome barriers to pedestrian mobility.



### Planning for Bicycle Transportation

Designated bicycle routes, on-street bikeways, and off-street bicycling and jogging trails should be developed in accordance with the Paducah-McCracken County

Parks and Recreation Master Plan to link major attractions and destinations throughout the City and County, including neighborhoods and apartments, parks, schools, churches, library and community centers, major employment centers, and shopping areas. In this way, bicycle routes can provide an alternative mode of transportation, while also serving the recreational needs of area residents.

The State of Kentucky recognizes a bicycle as a vehicle, with all rights and responsibilities for roadway use that are provided to motor vehicles. As such, cyclists can legally ride on any street in the City or County. Highway funds may be used for the construction and development of bicycle paths wherever a highway, road, or street is being constructed, reconstructed, or relocated. Additionally, drainage corridors, parks and recreation areas, and various rights-of-way and easements that traverse the City and County represent opportunities for future development of bicycle and pedestrian facilities. These opportunities can be incorporated as transportation enhancement projects, such as multi-use trails and scenic beautification areas. The master plan should guide the development and implementation of an interconnected network of bike and pedestrian trails.

### Pedestrian and Bicycle Accommodations in Kentucky<sup>5</sup>

In February 2000, the United States Department of Transportation (USDOT) issued the Design Guidance, Accommodating Bicycle and Pedestrian Travel: A Recommended Approach, as required by the federal highway authorization act, Transportation Equity Act for the 21st Century (TEA-21). The U.S. Congress included this requirement in the act because of increased public support and advocacy to improve the safety, comfort, and convenience of non-motorized travel. The Federal Highway Administration (FHWA) convened a task force comprising representatives of the FHWA, Institute for Transportation Engineers (ITE), American Association of State Highway and

Without designated bicycle lanes and off-street paths, bicycles must share the right-of-way with other vehicles.



Tree-lined streets improve the micro-climate for pedestrians and bicyclists.



<sup>5</sup> Pedestrian and Bicycle Travel Policy, Commonwealth of Kentucky Transportation Cabinet, July 2002

Transportation

**Maintenance of Pedestrian and Bicycle Facilities**

Sidewalks - Maintenance of sidewalks within city limits is the responsibility of the city. Maintenance of sidewalks outside city limits is the responsibility of the Kentucky Transportation Cabinet (KYTC) if the KYTC constructed the facility. Maintenance of facilities constructed by the fiscal court or city is the responsibility of that entity. Maintenance by the KYTC is limited to repairing the surface, mowing, and clearing vegetation. This maintenance is on the same schedule as normal roadway maintenance.

Bicycle Lanes - Maintenance of bicycle lanes is considered incidental to normal KYTC roadway maintenance. Maintenance by the KYTC is limited to repairing the surface, resurfacing, removing snow, striping, signing, and sweeping if the KYTC normally sweeps the roadway. This maintenance is on the same schedule as normal roadway maintenance.

Shared Use Paths - Maintenance of shared-use paths is the responsibility of the local government.

Source: Pedestrian and

Transportation Officials (AASHTO), bicycle and pedestrian travel groups, state and local agencies, U.S. Access Board and disability organizations to seek advice on how to create policy and design guidelines to develop well-designed and context-sensitive multimodal facilities. The FHWA developed the Design Guidance to provide a recommended approach to the accommodation of bicyclists and pedestrians.

The USDOT's Design Guidance paved the way for establishing the Kentucky Pedestrian and Bicycle Task Force, a multidisciplinary group whose charge was to draft a set of recommended policies and guidance to improve accessibility and safety for non-motorized travel in Kentucky. The task force developed policy statements in accordance with the Kentucky Transportation Cabinet (KYTC) Strategic Plan's mission and goals of improving accessibility, mobility, and safety for travelers throughout the Commonwealth of Kentucky in an environmentally and fiscally sound manner.

**Thoroughfare System Planning**

Thoroughfare system planning is the process to assure development of the most efficient and appropriate street system necessary to meet existing and future travel needs. The primary objective of a thoroughfare plan is to ensure that adequate right-of-way is preserved on appropriate alignments and of sufficient width to allow the orderly and efficient expansion and improvement of the thoroughfare system. Proposed alignments are shown for planned new roadways and roadway extensions, but actual alignments will vary depending on the design and layout of development and necessary amendments to and refinement of the thoroughfare plan. Requirements for rights-of-way dedication and construction of street improvements should apply to all subdivision of land within the City and County.

The thoroughfare system of highways, arterial roadways, and collector streets shows approximate alignments for planned thoroughfares that will be considered in platting of subdivisions, right-of-way dedication, and construction of major roadways within the City and urbanizing portion of the County. Within the outermost portions of the County, the thoroughfare designations, functional classifications, and right-of-way requirements are as designated by the Kentucky Transportation Cabinet.

Some elements of the thoroughfare system, such as those roadways for which abutting development has already occurred or is planned to occur, will require new or wider rights-of-way and may ultimately be developed as two-

lane or multi-lane roadways with various cross sections. Some streets identified as arterials or collectors on the plan will not necessarily ever be widened due to severe physical constraints and right-of-way limitations. Instead, the designation signifies its traffic-handling role in the overall street system and the importance of maintaining it and similar streets in superior condition to maximize their traffic capacity since they most likely cannot be improved to an optimal width and cross section.

The plan does not show future local streets because they function principally to provide access to individual sites and parcels and their future alignments will, therefore, vary depending upon individual land development plans. Local street alignment should be determined by the City and County in conjunction with landowners as part of the subdivision development process. Likewise, collectors are required with new development, but are not shown in all places on the Thoroughfare Plan since their alignments will depend on the surrounding street system and the particular development concept. They are, nevertheless, vital to an efficient and viable transportation network and must, therefore, not be overlooked during the subdivision development review process. Collectors should be situated on a case-by-case basis to connect arterial streets with other collectors and local streets.

The Thoroughfare Plan will affect the growth and development of Paducah and McCracken County since it guides the preservation of rights-of-way needed for future thoroughfare improvements. As a result, the plan has significant influence on the pattern of traffic movement and the desirability of areas as locations for future development. While other elements of the plan look at foreseeable changes and needs over a 20-year period, thoroughfare planning requires an even longer-range perspective, extending into the very long-term future. Future changes in transportation technology, cost structure, service demand, and long-term shifts in urban growth and development patterns require a far-sighted and visionary approach to thoroughfare planning decisions.

### Classification of Roadways

In the administration and enforcement of the Thoroughfare Plan, special cases and unique situations will occasionally arise where physical conditions and development constraints in certain areas conflict with the need for widening of designated thoroughfares to the planned right-of-way width and roadway cross section. Such special circumstances require a degree of flexibility and adaptability in the administration and implementation of the plan. Acceptable minimum design criteria and special roadway cross sections may have to be

“Collectors are required with new development, but are not shown in all places on the Thoroughfare Plan since their alignments will depend on the surrounding street system and the particular development concept. They are, nevertheless, vital to an efficient and viable transportation network and must, therefore, not be overlooked during the subdivision development review process. Collectors should be situated on a case-by-case basis to connect arterial streets with other collectors and local streets.”

Functional classification is the process in which streets and highways are ranked according to the character of service they provide. Basic to the development of any logical highway system is the recognition that a road does not by itself serve traffic needs. Travel involves movement through a network of inter-related roads and streets. The movement must be channeled through an efficient hierarchical system that progresses from a lower classification handling short, locally oriented trips to higher classifications that connect regional and inter-regional traffic generators, handling longer trips. The Kentucky Transportation Cabinet recognizes four levels of service and two localities, rural and urban.

applied in constrained areas where existing conditions limit the ability to meet desirable standards and guidelines. Special roadway cross sections should be determined on a case-by-case basis when a unique design is necessary, and these exceptions should be subject to approval by the City Engineer. Otherwise, standard roadway cross sections should be used in all newly developing areas and, whenever possible, in existing developed areas.

A single set of standards for development within the City versus that within the County may be problematic. Standards for development within the City limits, with rare exception, should reflect its auto-urban and suburban character, with provision for curb and gutter construction, sidewalks, street lighting, signage and sufficient open space. In the outlying areas of the County where the character of development is estate or rural, for example, the standards must be varied to mirror the character, yet be both reasonable and feasible.

The roads and streets in the City and County are grouped into functional classes according to their role for traffic movement and land access. Characteristics of each functional class of roadway differ to meet the corridor’s intended purpose. The functional classification of area roadways includes freeways and expressways (handled by KYTC), principal and minor arterials, major and minor collectors, and local streets.<sup>6</sup>

Local Streets

Local streets allow direct property access within residential and commercial areas. Through traffic and excessive speeds should be discouraged by using appropriate geometric designs, traffic control devices, curvilinear alignments, discontinuous streets, and traffic calming techniques. Local streets typically comprise about 65 to 80 percent of the total street system.

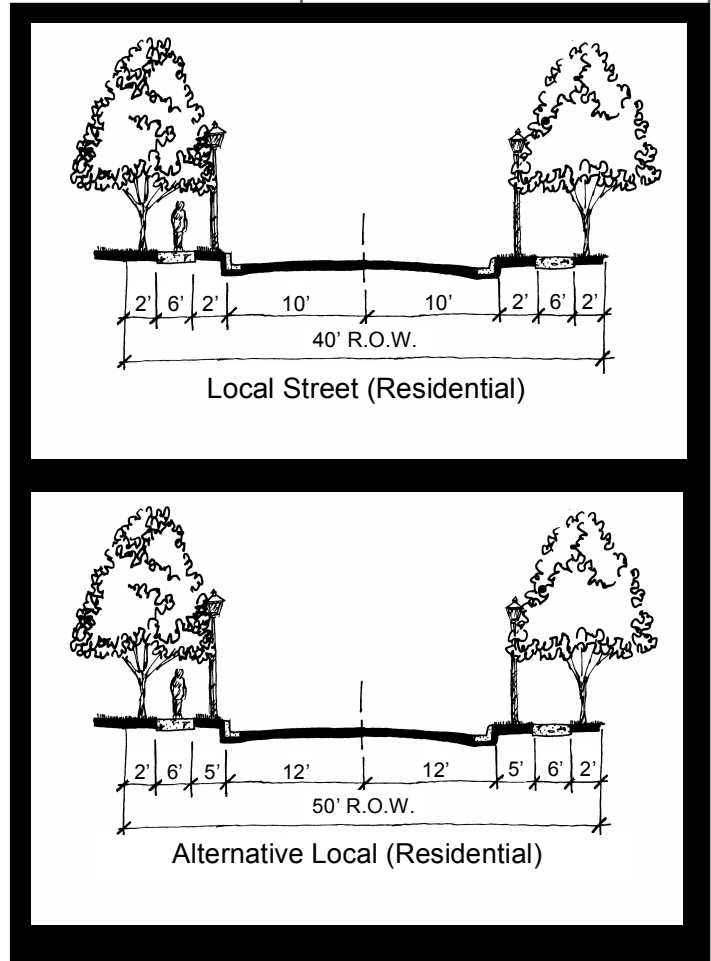
The Thoroughfare Plan does not differentiate between local streets by assigning class. Instead, the plan proposes alternative local street widths that may change according to need, including such characteristics as on-street parking, presence of bike lanes, choice of trails or sidewalks, anticipated traffic volume, and location within an urban, urbanizing, or rural setting.

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<sup>6</sup> McCracken County, Kentucky, Functional Classification, Kentucky Transportation Cabinet, Department of Highways, Division of Planning

The current standard for local streets (referred to as minor streets in the McCracken County Subdivision Ordinance) by the County is 50 feet of right-of-way and 20 feet of pavement width. The City’s subdivision regulations require 40 feet of right-of-way and a pavement width of 22 feet.

This plan proposes two alternate local street cross sections, which require a minimum 50 feet of right-of-way with minimum pavement widths of 24 and 28 feet. The narrow pavement width would be limited in the subdivision regulations to developments with fewer, larger lots taking access onto the local street. On-street parking would not be allowed on the narrower street width, while it would be allowed on only one side of the wider street section. Such parking restriction will necessitate review of lot sizes, setbacks, and on-lot parking provisions to accommodate parked vehicles out of the public right-of-way. These pavement widths are designed to adequately carry immediate local traffic and sufficient to accommodate fire apparatus, yet being of a width to allow neighborhood traffic calming. Narrower streets encourage reduced travel speeds, an increased distance between the street and sidewalk, and a wider streetscape.



Local streets may also be adapted to an estate or rural character to include an open or closed ditch system, as opposed to curb and gutter. The right-of-way of local streets within these environments may be reduced to 40 feet with a 20-foot pavement width. The street cross section must include adequate provision for storm water management by way of sufficient ditch cross sections. For very low-density developments, trails may be constructed in lieu of sidewalks. Alternatively, a striped pedestrian/bicycle lane may be used within the right-of-way assuming a minimum pavement width of 24 feet. There is an alternative residential street approach where there are a large number of width options that are governed by lot area and width, building setback, and the number of dwellings served. The width of the pavement and right-of-way are governed by the need for parking and, at the low end, by the frequency that two cars might meet where there is a single traffic lane. Under this system, a seven-lot subdivision on two-acre lots with 50 feet of right-of-way and no sidewalk could be served by a 10- to 12-foot road since two cars

are likely to meet less than once every 30 days during rush hour, there is no parking in the street, and the driveways have adequate storage capacity.

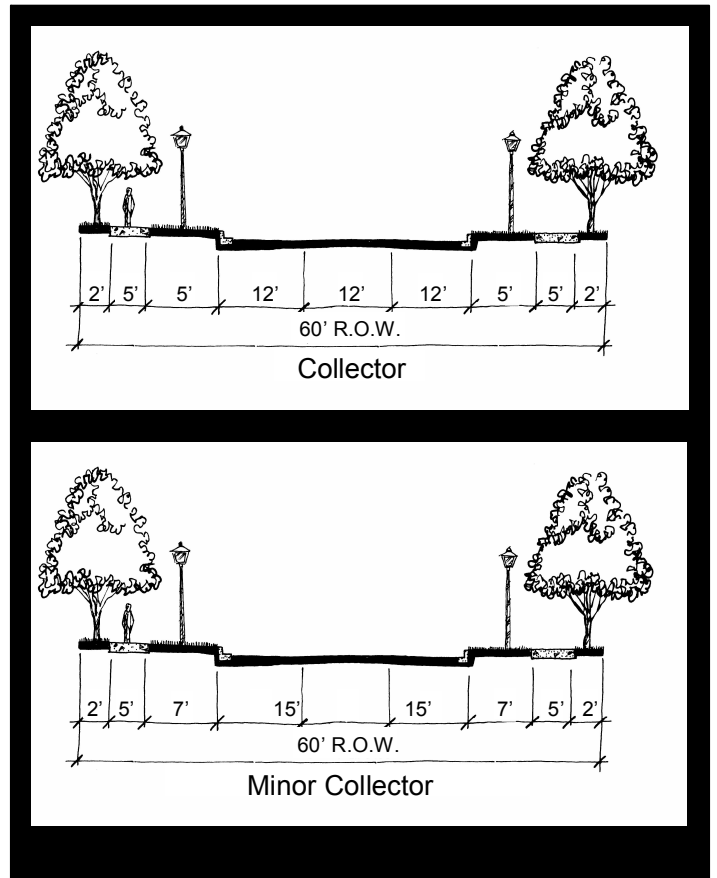
Classifications for alleys and marginal access streets are a function of service and property access and, therefore, are not included in the recommended classification system of the Thoroughfare Plan. This is not to indicate that the Thoroughfare Plan ignores the possibility of alleys in a development. In fact, the plan recognizes the valuable contribution of alleys to the urban fabric and establishment of community character and proposes that they be used, as appropriate.

Collector Streets

Subdivision street layout plans and commercial and industrial districts must include collector streets in order to provide efficient traffic ingress/egress and circulation. Since collectors generally carry higher traffic volumes than local streets, they require a wider roadway cross-section or added lanes at intersections with arterials to provide adequate capacity for both through traffic and turning movements. However, since speeds are slower and more turn movements are expected, a higher speed differential and much closer intersection/access spacing can be used than on arterials.

Collectors typically make up about five to ten percent of the total street system.

The standards for collector streets within both the City and County require 60 feet of right-of-way, which is sufficient. The pavement width differs significantly as the City requires 37 feet, while the County requires only 22 feet. This is largely due to lesser traffic volumes within the outlying areas of the County; however, as development density increases, the volumes are

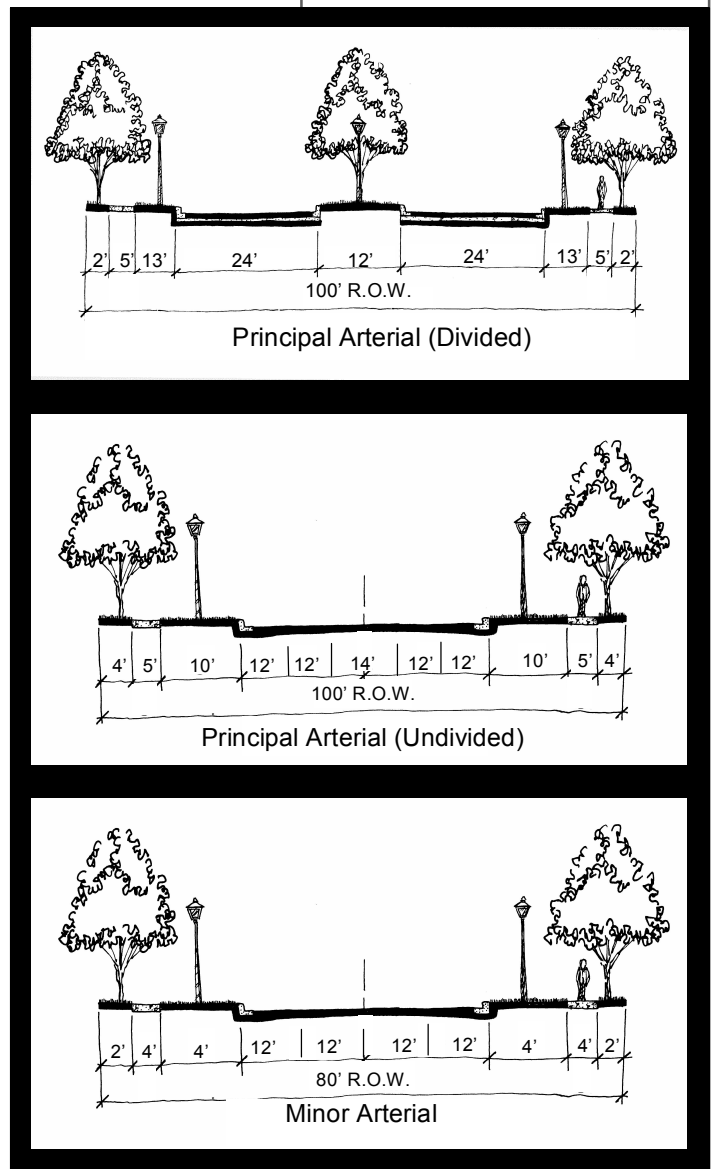


reaching similar levels, thereby – in many cases - necessitating similar standards. This plan proposes classifications of major and minor collectors distinguished by the volume of traffic. A major collector is designed for 7,500 to 15,000 vehicles per day (VPD), which requires a pavement width of 40 feet. Alternatively, a minor collector may allow a pavement width of 36 feet, which is for 1,000 to 7,500 VPD. The subdivision regulations would include provisions to distinguish the warrants and criteria for major and minor collector roadways.

Another option possible for estate and rural development is consideration of collector roads without sidewalks or curb and gutter. This permits the development to maintain the look and feel of a rural area, but, similarly, may not provide the drainage system offered with roads that utilize a curb and gutter system. In this type of development, significant green space and an interior trail system would be necessary to compensate for the loss of sidewalks. Pavement width could be reduced to 32 feet, while the right-of-way requirement would remain at 60 feet to account for the space required for open or covered ditches.

### Arterial Streets

Arterial streets form an interconnecting network for broad movement of traffic. Although they usually represent only five to ten percent of the total roadway network, arterials typically accommodate about 30 to 40 percent of an area's travel volume. Since traffic movement, not land access, is the primary function of arterials, access management is essential to avoid traffic congestion and delays caused by turning movements for vehicles entering and exiting driveways. Likewise, intersections of arterials with other public streets and private access drives should be designed to limit speed differentials between turning vehicles and other traffic to no more than 10 to 15 miles per hour. Signalized intersection spacing should be long enough to allow a variety of signal cycle lengths and timing plans that can be adjusted to meet changes in traffic volumes and maintain traffic progression (preferably one-third to one-half mile spacing).





The cross section of arterials may vary from multi-lane roadways with three, four, or five lanes, down to two-lane roadways in the developing fringe and rural areas of the County where traffic volumes either have not increased to the point that more travel lanes are needed or are not warranted due to limited density. Functional classification is not dependent on the existing number of lanes since the functional role served by a roadway typically remains constant over time, while the roadway's cross section is improved to accommodate increasing traffic volumes. Thus, lower-volume roadways that are continuous over long distances may also function as an arterial, particularly in the rural areas.

There are not any provisions in the subdivision ordinances of either the City or County for arterial streets. Therefore, this plan proposes new thoroughfare classifications for principal and minor arterial streets, consistent with the state functional classification system. A principal arterial would require a minimum of 100 feet of right-of-way, which could accommodate both divided and undivided roadway sections. An undivided pavement section would include four 12-foot travel lanes, with a total pavement width of 48 feet. The divided section would include the four 12-foot travel lanes, plus a 12-foot raised median. The median would be of sufficient width to accommodate a turning lane at intersections, plus provide for decorative street lighting, landscaping, and added green space.

A minor arterial roadway is proposed to have a total right-of-way of 80 feet, which accommodates a pavement width ranging from 40 to 48 feet. The distinction between principal and minor arterial roadways is their traffic volume, roadway length, spacing, posted speeds, and community relationship, as identified in *Table 4.2, Functional Classification Criteria*.

**Plan Implementation**

Implementation of thoroughfare system improvements occurs in stages over time as the City and County grow and, over many years, builds toward the ultimate thoroughfare system shown in the Thoroughfare Plan. The fact that a future thoroughfare is shown on the plan does not represent a commitment to a specific timeframe for construction or that the City and/or County will build the roadway improvement. Individual thoroughfare improvements may be constructed by a variety of implementing agencies, including the City of Paducah, McCracken County, and the Kentucky Transportation Cabinet (KYTC), as well as private developers and land owners for sections of

roadways located within or adjacent to their property. Road construction can be implemented by individual entities or in partnership, as is the case for construction of roads that are identified in the Statewide Transportation Plan.

The City, County, and KYTC, as well as residents, landowners, and developers, can utilize the Thoroughfare Plan in making decisions relating to planning, coordination, and programming of future development and transportation improvements. Review of preliminary and final plats for proposed subdivisions in accordance with the City and County subdivision ordinances should include consideration of compliance with the Thoroughfare Plan in order to ensure consistency and availability of sufficient rights-of-way for the general roadway alignments shown on the plan. It is of particular importance to provide for continuous roadways and through connections between developments to ensure mobility. By identifying thoroughfare locations where rights-of-way are needed, landowners and developers can consider the roadways in their subdivision planning, dedication of public rights-of-way and provision of setbacks for new buildings, utility lines, and other improvements located along the right-of-way for existing or planned thoroughfares.

Requirements and Standards

This section outlines criteria for certain characteristics of street and land development. These criteria supplement or expand upon the design standards of the City and County subdivision ordinances. These policies should be regulated through ordinance provisions to ensure proper implementation.



Continuous collector streets and other internal street connections improve mobility and the efficiency of the street

- ◆ **Location and alignment of thoroughfares** - The general location and alignment of thoroughfares must be in conformance with the Thoroughfare Plan, as currently expressed in the City and County ordinances. Subdivision plats should provide for dedication of needed rights-of-way for thoroughfares within or bordering the subdivision. Any major changes in thoroughfare alignment that are inconsistent with the plan should require the approval of the City and County Planning Commissions through a public hearing process. A major change would include any proposal that involves the addition or deletion of established thoroughfare designations or changes in the planned general alignment of thoroughfares that would affect parcels of land beyond the specific tract in question.

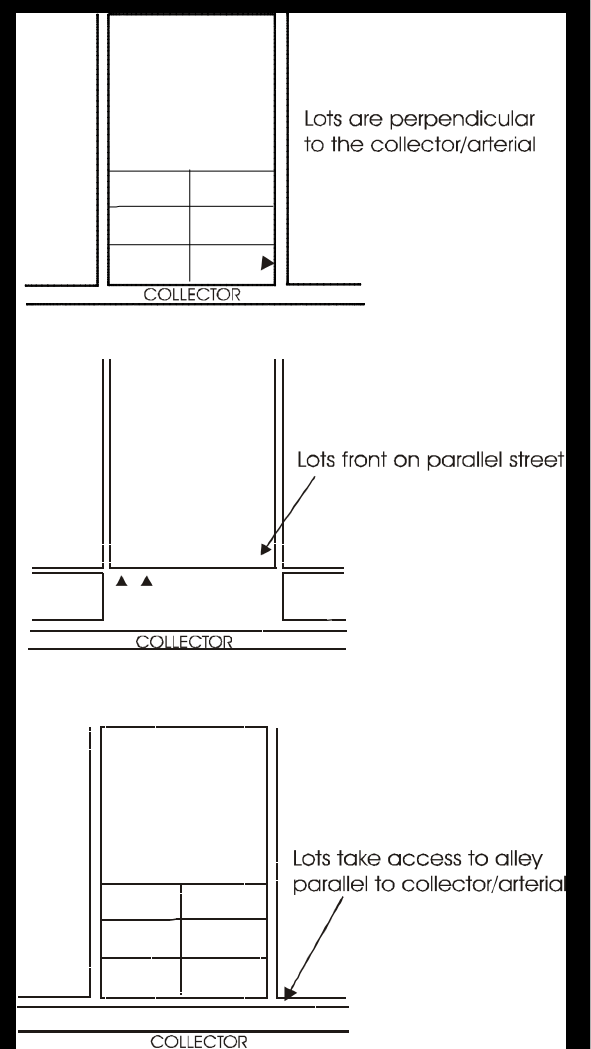
- ◆ **Location and alignment of collectors** - Generally, to adequately serve their role to collect traffic from local streets and distribute it to the arterial street system, collectors should be placed between arterial streets, with a spacing of approximately one-quarter to one-half mile for minor and major collectors, respectively. Collectors must be shown on all proposed subdivisions of land consistent with the Thoroughfare Plan. In cases where a collector is not shown on the Plan, but is warranted due to development

density and projected traffic volumes, it is also required and must be shown.

- ◆ **Roadway continuity** – To maximize mobility, it is essential that collector streets traverse adjacent neighborhoods to provide access and circulation not only within, but also between, neighborhoods. Collector streets

should generally connect bounding arterials, rather than allowing developments to design a street system with limited or no points of ingress/egress other than the primary entrance(s) to the development. Rather than allowing waivers of this requirement, the subdivision regulations must identify warrants and criteria for exemption.

- ◆ **Right-of-way and pavement width** - The pavement and right-of-way width for thoroughfares must conform to minimum standards unless a waiver is granted using formalized criteria. Properties proposed for subdivisions that include or are bordered by an existing thoroughfare with insufficient right-of-way width must be required to dedicate land to compensate for any right-of-way deficiency of that thoroughfare. When a new thoroughfare extension is proposed to connect with an existing thoroughfare that has a narrower right-of-way, a transitional area must be provided.
- ◆ **Continuation and projection of streets** - In accordance with the policies and recommendations of this plan, existing streets in adjacent areas should be continued, and, when an adjacent area is undeveloped, the street layout must provide for future projection and continuation of streets into the undeveloped area. In particular, the arrangement of streets in a new subdivision must make provision for continuation of right-of-way for the principal existing streets in adjoining areas - or where new streets will be necessary for future public requirements on adjacent properties that have not yet been subdivided. Where adjacent land is undeveloped, stub streets must include a temporary turnaround to accommodate fire apparatus.
- ◆ **Location of street intersections** - New intersections of subdivision streets with existing thoroughfares within or bordering the subdivision should be planned to align with existing intersections to avoid creation of off-set or "jogged" intersections and to provide for continuity of existing streets, especially collector and arterial streets.
- ◆ **Angle of intersection** - Consistent with the design standards in the subdivision ordinances, the angle of intersection for street intersections should be as nearly at a right angle as possible. Corner cutbacks or radii should be required at the acute corner of the right-of-way line to provide adequate sight distance at intersections.



The layout of lots contributes to the traffic carrying capacity, safety, and efficiency of collector streets.

- ◆ **Offset intersections** – Consistent with the design standards in the City’s subdivision ordinance, offset or "jogged" street intersections should have a minimum separation of 200 feet between the centerlines of the intersecting streets.
- ◆ **Cul-de-sacs** - Through streets and tee-intersections are preferable to cul-de-sacs. Care should be taken so as not to over utilize cul-de-sacs, which limits through access, restricts pedestrian circulation, increases response times, and confuses motorists. However, when cul-de-sacs are used, they should have a maximum length of not more than 500 feet measured from the connecting street centerline to the centerline of radius point, with a paved turnaround pad of at least 100 feet and a right-of-way diameter of at least 120 feet in residential areas and at least 180 feet diameter on a street with a 200 feet right-of-way diameter in commercial and industrial areas. A cul-de-sac with an island should have a diameter of not less 150 feet.
- ◆ **Residential lots fronting on arterials** - Subdivision layout must avoid the creation of residential lots fronting on arterials with direct driveway access to the arterial street. Lots should be accessed from collector or, preferably, local streets within or bordering the subdivision or an auxiliary street designed to accommodate driveway traffic.
- ◆ **Residential lots fronting on collectors** - Subdivision layout must minimize - and preferably avoid - the arrangement of lots to access collector streets, particularly within 180 feet of an intersection. To the extent practicable, lots should be accessed from local streets.
- ◆ **Geometric design standards and guidelines** - Other requirements and guidelines for the geometric design of thoroughfares and public streets should be provided in the subdivision ordinance and standard specifications. This includes special provisions for lot width and building setbacks on corner lots to preserve sight distances at adjacent intersections.
- ◆ **Private streets** - The City or County should not approve plats containing private streets unless adequate precautions are taken to ensure minimum standards of construction, necessary space for utilities and street widening, sufficient room for maneuvering emergency vehicles, and appropriate pedestrian circulation and emergency access.
- ◆ **Sidewalks** – Within the boundaries of a subdivision, sidewalks must be installed on both sides of local, collector, and arterials streets unless the development occurs in an estate or rural area and provisions are made and assurances committed for an internal trail or pathway system.
- ◆

### Access Management

Access management is an important component of the thoroughfare management process. Access management is the coordination between land access and traffic flow. The basic premise of access management is to preserve and enhance the performance and safety of the major street system. It manages congestion on existing transportation facilities and protects the capacity of future transportation systems by controlling access from adjacent development. Properly utilized, it can eliminate the need for street widening or right-of-way acquisition.

Techniques to accomplish access management include limiting and separating vehicle (and pedestrian) conflict points, reducing locations that require vehicle deceleration, removing vehicle turning movements, creating intersection spacing that facilitates signal progression, and providing on-site ingress and egress capacity. In addition, regulation focuses on the spacing and design of driveways, street connections, medians and median openings, on-street parking and parking facilities, on-site storage aisles, traffic signals, turn lanes, freeway interchanges, pedestrian and bicycle facilities, bus stops, and loading zones.

The following access management strategies may be used to coordinate the access needs of adjacent land uses with the function of the transportation system:

- ◆ **Intergovernmental coordination** - Access management is most effective as a regional strategy that involves members of the Kentucky Transportation Cabinet who are involved in the design and construction of area roadways. Through coordinated efforts, such as the design of the Outer Loop, access management can add to the functionality and ultimate efficiency of thoroughfares.
- ◆ **Separate conflict points** - Two common conflict points are driveways and adjacent intersections. Spacing driveways so they are not located within the area of influence of intersections or other driveways is a method to achieve access management objectives.
- ◆ **Restrict turning movements at un-signalized driveways and intersections** - Full movement intersections can serve multiple developments through the use of joint driveways or cross-access easements. Turning movements can be restricted by designing accesses to limit movements or by the construction of raised medians that can be used to provide turn lanes.

**Traffic Calming Devices**



Flat-top speed hump



Roundabout



Narrowed entrance



Street closure



Choker

- ◆ **Establish design standards** - Design standards within the subdivision ordinance addressing the spacing of access points, driveway dimensions and radii, sight distance, and the length of turn lanes and tapers are effective mechanisms for managing the balance between the movement of traffic and site access.
- ◆ **Locate and design traffic signals to enhance traffic movement** - Interconnecting and spacing traffic signals to enhance the progressive movement of traffic is another strategy for managing mobility needs. Keeping the number of signal phases to a minimum can improve the capacity of a corridor by increasing green bandwidth by 20 seconds.
- ◆ **Remove turning vehicles from through travel lanes** - Left and right turn speed change lanes provide for the deceleration of vehicles turning into driveways or other major streets and for the acceleration of vehicles exiting driveways and entering major highways.
- ◆ **Encourage shared driveways, unified site plans, and cross access easements** - Joint use of driveways reduces the proliferation of driveways and preserves the capacity of major transportation corridors. Such driveway arrangements also encourage sharing of parking and internal circulation among businesses that are in close proximity.

Traffic Calming

An approach to decrease the amount of “non-local” traffic in residential areas is adopting traffic calming programs, which are aimed at controlling cut-through traffic, speeding on neighborhood streets, and generally aggressive driving that threatens the safety of other drivers and pedestrians.

Traffic calming measures are instrumental in providing livable neighborhoods where residents feel safe walking, biking, and playing. Traffic calming is defined as “the combination of mainly physical features that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users.” In addition to addressing motor vehicle issues, traffic calming can also involve disparate objectives, such as improving aesthetics, promoting urban renewal, reducing crime, and increasing water filtration into the ground.

The broad goals for traffic calming include increasing quality of life, incorporating the preferences and requirements of nearby residents and others who use the area adjacent to streets and intersections, creating safe and attractive streets, helping to reduce the negative effects of motor vehicles on

the environment (pollution, urban sprawl, etc.), and promoting walking and bicycle use. More specific objectives are to:

- ◆ Achieve slower speeds for motor vehicles;
- ◆ Reduce collision frequency and severity;
- ◆ Increase safety and the perception of safety for non-motorized users of the street;
- ◆ Reduce the need for police enforcement;
- ◆ Enhance the street environment (streetscaping, etc.);
- ◆ Increase access for all modes of transportation; and
- ◆ Reduce cut-through traffic through neighborhoods.

Traffic calming is accomplished through a combination of measures that control both traffic speed and volume. Volume controlled measures include street closures, restrictive one-way streets, and turn restrictions. These measures are effective in reducing traffic on streets; however, such measures do not reduce speed and often result in the diversion of unwanted traffic onto other residential streets. Speed controlled measures are important in reducing injury accident rates. They also increase walking and bicycling on streets. Speed control measures should be designed into the community through urban design and land use features such as smaller setbacks, street trees, short streets, sharp curves, center islands, traffic circles, and textured pavements.



*Economic development helps harness the economy to secure the region's ongoing competitiveness and appeal as places to live, work and visit. Sustainable economies spawn first-rate jobs that generate wealth and investment. In turn, this economic activity ensures the City and County's ability to provide public services and invest in the future. Consequently, everyone making this region part of their family's future or their organization's mission has a stake in the economic strategies included in this Comprehensive Plan. No single entity—government, civic, business, educational, institutional, or community—can implement these strategies alone. Implementation will require the region's organizations to work in tandem and deploy its collective wisdom and experience.*

## Economic Strategies

### 5.1

#### INTRODUCTION

Our economy is in a constant state of flux. Jobs are constantly being created and lost. New companies open their doors while others close up shop. In celebrating successes and bemoaning setbacks, it's easy to forget that this progression is an essential part of a healthy, dynamic economy. In Paducah and McCracken County, the economy continually adapts and modernizes in response to changing demand, newfound efficiencies, and advances in product and process technology. Although some traditional industries remain significant economic generators, the region's transition to a knowledge-based economy is clearly underway.

This process reflects the influence of broad economic forces—globalization, the spread of capitalism, the rise of multi-national conglomerates, workforce expansion, etc.—and leaps of innovation far beyond the control of local government. Nonetheless, the power of the public sector in economic development is real.

Fortunately, attaining and sustaining regional economic competitiveness are challenges Paducah and McCracken County have chosen to face together with enthusiasm and resolve. Paducah and McCracken County can help set the right competitive environment for economic development, remove

#### Why a Knowledge Economy?

Traditional economic theory addresses only two aspects of production: labor and capital. During the industrial era, wealth resulted from replacing workers with machines. Today, long-term growth and sustainable prosperity link strongly to one aspect of capital: the knowledge, innovation and creativity available within the region's workforce. Intellectual capital and technological are mutually reinforcing; they create a platform for ongoing growth.

Factors behind this transformation include:

- globalization of commerce and communications;
- inexpensive information and communications technologies;
- innovation's link with science;
- readily available information infrastructure;
- componentization, outsourcing, clusterization,

barriers to growth and participation, and ensure that the region’s people benefit from the ensuing enhanced prosperity.

Approaching growth strategies from a regional perspective simply makes sense, for it reflects how both families and businesses function. Family members crisscross Paducah and McCracken County as they travel to work, school, shops, and social engagements. Businesses cluster where they can draw upon resources that aggregate at the regional level: labor, supplier networks, access to markets, etc. Paducah and McCracken County feature strong ties within the business community—the Chamber of Commerce, for example, serves the region—enabling local leaders to rub shoulders, share insights, and develop networks. Even as communications technology brings the world closer together, there is no substitute for face-to-face encounters made possible only by geographic proximity.

Acting regionally also helps ensure a pattern of development that reinforces other quality of life goals and policy objectives. Without inter-jurisdictional mechanisms for steering growth, decisions that are advantageous to one community can lead to deleterious effects (sprawl, congestion, premature land use succession, over-retailing, etc.) that diminish quality of life and impede the region’s ability to compete effectively. Shaping growth policies together helps regions overcome the central conundrum of planning and economic development: that government systems for decision making, revenue collection and service provision rarely match up to economic systems reflecting how markets, consumers, and businesses function.

Economic development policies should complement those determined for other aspects of governance, including planning matters, and vice versa. Most importantly, they must reflect what works for Paducah and McCracken County, reinforcing the region’s strengths and conquering its weaknesses.

## **5.2 INTEGRATING ECONOMIC DEVELOPMENT AND LAND USE PLANNING**

### 5.2.1 Quality of Life as a Competitive Advantage

For decades communities viewed economic development narrowly, limiting their targets to manufacturing facilities and their tactics to incentives geared towards reducing prospects’ capital and/or operating costs. This smokestack



Levee mural artist at work

chasing drove businesses to relocate every few years in search of further tax breaks, cheap land, low interest loans, free training, etc. For both the businesses and the communities, the results meant a short-term gain, attractive to voters and shareholders but ultimately a zero-sum endeavor that left little opportunity for sustained quality advantages.

As education, creativity, entrepreneurship, and other hallmarks of the knowledge economy emerge as key competitiveness ingredients, business location decision-making has shifted emphasis from corporate cost concerns to the quality of life concerns paramount to the high-skilled employees companies require. Quality of life encompasses good elementary and secondary school systems for employees' children (and the region's future workforce), cultural and recreational amenities, natural beauty, safety, affordable housing, retail/restaurant diversity, enjoyable urban centers, superior health care, and an intangible sense of community hospitality.

As "knowledge workers" become the most crucial and scarcest production resource, companies have become less concerned about fixed costs and more concerned about identifying locations that will help attract and retain talent. This shift has affected the economic development profession too, as practitioners find they must become stewards of community character and advocates of public investments that contribute to quality of life but only indirectly benefit their traditional corporate clientele. Attracting a skilled workforce, however, means making Paducah and McCracken County the nexus of a cluster of people likely to produce entrepreneurs, develop new products, ensure the health and growth of existing companies and, ultimately, catalyze the creation of wealth and opportunities for people throughout the region.

### 5.2.2 Economic Development and Balanced Growth

Paducah/McCracken County is a great place to live, work, and do business: the region offers a magnificent natural setting, a desirable mix of urban and rural lifestyles, and diverse recreational, arts, cultural, and leisure opportunities. But if the region is to continue to offer the lifestyle and quality of life its citizens currently enjoy, it must make the most of opportunities to support and improve the future prosperity of the region. That, in turn, means confronting some political, economic, and social challenges to fulfill the promise offered by the region's people, natural endowments, and history of entrepreneurship and innovation. Economic development entails concerted effort by community members, including elected and appointed officials, to:

- ◆ Identify where the region is now, wants to be in the future, and how it will get there;
- ◆ Select a set of focused priority activities for implementation;

### Riverport Advantages

The 48-acre Riverport, one of the County's busiest inland ports, offers a full-service public terminal with on-site rail and truck service ready to offload, store, package, or transport large volumes of solid and liquid products. Its location at the confluence of the Tennessee-Tombigbee Waterway, the Ohio River and the Cumberland River (less than 50 miles from the Mississippi River) means year-round direct connections to both New Orleans and Mobile. Eighteen towboat companies offer service. Outdoor yards provide storage space, while the Port's agri facilities allow for direct rail and truck-to-barge loading and accommodate liquid fertilizers. Portable conveyor systems move goods throughout the Riverport, including to indoor warehouse space suitable for dry storage.

The port also provides unloading services for grains, ores, fertilizers, and other bulk aggregates.



### WKCTC Students on Campus



**Services Available through the Commonwealth of Kentucky Cabinet for Economic Development's Office of Research and Information Technology:**

- Available sites and buildings lists
- Business cost comparisons
- City/County tax summary reports
- Community website development
- Company dossiers
- Economic development strategic plan support
- Economic impact analysis
- Economic, demographic, and community data
- Education and training information
- GIS mapping
- Industry profiles
- Kentucky business & industry information
- Labor force availability and costs
- New and expanding industry project support
- Planning and zoning related information
- Quality of life information and comparisons
- Tax estimates and comparisons
- Transportation issues and information
- Union activity reports
- Utility capacity and costs

- ♦ Allocate limited resources and monitor implementation; and,
- ♦ Provide vision, leadership, and guidance, to manage conflicts and trade-offs.

Since Paducah and McCracken County are undergoing transition, it's important that job creation proceed in ways that maintain the region's quality of life, which give it distinction relative to many competing smaller central riverside communities.

### 5.2.3 Regional Strengths for Economic Development

The Paducah/McCracken County region is fortunate to benefit from numerous locational advantages noted elsewhere in this Comprehensive Plan, including:

- ♦ **Access and Transportation Linkages** – With easy Interstate 24 access (and Interstates 66 and 69 under development), service by multiple rail lines, an airport boasting performance exceeding that of any comparable facility in the country, and a sophisticated riverport, Paducah and McCracken County can accommodate any leisure or business-related transportation needs.
- ♦ **Colleges and Universities** – Located just off Interstate 24, West Kentucky Community & Technical College offers traditional two-year Associate in Arts and Associate in Science degrees, Applied Science (technical) degrees and diplomas, and many certificates. Specialized programs devised to accommodate local market conditions address craft businesses, tourism and hospitality, and health care, among others. Other technical curriculum include auto body repair, computer-aided drafting, diesel technology, electrical technology, engineering technology, industrial maintenance technology, and welding technology.

WKCTC devotes space to an on-campus engineering program offered by the University of Kentucky specializing in mechanical and chemical engineering as well as the Challenger Learning Center, devoted to fostering a culture of life-long learning. And recently, the American Justice School of Law opened its doors in the Information Age Park Resource Center; the campus will ultimately support 500 students. Murray State's main campus is about an hour's drive away, but the institution offers a growing satellite facility in Paducah. Other nearby institutions include Mid-Continent University (Mayfield), a Christ-centered institution offers two and four year degree programs, and several colleges and universities in Illinois, Missouri, and Tennessee.

- ♦ **Cultural Amenities and Historic Character** – Paducah and McCracken County pride themselves on their history as a place where both native

peoples and European settlers found common ground on the banks of the Ohio River. In 1827, the arrival of William Clark (carrying a deed to 61.87 acres) disrupted this peaceful co-existence. The region's appreciation of arts and culture distinguishes it from many other Midwest river towns, putting it in the company of much larger communities known as destinations for heritage travelers.

Downtown Paducah and the adjacent Lower Town Neighborhood are now home to numerous art galleries. In addition, the region supports several performance venues, most notably the 1,800 seat Luther F. Carson Four Rivers Center for the Performing Arts, which is home to the Paducah Symphony Orchestra and offers a wide array of concerts and performances by touring casts and artists with national followings. Despite serving a relatively small market area, the not-for-profit Paducah Film Society shows thrive showing foreign, independent, documentary, and classic films at the Maiden Alley Cinema, an important downtown landmark and running the annual River's Edge Film Festival.

Nearby, the Market House Theatre stages productions Thursday through Sunday. The Paducah Area Painters Alliance (PAPA) represents 110 artists and features their work at four gallery shows each year. Meanwhile, the Yeiser Art Center mounts changing exhibits of contemporary art and pieces from its permanent collection. Perhaps Paducah's best-known cultural facility, the National Museum of the American Quilters Society, collects, preserves, and interprets historic and contemporary quilts, attracting patrons from throughout the world.

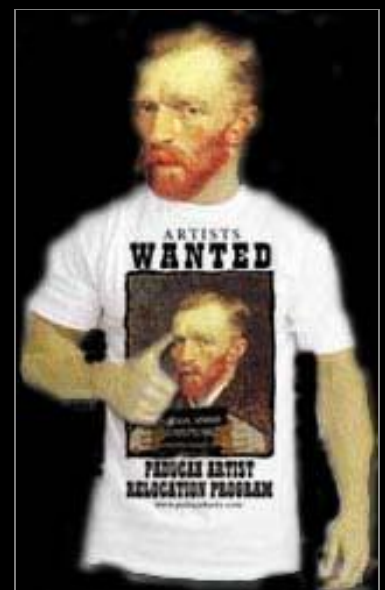
Paducah and McCracken County aficionados can be thankful urban renewal spared the region's historic commercial districts and residential neighborhoods. Lower Town, the neighborhood close by downtown that inaugurated the Paducah Artist Relocation Program, boasts a collection of terrific architectural beauties acquired and lovingly renovated under the auspices of the initiative. The Program has attracted artist participants from around the country and become an arts-as-economic-development model worldwide, honored with awards as well as by numerous imitators. Its success in Paducah—so far 75 artists have moved here and 40 structures have been renovated into residences, shops, galleries, bed and breakfasts, restaurants, etc.—has engendered community pride and created a thriving district from a once-neglected neighborhood.

- ◆ **Diverse Economic Base** - Paducah and McCracken County enjoy a diverse economic base, with a wide array of manufacturing enterprises, public sector employers, health care providers, and small entrepreneurial

Puffin Quilt by Shirley Kelly



Historic Post Card of Market House



**Paducah Gaseous Diffusion Plant**

PGDP is located in McCracken County, west of Paducah, on about 3,600 acres near the Ohio River; about 750 acres are "behind the fence" and off limits to visitors. In 1952, the Department of Energy (DOE) established the site to produce low assay enriched uranium for use as commercial nuclear reactor fuel. The United States Enrichment Corporation (USEC) now handles the production of uranium production at PGDP. Meanwhile, DOE focuses on environmental restoration and managing waste generated from site activities, as well as waste generated during the period prior to the changes to USEC operations. DOE activities at this site include:

- Site management
- Environmental cleanup and restoration programs
- Decontamination and decommissioning of facilities no longer in use
- Waste management, storage, treatment, and disposal
- Management of approximately 30,000 cylinders of depleted uranium hexafluoride

Gaseous Diffusion Plant



ventures. For over 50 years the Paducah Gaseous Diffusion Plant has drawn engineers and technology professionals to McCracken County; for even longer, maritime industry employers have provided steady high-paying jobs for thousands. Major employers include:

**Over 500 Employees**

- |                               |  |
|-------------------------------|--|
| ♦ Ingram Barge                | ♦ United States Enrichment Corporation |
| ♦ Lourdes Hospital            | ♦ Wal-Mart Supercenters                |
| ♦ McCracken Co Public Schools | ♦ Western Baptist Hospital             |
| ♦ Paducah Public Schools      |  |

**250-499 Employees**

- |                            |                            |
|----------------------------|----------------------------|
| ♦ James Marine             | ♦ Paducah City Government  |
| ♦ LYNX Services            | ♦ TVA Shawnee Steam Plant  |
| ♦ Marquette Transportation | ♦ West Kentucky Navigation |

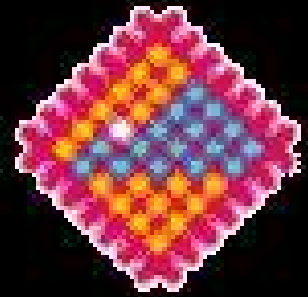
**100-249 Employees**

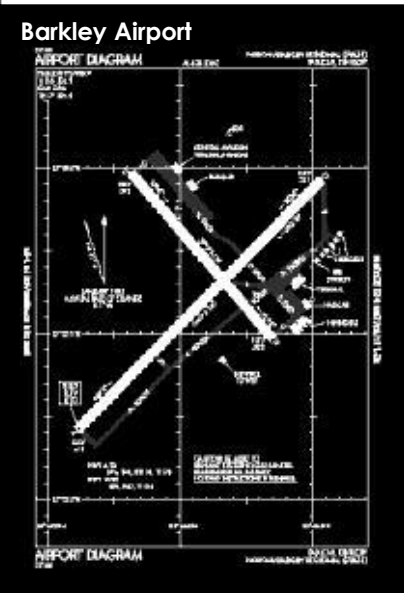
- |                            |                                 |
|----------------------------|---------------------------------|
| ♦ Amerisource Bergen       | ♦ Petter Business Systems       |
| ♦ B&H Towing               | ♦ Regions Bank                  |
| ♦ BellSouth                | ♦ Trees N Trends                |
| ♦ Computer Services, Inc.  | ♦ Triangle Enterprises          |
| ♦ Dippin' Dots             | ♦ Tyler Mountain Enterprises    |
| ♦ H.B. Fuller Company      | ♦ US Bank                       |
| ♦ McCracken Co. Government | ♦ US FoodService                |
| ♦ Paducah Bank             | ♦ Vinyl Technologies/AlumaKraft |
| ♦ Paducah Sun              | ♦ VMV Enterprises               |
| ♦ Paxton Media Group       | ♦ WKCTC                         |

**39-99 Employees**

- |                                  |                            |
|----------------------------------|----------------------------|
| ♦ Amtrol Inc.                    | ♦ Marine Systems, Inc.     |
| ♦ Arch Environmental Equipment   | ♦ Millwork Products        |
| ♦ Atlas Door of Paducah          | ♦ Paducah Power System     |
| ♦ Chemical Packaging Corp.       | ♦ Paducah Sheet Metal      |
| ♦ Cole Lumber Co.                | ♦ Precision Machine Inc.   |
| ♦ Credit Bureau Systems          | ♦ Reynolds & Doyle, Inc.   |
| ♦ Federal Materials Co., Inc.    | ♦ Schroeder Publishing Co. |
| ♦ Hawley Products                | ♦ Syntechnics, Inc.        |
| ♦ Hultman, Inc.                  | ♦ Wagner Enterprises       |
| ♦ Jackson Purchase Energy Corp.  | ♦ Wayne Supply, Inc.       |
| ♦ Long Concrete Industries, Inc. |                            |

- ◆ **Energetic, Effective Organizations** – Paducah and McCracken County benefit from the service of several organizations devoted to missions that directly or indirectly support the traditional economic development activities that are the purview of the Greater Paducah Economic Development Council. These organizations include:
  - The **Paducah Area Chamber of Commerce**, a membership organization that works closely with other organizations and WKCTC to help member businesses thrive. The Chamber’s view of economic development encompasses all aspects of trade and tourism affecting job creation and business health in the region, including retail sales. Consequently, the Chamber supports initiatives like downtown revitalization and the Artist Relocation Program, which induce residents and visitors to spend money locally. The Chamber also runs the Leadership Paducah Foundation, which introduces citizens to issues affecting the Paducah/McCracken region and then trains them in the art of getting things done in the public realm.
  - **Paducah Hospitality Association** is a membership organization closely aligned with the Paducah-McCracken Convention and Visitors Bureau. PHA works to ensure the health of the region’s hospitality businesses. PHA provides opportunities for networking, technical assistance, and services such as producing a map and other collateral materials that steer visitors towards member businesses.
  - **Paducah Main Street**, which manages downtown revitalization efforts in Paducah, spearheads the Saturday night strolls, and also takes charge of certain waterfront events, including the annual Old Market Days, which runs in conjunction with the BBQ on the River festival and competition held each fall. Paducah Main Street promotes the sensitive renovation of historic structures downtown. For example, the organization is working with the City to identify a developer to renovate the historic Columbia and Arcade Theatre (the City will convey the property free of charge to whoever takes it on.)
  - The **Paducah McCracken County Convention and Visitors Bureau**, funded through local transient occupancy tax revenues, which markets the region as a leisure travel destination, supports the major festivals and other special events (most notably the Paducah Summer Festival and the American Quilter’s Society spring show and convention, which are both run by independent organizations) and promotes area attractions and hospitality providers.
  - The **Paducah-McCracken County Riverport Authority** manages and markets the “nation’s northernmost ice-free riverport facility,” as described in the sidebar on page 5-3.





- **Barkley Regional Airport** is a remarkable resource for Paducah and McCracken County. Thanks to aggressive marketing and judicious management of its assets, the Authority’s Board of Directors and staff have succeeded in retaining air service for the region at levels well beyond that experienced in comparable markets without subsidizing the carriers. Survey and license data reveal that people from throughout the tri-state area recognize that PAH is an economic alternative to traveling to St. Louis or Nashville, particularly when factoring in parking costs, travel time, and hotel rooms. The Authority supports itself, earning revenues from landing fees, facility rentals, and service contracts. The Authority recently completed a runway extension and looks forward to the expansion of the National Guard Wing housed on site. Barkley features an Aircraft Rescue Fire Fighting (ARFF) facility and operates a Federal Contract Tower. Barkley has some land available that could accommodate a user needing airside access. The Authority also uses the airport terminal to showcase goods produced by area manufacturers and mount interpretive exhibits on flight-related topics, e.g., the Tuskegee Airmen. Last but not least, every Monday morning PAH and the Paducah Hospitality Association distributes coffee and donuts, along with literature about the region, to early travelers.
- ◆ **Greater Paducah Economic Development Council** – The GPEDC is a public-private partnership that represents the region in economic development matters and recruits occupants for the region’s inventory of prepared industrial park sites. GPEDC seeks to replenish the region’s manufacturing employment base with new high-tech entrants. GPEDC focuses on basic sector industrial, office, and distribution operations while leaving retail, hotel, and tourism recruitment activities to other organizations. The organization markets the region aggressively, advertising in site selection magazines, attending trade shows, and soliciting business. The American Justice School of Law project, which will ultimately employ about 300 people, stands out as one of GPEDC’s recent successes. GPEDC represents a significant commitment by both the City of Paducah and McCracken County, which approved an increase to the payroll tax to help fund the organization’s activities.



GPEDC works with other groups addressing economic development on a regional basis, including the Commonwealth of Kentucky Cabinet for Economic Development, E.ON.US (formerly LG&E) and The Western Kentucky/Southern Illinois Consortium for Economic Development, a partnership between GPEDC, Metropolis and Hickman, Fulton, Carlisle, Ballard, Graves and Marshall Counties. Together the Consortium retained representation in Europe to market the region to manufacturers seeking new US operations with a special focus on six industries that comport with the region's existing strengths: electronics, chemical, automotive, machine tool, automation and plastics. At present the overseas initiative relies on asset-based approaches but the group does not rule out eventually shifting to an incentive model.

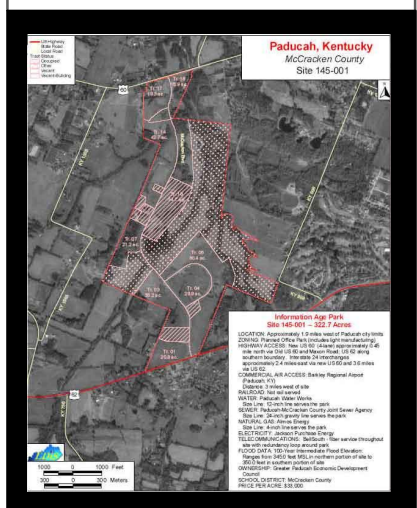
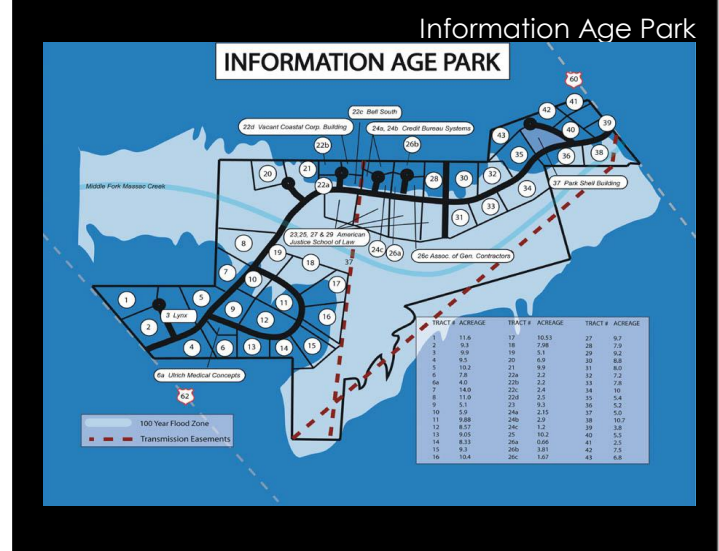
- ◆ **Vibrant Tourism Economy** – Paducah and McCracken County have become celebrated as a premier destination for travellers seeking arts and cultural in a small Southern city setting. The region's pleasant climate and naturally scenic geography make it an enjoyable place to visit. Paducah and McCracken County are also poised to capture snowbirds as they migrate north and south each year. An estimated 255,095 people visit the region in 2003 with expenditures of \$226,198,297 according to State of Kentucky Data. In 2005 this had grown to \$260,207,604.

According to the PHA tourism's economic impact in 2002 totaled about \$126 million, which resulted in about 2,700 direct jobs and about 4,350 jobs all together. Paducah and McCracken County are marketed by the state as part of the Western Rivers and Lakes Region, along with Ballard, Caldwell, Calloway, Carlisle, Christian, Crittenden, Fulton, Graves, Hickman, Livingston, Lyon, Marshall, Todd, and Trigg counties.

### 5.2.4 Challenges for Economic Development

Paducah and McCracken County are taking steps to redress two related shortcomings that, if ignored, would undermine previous investments in downtown:

- ◆ The absence of a convention hotel of a caliber on par with the revitalized



Julian Carroll Convention Center and Paducah Expo Center, which offers 110,000 square feet of convention/exhibit and meeting space and so is presently the 4th largest such facility in Kentucky. The adjacent 434-room JR's Executive Inn needs significant refreshment; replacing it, if a way were found to accommodate scheduled events, might be a cost-effective solution that could also deliver a more pleasing architectural statement that facilitated riverfront access. Unfortunately, some meeting planners are passing up Paducah because the hotel does not meet their standards. Local government is working to find a solution that works for both the hotel's current ownership group and the region's ability to book trade shows and other events. Solving the hotel issue is also tied to the management of the convention center and expo center; the three facilities are operated under the auspices of a single organization at present.

- ◆ Identifying ways to make the riverfront more accessible to recreational users from both the land and water sides will help enhance the region's appeal as a place to live, work, and visit. A planning and feasibility study that will address ideas including adding a full-service marina space and then using its revenues to offset capital costs associated with improving access and making the riverfront fulfill its potential as a regional urban amenity.

Other challenges remain:

- ◆ **Balance Between Economic Development and Other Planning Goals** - Economic growth enhances the Paducah/McCracken County region's overall quality of life. Economic policy choices must be supportive of other adopted City and County goals. The benefits of a healthy economy accrue to the region's citizens when economic programs, among other things, create jobs, invigorate urban areas, support transit use, strengthen property values, and provide the resources for improving public services.
- ◆ **Poverty Reduction and Job Growth** - While the McCracken County regional economy provides for many area families, not all citizens share in the prosperity. Integrating economic development activities with job training and entrepreneurship programs will help eradicate poverty, improve

Conference and Expo Center



underdeveloped areas, and ensure that all residents participate in the region's economic growth.

- ◆ **Coordination Among Organizations** – With so many organizations engaged in economic development, communication and coordination are particularly critical. Productive partnerships and meaningful collaboration is happening on an informal basis among the various entities, but in the rush to implement strategies and policies, nuanced understanding of each other's activities is sacrificed. Improved information-sharing could help avoid duplication of effort and perhaps identify situations where, for historic or haphazard reasons, responsibility for some function does not reside with the logical organization.
- ◆ **New and Small Business Needs** – Helping young and small business enterprises get off the ground has become fairly informal in Paducah and McCracken County, especially when the firm is located outside of downtown or pursuing a non-retail/hospitality endeavor.

### **5.3 GOALS, ACTIONS AND OUTCOMES**

Paducah and McCracken County will profit from a competitive, inclusive and dynamic economy. People of all stripes will understand the region as a great place to live and a great place to do business: a place where skilled people bustle in vigorous enterprise while taking time to enjoy the region's natural, cultural, and community resources. Achieving this ambition entails ensuring that the region is:

- ◆ competitive, because it must attract and retain skilled people and resources and sell its goods and services in both domestic and overseas markets;
- ◆ inclusive, because some groups in the community do not participate in the economy or benefit from its potential for wealth creation; and,
- ◆ flexible, because successful economies are nimble to take advantage of new opportunities and recover from downturns.

In Paducah and McCracken County, prosperity means more than wealth. It encompasses social and environmental objectives—important aspects of community—as well as economic goals. The seven outcome areas listed below reflect this broader understanding of prosperity:

- ◆ Continuous economic opportunities - More jobs and more opportunities for business establishment and growth.
- ◆ Balanced approach – the region's economic development stewards take on quality of life challenges as well as traditional economic development activities such as business attraction, retention, expansion, and creation.

- ◆ Diverse participation in the economy - Jobs and economic opportunities are distributed widely across the region’s demographic spectrum.
- ◆ Higher value economic activity – Economically productive business activity delivering high-paying jobs.
- ◆ Enjoyable community –Paducah/McCracken County are held in high regard by business owners, visitors, and residents, including positive outlooks on such issues as safety, respect, and participation in local government.
- ◆ Sensitive economic development choices – Economic activity is accommodated while maintaining and enhancing the region’s natural environment, including air and water quality and open space.
- ◆ Coordinated and transparent decision-making and implementation – activities pursued by the region’s public, private, and not-for-profit organizations concerned with economic development (including tourism, education and training, downtown revitalization, etc) reflect appropriate consultation, collaboration, and coordination with members of the public, elected officials, and other concerned groups.

**GOAL 5.3.1 Link economic development initiatives and quality of life initiatives together**

**Objective A:** Enhance and encourage the retention of existing businesses and creation of new ones.

**Action 1:** Implement a small business program to support enterprises that are independent, locally-owned, and serve day-to-day needs of residents.

**Action 2:** Develop programs geared towards retirees interested in launching small consulting practices, especially those who formerly worked in the PGDP complex or moved to the area from elsewhere.

**Action 3:** Convene the existing educational institutions and economic development organizations to coordinate the provision of business skills instruction to new and nascent enterprises, e.g., accounting, tax preparation, business plan development, etc.

**Action 4:** Create an awards program to help (and then honor) businesses who employ environmentally sensitive practices.

**Action 5:** Establish a clearinghouse of pertinent information about financial and technical assistance programs available through state, federal, and not-for-profit entities (e.g., the Service Corps of Retired Executives).

**Action 6:** Establish an ambassador group of area business leaders to call on existing companies once each year to find out how they are doing,

what they need, and whether any impediments to their success can be addressed by local government or the region’s economic development community.

**Action 7:** Encourage minority and women-owned businesses’ participation in economic development matters.

**Action 8:** Survey captured, existing, and lost business contacts to facilitate the identification, maintenance, and enhancement of factors that keep and attract investment in Paducah and McCracken County.

**Objective B:** Sustain and enhance existing community character.

**Action 1:** Complete architectural overlay district standards for remaining major commercial corridors.

**Action 2:** Identify other potential historic districts.

**Action 3:** Adopt policies institutionalizing the City and County’s ongoing efforts towards beautification, landscaping, and street-scaping improvements.

**Action 4:** Improve enforcement of existing ordinances addressing property and yard maintenance.

**Action 5:** Encourage the use and adaptive reuse of historic and other buildings for both commercial and residential use.

**Objective C: Encourage Sustainable Development**

**Action 1:** Encourage businesses to choose infill sites and locate or expand where efficient use of land and transportation corridors and minimum impact on the natural and cultural environment results.

**Action 2:** Amend the zoning ordinance provisions for home occupations to so as not to limit home businesses to certain prescribed uses but rather, establish standards for their compatible performance within the abutting and surrounding neighborhood.

**Action 3:** Adopt a policy and requisite zoning provisions to encourage the construction of public and commercial buildings according to green-building standards, considering such principles as water conservation, energy efficiency, reduced environmental building site impacts, and proximity to transportation.

**Action 4:** Explore possibilities for local lending institutions to finance and provide attractive loan rates for business condominiums, live-work units, and other sustainable office arrangements.

**Objective D: Promote the region to prospective businesses and industries**

**Action 1:** Develop plans to recognize and promote the region’s distinctive character to move beyond a site and infrastructure approach and leverage earlier investments.

**Action 2:** Centralize public sector staff participation in economic development organization activities.

**Action 3:** Support job training/retraining programs that encourage training for life skills and job readiness linked to specific target industries.

**Action 4:** Revisit the current list of target industries based on evaluation of existing clusters and other locational strengths including the availability of shovel-ready sites and key-ready buildings.

**Action 5:** Annually evaluate the success of the current approach to economic development.

**Objective E: Continue leveraging character for to expand the tourism sector**

**Action 1:** Leverage leisure travelers for business development and vice-versa.

**Action 2:** Recruit a full-service hotel for downtown Paducah.

**Action 3:** Work with AQS to increase television exposure for the region.

**Action 4:** Launch a campaign to get former area residents to return as visitors, perhaps in conjunction with local high schools.

**Action 5:** Develop a marketing and promotion plan to address short- and long-term booking issues surrounding the hotel, convention, and expo centers.

**Goal 5.3.2: Encourage a balance between commercial and residential property development that will also balance the cost of services with applicable funding sources.**

**Objective A:** Improve understanding of fiscal impact issues as they affect Paducah, McCracken County, and the independent districts providing water, sewer, school, and other services.

**Action 1:** Review the effects of Commonwealth and local tax/fee policies on the local tax base.

**Action 2:** Determine the availability of alternative approaches to financing capital and operating costs and determine what legislative changes are necessary.

**Action 3:** Explore whether alternative approaches to service provision and administration would yield efficiency benefits.

**Action 4:** Work with other municipalities and local elected officials to inform statewide decision-making.

**Goal 5.3.3: Build on Existing City-County Agreements to Advance Government Efficiency.**

**Objective A:** Encourage collaboration between McCracken County jurisdictions.

**Action 1:** Identify new administrative, service, and enforcement functions conducive to inter-jurisdictional MOUs.

**Action 2:** Encourage intergovernmental agreements between McCracken County municipalities.

All development places demands on the City or County, school districts, fire districts, utility districts, and others to provide new residents with services or facilities. This includes upgrading to meet the increased demand levels. Meeting these demands costs money at a time when government resources are scarce. When government simply reacts to every development proposal, it is placed in the position of responding to random development. It has been clear for the last 40 years that reactively serving scattered development is more costly than addressing planned compact growth. There are many competing projects for government funds, and this haphazard development style increases the risk of creating large budget deficits. Thus, it makes sense to have a plan that manages growth to keep government expenditures to a minimum, while meeting residents' needs.

The policies of the plan that address growth are called growth management policies. This Comprehensive Plan is designed to serve as a blueprint to guide the decisions of Paducah and to make recommendations for future growth in McCracken County.

## 6.1 THE GROWTH MANAGEMENT CHALLENGE

The greater part of the growth management challenge falls on McCracken County because there is a large land area and much of that area is either not served or existing services will be strained by the new development. This plan makes recommendations for growth outside the jurisdiction of the City of Paducah. Paducah has less vacant land, and existing infrastructure is almost-universally available to serve development. However, its problems are more likely to involve maintenance or replacement of old infrastructure. In both communities, the fiscal resources are not there to meet all needs for capital programs, maintenance, and operation; therefore, expenditures are prioritized and some needs go unmet.

### 6.1.1 McCracken County

Currently, 74.6 percent of McCracken County, excluding the City of Paducah, is either vacant or in rural uses. The County has accounted for all the area's population growth within the last two decades. While the vast majority of the County roads are paved, most are not built to current two-lane road standards with 12-foot lanes and shoulders that permit a breakdown to pull nearly completely off the road. Nor does road drainage meet current design

## CHOICES2025

Government provides the roads, sewers, water, schools, fire, police, and other services or infrastructure, all of which cost money. Land developers create new homes or businesses that require these services. Growth management is planning ahead to provide services in the most cost effective manner. If government simply reacts to each individual development, the costs rise due to inefficiency.



Du's/ac. means dwelling units per acre, a measure of density. The intuitive one-acre lot equals 1 du/ac., but neglects the fact that roads also must be part of a development. Further, it is rare that all lots are exactly the minimum size.

Gross density is the amount of dwelling units per acre that includes area for the street network. It seems intuitive to expect a density of 1.0 du's/ac from one - acre lots. However, streets, detention basins, larger lots in cul-de-sacs, and rigidity result in a lower density for subdivisions than lot size indicates.

standards. The roads have served farms for over 150 years and, as a result, these narrow roads were adequate when only farm service was needed. As they must serve increasing numbers of suburban residents driving modern automobiles, they will inevitably need to be brought up to a higher standard.

While the City and County created the joint sewer authority to provide sewer service to the rural areas, it should be noted that this effort is governed by the underlying policy that sewer service may be provided *where appropriate*. For the 20-year horizon of this plan, the vast majority of the County cannot be provided with services. In fact, the cost of extending systems is completely beyond the fiscal resources until well past 2025.

Further, the population forecast shows a maximum rate of growth of 2,829 dwelling units by the year 2025. In determining the area needed to support development, 25 percent of the development was anticipated to be at estate intensities having a gross density of 0.76 du's/ac. Suburban development is anticipated to be 60 percent of the development, averaging 2.00 du's/ac. The remaining 15 percent would be at urban densities averaging eight du's/ac. Of that, only 902 acres (75 percent) would have to potentially be connected to a sewer system.

From a cost perspective, it would be most desirable to extend service only to that land actually needed for development. There is adequate vacant land within areas presently served (see **Figure 6.1, Developed Areas**), and it could be argued that no sewer extensions are needed. Practically speaking, however, it is likely that some additional land must be served. However, the costs increase as more and more land area is served by sewers far from existing population centers. The same basic rules hold for water supply and roads, as well.

As development leaps out into the rural areas, sewer and water lines serve fewer and fewer people per mile and the costs of maintenance increase. Along with water and sewer costs, school bus trips, policing needs, mail delivery, and many other governmental costs increase. Many of these service increases affect local government budgets, and there are very few State and Federal funds available to offset these higher costs. It needs to be understood that only a fraction of the annual budget for roads and other infrastructure is available for new facilities; for roads, a majority of the budget is in operations, maintenance, and personnel. This means that the availability of funds for new facilities is very limited. With a road system that is not built to higher standards, the cost of upgrading is high.

In order to be fiscally responsible, while at the same time encouraging the County to grow, there is a need to manage growth to provide maximum service at minimal cost. This means promoting and encouraging new development in areas near existing infrastructure. Responsible growth will result in lower costs to the County. With limited fiscal resources, the result of being unable to meet all the growth needs because the development is uncontrolled means substandard service. Whether the result is driving on a road that cannot take the traffic loads or having too low water pressure because lines, pumps, or storage facilities are inadequate, citizens must “pay” in terms of lower service.

### 6.1.2 Paducah

The City is seeking to end years of population decline. Currently, limited new development is occurring in the City and newly developed areas are being annexed. However, there are numerous redevelopment opportunities in the City and will be more in the future. For instance, a major improvement of the City’s waterfront (see riverfront redevelopment plan) will make that area attractive to higher intensity residential development. This is an appropriate goal since higher density residential development near downtown with waterfront access is desired by the real estate market. The need for new or extended facilities is reduced in the City since nearly all the land within City limits is currently served by utilities. For both the City and County, infill development is cost effective because no extensions are needed.

The City faces a problem now that is still some years away from becoming a pressing need in the County – the upgrading of existing infrastructure that has passed its useful life. Water and sewer lines that are over fifty years old will need to be replaced in coming years. Water and sewer lines have fixed capacities and, in older lines, may need replacement to increase the ability to serve outlying areas. In both the City and County, parts of the system will need to be replaced or duplicated because their capacity has been exceeded.

Infill development is generally very desirable because it does not require extensions of service or upgrading of capacity. It may also have the advantage of being able to use funds allocated for maintenance and replacement to both replace deteriorated lines and provide for growth. When a project does double duty, it reduces the competition for scarce resources. Due to the fiscal challenges that infrastructure extensions pose for annual budgets, this “Fix-It-First” policy should be considered an imperative

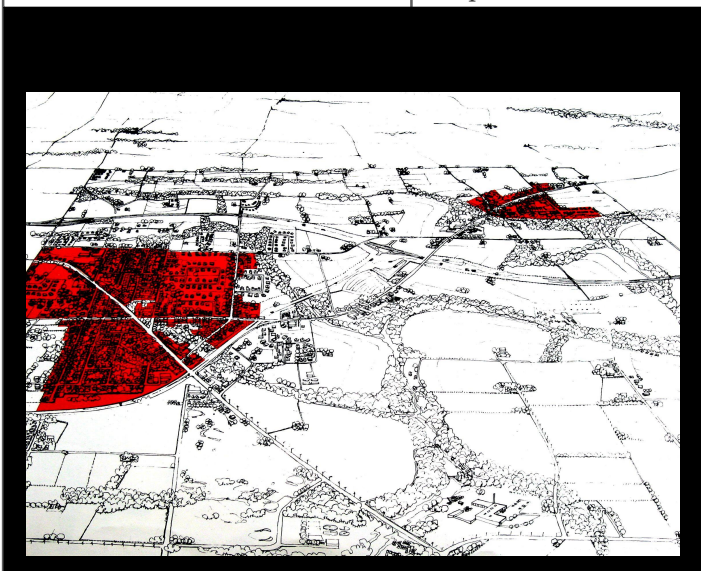
A “Fix-It-First” infrastructure policy allows municipal and county governments to more efficiently direct budgetary spending towards existing infrastructure and established population centers. An example of this type of policy is found in many State Departments of Transportation that direct funds towards the maintenance backlogs in existing communities, rather than focusing on new road construction in their

standard, rather than an ideal goal. The costs associated with unbridled low-density expansion simply demand that future development is directed towards location-efficient infill projects instead of ever expanding fringe sites.

The City has neighborhoods that have declined over the years. It is far better to seek redevelopment than to let them get rundown and become a blighting influence. Once neighborhoods are designated for redevelopment, it becomes a priority area to upgrade existing infrastructure. These public utility upgrades will spur private investment. Funds are scarce in the City, as well and should be leveraged with private funds in redevelopment areas. Thus, while growth takes on a very different form in the City, it, too, shares a need to manage growth to do a better job of serving citizens – present and future.

**6.2 GROWTH MANAGEMENT STRATEGY**

The basics of a growth management strategy (today also called smart growth and sustainable development) have been known for 40 or more years. The logical planning solution, first developed in the late 1960s and still valid today, is to identify an urban growth area. The planning framework involves four areas – the developed area, developing area, holding zone, and protection areas, as shown in Figures 6.1 through 6.4.



**6.2.1 Developed Area**

The developed area has existing infrastructure and planning issues are primarily infill and redevelopment. The developed area includes land that is vacant or in agricultural use in both the City and County. These sites would be smaller, and less than 20 to 25 percent of the developed area should be vacant. Both City and County benefit from encouraging infill development because it is highly cost efficient. **Figure 6.1, Developed Areas**, illustrates the developed area for a hypothetical community. Most of Paducah and all of Lone Oak are part of the developed area. The developed area is only 16.5 percent of unincorporated McCracken County’s land area.

**6.2.2 Growth Area**

An area or areas on the fringe of the developed area should be identified as the growth area<sup>1</sup> where new growth is to be encouraged. There is a boundary, most frequently referred to as an urban growth boundary, which limits zoning and infrastructure expansion. The size of the growth area should be on the order of 10 to 20 years of development potential. The number of years should be determined in conjunction with a capital program.

Some communities might be planning a number of growth areas to be phased in over 20 years, while others might have a single growth area that would last for most of the planning period. **Figure 6.2, Growth Area**, shows the area designated for future expansion. This should be the area where the communities have planned expansions of roads, water, and sewer. In McCracken County, it should also include planned expansion of low-density, one-acre lot development. This growth area amounts to 30.2 percent of the unincorporated land area.

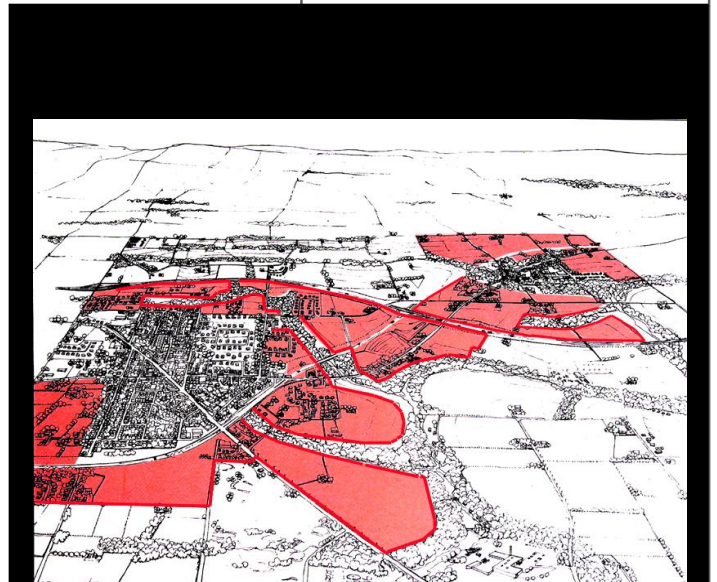


Figure 6.3, Protection Area  
Floodplains and steep slopes define resource protection corridors along streams in this example.



**6.2.3 Resource Protection Area**

In both the City and County, there are areas of floodplain, wetland, or other natural areas that need to be protected. Floodplains, in particular, are hazardous. Floods can result in the loss of life and always involve the loss or damage of property. Government responsibility for the public health and safety indicate that they should be protected. There are national standards that protect wetlands. Other resources may be deemed worthy of protection. These are areas where regulations should prohibit development. **Figure 6.3, Protection Area**, shows the protection area that, in the example, consists of floodplains and stream corridors. The McCracken County soil survey indicates that 56.6

<sup>1</sup> Over the years, the growth area has also been known as development district, urban growth area, urbanizing area, and other terms.



Figure 6.5, Initial Plan

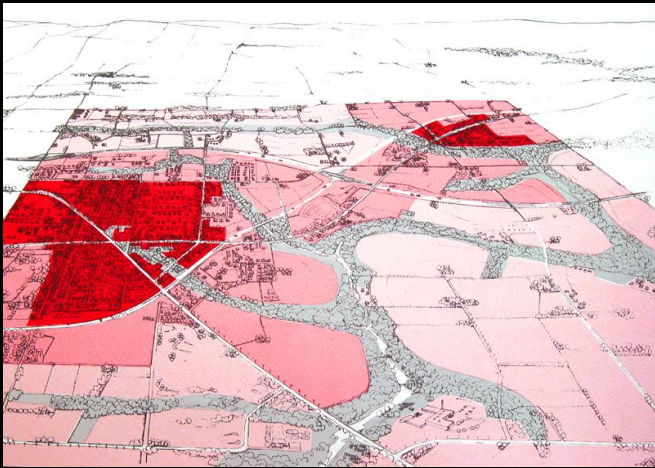


Figure 6.6, Revision



percent of the entire County, including the cities, is in floodplain or has water tables above the surface for part of the year.

#### 6.2.4 Holding Zone

Having identified the first three areas, this leaves at least 52.5 percent of McCracken County that is not needed to provide for growth over the next 20 years. **Figure 6.4, Holding Zone**, illustrates a typical holding zone. This is the most difficult of the four areas to address. It is assumed that, at some future time, this area will be ready for growth. What to do in the meantime? Logically, that would mean true rural zoning with lots in excess of 20 acres per dwelling unit, a figure that discourages all but the hobby farmer. This is a very severe restriction, and most of the problems with growth management revolve around how to treat this district. Land in the holding zone typically does not have sewer or adequate water pressure, so normal urban and suburban development is impossible. McCracken County should seek to create a strong disincentive to build in the holding zone, but not to prohibit it. Further, if the development pattern in the holding zone is such that it creates a rural character, the County should provide increased density as an incentive.

#### 6.2.5 Periodic Expansion

The urban growth area has a life of 20 years. The community needs to regularly revisit this area and add additional land. Expansion should take place well before the current growth area is 50 percent developed. The need should be assessed every five years and, ideally, the growth area will be expanded to maintain a 20-year growth potential. Similarly, the developed area needs to be updated. **Figure 6.5, Initial Plan**, and **Figure 6.6, Revision**, demonstrate the planned expansion.

The major issue becomes how the City and County implement the growth management strategy presented above. There will be major components. The first is the designation of the developed areas and the development or growth area. The second is the identification of the protection area. These are accomplished on a map that serves as a guide to decision making on development for both the private sector and the various governmental bodies. There will be additional policies that are attached to each of these basic mapping elements that provide controls or incentives for the implementation of the plan.



### 6.3 A GROWTH MANAGEMENT PROGRAM

The mapping of Paducah, Lone Oaks, and McCracken County into the four basic zones is a critical step. **Map 6.1, Growth Management Plan**, illustrates current development and proposed development patterns. The two cities are considered to be developed, as are parts of the County. The protection areas are found in all three jurisdictions. The rest of McCracken County was divided into development and holding zones.

#### 6.3.1 Developed Area

The developed area constitutes 24 percent of the total area of the County. Despite its name, not all land within the developed area is fully developed. Vacant property on parcels over ten acres is shown in **Table 6.1, Vacant Land within Developed Area**. There is substantially greater potential in the form of smaller parcels and individual lots. Other properties are underutilized or unoccupied. Due to the abundance of underutilized and vacant land, growth

Table 6.1, Vacant Land within Developed Area

	Vacant Parcels of 10 acres	Acres	Capacity at 2 dwelling units per acre
Paducah	63	1,572	3,144
Developed Area (including Paducah)	87	2,230	4,460
Growth Area (including Paducah and Developed Area)	656	24,780	49,560
McCracken County	1353	68,583	137,166

can occur within the developed area. Growth in the developed area will be characterized by infill development and redevelopment. Infill development is new development of open land, individual lots, or vacant properties where the surrounding properties are developed. In some cases, the vacant land may have had a prior use or been cleared (**Figure 6.7, Four Rivers Center**) to prepare it for redevelopment.

As is the case in all cities, Paducah wants to rehabilitate old neighborhoods that are in decline and make it a more attractive place to live. Redevelopment continues in the Lower Town Arts neighborhood and is planned for the Fountain Avenue and Uppertown neighborhoods. In redevelopment neighborhoods, water, sewer, sidewalks, and streets should have priority for upgrades to replace substandard lines and coordinate with growth needs. That does not mean that there are not other pressing needs, but simply that redevelopment requires significant infrastructure investments to encourage private land owners to reinvest in these communities. Parks should be reviewed and improved and, if there is a shortage of parks for the neighborhood, additional park land should be secured and improved early in the redevelopment period. Sidewalks should be provided on all streets.

It is estimated that a revitalization program for a neighborhood requires an intensive five-year or more effort. It includes actions to stabilize the neighborhood, to get programs in place for rehabilitation and redevelopment, and to allow enough time to give residents and lenders confidence to reinvest in the neighborhood without governmental assistance. At the end of the program, only minimal additional effort should be needed by the City. A redevelopment priority assessment shall be completed to encourage neighborhoods to begin to reinvest on their own action ahead of designation.

The VMV PaducahBilt railroad facility (**Figure 6.8, VMV PaducahBilt Site**) represents a major reinvestment opportunity. Employment has been declining for many years and a significant number of the buildings are either vacant or greatly underutilized. While the City does not anticipate the closing, it should anticipate site reutilization. To that end, the economic development agency should undertake a study to determine how the facility can be made to increase its attractiveness to other businesses, or have a closing and redevelopment as simple as possible. The final decision is determined for its economic future,



a joint effort of the City, State, and VMV PaducahBilt should be undertaken to determine the environmental problems that would be associated with reuse. This is an area where assessment and clean up could begin prior to the closing of the facility. The site today is clearly a brownfield site, with at least one area on the market. The sad history of brownfields is that they often sit vacant, unused, and decaying for decades. It makes sense for all concerned to develop a reuse plan so that the blighting influences of an abandoned or vastly underutilized property do not adversely affect neighboring areas.

The downtown area underwent a major reinvestment during the 1990s, which needs to continue. One problem confronting downtown is its size. The area is a tourist- and arts-oriented market; there is insufficient internal or nearby population to create a market for businesses serving the area's residents, rather than visitors. Most local and regional commercial is now located near I-24 and the mall. A major increase in population in the downtown area would provide new business niches and increase the vitality of downtown. With the development of a riverfront plan, it is important to make use of land with views of the river for high-intensity, residential development. The greater the nearby population, the better it will be for downtown economic interests. Some of the industrial facilities and other uses east and west of downtown might be targeted for relocation to make more land available for residential use near the river and greenway. The City currently has no residential areas taking advantage of the river. The topography is such that there is no potential for borrowing the river from adjoining hills, as is the case in Pittsburg, Cincinnati, Dubuque, and other cities. This is a serious problem for the revitalization effort of downtown, so the residential development should be a priority.

The United States Enrichment Corporation and Department of Energy (DOE) property is a major redevelopment site. Because of the hazardous and radioactive wastes on the site, clean up and redevelopment planning is very complex. DOE is the lead agency, and the County must stay alert to opportunities and ensure that potential liabilities do not saddle the County with a problem, rather than an economic development asset. This plan sets land use recommendations for this area of the County. While this is technically redevelopment, the scale of the property (over 1,350 acres) justifies a growth area designation.

### 6.3.2 Urban Growth Area

#### Paducah Gaseous Diffusion Plant

"Extensive support facilities are required to maintain the enrichment process including a steam plant, four major electrical switch yards, four sets of cooling towers, a building for chemical cleaning and decontamination, a water treatment plant, and maintenance and laboratory facilities. Approximately 740 acres of the plant are fenced industrial operations, which is surrounded by another fence forming a smaller area of uninhabited buffer zone. The PGDP started uranium-enrichment operations in 1952. Plant operations have generated hazardous, non-hazardous, and radioactive wastes including polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), technetium-99 (Tc-99), and multiple isotopes of uranium. Approximately 100 residences and businesses are presently receiving municipal drinking water due to groundwater contamination from the



The urban growth area has been defined to provide for the entire region’s anticipated growth for the next 20 years. The projections are for a 2025 population of 6,223 people, which translates to 2,829 dwelling units based upon a household size of 2.2 persons.<sup>2</sup> The urban growth area contains land for both residential and non-residential development. Further, residential is divided into estate areas that do not need sewers and suburban and urban areas that do require public sewers. In determining the area needed to support development, 25 percent of the development was anticipated to be at estate intensities having a gross density of 0.76 du’s/ac. Suburban

**Table 6.2, Urban Growth Area Development**

Character Types	Gross Density DU's/ac.	Percent of Dwelling Units	Dwelling Units	Area Required (acres)
Urban or Auto-Urban	6	15	424	70.6
Suburban	2.00	60	1,697	848.5
Estate	0.76	25	708	538.1
Total	NA	100	2,829	1,439.6

development is anticipated to be 60 percent of the development, averaging two du’s/ac. The remaining 15 percent would be at urban densities averaging eight du’s/ ac. **Table 6.2, Urban Growth Area Development**, shows the acreage needed to meet these needs.

It is important to plan for estate areas because a portion of the population desires this lifestyle. The goal should be to establish large areas where these needs can be met without conflicting with long-term sewer expansion due to the higher costs of either skipping over these areas to extend services to outlying areas or servicing low-density areas. Skipping over an estate area to service more remote suburban or urban areas means additional miles of interceptors that must be paid for and maintained. The alternative of providing sewer services in low-density development is costly because the length of line per dwelling unit is two to ten times that of suburban or urban development. Creating a long-range estate area can reduce uncertainty by specifically designating areas that will never be served with sewer.

<sup>2</sup> This future household size of 2.2 persons is a conservative estimate based upon existing household sizes in Paducah, currently 2.12 persons per household, and McCracken County, currently 2.31 persons per household.

The residential need is based on the projected population and subsequent number of dwelling units to house this population. This is not a conservative estimate and, furthermore, it is theoretically possible that 100 percent of the projected dwelling units could be sited in the Developed Area. In addition, the holding zone does not prohibit development, and it is anticipated that some development will also occur in that area. The result is that, in terms of actual capacity, the developed area and urban growth area will accommodate 25 to 30 year's development.

In addition to the residential need, there needs to be a wide range of other land uses to serve the residential area and provide jobs. Fifteen percent of the development district should be provided for commercial development and for institutional uses. This is a reasonable range for these uses given that the City and County have a large supply of older commercial areas where redevelopment will be important. The need for business and industrial land has, in part, been determined by some of the unique opportunities and future concerns. One of these is the potential siting of a container-type port facility near the I-24 crossing of the Ohio River. This area is served by the Canadian National Railroad and, thus, has significant potential. It is included to make it possible for economic development to pursue this as a possible new business.

A similar reservation for nonresidential use is recommended at the airport. The reason for this is two-fold. Most critically, it prevents residential development from crowding the airport and creating both safety and quality of life problems for residents, while preserving value for the owners. Secondly, it provides for long-term growth potential and a market niche that needs to be protected so it is available beyond the current planning period. In both these instances, the land designation is made to protect land with unique industrial potential. The uses that want these specific requirements of access are one-of-a-kind in the community. Thus, their long-term protection is desired and, by placing them in the urban growth area, the planning of infrastructure can be accomplished. This means that if the need materializes, the infrastructure will be there or the commitment to put it in place has already been made.

The City, County, and all other service providers need to develop capital improvement programs to ensure adequate services for the new development. These programs should also work together to create one cohesive strategy instead of conflicting plans that misdirect new development. For all development in the urban growth area and the

A development consists of lots, streets, and open space. As a result, the gross density (number of du's per acre of total site area) is less than expected because a portion the site is devoted to streets. The gross density of a five-acre lot subdivision is 0.18 du's/ac. or 18 homes on a 100-acre site, while dividing 100 by 5 acres, one would anticipate 20 du's

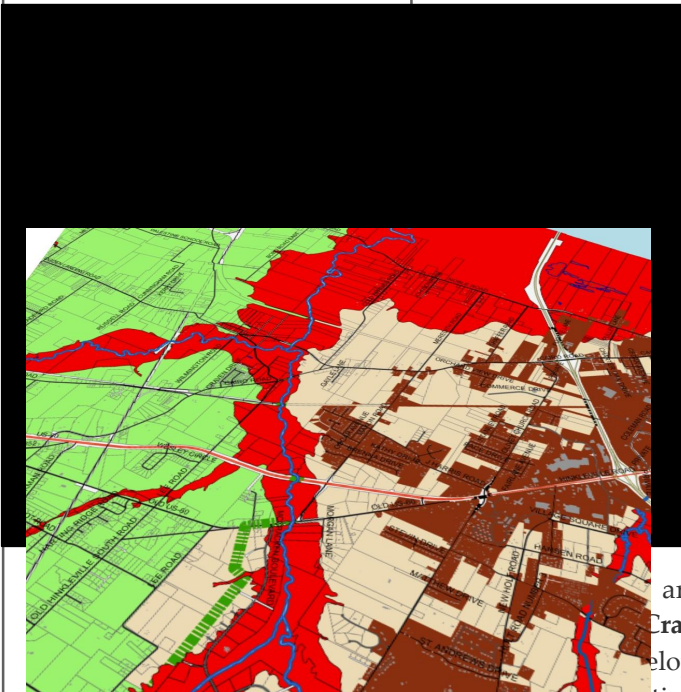
developed area, the water system should provide two things: an adequate supply and adequate fire service (pressure and flows). Nonresidential land uses and all residential areas, except the estate area should be served by public sewers.

The developed and growth areas have been defined to provide for the City's anticipated growth for the next 20 years. The projections are for a 2025 population of 6,223 people, which translates to approximately 2,829 dwelling units. The developed area currently has a mix of 53 percent residential uses and 47 percent nonresidential uses. The acreage level of nonresidential land uses is high due to the large amount of vacant and agricultural land included within this area. The urban growth area contains land for both residential and nonresidential development. The residential need is based on the population modeling of alternative future scenarios described in Chapter 2, Community Snapshot. The end result is an abundance of land availability in the developed and growth areas for infill projects and new development sites.

**6.3.3 Resource Protection Area**

This area consists of floodplains and wetlands as illustrated in the **Cracken County Floodplain Area**. These are areas that should not be developed, with the exception of some recreational uses and greenways. Active recreational areas can be located in the floodplain, but, in doing so, care should be taken to ensure that these are areas that do not flood regularly outside the 25- or 50-year floodplain. In addition, soil studies should be taken to ensure that the soils can support heavy activity in the spring or other rainy periods.

While there are federal regulations that apply to both of these resources, it is important to regulate and control these locally. Flooding takes an annual toll on property and life. The primary goal is to ensure that building in floodplains is absolutely minimized. To this end, only uses that actually need to be located in floodplains, what are known as water-dependent uses such as marinas or commercial docks, should be permitted in those locations. Thus, waterfront uses such as ports, shipping industry docks, marinas, and beaches could continue to be located in floodplains because they need access to the river or other water body to fulfill their function. Parking should also be prohibited in the floodplain. Some recreational uses that are not damaged by occasional flooding are also permitted, provided the flooding or water tables



are such that the facilities are normally useable, even in wet conditions such as the spring rainy season.

Filling of floodplains should be prohibited, except for road crossings of the river or stream where the road is needed to provide a network of collector and arterial roads or to provide access to otherwise isolated properties that do not have access to other roads except by the crossing. The floodplain should not be used as routing for roads to avoid the higher condemnation costs on dry land. Residential uses should not be located in the floodplain, nor should on-site sewer systems be located there as captured in **Figure 6.10, Paducah Flooding in 2002**. The filling of house pads to elevate the homes above the floodplain simply places homes in a dangerous condition. With roads under water, people are isolated and cut off from emergency services in the event of fire or health crisis. Further, the 100-year flood is simply a frequency of flooding measure and greater floods occur. Similarly, there is significant evidence that the 100-year floodplain is increasing as we pave over the landscape, which forces more and more water into the streams.



Wetlands are areas quite similar to floodplains. The vast majority of wetlands are in floodplains along streams, but there are some upland wetlands that are generally found upstream of the area where floodplain mapping ceases. Because water is above the land surface part of the year, wetlands are natural flood control facilities. In McCracken County and Paducah, the upland wetlands are few in number and small. In this environment, there is no residential development that needs to fill wetlands. The wetlands can be integrated into stormwater detention or retention systems. Filling wetlands and piping stormwater simply increases flooding elsewhere. The one exception to a policy against filling wetlands is in the case of small, upland wetlands in industrial or commercial development where the preserved wetland would be surrounded by impervious surfaces that send pollutants to the wetland, thus degrading it. These wetlands should be permitted to be filled, provided they are replaced on-site as part of the stormwater management system.

There is one other resource that is subject to flooding – drainageway soils. These are soils that form along streams and are listed as having seasonal water tables where the water is at or above the land surface. They follow the

topography and, above the limits of floodplain mapping, are still shallow floodplains. A great number of them carry water several times a year. This is an area that should be used for stormwater management. Water naturally flows here and properties should be engineered to use these areas to control the flow of stormwater as it exits the site. The regulations should require the excess water created by the development to be stored on site, in addition to their predevelopment storage capacity.

All three of the resources can be considered to be floodplains. Wetlands are under water a portion of the year and store stormwater. The drainageway soils are, in fact, floodplain. Some will be located within the 100-year floodplain; most are simply beyond the limits of the floodplain studies that do not go to the upper end or source of every stream. The regulations are important because development creates impervious surfaces. There is a direct correlation between the amount of impervious surface and the amount of run-off in any storm event. The best example of this is standing under a tree on a sidewalk when it is still dry under the tree, but water is starting to run in the gutter. The more impervious surface, the greater the run-off and the less groundwater recharge. Development channels stormwater and speeds it downstream, while the floodplains and pervious surfaces absorb and slow run-off. Engineering is not the solution; it simply moves the problem to some other location upstream or downstream. The simple solution is to avoid building where nature moves floodwaters.

With the regulations that Paducah and McCracken County currently have regarding development, the regulations discussed above would reduce the development potential of the site. The current regulations require lots of minimum area and minimum frontage. Thus, the loss of any land to resource protection reduces the area that can be divided into these lots. It is not the protection of the resource that creates the loss of development potential, but the rigidity of the zoning. It has been known for decades that cluster development, which is regulated by maximum density and minimum open space, can allow the developer to achieve maximum development potential, while preserving the resource. In adopting regulations that protect the resources in the protection area of the plan, the zoning should be changed to permit cluster development as a matter of right, with no special review requirements other than meeting the density and open space standards.

#### 6.3.4 Holding Zone

Within the holding zone, a long-term projection of estate areas where sewer will not ever be extended is provided in **Map 6.2, Future Service Area Boundaries.**

The term “holding zone” was chosen to indicate its transitory nature. The land is being held out of development for a given time period. Reviews every five years are intended to add to the growth area, thereby reducing the amount of land in the holding zone. The reason for the holding zone is to avoid premature development of land, which results in higher service costs to government for service and infrastructure and can lead to difficulties in servicing the facility with full services later.

The urban growth area is sized to accommodate all of the development in the City and County for the next 20 years. Because there is additional development capacity in the developed areas of the City and County, the development capacity of these two areas is closer to 30+ years. The entire holding zone is in unincorporated McCracken County. The present one-acre zoning in McCracken County encourages building at random anywhere in the County. This makes it difficult to implement the planning for the urban growth boundary.

Adequate area for one-acre, estate residential development has been planned for in the urban growth boundary. This planning has been done in a manner that ensures the development does not adversely affect the economics of future development. The County does not wish to prohibit development in the holding zone or to make it so costly that it is considered unaffordable. However, a disincentive to premature development that makes future extension of services more costly is required so that development does not force the public to accept higher costs or reduced services.

A series of development options will be available to all landowners. The options provide development patterns that reward development that contributes to desirable County goals and discourages development patterns that are costly through disincentives. As a base line, the density of a subdivision with five-acre lots is used with incentives or disincentives associated with different options.

### 6.3.5 Development Options for the Holding Zone

A development with five-acre lots would achieve a gross density of 0.18 dwelling units per acre. The optimal result of a holding zone is that no development would occur until sewer became available. It is inevitable that some land owners would want to or need to sell and there would be developers ready to buy the land. However, there should be no incentives for

Land treatment refers to a sewer system serving a subdivision where there is no discharge to streams. This includes common septic fields, treatment ponds with spray irrigation, and constructed wetlands.

development in the form of infrastructure amenities or promises for future construction.

On the incentive side, development patterns that preserve rural character or that promote efficient sewer or service expansion will receive the highest densities. Development patterns that are the most costly to serve or that are inefficient expansions receive disincentives. Several development patterns are considered to be desirable. Developments that can provide a permanent rural character and does not create burdens on the efficient provision of services are rewarded with a high density. Other development patterns that allow for initial development, but do not increase the cost of services, are also provided with incentives. The disincentives apply to development patterns that are undesirable.

There are four desired development patterns that are recommended: phased development with sewer, phased development for resubdivision, conservation development, and rural community development. The desired

**Table 6.3, Summary of Incentives**

Development Type	Gross Density	Average Lot Size	Open Space	Ultimate Density	Initial Bonus
Base Development	0.18	3 acres	30%	0.18	base
Phased Cluster, Sewer	0.29	½ acre	80%	1.11 – 2.25	61%
Phased Development, Septic	0.11	8 acre	0%	0.76-1.00	-38%
Rural Community	0.29 – 0.45	20,000 to 10,000 s.f.	80%	0.29 – 0.45	61-1.50
Phased Cluster at Development Area Boundary	0.40	¾ acre	60%	1.03 2.00	1.22
Large Lot	0.09	10 acres	0%	0.09	
Rural Subdivision	0.050 to 0.067	1 acre	NA	NA	NA

Source: Kendig Keast Collaborative

options are designed either to have a rural development that is permanently rural or to be a subdivision that initially works without sewer, but that is designed to support sewer through additional development (phased) or by resubdivision. The less desirable development patterns are a large-lot subdivision that will be a barrier to efficient extension of sewers and a rural subdivision for farm families. The base development will be a cluster development. All the options are shown in **Table 6.3, Summary of Incentives**.

1. **Base Development.** This is a cluster development that has a gross density equal to that of a five-acre subdivision, 0.18 du’s/ac. It would

have a minimum open space ratio (OSR) of 0.35 and an average lot size of three acres, with a minimum of two acres. This means the development can serve as an equestrian development with each home having enough land for a small stable and paddock (requiring three acres) and common area for pasture or riding trails. The lots need only be two acres in size, which leaves the developer free to provide more common open space or have a mix of lot sizes that would average the three acres. The clustering means that lot frontages are shorter, which, if sewer were to come to the area, means less cost to serve. The cluster also saves the initial developer and homeowner in the cost of roads and water lines.

2. **Phased Cluster, Sewer.** This is a cluster development that is designed to be provided with full sewer services in the future. The lot sizes should be such that sewer is efficient (between ½- and ¼-acre lots). The first phase of development has large amounts of open space to promote a rural character or estate character. It would qualify as what is called a “conservation development” and include more than 50 percent open space. The homes would initially be served with a private sewer system (some form of land treatment) that can be taken over at minimal costs when the public services are extended to the area. Public sewer and water lines would be installed in the first phase in a manner that would permit an efficient hook-up to the public system when it is extended to the area.

This option requires an ultimate site plan that provides 30 to 50 percent open space and an initial plan that provides at least 80 percent open space. The initial development would have a density equal to three-acre lots (0.29 du’s/ac.), with the final development having a gross density of one dwelling unit per acre. The second phase of the development is triggered by a plan amendment. The ultimate density could go higher than one dwelling unit per acre depending on how the land use element is amended when the property is designated as a “development area.”

3. **Phased Development, Septic.** This option uses on-site septic systems for the first phase of the development and requires resubdivision to institute the second phase. The incentive here is not an initial density increase. It comes in the form of increased future value due to the ability to subdivide to a known level in the future. The entire property would be subdivided into lots of at least ten acres, with a gross density of 0.09 du’s/ac. There would also be a tentative plat recorded that showed how



the initial lots could be resubdivided when sewer became available. This tentative plat puts all the property owners on notice that their property might be potentially connected to a sewer system. More importantly, it demonstrates how the landowner can subdivide to minimize the cost of the sewer serving their lots. It would also guide the initial land owner to place the house where it does not limit the number of future lots because the house sits where a road should go. This works for the land owners whether the future land use amendment calls for large, one-acre lots or development with sewer connections. The second phase would be triggered by the plan amendment.

4. **Rural Community.** This option is designed for the large, agricultural land owner who wants to continue in farming, but would like some development potential. It is a cluster development that requires a minimum open space ratio of at least 0.80 to ensure there is sufficient land to continue the agricultural operation after development. A minimum of 320 acres would be required to use this option in order to provide enough development potential to pay for infrastructure. This development is designed to preserve agriculture or natural areas over the long term and should have a site plan that preserves the best agricultural land, concentrating the development on lower quality land. The development density would increase as the total land area increases to promote permanent retention of rural areas in the County. The base density would be 0.29 du's/ ac., rising on a sliding scale to 0.45 du's/ac. when over 1,000 acres is involved. Not all the land would need to be continuous, but all the open space would have to be permanently preserved.
5. **Phased Development, Adjoining Development Area.** This is a variation on the phased development on sewer. It has a very limited application. Only land ultimately planned for sewers that immediately adjoins the development area boundary is eligible. Further, only when the sewer authority certifies to the County or City that there is excess capacity over and above the needs of the development area can that eligibility be acted upon. To qualify as excess capacity, both the plant and interceptor must have adequate capacity to serve the property. If the site is in an area designated for permanent, estate-type development by **Map 6.2, Future Service Area Boundaries**, it is ineligible. The initial phase would provide an open space ratio of at least 0.60. The initial density could not exceed 0.40. Nor could a development qualify for more than ten percent of the excess capacity. Ultimate densities would vary with the ultimate land use designations, but are assumed to be 1.11 or higher.

6. **Conventional Subdivision.** This is a subdivision serviced by on-site sewer. The minimum lot size would be five-acre lots. All lots would have to take access to an internal road system. Frontages would prevent the practice of developing piano key lots. This is intended as a permanent, large-lot development pattern.

**Rural Subdivision.** This is aimed at the concerns of farm families that want to retain the farm, but would like to provide lots for children or need to sell lots to get through a rough year. This type of development often occurs along roads, stripping off the frontage – a practice that is widespread in McCracken County. The practice of stripping the road frontage has several undesirable results. As development in an area continues, the rural road on which the lots front become collectors and need to move higher volumes of traffic. Given the alignment and cross-section of many McCracken County roads, this can lead to dangerous situations where people enter the road from individual lots. Residents will ultimately seek to control speed, reducing the capacity of the roads to serve as collectors. If the road needs to be widened, the costs will be dramatically increased. Another problem is visual; stripping road frontages destroys the views of the rural landscape, which is one of the reasons people move away from cities and suburbs. All these problems are eliminated by requiring an internal road system. The farm owners do not want to do a subdivision with internal streets because it is very expensive to build new roads. Further, they often want to sell or give away an occasional lot. How can the legitimate needs of both groups be met? The rural subdivision is the answer. It requires the lots to front on an easement of access on the farm property. The easement would be 66 feet wide to support a public street and drainage at some time in the future. The easement can be improved with a gravel drive to serve the homes, so the cost is minimal compared to a public street, and many farmers could do most of the work with their own equipment. The County gets the home onto a new street and leaves the existing road with limited intersections. **Figure 6.11, Four-Lot Rural Subdivision,** depicts an example of rural farm development. The size of the farm or property determines the number of lots that can be built using the rural subdivision as shown in **Table 6.4, Rural Subdivision Options.**

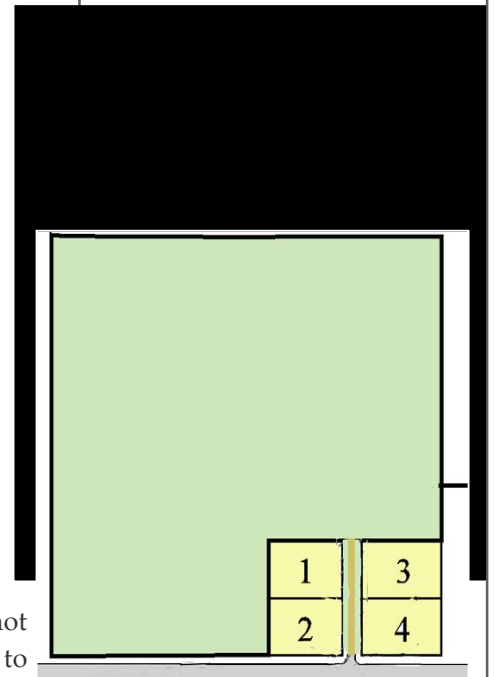


Table 6.4, Rural Subdivision Options

Parcel Size	Number of Lots	Density
40-49 acres	2	0.050 du's/ac.
50-59 acres	3	0.060 du's/ac.
60-79 acres	4	0.067 du's/ac.
80 -99 acres	5	0.062 du's/ac.
100 or more acres	6	0.060 du's/ac.

Because the rural subdivision is not intended to provide full development, there is a limit on the number of lots that can be given to children or sold. The rest of the farm continues in agriculture and is referred to as a remainder because it is intended to be farmed. The easement giving access to the lots is part of the remainder. The County wants to ensure that, at some point in time, the easement of access becomes a public road. The subdivision that is recorded contains the subdivided lots and the remainder. To ensure the road is eventually built, the remainder has a note on it that when the remainder is to be further subdivided under one of the previous options, that the developer is responsible for dedicating the public right-of-way and improving the road and drainage to County standards.

The result of the seven options is that landowners have far more choice in how to develop their land than as listed in the current zoning. Three of the options are for total build out; four provide for phased development. The base zoning in the holding zone would result in a cluster development at the density of five-acre lots. The phased options allow a landowner to do an initial development to enable them to wait for sewers and urban water service and a higher land value. Density incentives reward the developer who chooses the phased options. In return, the County and its citizens ensure a more efficient provision of services. The owner who does a rural community is rewarded with the ability to continue farming, while also being able to participate financially in the growth of the County. These are win-win options for both parties.

There is a disincentive for the development pattern that is least efficient for the County – subdividing with large lots with maximum street length per lot. This requires the use of five-acre lots, resulting in a 50 percent reduction in density.

The rural subdivision is simply a way for a rural land owner to accommodate family or get some funds from the sale of property in an emergency. The incentive is not in density, but in a means to achieve the desired result with minimal costs without creating problems for the County roads.

**6.4** LEVELS OF SERVICE

The service of residents by government can be quantified as meeting express levels of service. This is a familiar concept on roads where the level of service (LOS) relates to the degree of congestion. For parks and recreation, the LOS

would be described as acres of parks per 1,000 people. Two of these levels of service – sewer and water standards – are important for growth management since these are systems critical to development.

With sewer there are two levels – public sewers where government treats the wastes and on-site systems, typically septic systems, where the land owner treats the waste. Water service standards are based on pressure, the ability to reach all levels in a house, and flows that measure the amount of water that can be delivered in a fixed period of time. One level of service would involve pressures and flows adequate for household use. A second level provides the capacity to fight fires from hydrants, which requires more pressure and flow capacity than residential service. Fire and emergency services have a response time criteria, which for fire is also combined with water service conditions.

In order to best manage growth, a multi-tiered service approach is proposed. The developed area and growth area require full public service for water and sewer. These areas require a water system that fully meets the need to fight fires. A public sewer system ensures that wastes will be properly handled. The holding zone is not intended to be developed during the next 20 years, and the majority of the holding zone area is unlikely to be developed in the next 50 years. This area has a reduced level of service. Rural water can be on-site wells or residential service, and sewerage is treated on site. To move forward with a proposed development in the holding zone, the service provider must certify that both water and sewer meet the level of service standard.

The rural water districts should be required to demonstrate that the proposed development can be adequately provided with residential service without lowering service in other parts of the service area. A second condition is that the feeder infrastructure bringing water to the water district is adequate. If these conditions cannot be met, the units will have to be provided with on-site water. Each site will have to have been determined to be suitable for an on-site sewerage system.

### **6.5** IMPLEMENTATION

**Developed areas**  
*Redevelopment*

- ◆ The Arts Neighborhood should continue final efforts to redevelop and the Fountain Avenue Neighborhood will begin redevelopement in 2007.
- ◆ Once designated as a redevelopement neighborhood, water and sewer shall be studied to determine maintenance and replacement needs, including upgrades that will serve future growth.
- ◆ Parks should be improved to standard and level of service be brought to standard if current levels are inadequate.
- ◆ Sidewalks should be improved or provided in the initial redevelopement effort.
- ◆ Economic study of the VMV PaducahBilt site.
- ◆ Stage 1 environmental assessment of the VMV PaducahBilt site.
- ◆ Downtown zoning revised to encourage the increase in residential population, which should be coordinated with the waterfront planning.
- ◆ City and County continue to press for redevelopement plans of the Uranium Enrichment Plant that will provide for employment and other development opportunities and a clean up of the entire property for reuse.
- ◆ Roads and other infrastructure shall be maintained and replaced in accordance with a capital improvements and maintenance program that maintains such facilities in a safe, sound, and efficient condition.

***Urban Growth Area***

- ◆ Provide water and sewer for the entire growth area. Most of this area already has service or service is already planned. All expansions needed for this area shall be on the capital program so that they are completed within two years.
- ◆ Have plans for all other needed infrastructure.
- ◆ Capital program or other means of providing needed infrastructure or services should be in place. This includes other capital facilities including fire, emergency, library, schools, and parks.
- ◆ Provide for review of the plan and updating every five years to ensure that the development capacity is adequate.

***Protection Area***

- ◆ Revise zoning to prohibit development in the floodplain except for water dependent uses and essential road crossings.
- ◆ Prohibit development in wetlands, except for on-site mitigation in commercial and industrial areas where the quality of the wetland would be degraded if they were preserved in place.

- ◆ Use drainageway soils for stormwater management facilities.
- ◆ Revise zoning to permit clustering as a matter of right. Clustering makes it possible to avoid destruction of a significant amount of sensitive area on a property without losing density. Cluster should be a permitted use in all residential districts.
- ◆ For nonresidential districts, do not use building coverage as a regulation. Use floor area ratio and ensure that height standards permit intensity to be maintained when there are resources on-site.

### *Holding Zone*

- ◆ The area shall be divided into two areas for future development – perpetually on septic tanks and areas that, in some distant future, may be provided with sewers. Note the actual timing of service extension could be 50 or more years in the future.
- ◆ Zoning should be revised in accordance with the standards in this Chapter.
- ◆ The sewer and water providers should be required to adopt this plan.
- ◆ No services should be extended into the holding zone unless the area to be served is designated as an urban growth area by an amendment to this plan. Minor improvements to water systems shall be limited to upgrades that benefit the current users and are not being used to permit new subdivisions.

The purpose of this section is to provide information and insight into the issues concerning the use and development, which is the dynamic field of information technology and it's accompanying infrastructure. The potential impact on communities is tremendous in scope, and it appears that much education and planning is necessary in order to be prepared to address ever changing issues. This chapter will present some basic background information about the most significant issues at present and will make recommendations for addressing them and other rapidly development technologies both now and in the future

# Information Technology

## 7.1 A NEW INFRASTRUCTURE

In recent history there has been a great change in attitudes toward now common technologies such as cellular phones, e-mail, Internet, computers, personal digital assistants (PDAs), wireless devices, and other technologies. Cutting edge information technologies are now part of the societal fabric. As their uses are expanded, the demand for digital infrastructure and constant connections will be expected more and more by citizens and tourists.

The importance of making those tools convenient to use cannot be underestimated. It has been said that when the telephone was first introduced, the growth in its use was so explosive that a telephone industry executive predicted that everyone would have to become a telephone operator in order to handle the demand for service. That is, of course, exactly what happened. The technology developed to a level that was easy to use, permitting average citizens to make their own calls. The same has become true of the technologies under development today.

Information technology already plays a significant role in public safety, economic development, entertainment, work, communications, education, and is rapidly expanding its presence in the daily lives of our citizenry. But, the coincident increase in use of computers, and personal digital devices by average citizens, along with the enormous growth in the use of the "Internet"

We must realize that we are witnessing the leading edge of a rapidly evolving new infrastructure much like the railroads, the interstate highway system, and the water, sewer, telephone, gas, and electric utilities.



and wireless technologies has furlled the engine of one of the most substantial infrastructure development periods in decades.

As the City of Paducah looks toward the future, it is crucial that the community develops and has in place the knowledge and guidelines necessary for the process of planning for the expanding use of these technologies.

Recent federal and state legislation has already impacted the ability of local authorities to address these issues. The potential impact of ignoring these developments will be costly and will only further delay the necessity to plan for the future. The Comprehensive Plan is an appropriate avenue to address these issues and to develop recommendations for the future.

**7.2 TWO GUIDING THEMES**

Two guiding themes seem to have arisen regarding information technology. These themes are:

- 1) The desire for “Universal & Continuous Access” to the various information technologies; and;
- 2) The linking of information technology and infrastructure to the existing development Strategies of the Comprehensive Plan:

**Universal & Continuous Access**

The concept of “Universal & Continuous Access” is the ability of every citizen to have access to information technology and infrastructure development at any given time or location. This does not necessarily mean a computer or Internet access if so desired. This ability is available through the Paducah Public Library, public wireless hotspots, and could be offered through facilities located in other public spaces, schools, or kiosks in shopping centers. It is also provided in the home through any number of service providers. Many people already take advantage of this capability through modems, wireless devices, satellites, coaxial cable, and telephone lines.

**Linking to Comprehensive Plan**

In today's society, people expect to be connected to the digital world at all times. Newer devices can connect to the Internet, voice, data services, and other functions that were previously only possible with a person computer and separate devices. As technology advances, demand will be even greater for all types of wire





Initially, the best way to incorporate these issues and concerns into the Comprehensive Plan is to begin by relating them to the Comprehensive plan's Development Strategy. The following paragraphs are meant to describe some potential benefits that could be realized through the implementation of information technologies.

### **Transportation**

Information technology has the potential to alleviate dependency on vehicular trips to accomplish many tasks. For example, with a home computer or wireless device one can now search for books at the Paducah Public Library, shopping, and research from almost anywhere even without a home computer. Generally, this convenience has only been available from large mail order firms and cellular phone providers. However, with increased wireless technologies, these services are being made available by local governments and businesses. Home delivery of products ordered from local businesses such as groceries, drug stores, and hardware stores -- once a common occurrence -- is again being implemented in many areas of the country. Trends such as these have the potential to reduce short trips, with a corresponding benefit in air quality improvement. "Telecommuting" can especially reduce commuting to and from work, as people are increasingly able to work from their homes through the use of computers, modems, and fax machines. The potential impact of increased telecommuting must also be examined in light of present and future zoning ordinance. Increased numbers of people working from their homes will raise questions and concerns about business activities in residential areas, which were more clear-cut in the past, but will require further examination and planning in the future.

### **Governmental Structures, Education & Public Safety**

Information technology can assist in providing access to information, materials, and services typically found at public buildings, schools, libraries and other public agencies. The following examples for information technology and infrastructure related to community facilities should be examined:

- Further electronic linking of community facilities such as schools, libraries, city and county buildings, and other facilities holds potential for improving access to information by the public. This would include the availability of public information on-line where practical. For example, documents can be published electronically,



The US Department of Transportation relies on Information Technologies to inform citizens of traffic issues in congested areas. New technologies are planned that provide information on these issues wirelessly, long before you get to the trouble spot. Routes can be adjusted accordingly as you monitor the situation.

Wireless "hotspots" are rapidly increasing in numbers. Coffee houses, businesses, and local governments are providing wireless access points throughout communities. Some municipalities are contemplating providing free citywide coverage.



reducing cost of distribution, while also making the information more accessible, possibly even worldwide.

- Potential improvements in public safety could be realized by installing smoke, fire, and burglary detection systems, which could automatically link to emergency dispatch services when activated. Although such systems are not yet perfected, their availability and usability will improve in the future. 911 currently utilizes this technology.
- New developments in information technologies and infrastructure will have an impact on physical design and capacity of public facilities as well, perhaps affecting building and parking capacities as well as building code and design features. For example, new city/county/public office facilities being built should be designed to accommodate computer networking/video-conference networking capabilities and expandable wireless technologies in the design stage rather than as an afterthought.

Proximity to access points to information technology may become a factor in determining where people choose to live in the same way proximity to parks, schools, shopping, and churches plays a role now.

Sites for cellular phone towers, Personal Communication Services (PCS) equipment, and other facilities could be evaluated through the use of Geographic Information Systems (GIS) technology. In particular, the concept of sharing facility sites among various cellular and PCS providers, where possible, has great potential for reducing the number of towers necessary to serve the area's communication needs. It is important for the City of Paducah, to strongly encourage sharing or co-location of these facilities to minimize their proliferation within the community.

**Public Services & Facilities**

Technologies are now available which make it possible to read utility meters electronically and have the monthly readings sent to the utility headquarters. In some areas of the nation these systems are already in use. Utility service providers should be encouraged to examine such developments when installing new service capabilities. Increased wireless access throughout the community is necessary before these technologies can be effective and efficient.

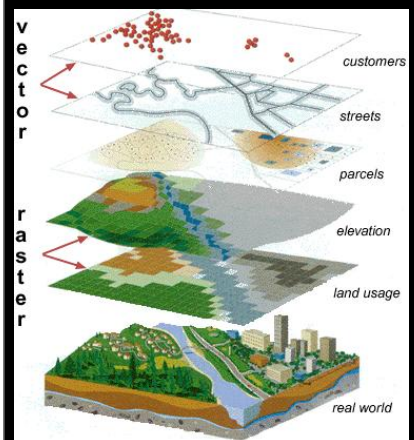
If electronic meter reading is implemented, it may be feasible to implement other capabilities through the same system, or to install multiple systems so that if one fails, the other will back it up. With more immediate feedback of utility service usage, the utility service providers may be able to use this information to better design their systems to handle peak loads/capacities and better balance service demands. The feasibility of these suggestions is unknown at this time, but the potential benefits are significant, and the decision-makers must become aware of the many new possibilities on the horizon.

Maintenance of facilities can be aided through the use of GIS and Automated Mapping/Facilities Management Systems (AM/FM.) Such systems are designed to store highly accurate base maps of a region and any related information about the maps in a computer database. These maps are separated into “layers” such as roads, buildings, property lines, and so on. In this way, it is possible to deal with a single layer or with multiple layers of information.

Utilities can also map their facilities as individual layers on top of the common “master base map” in order to organize and use their information in a method that is consistent with other uses. For example, when planning to repair a sewer line, a simple search could show the location of any water or gas lines that may be present. When repairing, replacing, or maintaining existing facilities or installing new facilities, consideration should be given to these new capabilities. The City of Paducah, McCracken County, Paducah Water Works, Paducah Power, Joint Sewer Agency, and Paducah/McCracken 911 formed a consortium to develop a complete GIS system. The “McCracken and Paducah Geographic Information System” (MAP~GIS) will cover all of McCracken County. The initial GIS system is in place and the consortium is working toward improved data and access to the system.

The use of GIS to help site facilities such as public buildings or to optimize school bus, public transit or solid waste pickup routes, must be more fully explored and encouraged. Use of this technology can provide a more tangible basis for decision making which otherwise can appear arbitrary if not properly explained.

Geographic Information Systems (GIS) are a collection of computer hardware, software, and geographic data for capturing, managing, analyzing, and displaying all forms of geographically referenced information. Data are referenced to the map and can be accessed by clicking on a particular feature. This new way of land, asset, or document management can be put onto the world wide web for public records access.



**Land Use**

Identification of the best sites for recreational facilities, agricultural and/or preservation areas, and industrial parks should be done before land available for such uses becomes scarce. Again, GIS technology could be used in this effort by tracking land consumption over time and by use. Trends in development and demographics can also be more accurately tracked using GIS capabilities.

**7.3 SIGNIFICANT TRENDS AND EXAMPLES**

When then is it necessary to plan for something that in some cases is already available through existing facilities? The answer is, while today's facilities are generally adequate for the uses being made of them, increasing growth in the use of these technologies and demand for faster and more reliable capabilities will increase dramatically in the coming years. Listed below are some examples of the services and capabilities that will be dependent on developments in the information technology field.

**Economic Development**

Business will demand even greater access to an information infrastructure that is flexible and capable of handling their diverse needs. This is especially true when firms are looking to expand their operations. Communities that are not prepared to accommodate such needs may be passed over in the process. Additionally, employees of companies will demand greater wireless access to digital information and entertainment.

**Electronic Commerce**

Closely related to economic development issues, electronic commerce deals with the exchange of purchase orders, invoices, and payments using an electronic standard. The amount of online sales has increased dramatically the past few years and is expected to continue to increase. This will also create the demand and need for more efficient shipping facilities and delivery trucks that will rely more on wireless communications and global positioning systems for efficiency.

**News Media**

News organizations will take advantage of the capabilities in reporting news as it happens and as a means of distribution. The Paducah Sun and the WPSD television station have entered into this new electronic publishing

There are becoming limitless applications for wireless technologies and Geographic Information Systems (GIS) and Global Positioning Systems (GPS). Below is a GPS unit made specifically for farming applications. The map of the field shows the crop rows and soil test data. The amount of fertilizer applied to a particular part of the field is controlled based on the soil data. Other wireless data could also be considered in a farmer's workday, such as weather conditions, soil moisture, or other important farming conditions. For example, a soil moisture sensor could transmit data to the irrigation controls as to when to turn the water on. This demonstrates the need for information technologies to be present



frontier. The near future holds digital wireless TV broadcasts, amateur audio/video broadcasts, music, and other news and informational media.

### Education

Schools are teaching our children how to use these technologies. As the workers and citizens of the future, they will expect these capabilities to be available at all times. Distance learning via video-conferencing/interactive television, and online degrees, as you would find at the Paducah Community College or the Murray State extended campus office in Paducah, as well as career training and other educational offerings, are offered through current and developing technologies. Those not prepared, risk being left behind as the information revolution proceeds.

### Medical

The medical professions already rely heavily on available information technologies and will increasingly require reliable, fast, and accurate exchange of information. Video-conferencing capabilities, in particular, hold great promise in extending the reach of the latest advances in health care from research hospitals to remote locations. New wireless technologies allow emergency medical technicians the ability to relay vital information about patients while en route to the hospital. New medical technologies monitor vital body functions and can transmit data so it can be relayed to the doctor before a patient is even seen. Wireless cameras and other medical devices can now be inserted inside the human body to aid in proper treatment. Ambulances with global positioning systems transmit their locations to the hospital so staff can know exactly when the patient arrives. Most all of these technologies are already in use in several communities and rely on a strong digital infrastructure to succeed.

### Telecommuting

Working from remote locations or from home will become more commonplace resulting in increasing demands for adequate information technology infrastructure. Banking, shopping, paying bills, submitting tax returns, performing research, and using e-mail are among many of the activities and services that are now in routine practice. Many of these have the potential to reduce short trips and save considerable time. People are now starting to work from coffee shops, public parks, and other such locations.

One popular example of telecommuting in today's wireless age is working from the coffee shop. As wireless coverage is growing, the number of places people go to do remote work is expanding. Some other favorite places include public parks, malls, and front porches.



**Government Organizations**

Government agencies can take advantage of many capabilities to improve the delivery of services to the public. Publication and distribution of public records in electronic format, where practical, can help make information more accessible to the general public. "One-Stop Kiosks" can be designed to handle applications for permits and/or other necessary paperwork rather than forcing the citizen to visit several different locations. Wireless inspections of properties can make clients more informed and city staff more efficient.

**Emergency Services**

The City of Paducah, McCracken County, Disaster and Emergency Services (DES), Joint Sewer Agency (JSA), Barkley Regional Airport, Paducah Water Works, and the US Department of Energy (DOE), currently use an 800-megahertz radio system. This system is designed to permit either addressable communication from one station to another, or when necessary, to permit communication within or among groups of radios. In this way, emergency service providers communicate individually and within their own organization and under normal conditions, or in case of a natural disaster or other emergency situation, could easily switch to a cooperative mode for coordinated response. Currently the city has approximately 60 mobile data terminals (MDTs) in police vehicles. Ideally all disaster and emergency vehicles need MDTs. This is an immediate need of approximately 125 MDTs that rely on wireless communications. In the future the entire city and county government and associated agencies will need similar types of digital communications devices. That will create demand for 300-400 more units that will rely on an adequate wireless communications backbone. As time moves on and new technologies come into reality, adequate digital infrastructure must be in place, as wireless communication is becoming the main form of communication and information.

**Kentucky Information Highway**

The "Kentucky Information Highway" is a statewide initiative to make the latest advances in information technologies available to all public agencies in the state at a uniform rate. Many of the examples listed herein are part of this initiative. The goals and objectives of the "Kentucky Information Highway" initiative should be examined for a greater understanding of its potential benefits to local government organizations.

Mobile Data Terminals (MDTs) are rapidly becoming standard equipment in emergency response vehicles. These mini computer rely on wireless technologies to send and receive information in the field. One example is the use in police vehicles to run license plates, records checks, and existing warrants on suspects. Another application is with disaster response teams. Critical information can be updated to the response teams almost instantly.



Motorola MDT

The “Kentucky Statewide Base Map” is an initiative of Kentucky’s “GIS Advisory Council”, in cooperation with the United States Geological Survey (USGS), the Natural Resources Conservation Service (NRCS) -- formerly the Soil Conservation Service -- and the U. S. Forest Service (USFS), to map the entire commonwealth at a uniform scale for the purpose of making up-to-date mapping available for use by all state and local government agencies. This mapping will be sufficiently accurate to be used as a base for property mapping in all but the most urbanized areas of the state. The potential benefit of such a product to the state in the areas of economic development, transportation, tourism, environmental and natural resources, and conservation efforts is tremendous.

**7.4 RECOMMENDATIONS**

**Community Plan**

Aggressive development of information technology infrastructure has taken place due to consumer demand and also due to changes brought about by the Federal Communications Act of 1996. Accordingly, a comprehensive, unified countywide plan should be developed and implemented to address the needs and concerns of the community and to prevent a fractious, piecemeal approach, which could adversely affect the continued orderly development of the county. A steering committee of local representatives and professionals with knowledge of this technology should be appointed to prepare this plan.

A long-range goal should be to be able to offer everyone in the City of Paducah, the ability to have individual residential wireless access to information technology and infrastructure if desired. A short-term goal should be to first make services available at local libraries, shopping malls, and expand access to public places.

**Education**

Continuous efforts should be made to inform decision-makers and the general public about present and future information technology developments in a timely fashion. Decision-makers must be well informed in order to make intelligent decisions. Training programs, on-going education,

Wireless access is relatively inexpensive to provide in localized areas. A simple router, computer, and a high-speed Internet connection is all you need to provide basic wireless Internet access. As technologies improve, the costs to serve greater areas will become cheaper.



and public awareness programs will all contribute to the goal of making people aware of developments and their potential impacts. Since information technology developments are unfolding so rapidly, it is imperative that these educational efforts be sustained and continually offered in order to provide the most up-to-date information.

**Cellular Towers, PCS Facilities and Satellite Dishes**

The siting of cellular phone towers, Personal Communications System (PCS) facilities, and satellite dishes are subject to local review and approval. Co-location of antennas on existing structures should be encouraged. Creative designs that limit the visual impact, but still provide necessary coverage should also be encouraged.

**Telecommunications Act of 1996**

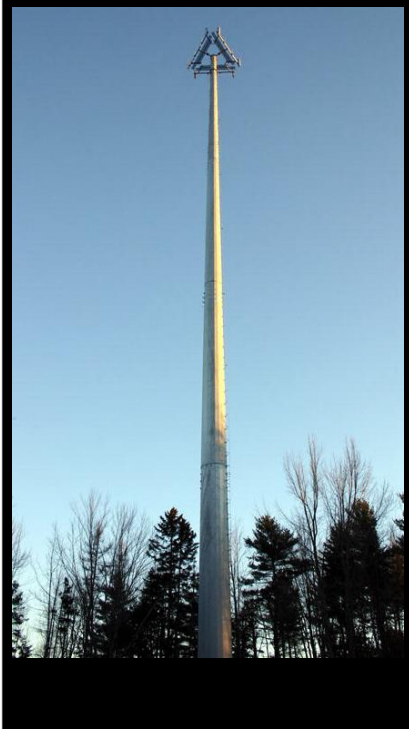
The federal *Telecommunications Act of 1996* has severely restricted, to the point of preempting local control, the ability of local authorities to control satellite dish placement for aesthetic reasons. Local authorities have no control over satellite dishes 1 meter (3.28 feet) or less in diameter in residential areas and 2 meters (6.56 feet) or less in commercial areas.

Prior to July 15, 1998, cellular towers and their facilities were only subject to local review and control when located in Jefferson County, Kentucky. Presumably this will also be the case with the new Personal Communication Services (PCS) facilities, which will require much higher densities to provide for adequate coverage. Effective July 15, 1998, local review and control authority has been extended statewide under the jurisdiction of local planning commissions registered with the Kentucky Public Service Commission, where applicable, per H.B. 168. The Paducah Planning Commission registered with the Public Service Commission on October 1, 1998. Infrastructure within the public right-of-way is still subject to local control per Paducah Ordinance 98-3-5828.

Sites for cellular phone towers, PCS, satellite dishes, and other similar technologies that may be developed should be examined and evaluated through technologies such as GIS and computer imaging. GIS can be used to locate optimal sites for facilities while computer imaging permits creation of



There are three basic types of cellular towers in the region: a monopole, guyed, and self-supporting. The monopole type shown below takes up the least amount of area both visually, and physically. The disadvantage to this type of pole is the cost and the fact that it will support fewer antennas than the other types.





visual models of proposed facilities. Service providers themselves use these technologies when making presentations before boards and commissions in areas of the country having local review and control authority.

Service providers should be required, where feasible, to share towers and site facilities in order to minimize their proliferation. Aesthetic issues are prominent and will need to be addressed at the local level. Also, as new technologies make such towers or other facilities necessary, it will be important to assure their removal and disposal.

This plan recommends that city officials and the planning commission work cooperatively with the service providers and use the following list of recommended criteria when evaluating a site:

- Service Providers should be required where possible to co-locate or share towers/facilities with other providers in order to minimize the proliferation of towers/facilities.
- Wherever possible, service providers should be required to use existing structures or facilities that meet all of the requirements of the proposed installation. For example, water towers, radio and television towers tall buildings, commercial signs, church steeples, etc., in order to minimize the proliferation of new towers/facilities.
- Potential sites that should be considered (in order from most-preferred to least-preferred) include street rights-of-way, existing utility towers, industrial zones, commercial zones, and government buildings.
- Ground level compounds such as equipment shelters, backup generators, etc. should be heavily screened from view.
- To provide for proper separation, adequate setbacks should be provided based upon adjacent land uses and character of affected areas.
- The type of tower (e.g., monopole, carillon, etc.) should be evaluated based upon adjacent land uses and character of affected areas.

A guyed cell tower is a single support structure that has several guy wires extending out various lengths from the tower. This type of tower is the least attractive and takes up the most land area when compared to the other types. Advantages to this tower are the cheaper cost and the greater heights that can be achieved.



- The height and type of the tower should be designed to allow for co-location.
- When the facility is no longer required, the owner should remove it and the land restored to its natural state.

**Employment and Economic Development**

In order to foster a climate of economic prosperity for all residents of Paducah, appropriate information technology infrastructure requirements must be described, understood, and encouraged. Information technology will play an increasingly important role in employment and economic development. Decision makers must recognize and examine the long-term impacts (both good and bad) of decisions made in this area regarding the information technology infrastructure requirements of future employers, as well as new job skills and educational requirements for the workers of the future. These needs must be clearly described, understood, and encouraged where appropriate.

**Zoning Issues**

The potential impact of increased telecommuting on transportation and land use should be examined in light of present and future zoning ordinances and requirements. With the ability to alleviate dependency on vehicular trips to accomplish many tasks, information technologies will permit many people to work at home, resulting in potential zoning and/or business permit issues. These issues should be reviewed in accordance with the zoning ordinance.

**Future Facilities**

The construction of future facilities should be examined in light of capacity, technology, and other information technology needs. Information technologies will impact the design, construction, and wiring of future facilities, both public and private. Decision-makers must examine these issues, in terms of new technology developments, capacity, and expansion when designing and building new schools, libraries, or any other public buildings. Right-of-way issues in subdivision development need to be examined in light of emerging technologies and public expectations for the use and delivery of information services. Libraries, schools, and other public buildings need to have a flexible design in order to accommodate future developments as simply as possible. Electronic linking of community facilities can improve access by the public.

Self-supporting towers have a much wider base than the other two towers, but taper up as the height increases. They require much less land than the guyed towers, but are the most expensive to construct. Advantages of these towers include the stability of the structure and the ability to put several providers on one tower.



It is important to recognize that simply installing equipment or computerizing information that currently exists in paper form is not the end in itself. The ultimate goal is to take advantage of improved capabilities in the delivery of information through reductions in cost, improved availability and timeliness, and better decision-making.

### Examination and Improved Use of Information Technologies

Public and semi-public organizations or agencies should examine their current use of information technologies in the provision of services to the public and strive to improve such use where appropriate. Increasing numbers of our citizenry are becoming familiar with the use of computers, wireless devices, and on-line systems. Information of a public nature should be made available, where practical, in a format that is increasingly being expected by the public. Care must be taken however, that in so doing, traditional access methods are not inadvertently denied to those without the latest technology. This can be achieved through the use of "Public Access Stations", information kiosks, or on-line sites. Here, citizens can get the latest information about public hearings, meeting agendas, minutes of previous meetings, maps of zoning districts, or a multitude of other kinds of information in one, central location. Citizens could also use e-mail to deliver their comments on issues to elected officials or other officials.

### Automation of Land Records

Submissions of land records such as final plats, improvement drawings, and record copies of drawings (as-built drawings) are recommended to be made in a prescribed and uniform digital format, wherever possible, for purposes of improved record keeping and reduced errors. Most subdivision plats and development plans are now created on computers in a "Computer Aided Drafting" or "CAD" format and submitted as a computer drawing on mylar film. Since the original work is already in a computer format, it makes sense that the submission should be, where feasible, required to be in such format for improved record keeping and reduction. These documents should then be incorporated into the public Geographic Information System and be made available for on-line viewing.

Information kiosks can provide valuable information to citizens and tourists. Citizens may want to access information about an application submitted for city approval or a local concert or event. Tourists may want to get directions to a particular location or get information about trolley or bus routes. Kiosks can also serve as wireless access points to provide wireless services in high traffic public spaces.



*Implementation is the most important part of the planning process because it is the point at which the Comprehensive Plan transitions from policy into reality. The best plan will fail if there is not a will to take the actions needed to achieve it. Whether it is spending money to build a road or water line or adopting regulations that control development, failure to take action negates the plan. Thus, implementation is the critical chapter of this document.*

## Implementation

### 8.1 IMPLEMENTING THE PLAN

In prior chapters, specific elements of the plan were discussed in detail: land use, transportation, economic strategies, and growth management. In each chapter, text or maps set forth things that need to be accomplished in the next 20 years in order to meet the City vision for what the area should be like in 2025. Additional recommendations have been made for the McCracken County Fiscal Court.

In this chapter, the large goals from each chapter will be set forth, along with objectives to be achieved under those goals. This will be followed by a discussion of critical challenges to implementation. There are some areas where the plan will be implemented in a series of year-by-year decisions. In other cases, a major action needs to be taken to begin implementation. The year-by-year elements must be monitored yearly to judge progress. With the major actions, failure to act stops the implementation process in that area cold. A schedule of actions that need to be taken in the next five years is set forth as a guide to elected officials in the City.

The City has spent a great deal of time and resources; it is important to the future of the community that the plan not sit on a shelf and gather dust. This chapter sets forth the actions that are required if the plan is to be successful.

### 8.2 GOALS AND OBJECTIVES

### CHOICES2025

The planning process of **CHOICES2025** led the community through a series of decision-making workshops. The choices made on those chapters created the desired future. In this chapter, the requirements for implementation are set forth.

There are no choices here; failure to take action means



**Goals and Objectives**

Goals are general policy direction that often comes from the vision of the community. Objectives are generally action items needed to achieve the vision.

In the following sections, the goals from each of the chapters are set forth.

The goals are the broadest policy statements, and there are only a few per chapter. Each goal has several objectives that refine and narrow the goal into elements that are more specific in terms of policy. There are no goals for Chapter 1, Plan Context, because this is an introductory chapter.

**Chapter 2 – Area-wide Snapshot (Growth)**

*Goal: Increase the rate of population growth above those of projections and trends analysis. The County, by the most optimistic projections, would grow only about 10 percent over the next 20 years, with the State projecting almost no growth.*

- Develop programs and regulations to improve Paducah’s attractiveness to both businesses and residents.
- Review the strengths and weaknesses of the City, enhancing areas of existing strength and improving areas of weakness.
- Enhance and encourage the retention of existing businesses and the creation of new ones.
- Review the City’s annexation policy for enhancement.
- Actively engage developers that may be interested in developing subdivisions (both residential and commercial) to make them aware of the existing reimbursement annexation policy.
- The City should continue to develop programs that attract and retain artists.
- Create a TIF district for downtown or in another location that is advantageous to the City.
- Actively support the GPEDC to market the I-24 Logistics Park, Information Age Park and the Ohio River Triplerail Mega-park.

**Chapter 3 – Land Use**

*Goal: Provide for adequate land to support more than 30 years of residential development. Ensure a wide range of community character types that provide attractive residential opportunities for a full range of life styles and incomes.*

- Provide more flexible opportunities to produce housing of a variety of types by providing less rigid zoning standards.
- Where public water and sewers are available and adequate to serve the plan intensity, comprehensively rezone the land to the desired zoning category.

*Goal: Upgrade the quality and character of new residential areas.*

- Improve the quality of new residential areas by permitting cluster developments that preserve attractive open space within the community.
- Provide buffers between residential districts and nonresidential districts with a nuisance potential.
- Protect natural resources that enhance the quality and character of development.
- Provide incentives to take advantage of the river and downtown to promote higher density, high-quality housing.
- Encourage new developments to incorporate a range of housing options to allow for affordable housing.
- Adopt density bonus incentives for new developments that incorporate affordable housing strategies.

*Goal: Upgrade the condition of deteriorating neighborhoods to improve the condition of housing and create a condition where residents invest in their homes and neighborhoods.*

- Encourage infill development in the developed area of the City.
- Continue to develop and fund neighborhood revitalization plans.
- Monitor the condition of neighborhoods and maintain a listing of priorities.
- Develop a program to mitigate nonconforming uses.
- Seek the reuse or redevelopment of old industrial sites.
- Utilize design guidelines that encourage compatible redevelopment and quality infill in identified neighborhoods.

*Goal: Provide land near I-24 for commercial, business park, and industrial uses to increase the work force*

- Provide adequate land area in a concentrated area for regional commercial uses.
- Provide different opportunities at various interchanges to be in position with land for all business or industrial needs.

*Goal: Improve the waterfront and continue to enhance downtown to make it more of a regional, national commercial, tourism and arts attraction and to offer more retail for City residents.*

- Continue to improve the downtown commercial area.
- Implement the waterfront plan.

- Encourage creative financing to fund the waterfront plan and other downtown projects.
- Integrate increased residential development into the waterfront and downtown.

*Goal: Upgrade the character of nonresidential areas to promote the unique character that sets the area apart from other towns.*

- Work with the State to landscape existing rights-of-way to improve the visual character of developed areas.
- Adopt design standards for entryway corridors.
- Adopt regulations for building design control and review, especially for corporate architecture in selected areas or neighborhoods of the City.

*Goal: Provide a sound inter-modal transportation network for Paducah and McCracken County.*

- Upgrade roads by providing pedestrian and bicycle facilities, such as sidewalks, bike racks, bike lanes, street furniture, crosswalks and signage.
- Enhance the separated greenway system and promote connectivity between non-automotive corridors (i.e. sidewalk to trail).
- Seize opportunities for use of stream corridors, greenway linkages and enhanced roadway corridors for leisure, sight-seeing and recreational purposes.
- Reconcile the capacity of the roadway system with the density of development to ensure safe and efficient travel conditions.
- Utilize a performance-based approach with density bonuses allowed for meeting mixed-use objectives and a specified connectivity index.
- Improve arterial and collector roads to facilitate the high volumes on these roads.
- Develop a checklist of planning items to be inspected and confirmed prior to issuance of a certificate of occupancy.
- Utilize a growth plan to determine the timing and sequencing of capital transportation improvements.
- Manage future growth commensurate with the availability and adequacy of the roads to support increased traffic volumes.

- Use the Land Use Plan to identify the future high density and non-residential development areas to plan and coordinate the necessary street system to convey the projected traffic volumes to the thoroughfare system.
- Utilize arterial and regional road access management techniques such as separation of conflict points, reducing turning cars in travel lanes, restrict turning movements at unsignalized driveways, establishing design standards and encouraging shared driveways.
- Complete an outer loop road to improve circumferential movement southwest of the interstate.
- Continue to support river-oriented traffic and inter-modal connections to rail and highways.
- Provide the necessary infrastructure improvements and facilities to support the Riverport and related industries.
- Re-evaluate and designate both truck and material transport routes to ensure safe routing of industrial traffic.
- Promote the regional airport and support it's use and expansion.
- Promote increased utilization of the airport by employers and residents throughout an expanded market area.
- Conduct a survey of major employers throughout the immediate region and the larger market area to identify their needs for airline service.
- Continuously pursue expansion of air service by United Express or a second commercial airline provider.
- Improve roadway access and infrastructure to support the airport and its surrounding development.
- Promote the I-66 and I-69 corridors.

### **Chapter 5 - Economic Development.**

*Goal: Link economic development initiatives and quality-of-life initiatives together.*

- Enhance and encourage the retention of existing businesses and the creation of new ones.
- Adopt a policy and requisite zoning provisions to encourage the construction of public and commercial buildings according to green building standards.
- Focus recruitment efforts on sectors of the economy that are growth sectors and on small business development.



- Develop programs geared towards retirees interested in launching small consulting practices, especially those who worked in the PGDP complex or moved to the area from elsewhere.
- Create an awards program to help (and then honor) businesses that employ environmentally sensitive practices.
- Sustain and enhance existing community character.
- Identify other potential historic districts.
- Encourage sustainable development.
- Promote the region to prospective businesses and industries.
- Continue leveraging character to expand the tourism sector.
- Improve enforcement of existing ordinances addressing property and yard maintenance.
- Encourage the use and adaptive reuse of historic and other buildings for both commercial and residential use.
- Recruit a full service convention hotel and recruit or renovate a family-style hotel in downtown Paducah.
- Work with AQS to increase television exposure for the region.
- Support entrepreneurship and enhance community character to attract young, mobile professionals.

*Goal: Encourage a balance between commercial and residential property development that will also balance the cost of services with applicable funding sources.*

- Improve understanding of fiscal impact issues as they affect Paducah, McCracken County and the independent districts providing water, sewer, school and other services.

*Goal: Build on existing City-County agreements to advance government efficiency.*

- Encourage collaboration between McCracken County jurisdictions.

## **Chapter 6 – Growth Management**

*Goal: Manage growth to reduce the cost of supporting new development with costly infrastructure and services.*

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- ◆ Update zoning and subdivision regulations to allow clustering by-right.
- ◆ Revise zoning to prohibit development in the floodplain except for water dependent uses and essential road crossings.

**Intergovernmental Cooperation**

This plan is the product of intergovernmental cooperation, which can foster better and stronger planning and make more efficient use of tax dollars.

- ◆ Create a joint City-County Planning Commission.
- ◆ Create a joint City-County Zoning Board.
- ◆ Work to better coordinate service and infrastructure using the JSA model.

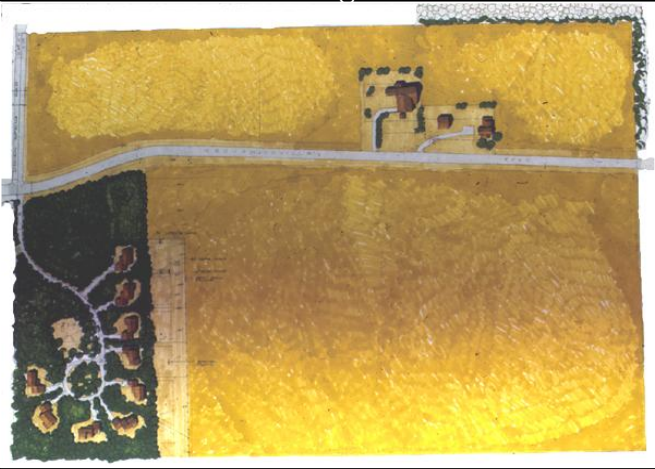
**8.3 IMPLEMENTATION TOOLS**

Implementation requires the City and/or County to take specific actions. In some cases, particularly with regard to infrastructure, other government agencies have the authority to take action, and the City and County should work with those agencies to ensure that the plan goals and objectives are met. Action takes a number of forms: plans and studies, regulation, fiscal expenditures, leadership, and intergovernmental cooperation. The most challenging are those that require regulating land or spending scarce resources to pay for improvements. Planning is much easier for the City as it has a full-time planning staff, whereas the County does not. In many cases, the staff is too caught up in day-to-day development review, so large-scale planning, such as this plan, is contracted out and, thus, is both a planning and funding concern. Intergovernmental cooperation has a significant history between Paducah and McCracken County with such things as the Joint Sewer Authority and the initial development of this plan. Both

Rural Area



Cluster Plan to Preserve Agriculture



# CHOICES2025

Implementation

the City and County must continue to deal with other agencies or governmental entities. Leadership is very important, not only in areas like intergovernmental cooperation, but also in dealing with the private sector and businesses. The primary load of implementation is carried by regulations, particularly zoning as this and subdivision regulations represent the control of what is developed and where it is developed in the community. There is a distinct link between land use and the provision of government services. In the following sections, implementation is discussed.

## Zoning

Zoning actions are required by both the City and County. The most critical change is the recommendation of the establishing a rural district because it is essential to the growth management strategy. Zoning amendments are generally done piecemeal by topical area. However, these could all be combined into a single action – a comprehensive action creating a unified development code for both City and County. A unified development code would combine the City and County zoning and subdivision ordinances and, possibly, several other development related codes into a single document, making it much easier for developers by having a single standard.

**Rural District.** The most critical and time sensitive implementation action is the adoption of a rural zoning district, as described in **Table 6.4, Rural Subdivision Options**. The rural area of McCracken County should be rezoned to this rural category. By lowering the density, much of the development now occurring on one-acre lots will be pushed into the estate area within the urban growth boundary. This is the primary tool to implement the growth management system. The other growth management tools only address the expansion of infrastructure. Since a significant amount of development occurs on one-acre lots, this action is critical. It is time sensitive because every new

Vegetated Neighborhoods



Good Landscaping of Big Box



Tasteful Monument Sign



subdivision that is approved in the rural area prior to the adoption of this district will provide additional lots that reduce the effectiveness of the growth area. Since the subdivisions often are built out over a number of years, eliminating the supply of one-acre lots outside the urban growth boundary is critical. Thus, the County should take action as soon as possible after adoption of this plan by the City of Paducah. No City action is required on this item.

Implementing the growth boundary requires a new zoning district, not a complete rewrite, of the County code and, thus, can be completed rather quickly – in a matter of months as opposed to over a year for a comprehensive rewrite of the code.

**Landscaping.** Both streetscape landscaping and general landscaping provisions are needed. The creation of a good streetscape standard is important because it is the most easily visible thing to make Paducah and McCracken County appear different and special. There are three elements of landscaping that should be revised: street trees, parking lot landscaping, and yard landscaping. The City has recently improved its standards. At a minimum, the County should bring their code up to similar standards. However, it is recommended that both City and County adopt even more stringent standards.

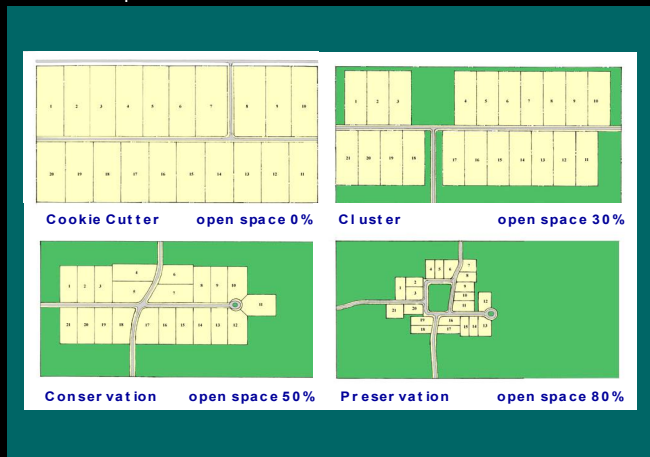
**Signs.** Signs are a very unsightly aspect of the landscape, particularly in the commercial areas along arterials and the interstate. The elimination of tall pole signs is advocated; there is no reason for these high signs since residents know where restaurants, gas stations, and hotels are located, and the Interstate has signage at the exits for travelers who are unfamiliar with the area. The elimination of all pole signs in favor of monument signs would also greatly enhance the character of the County and City. Modifying sign ordinances is always a difficult issue. It is recommended that this be a joint effort undertaken with the cooperation of the Chamber of Commerce and business organizations. If this effort is

to succeed, the business community as a whole must see the advantages and

Too Many Confusing Signs



Cluster Options



be supportive. A sign study is recommended. It should be done separately from other regulatory changes, even the unified development code. While this is an important priority, it is critical to success to spend time generating heavy support for the reform before undertaking the effort.

**Cluster and Planned Developments.** Clustering, the land planning system that regulates density and open space, is critically important. It provides flexibility for developers to work with the site and respect neighbors without incurring a fiscal cost in the loss of density. The provisions for cluster and planned development are important to improving quality, as well as providing flexibility. Planned development is a form of clustering in which all dwelling unit types are permitted. This plan provides guidance on these provisions. Currently, these techniques are only available by using planned unit development provisions of the City or County codes. Developers do not like this process because it is unpredictable, time consuming, costly, and subjects them to attacks from those who would prefer that the property not be developed. It is essential that there are clear density and open space standards so that the use can be permitted as a matter of right. This is a major zoning change and is best accomplished with a comprehensive revision to the codes, although it could proceed with a text amendment as a quick fix.

**Bufferyards.** The buffering of uses of different intensities is an important provision in landscaping that is designed to protect neighboring properties from nuisances, real or imagined. It should be applied between zoning districts and may also make cluster and planned options more acceptable because it ensures good design.

**Resource Protection.** Resource protection standards will encourage the County to protect existing vegetation, which is far more effective than planting new trees that take 10 to 20 years to begin to have a significant effect on character. Clustering is essential to making resource protection work. Without clustering, an attempt to preserve even individual large trees in a development most often results in a loss of a lot or two. This is a real

Bufferyard Screen of Commercial Uses



economic cost because the developer gets fewer lots over which to spread the cost of roads, sewers, water, and other utilities. Clustering permits the developer to preserve resources and retain density. The benefit of resource protection is more attractive developments and a better image for City and County.

**Design Controls.** Design controls, particularly for nonresidential areas, are an important strategy for improving the character of the area. This, too, can make Paducah and McCracken County different and more attractive than competing communities. Design controls should focus on controlling corporate architecture. Too many commercial buildings are designed as signs, with roofs, details, and colors making the building an architectural extension of a sign.

**Nonconforming Provisions.** The City has a problem with existing nonconforming uses that are in residential areas. A means to make them conforming is desired. A simple fix is available by allowing mitigation through the approval of a conditional use permit. This quick fix could be done either separately by the City or as part of a land development code. Other improvements can be made in drafting the land development code.

**Unified City-County Zoning.** It is desirable to have a joint City-County land development code. Having a single set of definitions and procedures covering both City and County has value in implementing the plan. A land development code combines both zoning and subdivisions, so everything governing development would be in a single document. The development community is better off when there is one book, not four (two County and two City), controlling development in the County and City. There are planning advantages of having regulations to ensure that roads, sidewalks, and utilities are installed in the same manner. Since quality of development is an important land use goal, this is best achieved when there is a single set of standards of uniform quality. The development of this Code should also be a high priority. However, this does not need the creation of a joint planning agency as has occasionally been discussed. While not common in Kentucky, there is a history in Pennsylvania of communities adopting a single zoning ordinance covering as many as six jurisdictions. All the municipalities continue to have their own plan commission and zoning board. This would enable the joint ordinance to be created in the same fashion as this plan.

The process of adopting a new land development code can be expected to take 15 to 18 months, so it is a second priority. If the County adopts the

needed rural zoning district, the major growth management implementation tool would be in place, making this the top priority. Work could then begin on a unified land development code, and PUDs can address most other implementation issues involving clustering or mixing of uses. While there are additional standards that new landscaping or sign standards would provide, they are not on the critical path for the first few years, and, as long as there is a commitment to move forward on a timetable, there is no need to move on the other areas because they would all be provided in a comprehensive revision.

### **Infrastructure**

**Water and Sewer.** The infrastructure has few immediate projects needed to implement the plan, as most of the developing area is currently served by water and sewer. The major improvements are not critical for at least five years. What is needed is the adoption of the plan by the utility providers, particularly the Joint Sewer Authority (JSA) and the Paducah water department. This action will become effective after the adoption of the plan by the McCracken County Fiscal Court. These agencies are the ones that must fund improvements and also make decisions on the adequacy of facilities when a development is proposed. As such, they need to adopt the plan as their official planning and policy document. The JSA is the sole provider of sewer service, so it offers full control once it has adopted the plan. The Paducah water department is the sole provider of water to the independent water districts. Thus, it is in a position to set standards that purchasers must meet. While this department is under City control, it, too, should adopt the plan to avoid the problem of reacting to development, rather than channeling development.

After adoption of the plan, the County should put pressure on the rural water districts to adopt the plan and bring their utilities up to standard before expanding service. The history of rural water districts is replete with districts that expand service to gain more customers, while ignoring needed investments in the quality of service. While this is not a universal problem, in McCracken County it is a real problem. This is particularly true with water pressure and volumes needed to fight fire. The City water department enforces adequacy, while this is not true in many areas served by the rural water districts. This issue is particularly critical in the development area. The development area provides densities that make adequate water supplies for fire suppression essential. Within this area, upgrading water supplies to provide needed levels of protection must be a priority. Both City and County



should have regulations that require subdivisions within the growth area to have water that meets fire suppression needs or be sprinklered.

**Roads.** There are a number of known projects in the plan. The most important of these is the outer loop road. Of secondary importance is the additional interchange on I-24. A major factor that remains uncertain is the routing of I-66. This road is outside the control of the County, but could have profound effects on the outer loop road. In addition, improvements to County and City roads will be needed during the planning period. The most crucial thing needed for roads is the development of a joint capital improvement plan by the City and County. While only local projects could actually be funded through such a program, setting a joint priority for lobbying the State is an important benefit. It also shows other agencies the relationship of State programs to the local ones.

The capital improvement program should provide sidewalks and bicycling paths. The greenway in Paducah should be tied into the overall road improvement program and be extended out into the County.

**Services**

Currently, there is a difference in police and fire service between City and County, with the City providing higher levels of service, which may be measured by level of service (LOS) standards. For police, this is dwelling units per patrol officer and response times; the lower the number, the higher the LOS. With fire, it is the response time and the resources available to put out the fire. The urban standard is that a fire station be within 1.5 miles of all residents. As **Figure 6.3, Protection Area**, illustrates the vast majority of the City meets this standard, and there is significant overlap in the oldest part of the City. On the other hand, there are some areas on the edge of the City and major areas outside the City, but within the growth area, that are outside the 1.5 mile radius from existing stations.

The plan goal is to offer full urban services within the developed and growth areas. The rural area is to have a lower service standard. With sewer provided by JSA, there is no problem in meeting the requirement for sewer. However, with regard to fire protection, there is currently a disparity between the level of service in the City, and many residents are served by other fire service districts. Since the LOS in the growth area should be the same, there needs to be an overall strategy for providing new stations where there is inadequate coverage. Since the boundaries between City and County are irregular and likely to continue to be irregular, a program needs to be

developed to meet the needs. There are two approaches to the problem. The first is to rely on a regulatory approach where rezoning and development permits would be controlled by adequacy of services. The second would be to look at other communities that have gone to regionalized fire protection within the urban growth boundary, similar to the JSA approach to sewer service.

The County would need to address this directly by setting the LOS standards for urban and rural areas and getting a force capable of meeting the standard. For fire, this is a more difficult challenge, as new stations and equipment would be needed. This is best achieved on a cooperative basis with City and rural fire districts working together.

### **Planning**

The comprehensive plan is not the end of planning needs. A park and recreation plan has been developed, but will need some updating to make it consistent with this plan. This also needs to tie together normal recreation planning with the riverfront plan. A second area of planning is natural resource protection and agriculture. Currently, floodplains and wetlands are only minimally protected as resources. Tree cover is very important to the character of the residential areas. A natural resource plan would provide a basis for protecting forests and other resources. The combination of very slow growth and a large capacity in the growth area means that the rural area is not needed for development for the next 40 to 60 years. Given this, farming will continue, and it makes sense to assess this industry to see if there is a need to shelter it from land value increases that work against farm economics.

### **Intergovernmental Cooperation**

The City and County have worked together to create the Joint Sewer Authority (JSA), to develop this plan, and to develop a park and recreation plan. In the immediate future, a joint City-County planning commission should be created, as well as a joint zoning board. This, in combination with a unified development code, would do much to strengthen planning in the area. A joint zoning board to hear variances would also improve consistency. In particular, a single regional water system would better ensure fire-fighting potential in new developments.

## **8.4 ACTION PLAN**

The Action Plan covers the next five years. It lays out actions to be taken over the next five years and includes the first revision to this plan. This should become an important tool for the two governing bodies. This Action Plan does not contain a five-year capital improvement program, but its development is one of the action items. Ultimately, the Action Plan should include the capital improvement program. The Plan becomes more effective when it is routinely referred to not only for the review of zoning changes, but also as an integral part of managing government. Some of the initial actions need to be taken by only the City or County; these are noted. All other actions are recommended to be joint actions.

**2008**

- ◆ Adopt rural zoning district and amend zoning map. (County)
- ◆ Create joint City-County planning commission and zoning board.
- ◆ Consider nonconforming standards that encourage improvements. (City)
- ◆ Begin capital improvement program.
- ◆ Authorize preparation of joint Land Development Code.
- ◆ Service providers adopt plan.

**2009**

- ◆ Adopt joint Land Development Code.
- ◆ City and County both adopt capital improvement programs.
- ◆ Begin sign study.
- ◆ Develop a monitoring system to monitor progress of the Plan towards its goals.
- ◆ Get all utility providers to prepare and submit capital improvement programs that reflect the comprehensive plan.

**2010**

- ◆ Adopt new sign regulations and amend Land Development Code.
- ◆ Study level of service standards for police and fire to differentiate between growth area for police and fire.
- ◆ Begin discussion of unified code administration.

**2011**

- ◆ Undertake natural resources and agriculture study.
- ◆ Prepare and adopt first joint Capital Improvement Program.

- ◆ Do design study for commercial development and corporate architecture regulations.

**2012**

- ◆ A single administration for all zoning and subdivision decisions adopted.
- ◆ Undertake five-year plan review.