# McCracken County



## 2013

## **Comprehensive Plan**



Approved by McCracken County Planning and Zoning Commission July 24, 2013. Amended September 26, 2018

Approved by McCracken County Fiscal Court on: August 12, 2013. Amended November 5, 2018.

## **COMPREHENSIVE PLAN**

## 2013

# **Unincorporated Portion** of McCracken County

Prepared by the

McCracken County Planning and Zoning Commission

Amended November 5, 2018

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# CHAPTER ONE INTRODUCTION

A Comprehensive Plan is a document prepared to help guide the future growth and development of a planning area. McCracken County is poised to experience growth along the west US 60 corridor due to the new consolidated McCracken County High School. Resulting from this and other increasing development, the county needs to plan for further expansion over the next twenty years.

**Comprehensive:** A plan should cover all geographic parts of a county and all activities that affect physical development.

**General:** A plan is not supposed to be confining; it simply summarizes policies and proposals and is intended to provide flexibility.

**Long Range:** The plan strives to present a vision of the future of the county, while addressing short-term issues and problems. The plan's main function is to look beyond current conditions to those desired twenty years from now.

This plan is designed as a tool to be used by all decision makers, both public and private. As such, this document reflects the expressed desires of the county. The comprehensive plan serves as a guide to making decisions (i.e. zone changes and development plans) and outlines governmental strategies that can be employed to accomplish the various components of the plan. The Kentucky Revised Statutes, Chapter 100 (commonly known as KRS 100) requires the adoption of such a plan in conformance with the requirements of KRS 100 in order for a planning unit to adopt land use and subdivision regulations. The adopted regulations must be in conformance with the adopted plan.

In order to be effective, a comprehensive plan should also be reviewed and evaluated every five years to insure that it still guides the county in the most appropriate direction. The plan is the result of the efforts of the McCracken County Planning and Zoning Commission to legally participate in the planning and land use regulation process.

### **LEGAL FRAMEWORK**

The Kentucky Revised Statutes, Chapter 100 provides the enabling legislation for planning and plan implementation (zoning ordinances, subdivision regulations, official maps and capital improvement programming) to local governments. Several parts of KRS 100 are related to the preparation and use of this comprehensive plan. KRS 100 is briefly summarized below:

**100.183** Comprehensive Plan Required: This section requires each planning commission to 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."

**100.187** Contents of a Comprehensive Plan: The Comprehensive Plan shall contain a statement of goals and objections, a land use element, a transportation plan element, and a community facilities plan element. The comprehensive plan may include additional elements which in the judgment of the planning commission will further serve the purposes of the comprehensive plan.

**100.191 Research Requirements for a Comprehensive Plan:** Preparation for the plan must include examination of past and present population and projection of future trends, an economic survey and analysis, and "the nature, extent, adequacy and the needs of the county for the existing land and building use, transportation and county facilities in terms of their general location, character, and extent."

100.193 Statement of Goals and Objectives: The planning and zoning commission must prepare and adopt the statement of goals and objectives to act as a guide for preparing the rest of the plan. In addition, this section also directs the Commission to present this statement for consideration, amendment, and adoption by the legislative body within its area of jurisdiction.

**100.197 Adoption and Amendment, Comprehensive Plan:** This section outlines the processes for adoption and amendment of the plan. It specifically states that the plan elements shall be reviewed and amended if necessary and readopted at least once every five years.

This plan has been prepared in accordance with these statutes.

# CHAPTER TWO GOALS AND OBJECTIVES

## Goals and Objectives Statement Adopted for the Comprehensive Plan

The Planning Commission recognizes its public responsibility to insure McCracken County develop in an orderly manner. To meet this responsibility, the Planning Commission hopes to establish harmonious County growth that will adequately protect the health, safety and general welfare of its citizens.

The following statements of Goals and Objectives are intended to provide direct guidance for the implementation decisions of the McCracken County Planning and Zoning Commission, the McCracken County Fiscal Court and others in McCracken County as related to future physical development. Goals are very broad statements of what is to be accomplished. Objectives are general statements of purpose designed to lead to the achievement of the delineated goals. Policies and programs, set out in the Policies and Programs chapter, are designed to help accomplish the Goals and Objectives and implement the Comprehensive Plan.

## A. GENERAL LAND DEVELOPMENT Goals

Achieve the best match of types of land use and street systems.

Encourage growth that most efficiently utilizes the existing and planned utility systems.

Maximize the public input into all types of land development through the McCracken County Planning and Zoning Commission.

Allow the character, location and extent of McCracken County growth to be determined by its citizenry through the McCracken County Planning and Zoning Commission.

Provide sufficient land to meet the projected needs of each primary land use (agricultural, commercial, industrial, public, recreational and residential).

## **Objectives**

Achieve high quality development through compatible land uses.

Use the Planning and Zoning Commission in effectively coordinating and directing development.

Lessen the cost and impact of development through the concentration of development.

Encourage better communication between the public and private sectors and the Planning and Zoning Commission.

Require all divisions and site improvements public and private to be subject to the planning and zoning process.

#### B. RESIDENTIAL DEVELOPMENT

#### Goals

Create high quality living environments for all residents of McCracken County.

Residential developments should assure safe and sanitary housing, facilities and protection, free from nuisances and hazards.

Provide adequate housing to meet the needs of the low-income and senior citizens within McCracken County.

Provide adequate, decent, safe, and sanitary housing for all economic and social levels.

### **Objectives**

Assure that when new residential areas are built, they are compatible and complement the adjacent older residential areas of McCracken County. Efforts should be made to encourage a variety of residential densities and housing types to meet the needs and desires of a range of family sizes, age groups, and income levels and to ensure that equal opportunity in choice of housing by all elements of the population is provided throughout the county.

Ensure that areas which are proposed to be developed for purely residential purposes are protected from the intrusion of incompatible land uses.

Match subdivision density to topographical and environmental constraints.

### C. COMMERCIAL DEVELOPMENT

#### Goals

Provide adequate commercial service areas located for safe and easy access to the residential areas of the County.

## **Objectives**

Encourage the consolidation of commercial activities.

Minimize the encroachment of commercial establishments into residential areas.

Minimize traffic congestion problems resulting from commercial land development.

Encourage retail development to locate on major transportation arteries.

Recognize and encourage small, agricultural and recreational businesses.

#### D. INDUSTRIAL DEVELOPMENT

### Goals

Provide adequate employment opportunities in order to maintain the economic vitality of Paducah and McCracken County.

Encourage the expansion of industrial development.

Make more industrial land available.

Provide a positive environment for light and heavy industry, small business and small offices.

## **Objectives**

Lessen the cost and impact of development through the concentration of development.

Areas which exhibit particularly desirable characteristics for industrial development should be identified, planned, and regulated for such use.

Ensure that industry is developed with appropriate environmental and aesthetic controls.

Locate industry in areas served by existing and proposed utilities, police and fire protection, access to existing or proposed highways, rail transportation and river facilities when necessary.

Adequately buffer residential areas from industrial development.

#### E. TRANSPORTATION

### Goals

Provide an efficient highway and rail transportation system.

Provide the best possible major and minor street systems.

Provide for efficient aviation needs of McCracken County.

## **Objectives**

Insure that the street system appropriately relates to residential, commercial, industrial and public uses of land.

Obtain sufficient dedication of street right-of-way with all new development.

Upgrade existing rights-of-way when new development occurs.

New developments shall provide effective and sufficient street construction.

Coordinate and plan future subdivision design in order to facilitate appropriate traffic circulation.

Design subdivision streets to accommodate emergency vehicle access.

New developments containing road construction shall be at the cost of the developer.

When upgrading or creating new road intersections ensure proper sight-distance.

Maintain close communication between the McCracken County Planning and Zoning Commission and the Barkley Regional Airport Board of Directors.

Maintain close communication between the McCracken County Planning and Zoning Commission and the Paducah/McCracken County Riverport Authority.

#### F. COMMUNITY FACILITIES

#### Goal

Increase the overall quality of life for residents of McCracken County by providing adequate community facilities to serve the growing population.

Provide an adequate amount and variety of recreational opportunities to satisfy the full range needs of the population.

Provide basic recreation and open space facilities and programs which are conveniently located and accessible to the population.

Provide for an adequate amount of well-located cultural facilities to serve the basic needs of the population.

## **Objectives**

Coordinate the rehabilitation, development, and expansion of community facilities with land development activities by requiring, at the time of development, infrastructure sufficient to accommodate projected growth.

Enhance and protect the public health, safety, and welfare by:

a. Providing educational facilities for the young and continuing education for adults;

- b. Concerted effort should be made to provide a wide variety of types of recreational facilities programs to meet the year round desires and needs of various age and interest groups.
- c. Providing efficient public safety services including police, fire, and ambulance coordinated through the 911 service;
- d. Encouraging and supporting affordable local health facilities, nursing homes and child care facilities;
- e. Effort should be made to provide for recreation and open space facilities which are both region oriented, containing a variety of active and passive recreation pursuits, and neighborhood oriented, which are primarily aimed at satisfying the day-to-day desires and needs of immediately surrounding residents.
- f. Effort should be made to provide for the establishment of programs and institutions which promote the cultural pursuits of all segments of society. In this connection, it would be necessary to provide for adequate, well-located, cultural facilities primary to serving local residents (e.g., churches, theater, libraries).
- g. Requiring developers to provide proper drainage.
- h. When selecting community facilities, several sites should be evaluated to ensure that the best location is chosen.

#### G. AGRICULTURE

#### Goals

Maintain the rural and agricultural characteristics of McCracken County.

Use soil and water Best Management Practices.

Ensure compatibility between agricultural land uses and suburban development.

## **Objectives**

All developments adjacent or "near" a working farm shall not interfere with a farmer's past farming practices of the existing farm operation.

#### H. NATURAL RESOURCES

### Goals

Protect the County's environmental quality.

Protect and preserve the natural resource of McCracken County.

Minimize the impact of flooding.

Identify and protect environmentally sensitive areas.

## **Objectives**

Control soil erosion by requiring erosion control measures (plans) during construction and requiring adequate re-vegetation of disturbed areas.

Preserve environmentally sensitive areas by directing development away from floodplains and wetlands.

Discourage development within the 100-year flood plain; however development within the limits of the 100-year flood plain shall be in compliance with all federal, state and local environmental regulations.

#### I. AESTHETICS

### Goal

Maintain and improve the visual character of McCracken County.

## **Objectives**

Enforce the McCracken County Property Maintenance Code Ordinance.

#### J. HISTORIC PRESERVATION

#### Goal

Preserve the historic characteristics of McCracken County.

## **Objectives**

Identify and encourage preservation of historic buildings, districts, and sites from destruction or harm from land use changes.

# CHAPTER THREE POPULATION

### A. POPULATION ANALYSIS

#### 1. Introduction

The analysis of population trends serves as a fundamental basis for many planning decisions. The size of the population, its composition, and its spatial distribution impact future social, economic and physical land use needs. An examination of the current population size and trends over recent years provides an estimate of current land use and spatial needs. The use of future population projections allows for the prediction of future land use and space needs. Population composition provides the breakdown by categories such as age groups, household sizes and income levels. This information assists in determining the division of space needs for schools, recreation areas, and other community facilities for each population characteristic category. The current and projected future population distribution determines where the various land uses, transportation routes and community facilities should be located throughout the county or urban area.

## 2. Past Population Characteristics

#### a. Size

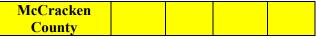
The 2010 Census identified McCracken County as having a population of 65,565 persons. This figure represents 4.3% increase in population since 1990, a continuation of the trend of slow but steady growth in population experienced by the county throughout most of the 20<sup>th</sup> Century. With the exception are the 1920's (24.2%) and the 1950's (16.6%). In both cases, the significant increase in population can be attributed to major industrial projects taking place in the county. The 1920's saw Paducah's selection for the construction, by the Illinois Central Railroad, of what was at the time the largest rail manufacturing facility in the world.

The 1950's saw the development, in northwestern McCracken County, of the uranium enrichment facility by the Atomic Energy Commission. Both projects brought a massive influx of families for construction and operation of the facilities. Absent unique conditions, the county's growth has been incremental, Table -1.

Table – 1
McCracken County / City of Paducah / Unincorporated Portion of McCracken County
POPULATION 1900 – 2010

	190	00	1910		1920		1930		1940	
	#	% Tota l								
McCracken County	28,73 3	100	35,06 4	100	37,24 6	100	46,27 1	100	48,53 4	100
City of Paducah	19,44 6	67.7	22,76 0	64.9	24,73 5	66.4	33,54 1	72.5	33,76 5	69.6
Unincorporate d Portion of McCracken County	9,287	32.3	12,30 4	35.1	12,51 1	33.6	12,73 0	27.5	14,76 9	30.4

	195	50	190	60	19'	70	1980		1980 1990						
	#	% Tota l	#	% Tota l	#	% Tota l	#	% Tota l	#	% Tota l					
McCracken County	49,13 7	100	57,30 6	100	58,28 1	100	61,30 1	100	62,87 9	100					
City of Paducah	32,82 8	66.8	34,47 9	60.2	31,62 7	54.3	29,31 5	47.8	27,25 6	43.3					
Unincorporate d Portion of McCracken County	16,30 9	33.2	22,82 7	39.8	26,65 4	45.7	31,98 6	52.2	35,62 3	56.7					
	200	2000 20		2010		2010						M.C. 1. C. 1			
	#	% Tota l	#	% Tota l			McCracken County Unincorporated								
McCracken County	65,51 4	100	65,56 5	100			Portion of McCracken County								
City of Paducah	26,30 7	40.2	25,02 4	38.2			meetacken county								
Unincorporate d Portion of	39,20 7	59.8	40,54	61.8			City	of Padu	ıcah						



\*# = Number % = Percent

McCracken County as a whole experienced an increase in population from both in-migration and birth exceeding deaths for the decade ending in 1990 (0.6 % and 1.9% respectively). This modest growth rate for the county as a whole has continued for the decade ending in 2010, deaths exceeded births producing a net increase growth rate of 0.2%. (Table -2)

TABLE – 2

POPULATION CHARACTERISTICS 1990 – 2010
STATE/COUNTY COMPARISON

	POPULATION			NATU INCR BIRTHS DEA	EASE S OVER	NET MIGRATION		
	1990	2000	%	#	%	#	%	
State of Kentucky	3,685,296	4,041,769	9.7	-1925	0.0	358,398	9.7	
Boyd County	51,150	49,752	-2.7	-20	0.0	-1418	2.7	
Christian County	68,941	72,265	4.8	258	0.4	3066	4.4	
Madison County	57,508	70,872	23.2	100	0.2	13,264	23.0	
Warren County	76,673	92,522	20.7	-22	0.0	15,871	20.7	
McCracken County	62,879	65,514	4.2	-122	-0.2	2757	4.4	

	POPULATION			NATU INCR BIRTHS DEA	EASE S OVER	NET MIGRATION		
	2000	2010	%	#	%	#	%	
State of Kentucky	4,041,769	4,339,367	7.4	-1275	0.0	298,873	7.4	
Boyd County	49,752	49,542	0.0	70	0.0	-140	0.0	
Christian County	72,265	73,955	2.3	-386	-0.5	2076	2.8	
Madison County	70,872	82,916	17.0	-138	-0.2	12,182	17.2	

Warren County	92,522	113,792	23.0	150	0.2	21,120	22.8
McCracken County	65,514	65,565	-0.1	-96	-0.1	147	0.2

## b. Age and Sex Distribution

Table -3 is an analysis of the age composition characteristics of McCracken County as a whole compared to selected counties and the State of Kentucky.

## TABLE - 3 POPULATION CHARACTERISTICS 2000 - 2010 STATE/COUNTY COMPARISONS BY AGE COHORTS

2000

	Boy	ď	Chris	tian	Madis	son	Warr	en	McCrac	eken	State of Kentucky
Age	#	%	#	%	#	%	#	%	#	%	%
0-19	12,126	24.4	23,037	31.9	19,293	27.2	26,001	28.1	16,876	25.6	27.6
20-24	2,856	5.7	8,840	12.2	9,541	13.5	10,377	11.5	3,612	5.5	7.0
25-64	27,012	54.3	33,335	46.1	35,105	49.5	46,467	50.0	34,581	52.9	53.0
65+	7,758	15.6	7,053	9.8	6,933	9.8	9,677	10.5	10,445	16.0	12.4

2010

	Boy	⁄d	Chris	tian	Madis	son	Warr	en	McCrac	ken	State of Kentucky
Age	#	%	#	%	#	%	#	%	#	%	%
0-19	11,729	23.7	23,339	31.6	22,185	26.7	31,475	27.7	16,108	24.5	26.4
20-24	2,489	5.0	8,047	10.9	9,492	11.4	12,849	11.3	3,353	5.1	6.7
25-64	27,082	54.7	34,976	47.2	41,927	50.6	57,028	50.1	35,103	53.6	53.6
65+	8,242	16.6	7,593	10.3	9,312	11.3	12,440	10.9	11,001	16.8	13.3

Source: U.S. Census Bureau

The age composition of the unincorporated portion of McCracken County, Table- 4, reveals a reduction in the 6-19 age group; however this reduction closely aligns this group with state wide percentages. The 65+ age group has increased and exceeds the state wide percentage, this increase is driven primarily by the over 90 age group.

The under 5 age group has remained constant; this is noted due to trend throughout the United States of residents having fewer children resulting in the under five years of age group decreasing sharply.

TABLE – 4 UNINCORPORATED PORTION OF McCRACKEN COUNTY POPULATION BY AGE COHORT

2000 - 2010

	200 Unincorj Port McCra Cou	porated ion acken	2000 State of Kentucky	2010 Unincorporated Portion McCracken County		2010 State of Kentucky
Age	# %		%	#	%	%
0-5	2,273	5.8	6.9	2,334	5.8	6.5
6-19	8,050	26.3	20.5	7,789	19.2	19.9
20-24	2,006	5.1	7.0	1,890	4.7	6.7
25-64	21,766	55.6	53.0	22,069	54.4	53.6
65+	5,112	13.0	12.4	6,459	15.9	13.3

Source: U.S. Census Bureau

The sex composition characteristics of the unincorporated portion of McCracken County Table - 5 has remained constant over the past decade.

TABLE - 5 UNINCORPORATED PORTION OF McCRACKEN COUNTY POPULATION BY SEX

2000 - 2010

		20	000		2010				
	Ma	ile	Female		Male		Female		
	#	%	#	%	#	%	#	%	
Under 18	4,244	10.8	4,448	11.3	4,469	11.0	4,652	11.5	

18 - 21	322	0.8	407	1.0	391	1.0	386	0.9
22 - 61	10,712	27.3	11,194	28.6	11,128	27.4	11,575	28.6
62 – 64	771	2.0	797	2.0	879	2.2	802	2.0
65+	3,109	7.9	3,203	8.1	3,064	7.5	3,195	7.9

### c. Race Distribution

The racial composition Table - 6 of the unincorporated portion of McCracken County has experienced modest growth over the past decade and represents approximately 6% of the total population.

TABLE - 6

## McCracken County/City of Paducah/ Unincorporated Portion of McCracken County POPULATION BY RACE 1990 – 2010

		M	IcCracke	n Coun	ty		City of Paducah					
	199	90	2000		2010		1990		2000		2010	
	#	% Total	#	% Total	#	% Total	#	% Total	#	% Total	#	% Total
White	56,258	89.5	56,873	86.8	55,762	85.0	21,343	78.2	19,145	72.8	17,765	71.0
Black	6,257	9.9	7,128	10.9	7,224	11.0	5,689	20.9	6,353	24.1	5,925	23.7
Other	364	0.60	1,545	2.3	2,579	4.0	244	0.9	809	3.1	1,334	5.3

Source: U.S. Census Bureau

### **TABLE – 6 (continued)**

McCracken County/City of Paducah/
Unincorporated Portion of McCracken County
POPULATION BY RACE
1990 – 2010

**Unincorporated Portion of McCracken County** 

	199	00	200	00	2010		
	# % Total		#	% Total	#	% Total	
White	34,957	98.0	37,696	96.1	37,997	93.7	
Black	568	1.6	775	2.0	1,299	3.2	
Other	140	0.4	736	1.9	1,245	3.1	

## 3. Change in Population

While the overall picture of McCracken County's population reflects slow growth, such is not the case with respect to the location and composition of that population.

The City of Paducah, once the abode of two-thirds of the county's population, now contains less than forty percent (40%) of all McCracken Countians. The city has been losing population since 1960, both in real and relative terms. From a high of 34,479 persons in 1960, Paducah has fallen as of the 2010 census, to 25,024 persons a twenty-seven percent (27%) population decline. Conversely, the unincorporated portion of McCracken County experienced a seventy-eight percent (78%) increase in population over this same 50 year period, Exhibit 3-1 and Table – 7.

Exhibit 3-1 Change in Population City of Paducah, McCracken County & Unincorporated Portion of McCracken County

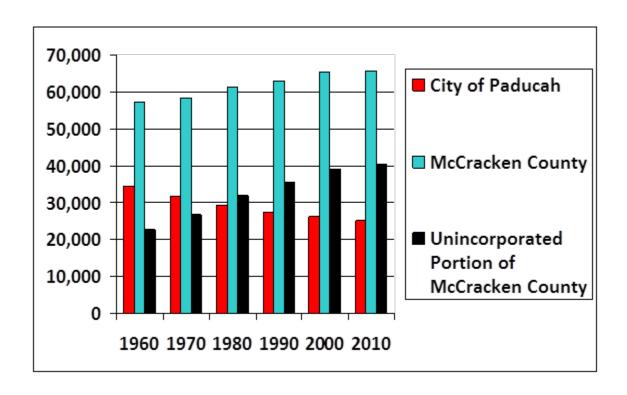


TABLE - 7 CHANGE IN POPULATION
UNINCORPORATED PORTION OF McCRACKEN COUNTY

1960 -	1960 – 1970		1970 – 1980		1980 – 1990		1990 – 2000		2000 - 2010	
#	%	#	%	#	%	#	%	#	%	
3,827	16.7	5,332	20.0	3,637	11.3	3,584	10.1	1,334	3.4	

### 4. Population Forecast

The Kentucky State Data Center (KSDC) at the University of Louisville provided the population forecast for McCracken County and the City of Paducah.

The projections for McCracken County are more reliable due to the data on the components of change (births, deaths, net migration) are available at the county level and are utilized in a more detailed forecasting model.

According to KSDC, projections for cities are not as reliable due to the fact they are not based on components of change, rather relying on reasonable assumptions regarding the population.

Forecast in Table – 8 presupposes that Paducah's share of the county's population will decline at the same rate experienced in the decade 2000 – 2010. In the 2000 census, Paducah comprised 40.1 % of McCracken County's population. With the 2010 census, Paducah had reduced to 38.1% of McCracken County's population – a decline of 2% over 10 years.

TABLE - 8 KSDC POPULATION FORECAST

			Projections		
	2015	2020	2025	2030	2035
McCracken County	66,188	66,621	66,781	66,567	65,958
City of Paducah	24,604	24,103	23,497	22,760	21,896
Unincorporated Portion of County	41,584	42,518	43,284	43,807	44,062

Source: Kentucky State Data Center

Forecast in Table – 9 presupposes that the percentage of McCracken County's population that lives within Paducah will remain constant at the 2010 census rate. That is in 2010 approximately 38.1% of the county's population lived within Paducah, there the population forecast is based on this share of the county's population will remain constant in the future.

TABLE – 9 KSDC POPULATION FORECAST

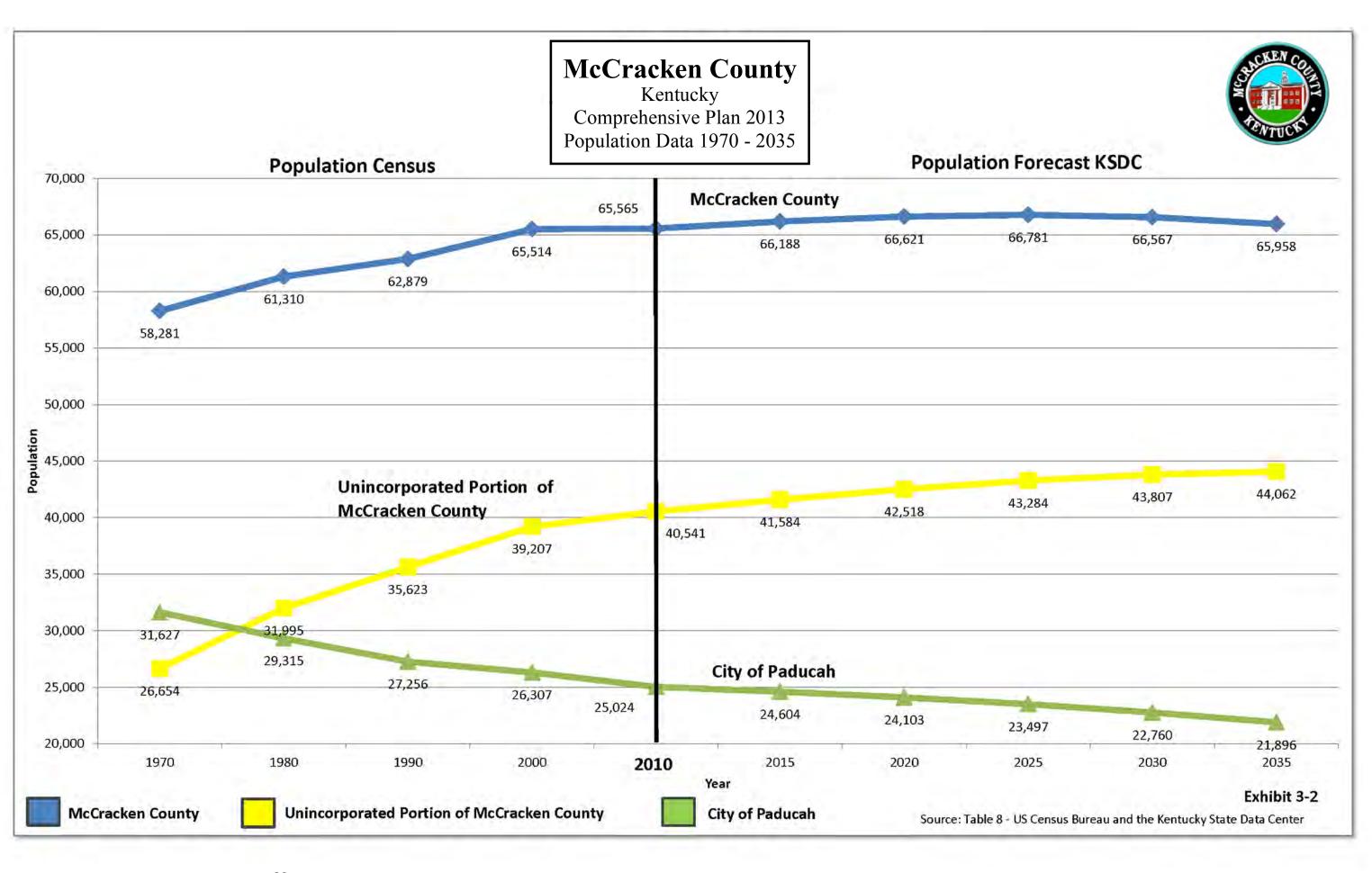
			Projections		
	2015	2020	2025	2030	2035
McCracken County	66,188	66,621	66,781	66,567	65,958
City of Paducah	25,262	25,427	25,488	25,406	25,174
Unincorporated Portion of County	40,926	41,194	41,293	41,161	40,784

Source: Kentucky State Data Center

An analysis of Paducah and McCracken County's population trend lines in Exhibit 3-2 reveals that the city's proportionate share of the county's population has decreased each decade since 1970.

Based on this analysis population forecast generated by KSDC and presented in Table-8, will be used for quantifying necessary capacities and estimating future needs.

It is important to note that due to the loss of the Paducah Gaseous Diffusion Plant located in the western part of McCracken County, the population forecast will need analyzing upon receipt of the 2020 census data.



## CHAPTER FOUR HOUSING

#### A. HOUSING ANALYSIS

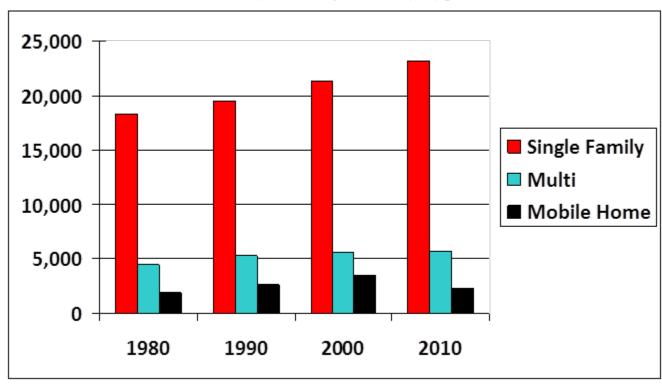
#### 1. Introduction

The analysis of the housing trends serves as an indicator of future housing needs when reviewed in concert with existing and future population trends. This information is essential for many planning decisions.

## 2. Existing Housing Elements

As with the population, the housing stock reflects the multiple characteristics of the residents of McCracken County. The McCracken County housing stock has continued to increase over the past two decades, Exhibit 4-1 and Table – 10.

Exhibit 4-1 McCracken County Housing Units, By Type, 1980 - 2010



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## McCRACKEN COUNTY HOUSING UNITS BY TYPE

	1980	1990	1990			2010	
	#	#	%	#	%	#	%
Single Family	18,338	19,511	6.4	21,311	9.2	23,148	8.6
Multi Family	4,504	5,300	17.7	5,580	5.3	5,661	1.8
Mobile Home	1,939	2,626	35.4	3,470	32.1	2,270	-34.5
TOTAL	24,781	27,437	10.7	30,361	10.5	31,079	2.4

Source: U.S. Census Bureau

During the last two decades total housing units in the unincorporated portion of McCracken County Table -11 have increased at a rate in excess of eighteen percent (18.5%) and seven percent (7%), respectively, resulting in a net increase of three thousand eight hundred forty eight (3,848) total units.

**TABLE - 11** 

## UNICORPORATED PORTION OF McCRACKEN COUNTY HOUSING UNITS BY TYPE

	1980	1990		2000		2010	
	#	#	%	#	%	#	%
Single Family	9,413	10,766	14.2	12,541	16.5	14,974	19.4
Multi Family	919	1,266	37.8	1,392	9.7	1,405	2.4
Mobile Home	1,700	2,353	38.4	3,107	32.0	1,849	-40.5
TOTAL	12,032	14,385	20.0	17,040	18.5	18.228	7.0

Source: U.S. Census Bureau

The housing units in the City of Paducah over this two decade time frame Table -12 have remained generally stable resulting in a net loss of two hundred one (201) total units. This relative loss in total units is attributed to a decrease in single family units.

**TABLE - 12** 

### CITY OF PADUCAH HOUSING UNITS BY TYPE

	1980	1990		2000		2010	
	#	#	%	#	%	#	%
Single Family	8,925	8,745	-2.0	8,770	0.3	8,174	-6.8
Multi Family	3,585	4,034	12.5	4,188	3.8	4,256	1.6
Mobile Home	239	273	14.2	363	33.0	421	16.0
TOTAL	12,749	13,052	2.4	13,321	2.1	12,851	-3.5

Source: U.S. Census Bureau

A comparison of the average household size Table – 13 over the past decade has remained generally stable with continued size erosion in the City of Paducah. The differential between the unincorporated portion of McCracken County and the City of Paducah reflects the age distribution of the population. In addition the majority of the new home construction within an affordable price range for first time and younger home buyers is occurring in the unincorporated portion of McCracken County.

**TABLE - 13** 

#### HOUSEHOLD SIZE

	2000 Persons Per Household	2010 Persons Per Household
McCracken County	2.36	2.32
City of Paducah	2.12	2.09
Unincorporated Portion McCracken County	2.46	2.42

Source: U.S. Census Bureau

#### 3. FUTURE HOUSING

The development of residential housing in the unincorporated portion of McCracken County is concentrated in the Lone Oak, Heath, Reidland and Farley communities due to the proximity of the three (3) McCracken County High Schools. With the completion of the consolidated McCracken County High School campus set for the fall of 2013 located on U.S. Highway 60, just west of Maxon Road; it is highly likely future residential development will occur in close proximity to this facility.

Due to the continuing growth of the 65+ age group Table – 4 additional multi-family facilities; especially retirement residences and senior assisted living communities will develop.

The McCracken County housing market has historically remained stable and experienced slow steady growth. What effect the loss of the Paducah Gaseous Diffusion Plant will have on the housing market is uncertain especially when considered in conjunction with future population trends.

## CHAPTER FIVE TRANSPORTATION

#### A. Introduction

The transportation system is a vital communication link between a county and the region. McCracken County's transportation system consists of highways, air, river, and rail facilities. In addition to determining the degree of community accessibility, the transportation network establishes patterns of growth and influences future growth areas. The lack of an efficient transportation system has a direct, detrimental effect on the welfare, education, and standard of living of the area's population.

### **B.** Highway Transportation

#### 1. Introduction

The McCracken County highway transportation network is comprised of 858 miles of public roadways. McCracken County maintains 333 miles with the balance of the network maintained by the Kentucky Highway Department (302 miles) and the City of Paducah (223 miles).

## 2. Functional Highway Classification

In order to examine a highway network to a degree equivalent with its importance in the socioeconomic structure of an area, the elements comprising the network must first be defined according to their functional importance. For purposes of analysis, a highway network is organized as a hierarchy, based on the needs to be served, and each highway is identified according to this hierarchy.

The functional classification of roads and highways depicts the character of service that these facilities are to provide; however it is not a guide to the size, condition, or type of construction. For this particular study, the functional classifications as per the National Highway Functional Classification system are:

a. *Rural Principal Arterial System:* Continuous routes serving traffic movements with trip length and travel density characteristic of state wide interstate travel. Serve virtually all urban areas of 50,000 people or greater, and a large majority of those over 25,000 people. Provide an integrated flow

network.

- b. *Rural Minor Arterial Road System:* Integrated interstate and inter-county highways that link cities, large towns, and major traffic generators. A spatial distribution such that all developed areas are within reasonable distance. Provide relatively high overall travel speeds with minimal interference.
- c. *Rural Collector Road System:* Serve inter-county travel needs where the distance is shorter than on arterial routes. Divided into major and minor categories.
- d. *Rural Local Road System:* Principally for use over short distances; is very locally oriented and accounts for all road mileage not included in the above.

#### 3. Existing Highway System

McCracken County has an adequate inter-county highway network for the movement of the population as well as goods and services, Map 1.

Primary roadway access to the county is by way of Interstate 24, which connects through Nashville to Chattanooga, Tennessee to the east and to Interstate 57 near Marion, Illinois to the west. This interstate provides connections to I-69, 23 miles east of Paducah at Calvert City, Kentucky, I-65 and I-40 in middle Tennessee and I-64 and I-70 in southern Illinois. Each of these interstate corridors connects to other interstates providing access across the country and to Canada and Mexico. In addition to I-24, there are numerous state and U.S. routes providing local and regional access, including U.S. 60, U.S. 62, U.S. 45, U.S. 68, KY 305/Cairo Road, KY 994/Old Mayfield Road, KY 998/Olivet Church Road, KY 1286/Friendship Road, KY 1954/John Puryear Drive, and KY 1954/Husbands Road.

There are county roads that would be classified as rural collectors, providing access to adjacent areas, over relative short distances. These facilities tend to be narrow and not well-suited for heavy traffic volumes. These facilities play an important role in the internal transportation system of McCracken County.

It is imperative that normal upkeep and maintenance be performed and improvements initiated when warranted.

## 4. McCracken County Truck Facilities

Thirty-two (32) firms provide interstate and/or intrastate trucking services to McCracken County. Seven (7) of these firms service area is regional, twelve (12) national and thirteen (13) international. Twenty-three (23) of these firms are located in Paducah and McCracken County.

Adequate planning for trucking facility operations is necessary due to the increasing multimodal transportation opportunities available in McCracken County.

5. Future Highway Plans for McCracken County a. Short Term Plans – Table 14

	Project Item Number	Route Number	Project Description	Estimated Costs In Millions
А	1-152	U.S. 62	Widening of US-62 from KY- 998 to Paducah Information Age Park	8.1
В	1-153	KY 1286 KY 998	Improvements to KY 1286 Friendship Road from U.S. 45 to KY 994 Olivet Church Road to U.S. 60	25.0
С	1-115.10 1-115.11	U.S. 60	Improvements to U.S. 60 from Bethel Church Road to the existing 4 lane facility	13.3
D	1-154	I-24/U.S. 60	Interchange modification to the I-24/U.S. 60 interchange to a double crossover diamond type and improvements to U.S. 60 (access management) West of I-24	20.0
Е	1-115	US60	Improvements from Stafford Road in Ballard County to Bethel Church Road	6.0

Source: Kentucky Transportation Cabinet

## COMPREHENSIVE PLAN

## b. Long Term Plans – Table 15

	Project Item Number	Route Number	Project Description	Estimated Costs In Millions
А	1-8702	New Route	Ohio River Mega Park new access road from KY 305/Cairo Road near I-24, extending west to the Ohio River Mega Park	32.2
В	01-073	US62	Correct substandard geometric design of Y- intersection and address safety concerns with US 62 and KY 286	1.6
С	1-1115.10 1-1115.20	U.S. 62/68	Beginning at the Clarks River extending east to Park Road	34.1
D	01-073	KY131	Improve safety, truck mobility, and access and address geometric deficiencies from Graves Co. line to KY284 in Reidland	18.5

Source: Kentucky Transportation Cabinet

## C. Air Transportation Services

#### 1. Introduction

As the only airport facility in McCracken County, Barkley Regional Airport, an FAA-designated Class 1 certified airport, is a significant economic development engine for Paducah and McCracken County. In terms of direct, indirect and induced economic impact on the region, the airport generates \$43.6 million annually. This comes in the form of airline and general aviation spending, ancillary services such as car rentals and parking, and the employment of 150 people, with a combined payroll of \$4 million.

#### 2. Overview

The airport's reach is regional, national, and international with air traffic in the form of commercial airlines, corporate and private owned aircraft, and military aircraft that utilize Barkley Regional.

Additionally the airports enhanced impacts on the economy of McCracken County are realized through the general aviation services (aircraft servicing, repair and maintenance, aircraft charters, flight instruction and aircraft sales) provided; as well as employers in the region who use Barkley Regional for their companies transportation needs.

A survey revealed that roughly sixty percent (60%) of the top employers of the region utilize the commercial air service as part of their day-to-day activities.

At present, one commercial airline provider serves Barkley. United Express, operated by SkyWest Airlines, offers twice daily flights to Chicago O'Hare, one of the nation's largest hub airports. Service to Chicago offers regional travelers non-stop or single plane change service to 130 domestic and over 30 international destinations via United Airlines or one of its partners. It should be noted that since the arrival of United Express, a full 10 percent of the airport's annual passenger traffic is for international travel, something that is a relatively new phenomenon.

In terms of airport reach, studies have shown that passengers from within an 80 mile radius utilize Barkley Regional. The airport's marketing area encompasses

not only far Western Kentucky, but portions of northwest Tennessee, southeast Missouri, and southern Illinois. Census data shows that one (1) million people live within a 60 minute drive of the airport.

Due to economic and industry-specific factors, the airline industry is constantly evolving. This fact carries with it the ever-present threat of the loss of commercial air service, and the reduction or loss of state and federal funding. Regionally speaking Cairo, Sikeston, Murray, Union City, Hopkinsville/Ft. Campbell, and Bowling Green have seen a total loss of air services.

In spite of this reality, area residents desire increased service options, and affordable airfares, requests which coincide with objectives held as vital to strengthening the local economy.

The present terminal building was constructed in 1955 and has been expanded on three separate occasions, but is plagued by outdated construction, limited further expansion and renovation possibilities and footprint availability. The age of the structure itself also indicates that the current terminal is near the end of it usable life.

While preliminary site selection within the current airport property has been done, estimates suggest that a new terminal building and required associated facilities, i.e. fire department and maintenance and equipment facilities, would cost approximately \$30 million, with local sources contributing \$6 million of that total. The one bright spot is that no additional land purchases would be necessary for a new terminal to become a reality.

## 3. Air Space Restriction

There are restricted air space requirements established by the Federal Aviation Administration (FAA) that impact development within this restricted airspace area.

Close and continuous coordination between the McCracken County Planning and Zoning Commission and the Barkley Regional Airport Authority is required to ensure future land-use plans and requests for building permits within the defined areas used for approach and landing purposes administered by the FAA, the

Kentucky Airport Zoning Commission, and Barkley Regional Airport Authority be carefully reviewed by the McCracken County Planning and Zoning Commission prior to approval to avoid encroachments into restricted air space.

#### 4. Future Plans and Goals

Maintain and enhance the level of air transportation service provided.

New Terminal Building

The extension of the Paducah McCracken County Joint Sewer Agency (JSA) sanitary sewer to the airport and adjacent properties.

Improved access for residents of Graves, Marshall and Calloway counties with construction of the Paducah Outer Loop and improvements to U.S. 62 and KY 786.

Enhance multimodal transportation with river freight, highway freight, rail freight, and air freight.

## D. River Transportation

#### 1. Introduction

McCracken County's largest industry is the river transportation industry. There are more than twenty-four (24) marine towing companies with operation centers or headquarters in McCracken County; in addition, there are more than fifty (50) companies which provided services to the industry with over ten thousand (10,000) employees total between the two.

#### 2. Overview

The McCracken County river industry is served by one (1) public loading and unloading terminal and several private terminals. The public terminal is operated by the Paducah/McCracken County Riverport Authority. The Paducah facility is the only public facility located in the U.S. where four (4) major rivers converge, the Ohio, Cumberland, Mississippi and Tennessee. With the river port's location, adjacent to major east/west (I-24) and north/south (I-69) interstate highways and numerous federal and state routes, classified federal truck routes. It is within one (1) days ground transportation of sixty-five percent (65%) of the U.S. population.

The Paducah/McCracken County Riverport Authority has on site rail and truck capabilities to offload, store, package or transport rock, sand, grains, steel, rubber, fertilizer, in short all commodities. The riverport is also equipped for bulk and general cargo.

There are three (3) public accesses to the river in McCracken County. The foot of Broadway, located in Downtown Paducah, Metropolis Ferry Landing, located in western McCracken County and Clarks River Ramp, located in eastern McCracken County.

There are approximately thirty (30) navigable miles of river bordering McCracken County. Four (4) bridges cross major rivers in McCracken County: One (1) railroad bridge across the Ohio; three (3) highway bridges, two (2) across the Ohio River, and one (1) across the Tennessee River. One navigational dam is located in McCracken County (Dam 52), operated by Army Corp. of Engineers, on the Ohio River.

The largest percent of the industry on the river is towboat operation, barge and towboat repair. McCracken County has two (2) private repair yards.

#### 3. Short Term Plans

The Paducah/McCracken County Riverport Authority is seeking the establishment of a foreign trade zone which will enhance economic development efforts in the entire region.

Increased crane capacity at the port providing services for container transfer on barge traffic to multimodal traffic (highway traffic/rail traffic). A new 48-ton crane and marine cell will be installed by December, 2013.

Completion of the Ohio River Olmstead Dam Project located down river in Ballard County, Kentucky west of and adjacent to McCracken County, Kentucky.

Completion of the Tennessee River Kentucky Dam Project located up river in Marshall County, Kentucky east of and adjacent to McCracken County, Kentucky.

## 4. Long Term Plans

Continue to utilize the river transportation resources in conjunction with the highway transportation resources and rail transportation resources in an environmentally safe and efficient manner while serving the economic needs of McCracken County.

## E. Rail Transportation

#### 1. Introduction

McCracken County is served by the Paducah & Louisville Railway (P & L), a 265 mile Class II Carrier and two (2) Class I Carriers, the Canadian National (CN) serving Canada and the Midwest and Southern United States with approximately twenty thousand four hundred (20,400) route miles of track and the Burlington Northern Santa Fe (BNSF) operating more than one thousand (1,000) trains a day on one of the largest freight rail transportation networks in North America.

#### 2. Overview

The Paducah & Louisville Railway (P & L) with over two hundred fifty (250) employees is a full service regional railroad and connects directly with four (4) of the seven (7) North American Class I Carriers: Burlington Northern Santa Fe (BNSF), the Canadian National (CN), the Norfolk Southern (NS) and the CSX Transportation (CSXT). Additionally, the P & L interchange unit coal trains with the Union Pacific (UP) and connects with the Indiana Railroad Company (INRR), a regional carrier, and two (2) short lines: the Louisville & Indiana Railroad (LIRC) and the Fredonia Valley Railroad (FVRR).

Rail services in McCracken County is further enhanced by our geographic proximity to the inland water system and the nation's interstate highway system.

The P & L maintains close working relationships with water carriers by serving rail to barge locations at the Paducah/McCracken County Riverport Complex, the Calvert City Terminal (Southern Coal), the Grand Rivers Terminal (Kinder Morgan) and the Louisville Jefferson County, Riverport Complex.

Several rail to truck bulk terminals, warehouses and trans-load facilities are located along the P & L. Interstate highway connections include I-64, I-65 and I-71 in Louisville, KY, I-65 in Elizabethtown, KY, I-69 and I-24 in Calvert City, KY, I-69 in Mayfield, KY and I-24 in Paducah, KY.

The P & L handles a broad range of commodities, serves over ninety (90) industries and handles approximately two hundred thousand (200,000) car loads annually.

## 3. Goals

The length of trains (number of cars) is continuously increasing as the power and technology of locomotives improve. Due to these facts the P & L is continuously improving mainline rail facilities, staging yard spurs and staging yards to meet these needs.

Maintain their leadership and high standards among regional carriers and promote economic development.

# CHAPTER SIX ENVIRONMENTAL NATURAL RESOURCES

#### A. Introduction

The type and degree of development that occurs often depends on the physiographic features of that area. The climate, soils, topography and other natural resources either prohibit or encourage varying development patterns.

The topography and soils of an area provides information about an area's potential water, sand and gravel supply. Drainage, runoff, erosion and permeability are all important factors in determining an area's natural limitations for purposes for which it is not entirely suited; dangerous and costly effects may result. These often can be avoided with proper land use planning.

#### **B.** Climate

The climate in McCracken County is temperate. Winters are moderately cold and summers are warm and humid. All seasons are marked by weather changes that come from passing weather fronts and associated centers of high and low pressure.

- 1. Temperature: The 2012 average temperature for McCracken County was 64.1 degrees Fahrenheit. The monthly fluctuation in temperature indicates January to be the coldest month, with average daily maximum temperatures of 34.6 degrees Fahrenheit, and July being the warmest month, with an average daily maximum temperature of 78.9 degrees Fahrenheit. In the past ten (10) years high temperature was recorded on June 30 and July 1, 2012, at 106.0 degrees, the record low of minus 4.0 degrees was recorded on December 25, 2004.
- 2. Precipitation: Average precipitation is fairly well distributed throughout the year. There is no wet or dry season, but periods of dry and wet weather do occur during a typical year.

Thunderstorms occur on an average of about 52 days a year. The most frequent time for thunderstorms is in the spring and summer months, but thunderstorms can occur in any month. The annual amount of precipitation received averages around 49 inches or on average in McCracken County over the past ten (10) years approximately 4 inches per month. The month with the greatest amount of precipitation is February with a monthly average rainfall measuring 3 inches. McCracken County also experiences snow and ice during the months of November, December, January, February and March. The amount of snow and ice varies from year to year. The average annual snowfall for McCracken County is 9 inches.

3. Wind: For the most part, McCracken County's wind patterns are from the south to southwest. Wind speeds average from 7 miles per hour during the months of May to October and from 10 miles per hour during the months of November to April.

## C. Physiography

McCracken County is in the northeastern part of the Mississippi embayment of the Gulf Coastal Plain. This area is characterized by unconsolidated sand, clay and gravel deposits, which fill a bedrock trough that deepens (at a rate of 20 to 30 feet per mile) as one travels south. The stratrography of the area begins with the Paleozoic bedrock of the Mississippi age. The next strata are the Ripley formation of the late Cretacceous age and are the oldest formation with no outcroppings in the area. From the Ripley formation is found the Porters Clay strata of the Paleocene Age. This is the only tertiary formation in this area, which is of marine origin. The Holly Springs and formation of the Eocene age lies above the Porters Creek Clay. Finally, the remaining strata is composed of deposits of gravel and sand from the Paleocene age with loess of Pleistocene age overlying older deposits and capping the upland areas.

#### D. Soils

The McCracken County Soil Conservation District surveys the soils of McCracken County. Three (3) primary soil associations comprise two-thirds (2/3) of McCracken County with the remainder comprised of four (4) soil associations. Map 2

## 1. Calloway-Routon Association:

This association is nearly level, poorly drained, medium-textured soils on uplands. This association extends through the northwestern portion of McCracken County and constitutes approximately 15% of the county's soil type.

#### 2. Ginat-Okaw Association:

This association is nearly level, poorly drained, medium-textured soils on stream terraces. This association, which accounts for approximately 21% of the County and the bulk of the soil, on which Paducah is located, is found on high terraces in the east central and northern parts of the county.

## 3. Grenada-Calloway Association:

This association is nearly level to sloping, moderately to poorly drained, medium-textured soils on the uplands. This particular association occupies a large, continuous area across the west-central part of the county, comprising approximately 30% of the county.

The remainder of the county includes: the Nolin-Newark association (4%); the Melvin-Wheeling-Uniontown association (5%); the Falaya-Waverly-Vicksburg association (12%); and the Loring-Feliciana-Brandon association (13%).

Each soil type is a unique combination of the characteristics that affect the nature of the soil, its reaction to stress, and its potential to sustain certain land uses. Development without regard for the limitations of the soil can result in wet basements, unstable foundations, malfunctioning septic tanks, increased erosion, and other problems.

## E. Topography

The upland portion of McCracken County is rolling, but large areas of level land are present between some of the area's streams and their headwater. These areas are typically located in the western part of McCracken County and along flood plains of the Ohio, Tennessee and Clarks Rivers. Highest elevations occur along the Tennessee Valley Divide near St. Johns in the southern part of the county, where ridge tops have elevations in excess of 500 feet above sea level. Other high elevations are present in the uplands between Mayfield Creek and the west fork of Massac Creek in the southwestern part of the county, where ridges and knolls attain elevations in excess of 490 feet. Lowest elevations are on the Ohio River. Normal pool elevation at Paducah on the upstream side of navigation Dam No. 52 is 302 feet; the normal pool elevation below the dam is 290 feet. Greater local relief occurs in the vicinity of Clarks River and Mayfield Creek, where hills commonly rise 100 feet or more above the broad valley flats. There are no bluffs on the McCracken County shore of the Ohio River. Elevation in downtown Paducah at the McCracken County Courthouse is 341 feet; Lone Oak – 475 feet; Reidland – 400 feet, and Barkley Field – 400 feet.

## F. 100 Year Floodplain

McCracken County is located in an area where four (4) major rivers converge, the Ohio, Cumberland, Tennessee and Mississippi.

Flood conditions occur in McCracken County by both headwater and backwater storm events. The 100-Year flood areas are shown on Map 3, in addition wetland areas are shown on Map 4.

Future land use plans should discourage development within the 100 Year floodplain. Any development shall be in compliance with all federal, state, and local environmental regulations and the Federal Flood Insurance Administration.

#### G. Seismic Zone

According to the McCracken County Emergency Management Earthquake Plan, Kentucky's western twenty-four (24) counties (including McCracken County), earthquake threat comes from two (2) seismic zones: the New Madrid Seismic Zone (NMSZ) and the Wabash Valley Seismic Zone (WVSZ). The recurrence intervals for large events on the NMSZ are from 500 to 1,000 years and for the WVSZ from 2,000 to 5,000 years.

The WVSZ is located in southeastern Illinois and southwestern Indiana. The WVSZ is active as proven by a 5.0 earthquake that occurred in the Evansville area in 2002. The NMSZ lies within the central Mississippi Valley, extending from northeast Arkansas through southeast Missouri, western Tennessee, and western Kentucky to southern Illinois. During a three-month period in the winter of 1811 to 1812, there were a series of shocks that produced at least three quakes that were estimated to have a magnitude near, or greater than, 8.0 on the Richter Scale. Earthquakes along this zone occur every year, although most are of a magnitude less than 2.0 Richter. Although these actual fault systems do not extend directly into Kentucky, a background earthquake magnitude 5.0 Richter is a possibility that should be considered according to James Cobb, Ph.D., Director of the Kentucky Geological Survey (KGS).

According to the United States Geological Survey (USGS) and the Center for Earthquake Research and Information at the University of Memphis, the following probabilities of an earthquake in the NMSZ over a 50-year period are as follows:

There is a 7% to 10% probability of a repeat of the 1811 - 1812 earthquakes (magnitude 7.7 - 8.0 Richter); a 25% to 40% probability of a magnitude 6.0 Richter or larger.

Because of the growth and dispersal of the population and the accompanying development of critical infrastructure that is required to sustain this population, any significant earthquake event, especially over a 6.0 Richter magnitude, could cause consequential impacts within McCracken County.

According to the (KGS) researchers at the University of Kentucky the catastrophic destruction and unprecedented economic loss along the NMSZ in western Kentucky might not be as severe as stated by the USGS. KGS researchers say maps published by the USGS overstate the earthquake threat in western Kentucky and surrounding region.

KGS researchers have been working for a decade to have the maps changed to reduce the estimated threat level. The USGS uses a probabilistic method to determine the earthquake hazard level, a method KGS researchers say is flawed.

"This method, mathematically, is not correct," said Zhengming Wang, Ph.D., head of the KGS Geologic Hazards Section. "The national hazard maps are not scientifically sound; that's why there is a problem."

A Deterministic Seismic Hazard Analysis (DSHA) was performed by the KGS at the University of Kentucky (Wang, 2010). According to this analysis, the Paducah region showed a much more moderate seismic hazard. "It's just not as significant as California and other places like Japan or China," he said

Cobb and Wang wrote an article published by the Geological Society of America late last year detailing the scientific flaws in the probabilistic method and presenting the deterministic method and its results.

Standard building codes are based on the USGS hazard maps and federal installations cannot be constructed in zones with an earthquake threat as high as the USGS map depicts for the NMSZ, which includes Western Kentucky. That could put Western Kentucky at an unnecessary disadvantage when trying to attract federal facilities, impeding economic development, Cobb said.

The USGS is developing new hazard maps, which will be released in 2014. Cobb and Wang hope their efforts along with the persuasive efforts of others, will result in a reduced estimation of the USGS seismic hazard in the midwest on the new maps.

## CHAPTER SEVEN COMMUNITY FACILITIES

#### A. Education

#### 1. Introduction

All levels of education opportunities are available in McCracken County including elementary and secondary education through four (4) school systems. Higher education is provided at the West Kentucky Community and Technical College, The University of Kentucky Paducah College of Engineering and the Murray State University Paducah Regional Campus and Mid-Continent University.

## a. Elementary and Secondary Education

McCracken County's educational needs at the elementary and secondary level are addressed by four (4) educational systems, consisting of two (2) public systems and two (2) parochial systems Table 16. Home schools serve an unknown number of children.

The McCracken County School system consisting of six (6) elementary schools, three (3) middle schools and one (1) high school.

The Paducah Independent School system consisting of three (3) elementary schools, one (1) middle school and one (1) high school.

## **b.** Parochial Systems

The St. Mary School system and the Community Christian Academy offer elementary, middle school and high school education.

Table 16

## **PUBLIC SCHOOLS**

	McCracken County	Paducah Independent
Total Enrollment 2012 – 2013	6,989	2,863
Accreditation	AvancED	Southern Association of Colleges & Secondary Schools
Pupil Teacher Ratio 2012 - 2013	16:1	13:1
Percent of High School Graduates to College 2012 – 2013	70.4%	60%
Expenditure Per Pupil	\$8,945.00	\$13,563.00

#### PAROCHIAL SCHOOLS

	St. Mary	Community Christian Academy
Total Enrollment 2012 – 2013	549	170

Source: Kentucky Department of Education

The state of Kentucky evaluates school systems by the successful transition of students into adult life. By this measure the public schools in McCracken County exceeded the state average in 2010 - 2011, Table 17.

**Table 17** TRANSITION RATE INTO ADULT LIFE 2010 – 2011

	McCracken County		Paducah Ir	ndependent	State of Kentucky		
	#	%	#	%	#	%	
Successful Transition Rate	483	97.8	150	96.0	41,386	93.6	
College	340	68.9	90	60.0	24,405	55.2	
Vocational/Technical	6	1.2	4	2.7	2,792	6.3	
Military	13	2.6	1	0.7	1,033	2.3	
Working Part & Full Time	124	25.1	49	32.6	13,156	29.7	
Not Successful	11	2.2	6	4.0	2,827	6.4	

Source: Kentucky Department of Education

## c. Higher Education

Higher education is available locally through a variety of educational institutions.

#### 1. West Kentucky Community and Technical College (WKCTC)

WKCTC is a comprehensive two year community and technical college and provides excellent education to the area and supports economic development.

6,099 students enrolled at WKCTC in Fall 2017 seeking traditional two-year transfer degrees in arts, science, and fine arts; applied science degrees; diplomas and certificates.

Source: westkentucky.kctcs.edu

## 2. The University of Kentucky College of Engineering

The UK College of Engineering Paducah facility, located on the WKCTC Campus, offers engineering degrees in mechanical and chemical engineering with an enrollment of approximately 180 students.

Source: UK College of Engineering – Paducah Campus administration

## 3. Murray State University Paducah Regional Campus

Murray State University (MSU) moved to the new twelve (12) million dollar Paducah Regional Campus in January 2014. MSU Paducah Regional Campus had 242 students enrolled in the Fall of 2017. The Paducah campus offers bachelor's degree programs including business administration, computer information systems, elementary education, integrated studies, middle school education (math/science), organizational communication, public and community health, social work and special education. Master's degree programs include business administration (MBA), human development, leadership, information systems, occupational therapy, public relations, public administration, school administration, school counseling and teacher training. The Murray State University main campus is located forty (40) miles south of McCracken County.

Source: Murray State Registrar's Office

#### **B. MEDICAL**

#### 1. Introduction

The City of Paducah and McCracken County serves as the regional medical center for western Kentucky and a large part of southern Illinois.

#### 2. Overview

McCracken County's medical community has almost every major medical specialty represented in the physician population. The county's principle medical facilities, Lourdes Hospital and Baptist Health Paducah, provide over 710 beds.

These facilities are supported by 323 physicians, 995 registered nurses, 202 licensed practical nurses, 86 nurse practitioners, 40 nurse anesthetists and 14 nurse clinical specialists. Other medical facilities of note are The Orthopedic Institute of Western Kentucky, Four Rivers Behavioral Health Clinic and the Purchase Health Department.

#### 3. Ambulance Service

McCracken County's emergency medical needs are provided by Mercy Regional Emergency Systems LLC. Mercy EMS operates four (4) facilities with forty-eight (48) employees and eleven (11) Advanced Life Support EMS units. Mercy EMS makes approximately thirteen thousand (13,000) calls per year. Mercy EMS, through PHI Paramedical, provides advanced medical transportation to and from, in and out-of-state larger medical facilities.

#### C. Recreation/Cultural

#### 1. Introduction

Paducah and McCracken County provide a broad variety of recreational and cultural activities utilized by a large portion of the surrounding population. Additionally, McCracken County offers a myriad of annual events creating opportunities for family enjoyment.

#### 2. Recreation

McCracken County and Paducah provide supervised public recreation and instruction in a number of activities. Public facilities include eighteen (18) parks and playgrounds, two (2) swimming pools, two (2) spray parks, numerous tennis courts, baseball diamonds, soccer fields, football fields, softball fields and frisbee golf. There are nine (9) public community centers.

Private recreational facilities include Brooks Stadium baseball complex, two (2) Country Clubs, three (3) golf courses, three (3) swimming pools.

McCracken County and Paducah have top-notch sporting venues including, Paducah Regional Sports Plex, Paul Rowton Indoor Tennis Center, Players-Bluegrass Downs, Paducah International Raceway and Beacon Dragway.

#### 3. Cultural

A creative culture abounds in Paducah and McCracken County. Highquality and diverse art forms are highlighted by the vibrant history of the area.

Paducah and McCracken County's cultural offerings in the performing arts are unparalleled for a community this size. Cultural offerings include the National Quilt Museum of the United States; the eighteen hundred (1,800) seat Luther Carson Four Rivers Performing Arts Center offering Broadway plays, concerts, children's theatre performances, educational programs and summer arts camps; the Market House Theatre located in a restored farmers' market presents performances of comedy, drama and music by local artists; the West Kentucky Community and Technical College's Clements Fine Arts

Center/Arts in Focus; the Paducah Symphony Orchestra encompasses a wide range of ensembles, including the Professional Orchestra, adult Symphony Chorus, multi-county Youth and Children's Chorus, Youth Orchestra and a Music Education Program; the Yeiser Art Center and numerous art galleries.

Other attractions include the Barkley Monument, the Alben Barkley Museum, Whitehaven Mansion, the Paducah Railroad Museum; the Lloyd Tilghman House and Civil War Museum, the River Discovery Center, and the Hotel Metropolitan

## 4. McCracken County Public Library

Andrew Carnegie donated funds in 1902 for the construction of a library in Paducah. The Carnegie Public Library opened October 4, 1904. In 1970 a new 28,000 square foot library designed to hold 125,000 volumes opened. In 1999 the McCracken County Fiscal Court established the McCracken County Public Library taxing district and the name changed to the McCracken County Public Library. The total collection size is 147,000 volumes including 88,700 books, 32,600 DVD's, 5,400 books on CD, 1,700 music CD's and 19,000 special collections and other volumes.

The McCracken County Public Library provides current, high-demand, high-interest resources in a variety of formats and methods to entertain, educate and enrich the community.

## 5. Major Annual Events

Annual events are:

The American Quilters' Society Quilt Show and Contest (Spring)
The American Quilters' Society Quilt Show and Contest (Fall)
Dogwood Trail Celebration
Lower Town Art and Music Festival
McCracken County Fair
Eighth of August Emancipation Celebration
Barbecue on the River
River's Edge International Film Festival

#### **D. Fire Protection**

#### 1. Introduction

Adequate fire protection is important to a community for the protection and safety of the existing residential, commercial and industrial structures and the attraction of new and commercial and industrial establishments.

McCracken County is served by six (6) fire protection districts, the Paducah Fire Department and two (2) private fire departments.

#### a. Fire Protection Districts

The unincorporated area of McCracken County is served by seven (7) fire protection districts: (1) Reidland/Farley, (2) Hendron, (3) Lone Oak, (4) Concord, (5) West McCracken, (6) Melber and (7) Kevil; operating thirteen (13) fire stations. (Map 5)

All seven (7) fire districts operate on a voluntary basis, with approximately two hundred (200) volunteers. Currently the fire protection districts have: twenty-three (23) pumper trucks, four (4) ladder trucks, five (5) tanker trucks, fifteen (15) brush vehicles, and five (5) rescue vehicles. The majority of the unincorporated area has a Class 5 rating from the insurance service office.

## b. Paducah Fire Department

The Paducah Fire Department maintains seventy-four (74) full-time firefighters and operates five (5) fire stations. Currently the Paducah Fire Department has: seven (7) pumper trucks, two (2) ladder trucks, two (2) rescue vehicles, two (2) water craft and ten (10) support vehicles.

The department maintains trench rescue capabilities, technical rescue capabilities and provides fire safety and code enforcement services.

#### c. Private Fire Protection

Private fire departments are maintained at Barkley Regional Airport and the Paducah Gaseous Diffusion Plant operated by the United States Enrichment Corporation.

#### E. Emergency Management

#### 1. Introduction

McCracken County is located at the confluence of four (4) rivers and in a seismic area; therefore emergency management is a vital element necessary to protect the health and welfare of its citizens and foster economic development.

Emergency management services are provided by the McCracken County Emergency Management Agency (EMA). Additionally, two facilities maintain private emergency management service.

## a. McCracken County Emergency Management Agency (EMA)

The EMA began serving Paducah and McCracken County in 1942 as the Paducah McCracken County Rescue Squad. The EMA Complex consists of three (3) buildings located at 3700 Coleman Road including the Emergency Management Center, a Rescue Building and the completely updated Emergency Operations Center. The EMA consists of one full-time director and a part-time administrative assistant. The EMA presently has forty-eight (48) volunteers on the roster with eighteen (18) assigned to the Emergency Operations Center and thirty (30) assigned to the Rescue Squad

Major equipment includes a mobile command center, dive rescue vehicles, four (4) all hazard rescue trucks, seven (7) traffic control vehicles and a swift water rescue trailer. The EMA has nine (9) certified rescue divers.

In addition to the basic search and rescue team the EMA maintains specialty rescue teams including swift water rescue team, high angle rescue team, trench rescue team and a Region I HazMat rescue team

**b.Barkley Regional Airport and Paducah Gaseous Diffusion Plant**Private emergency management services are maintained at Barkley
Regional Airport and the Paducah Gaseous Diffusion Plant operated
by the United States Enrichment Corporation.

#### F. Police Protection

#### 1. Overview

There are three law enforcement agencies that provide police protection for McCracken County: The Kentucky State Police, the McCracken County Sheriff's Department and the Paducah Police Department.

The Kentucky State Police, based at the Hickory Barracks provides officers and cruisers for McCracken County.

The McCracken County Sheriff's Department has fifty-five (55) full-time and three (3) part-time employees. Thirty (30) road deputies provided twenty-four (24) hour law enforcement service.

# CHAPTER EIGHT INFRASTRUCTURE

#### A. Water

#### 1. Introduction

The unincorporated portion of McCracken County is served with potable water by Paducah Water and the West McCracken County Water District. The water supply for Paducah and McCracken County, including the West McCracken County Water District, is from Paducah Water's treatment facility which pulls surface water from the confluence of the Ohio and Tennessee Rivers, Map 6.

#### 2. Paducah Water

#### a. Overview

Paducah Water supplies water to over twenty-six thousand (26,000) users utilizing a seven hundred fifty (750) mile distribution system ranging in size up to thirty-six (36) inches.

The treatment plant capacity is over nineteen (19) million gallons per day with a system wide storage capacity of over twelve (12) million gallons. Over the past twenty-five (25) years Paducah Water has invested millions of dollars in capital improvements.

## **b.** Capital Improvements

Since adopting the 2009 – 2019 Capital Improvements Plan Paducah Water has completed thirty-nine (39) projects totaling over thirteen million dollars (\$13,000,000) to date.

#### c. Plans and Goals

Paducah Water has more than twenty million dollars (\$20,000,000) in capital improvements anticipated during the next six (6) years including:

- Lovelaceville Road transmission improvements from South Gum Springs Road to Skyline Drive
- Massac Area storage improvements at Mayfield-Metropolis Road

 Transmission improvements along Blandville Road from Buchannan Road to Fisher Road near Barkley Regional Airport

## 3. West McCracken County Water District

#### a. Overview

The West McCracken Water District serves the northwest portion of McCracken County excluding the United States Enrichment Corporation. They serve approximately one thousand five hundred (1,500) users, utilizing a distribution system of over one hundred (100) miles with three elevated storage tanks totaling eight hundred fifty thousand (850,000) gallons.

#### **b.** Short Term Plans

Continuously maintain the integrity of the system.

#### 4. Private

There is one (1) private potable water treatment and distribution system located at the Paducah Gaseous Diffusion Plant in northwest McCracken County operated by the United States Enrichment Corporation.

## **B. Sanitary Sewers**

#### 1. Introduction

The unincorporated portion of McCracken County is served with sanitary sewer service by the Paducah McCracken County Joint Sewer Agency and private sanitary sewer systems. The primary private sanitary sewer treatment option for facilities beyond the limits of sanitary sewer service are individual septic systems, Map 7.

## 2. Paducah McCracken County Joint Sewer Agency

#### a. Introduction

The Paducah McCracken County Joint Sewer Agency (JSA) was created July 1, 1999, with the consolidation of sanitary sewer facilities located in the City of Paducah and the four (4) sanitary sewer districts in the collar communities adjacent to the City of Paducah: Reidland, Farley, Woodlawn, Lone Oak and Concord. The mission of the agency is to maintain and operate McCracken County's comprehensive public wastewater facilities.

#### b. Overview

The JSA's system includes separate sanitary sewers, as well, as combined sewers. Separate sanitary sewers are designed to convey only sanitary sewage (no stormwater is to be conveyed). Combined sewers are designed to convey stormwater and sanitary sewage in the same main. Major components of the JSA system are:

- 380 plus miles of gravity sanitary sewers.
- 41 plus miles of combined storm and sanitary sewers.
- 50 miles of sanitary sewer force mains.
- 81 pumping stations.
- 6,400 sewer manholes
- Three Wastewater Treatment Plants
  - Paducah Wastewater Treatment Plant
     9 MGD Process; 18 MGD wet weather.
  - Reidland Wastewater Treatment Plant
     1 MGD Process; 4 MGD wet weather.
  - Woodlawn Wastewater Treatment Plant 0.910 MGD Process
  - Users approximately 18,000. This represents
     65.6% of all users of the Public Water Systems.

## c. Industry Compliance Challenges

As stated, the JSA maintains both separate sanitary sewers and combined sewers. As previously noted, separate sanitary sewers are designed to only convey sanitary sewer flow. Materials and construction methods for the installation of gravity sanitary sewers pre-1980 did not provide the ability to construct water- tight sanitary sewers, resulting in the possibility that the sewer capacity is overwhelmed during high wet weather events creating a sanitary sewer overflow (SSO).

The combined sewer system, as previously noted, is designed to collect storm water runoff and sanitary sewage in the same main. During storm events flow in combined sewers may exceed the treatment plant capacity and discharge into the area rivers and streams resulting in a combined sewer overflow (CSO) in accordance with the Kentucky Division of Water's Permit. This situation is not unique to the JSA as over 772 communities in the United States utilize combined sewer systems.

In September of 2007, the JSA entered into an agreement with the Kentucky Division of Water to address compliance issues.

#### d. Capital Improvements

Since 2008, the JSA has completed an array of projects on compliance issues, expansions or projects that serve both purposes totaling approximately twenty-four million dollars (\$24,000,000). A portion of these are: increased treatment plant capacity, elimination of one CSO outfall, removal of sanitary sewer flow from combined sewers which reduced CSO dry weather flow by thirty percent (30%), expanding sanitary sewer service into the unincorporated portions of McCracken County including North Friendship Road, Holt Road, New Holt Road and the Massac Creek Interceptor, a thirty-five thousand foot (35,000') project in the Massac Creek watershed from Cairo Road to U.S. 45.

#### e. Plans and Goals

- Massac Creek Interceptor Part II
- Wallace Park combined sewer system separation
- Cook Street overflow project
- Continuously maintain and improve the system to protect the environment and foster growth and economic development

#### f. Private Facilities

There are private residential facilities located at the Heath School complex, Great Oaks Subdivision, Blandville West Subdivision, Terre Verde/Terre Mont Subdivision, Wilmington Chiles Subdivision, Timberland Subdivision and JoAnn Estates Subdivision.

Industries with private facilities are the Paducah Gaseous Diffusion Plant

operated by the United States Enrichment Corporation, James Marine, Browns Plating, Barkley Airport and the TVA Shawnee Steam Plant. Some of these private facilities will have the opportunity to join the JSA with the completion of the Massac Creek Interceptor project.

#### C. Solid Waste

#### 1. Overview

Solid Waste collection and disposal services for the residential, commercial and industrial generators in the unincorporated portions of McCracken County is provided by private haulers. These firms include SWS Environmental, Waste Path Services LLC, Dream Green, Summit Environmental, Affordable Trash Service Inc., CWI of Kentucky and Mathis Trash Service. Additionally CWI of Kentucky operates a solid waste transfer station at 829 Burnett Street in Paducah.

#### D. Electrical Power

#### 1. Overview

Paducah and McCracken County's electrical needs are served by the Paducah Power System, Jackson Purchase Energy and Kentucky Utilities Company.

(Map 8) Additionally McCracken County is crisscrossed with major power transmission facilities ranging from 161 KV to 500 KV that are part of the national grid system. These include Big Rivers Electric Corporation, Kentucky Utilities Company, Electric Energy Incorporated and The Tennessee Valley Authority. Portions of the McCracken national grid network are a part of the Midwest Independent System Operators (MISO) group.

#### E. Natural Gas

#### 1. Overview

Natural gas for Paducah and McCracken County is provided by the Atmos Energy Corporation (ATMOS), one of the country's largest natural-gas-only distributors. Atmos serves over twenty-one thousand (21,000) users including residential, commercial, light industrial and heavy industrial facilities. Their distribution system covers over sixty percent (60%) of McCracken County and is located along the majority of the state and local roadway networks.

## F. Fiber/Optic Telecommunications

#### 1. Overview

McCracken County is served by the Paducah Power System FiberNet (PPS Fiber Net) a subsidiary of Paducah Power System (PPS). In 2004 PPS constructed sixtyone (61) miles of fiber backbone for its service territory. Since that time through local agreements with the two (2) other power providers in McCracken County the PPS FiberNet facilities have been expanded and is utilized by several telecommunications companies providing businesses, manufacturers, health care providers, government entities and financial institutions a variety of services such as high speed internet, telephone and point to point connectivity. Telecommunication companies who are using PPS FiberNet include: Dialog, VCI, Computerland, Heartland (CSI) and Windstream Communications. Approximately ninety percent (90%) of the McCracken County business/manufacturing community is within the service territory of this superior level of connectivity.

In addition to PPS FiberNet, at&t and Comcast provide fiber optic services.

## **G.** Transportation

See Chapter Five

# CHAPTER NINE ECONOMIC ANALYSIS

#### A. Introduction

The examination of the local economy is critical in the preparation of a comprehensive plan. Local economic activity supports a given population that in turn influences the type and amount of land brought into development. The general health of the economy influences the pace of land development.

#### **B.** Overview

McCracken County serves as the economic hub of an eleven (11) county region of western Kentucky and southern Illinois, an area with a population of approximately two hundred thirty thousand (230,000). The region features eighteen percent (18%) of its population working in manufacturing compared to thirteen percent (13%) in Kentucky and eleven percent (11%) in the United States. More specifically the unincorporated portion of McCracken County employs in retail trades more than fifteen percent (15%) of its population compared to fourteen percent (14%) in Kentucky and thirteen percent (13%) in the U.S. In warehousing/transportation the unincorporated portion of McCracken County employs more than six percent (6%) of its population compared to five percent (5%) in Kentucky and just over three percent (3%) in the U.S. The county features thirty-one (31) times as many employees in the marine industry than the average county in the U.S., with continued growth of waterborne jobs anticipated. Less than one percent (1%) are employed in agriculture, leaving virtually all the working population being employed in nonagricultural activities. The unemployment rate has hovered around eight percent (8%) in 2012.

The county averages retail sales of over \$4 billion per year making it double the next closest Kentucky community in terms of retail sales per capita. This growth should continue as the Kentucky Oaks Mall recently underwent a \$10 million renovation. Additional commercial development should continue along U.S. 60 west of I-24.

The Highway 62 College/University Corridor featuring approximately 12,000 college students at the West Kentucky Community and Technical College, the

Murray State Paducah Regional Campus, and the University of Kentucky's College of Engineering, Paducah Campus should spark considerable economic growth by providing access to post-secondary education.

## **C. Existing Conditions**

## 1. Major Employers

Paducah and McCracken County enjoy a diverse economic base with a wide array of employers, Table 18.

**Table 18 - Major Employers** 

,
McCracken County Public Schools
Marquette Transportation
West KY Community and Technical College
Wal-Mart Super Centers
Paducah City Government
McDonald's Restaurants
Fluor Federal Services
Credit Bureau Systems
Paducah Bank
Dippin Dots
Paxton Media Group
Triangle Enterprises
National Maintenance & Repair
Petter Business Systems
VMV Enterprises
ViWinTech Window & Door, Inc.

Table 18 - Major Employers (continued)

39 – 99 Employees	
Amtrol	Cole Lumber
JMS Russell Metals	Marine Systems, Inc.
Paducah & Louisville Railway	Millwork Products
ICA Engineering, Inc.	Pepsi MidAmerica
BFW/Marcum Engineering	Paducah Water
United Parcel Service	Precision Machine
Arch Environmental Equipment	Waggoner Enterprises
Reynolds & Doyle, Inc.	Federal Materials Co., Inc.
Jackson Purchase Energy	Paducah Power System
Whayne Supply, Inc.	

Source: Paducah Economic Development

## 2. New Expansions

Over the past five (5) years economic development activities have produced new jobs and investments in the City of Paducah and McCracken County, Table 19.

Table 19 - Recent Expansions in the City of Paducah and McCracken County

Entity	Description	Number of Jobs	Public/Private Investment
Whitehall Industries	Automotive Supplier	150	\$10.0 Million
Macco Organiques	Pharmaceutical Grade Manufacturing	40	\$11.5 Million
TeleTech	Call Centers	450	\$5.0 Million
Dippin' Dots	Expanded Production	30	\$3.1 Million
VMV	Expanded Production	25	\$1.0 Million
The H Group	Behavioral Healthcare	40	\$1.0 Million
Superior Care Home	Skilled Nursing Facility	25	\$1.0 Million
Four Rivers Terminal	Coal Facility	40	\$20.0 Million
Shoreline Steel	Steel Piling Manufacturer	13	\$2.0 Million
H.T. Hackney	Distribution Center	25	\$14.0 Million
H.B. Fuller	Expanded Production	11	\$1.0 Million
TOTAL		849	\$69.6 Million

Source: Paducah Economic Development

## 3. Additional Employment and Economic Statistics

**Table 20 - Workforce By Occupation** 

	State of Kentucky		McCracken County				City of Pa	ducah	Unincorpo Portion McCrac Count	of ken
Occupation	Employee s	%	Employee s	%	Employee s	%	Employee s	<b>%</b>		
Management, business, science & arts	595,388	32.4	8,999	31.6	3,266	31.9	5,733	31.4		
Service	311,964	17.0 %	5,162	18.1 %	2,178	21.3	2,984	16.3 %		
Sales & office	446,695	24.3	7,827	27.5 %	2,763	27.0 %	5,064	27.7 %		
Natural resources, construction and maintenance	187,398	10.2	2,961	10.4	707	6.9%	2,254	12.4 %		
Production, transportation , and material moving	296,688	16.1	3,534	12.4	1,314	12.8	2,220	12.2		

Source: American Community Survey

**Table 21 - Workforce by Industry** 

	State of Kentucky		McCracken County		City of Pa	ducah	Unincorpo Portion McCrac Count	of ken
Industry	Employees	%	Employees	%	Employees	%	<b>Employees</b>	%
Agriculture, forestry, fishing, hunting & mining	54,499	3.0%	531	1.9%	120	1.0%	411	2.6%
Construction	113,394	6.2%	1,832	6.4%	575	4.6%	1,257	7.7%
Manufacturing	243,563	13.3%	2,975	10.4%	1,587	12.8%	1,388	8.5%
Wholesale Trade	48,543	2.6%	1,047	3.7%	600	4.8%	447	2.7%
Retail Trade	215,242	11.7%	4,174	14.7%	1,381	11.1%	2,793	17.0%

Source: American Community Survey

Table 21 - Workforce by Industry (continued)

	State ( Kentuc			McCracken County				ducah	Unincorpo Portion McCrac Count	of ken
Transportation, warehousing and utilities	108,503	5.9%	1,658	5.8%	529	4.2%	1,129	6.9%		
Information	32,667	1.8%	471	1.7%	133	1.0%	338	2.1%		
Finance, insurance, real estate, rental and leasing	99,736	5.4%	1,337	4.7%	721	5.8%	616	3.8%		
Professional, scientific, management, administrative and waste management services	142,802	7.8%	2,814	9.9%	998	8.0%	1,816	11.0%		
Educational services, health care and social assistance	450,332	24.5%	6,140	21.6%	2,235	18.0%	3,905	23.8%		
Arts, entertainment, recreation, accommodation and food services	155,652	8.5%	2,453	8.6%	1,862	15.0%	591	3.6%		
Public Administration	85,234	4.5%	1,059	3.6%	624	5.0%	435	2.7%		
Other	87,966	4.8%	1,997	7.0%	1,038	8.4%	959	5.8%		

Source: American Community Survey

Table 22 - Residential Construction Activity
Unincorporated Portion of McCracken County
From Building Permits

	Single Family		Multi-Family		Manufactured Homes
Year	Units	Project Cost	Units	Project Cost	Units
2009	50	\$14,860,000	20	\$3,500,000	63
2010	44	\$11,875,000	28	\$5,389,000	67
2011	45	\$13,177,200	23	\$5,226,500	102
2012	56	\$16,624,000	16	\$14,279,000	63
2013 (1/1 to 6/30)	20	\$6,848,000	2	\$409,000	25

Source: McCracken County

**Table 23 - Per Capita Income Comparisons** 

	1990	2000	2010	% Increase 2000 - 2010
State of Kentucky	\$11,153	\$18,093	\$23,033	27.3%
McCracken County	\$12,460	\$19,533	\$25,676	31.4%
City of Paducah	\$11,918	\$18,417	\$20,430	10.9%
Unincorporated Portion of McCracken County	\$12,874	\$20,282	\$28,914	42.5%

Source: U.S. Census Bureau

**Table 24 - Poverty Comparisons** 

	State of Kentucky	McCracken County	City of Paducah	Unincorporated Portion of McCracken County
2010	19.1%	16.4%	22.0%	12.9%

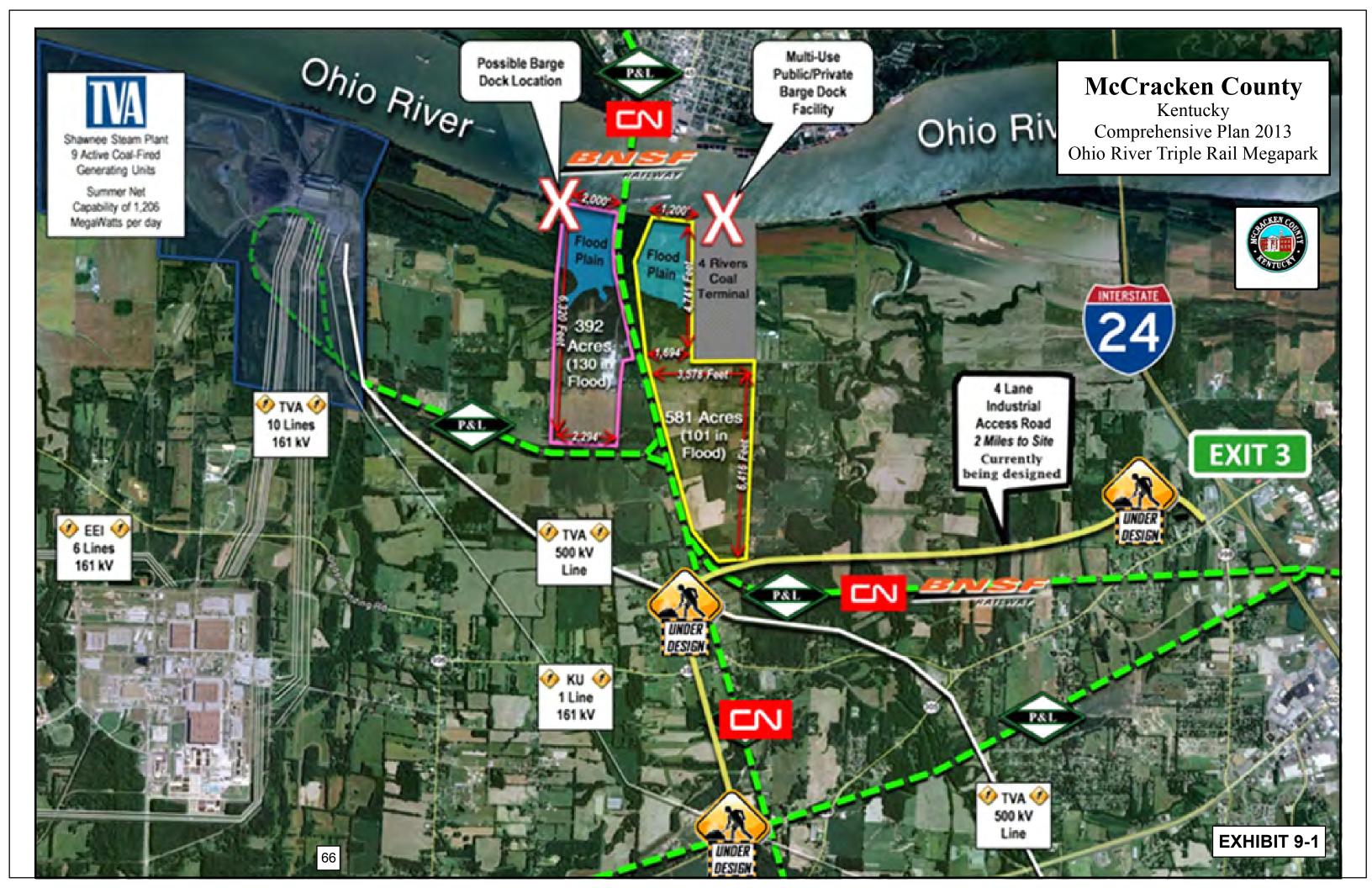
Source: U.S. Census Bureau

The statistical information presented bodes well for the current economic state of McCracken County. Table 23 shows McCracken County's per capita income to be increasing at a rate similar to the state of Kentucky; while the City of Paducah's per capita income indicates a much lower rate than the state. This further illustrates the trend that both the wealth and population are continuing to migrate from the City of Paducah to the unincorporated portion of McCracken County.

Not surprising in 2010, approximately sixteen percent (16%) of the county residents were at or below the poverty level. This rate compares favorably with over nineteen percent (19.1%) for the state. Once again a significant discrepancy exists when the data is analyzed for the City of Paducah and the unincorporated portion of McCracken County, Table 24.

#### D. Plans and Goals:

- Continue to pursue a variety of industrial and commercial development.
- Secure adequate land for future development.
- Develop the Ohio River Triple Rail Megapark, Exhibit 9-1.



# CHAPTER TEN INFORMATION TECHNOLOGY FIBER OPTIC NETWORK

#### A. Introduction

Information technology plays a significant role in the daily lives of our citizenry. Recent legislation improves the ability of local authorities to address these issues. The Comprehensive Plan is an appropriate avenue to propose recommendations for the future.

#### **B.** Overview

McCracken County is served by the Paducah Power System FiberNet (PPS Fiber Net) a subsidiary of Paducah Power System (PPS), at&t and Comcast. In 2004, PPS constructed sixty-one (61) miles of fiber backbone for its service territory. Since that time through local agreements with the two (2) other power providers in McCracken County the PPS FiberNet facilities have been expanded and is utilized by several telecommunications companies providing businesses, manufacturers, health care providers, government entities and financial institutions a variety of services such as high speed internet, telephone and point to point connectivity. Telecommunication companies who are using PPS FiberNet include: Dialog, VCI, Computerland, Heartland (CSI) and Windstream Communications. Approximately ninety percent (90%) of the McCracken County business/manufacturing community is within the service territory of this superior level of connectivity.

McCracken County is now connected via fiber optics to other cities in western Kentucky through PPS FiberNet's membership in MuniNet. MuniNet is a joint action agency created to build fiber optic highways between communities in western Kentucky and perhaps, other parts of the state. In 2012, utility members of MuniNet completed construction of the fiber loop connecting Paducah, Calvert City, Benton, Murray and Mayfield, Kentucky. This loop allows all of the communities along that loop to offer the high speed connectivity to the world that industries require when choosing a new site and that existing businesses need to stay in their current locations.

The recommendations in this section will assist in increasing the productivity of the county departments, encouraging economic growth through business friendly technologies, and increasing population by improving the overall quality of life.

#### C. Goals

- McCracken County should obtain "Universal Access"; every citizen in McCracken County must have internet access. This access must be strong and affordable for every family no matter their location within the county. McCracken County should also work regionally to ensure its neighboring counties have internet access for its workforce.
- McCracken County should work closely with all providers to ensure all business areas have redundant fiber.
- All permits and other licenses should be available for purchase online through a credit or debit card. An online transaction should be no additional cost to the citizen.
- The Geographical Information System (GIS) Consortium must work tirelessly to ensure the GIS system is completely accurate and updated in real time, or as close to real time as possible. All utility providers must assist in this goal.

McCracken County must streamline all of its news and information through social media and mobile app. Citizens should be able to get news, information, Twitter and Facebook posts, and pay tax and other bills through e-payment on a mobile device. This app should also have links to other beneficial community websites so citizens can access all of this information via their smartphone wherever they are worldwide.

#### CHAPTER ELEVEN FUTURE LAND USE

#### A. Introduction

The purpose of this chapter is to determine the future land use needs of the unincorporated portion of McCracken County and to designate those areas that are most appropriate for the needed growth and development. The information is derived from the population analysis, existing land use, economic conditions and other sections to provide the basis for development of a useful Land Use Plan.

Proper utilization of the Land Use Plan can benefit the citizens of the unincorporated portion of McCracken County by appropriately shaping future development. To meet future needs, the land that is currently vacant is considered for possible development as designated in map format and classified as agriculture, urban residential, rural residential, commercial, light industrial, heavy industrial or resource protected/recreational.

An ample surplus of land for all uses should be set aside above and beyond that which is needed to satisfy future growth needs. Balancing the exact amount of land needed to an exact location can be detrimental in the long run, especially where topographic and physiographic conditions come into play in selecting sites for development. Since suitable land for development cannot always be acquired, a community can generally place itself in a comfortable position by providing more land than needed within all land use categories.

#### B. Map/Policy Plan

Overall this Comprehensive Plan is a combination of a policy-type plan and a map plan. In projecting future land use needs and location requirements, economic development, population projections and other elements of the plan may be referenced. The Future Land Use Plan, Map 9 provides suggestions for future locations of types of land uses. Within the unincorporated portion of McCracken County it should be understood that these suggestions are flexible and/or may be contingent upon certain improvements occurring. The Future Land Use Plan is to allow the Planning Commission to guide growth in areas where improvements to meet development needs exist or are anticipated.

In all land use decisions made within the unincorporated portion of McCracken County, the entire Comprehensive Plan must be looked at as a whole with a balance provided between the base data collected, the future population projections, the adopted goals and objectives and the text and maps found in the Plan.

#### C. Potential Land Uses

Each future land use category has a variety of potential land uses to give the land owners different options should they choose to develop a piece of property. This variety offers flexibility and allows potential development to change as development patterns and demands change. A brief description of the potential uses that may be allowed in the land use categories are as follows; (Consult the McCracken County Zoning Ordinance and the Subdivision Regulations for detail, descriptions and requirements.)

#### 1. Agriculture:

Large tracts which are currently undeveloped, agriculturally used land, and/or tracts with very limited infrastructure which limits development.

#### 2. Rural Residential:

Large tracts which are currently undeveloped, agriculturally used land, and/or tracts with very limited infrastructure. Individual parcels of property tend to be significantly larger than parcels in an urban setting. These typical plots of rural property extend over multiple acres.

#### 3. Urban Residential:

Small tracts of land less than one acre served by or capable of accessing sanitary sewers. Those who choose to locate outside areas currently not served by sewers should be prepared to accept a greater economic cost of land development.

#### 4. Mobile Home Parks:

Areas for Mobile/Manufactured homes.

#### 5. Commercial:

Areas that include shopping, personal service, institutional facilities (government entities, religious institutions), food service and miscellaneous general business establishments.

#### 6. Light Industry:

Any operation which does not create a noticeable amount of noise, dust, odor, smoke, glare or vibration.

#### 7. Heavy Industry:

Any operation which by its nature might be considered a nuisance because of noise, dust, odor, smoke, glare or vibration outside the building and which might require outside storage of raw material or finished products.

#### 8. Resource Protected/Recreational Area:

Floodplains and flood prone areas; greenways, water dependent uses, and open space.

#### **D.** Growth Management Strategy

#### 1. Strategy Statement

The Future Land Use Map illustrates the proposed and land use patterns and the current land use patterns. The most apparent growth in the unincorporated portion of McCracken County in the last couple of decades has been in close proximity to Paducah. Growth should be carefully monitored in order to avoid growing pains and conflicts in land use and infrastructures.

#### 2. General Development Guidelines

All new developments should be developed according to the following guidelines:

- a. All developments must meet the development plan requirements set forth in the McCracken County Zoning Ordinance.
- b. No new developments should be allowed to occur within the designated 100-year floodplain areas unless mitigation measures are taken in compliance with all federal, state and local environmental regulations.

- c. Encourage new development to be in close proximity to previously built up areas.
- d. Such measures as existing or man-made barriers, distance or screening shall be required to buffer adjoining incompatible land uses. Buffer zones and utility easements should not co-exist.

#### E. Land Use Plan

#### 1. Unincorporated Portion of McCracken County

Over the last two (2) decades most all of the population growth in McCracken County has occurred in the unincorporated area of the county. According to the Kentucky State Data Center's population forecast this trend is expected to continue into the next decade with modest growth in population of approximately two thousand (2,000) persons, Exhibit 3–2. The areas that have experienced the most development are those areas surrounding the City of Paducah. However, there has been residential development throughout the county. It is natural that most of the future development in the next decade will occur in and around the city and the new consolidated McCracken County High School located on U.S. 60 just west of Maxon Road. This development will include infill areas and new developments on land that is vacant or in agricultural use. Additionally these areas are served by the JSA or in close proximity to their facilities. There is a benefit from infill development because it is highly cost efficient. It does not normally require the extension of services such as water, wastewater, electricity or other utilities.

There are areas of floodplain, prone to flash flooding, wetland or other natural areas that need to be protected. Floods can result in the loss of life and always involve the loss or damage to property. These areas should have limited development, except for water dependent facilities, essential road crossings, parks, and other recreational uses.

This strategy designates areas of the unincorporated portion of the county that need protection, and defines the growth avenues for commercial, urban residential, light industrial and heavy industrial. The remainder will be available for rural residential and agricultural use. The primary limiter on the growth of residential development

will be the ability to provide essential services such as water, wastewater, electric or other utilities.

Traditionally the county has limited lot size to a minimum of one (1) acre unless an acceptable sanitary sewer system connection is available. This plan endorses that policy.

#### 2. Developed Areas

Developed areas lay primarily in collar communities that border Paducah. Despite its name, not all land within the developed areas is fully developed. There is great potential in the form of smaller parcels, individual lots, and other properties that are underutilized or unoccupied. Due to the underutilized and vacant land, much growth can occur within the developed areas. Growth in developed areas 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 to prepare it for redevelopment.

#### a. Infill Development Strategy

This strategy is intended for existing neighborhoods constructed prior to the enactment of the zoning regulations. In these neighborhoods future development will likely take the form of small infill projects on vacant lots and redevelopment parcels. Site landscaping and architectural design will become much more important in the future when reviewing development proposals. Infill development should be encouraged that preserves the character of the surrounding neighborhood.

#### b. Commercial Areas

There are several commercial areas in the unincorporated portion of the county. The common feature is close proximity to major highway arteries. The largest of these areas is the I-24/U.S. 60 Exit 4 area which contains the Kentucky Oaks Mall, Wal-Mart and a number of restaurants and other businesses. While most of the developments are within the City of Paducah, the county has experienced significant commercial growth west along U.S.

60. This growth is expected to increase because of the McCracken County High School.

Additionally the I-24/KY 305 Exit 3 has experienced commercial growth along KY 305 east and west of the interstate. This area is expected to continue to develop with the proposed new Ohio River Triple Rail Megapark access road, Exhibit 9 - 1. The Lone Oak area from Lourdes Hospital to Lone Oak Baptist Church is a commercial area with stores, businesses and restaurants. The Reidland area from the middle school to Traders' Mall is developing a commercial character.

Adequate land must be identified to accommodate the various levels of commercial needs in the county by utilizing the following suggestions:

- Identify and provide adequate land in concentrated areas for commercial activities along major traffic arteries, Barkley Regional Airport and existing business developments.
- Effectively buffer commercial areas from nearby residential areas.
- Consider commercial and workplace uses within new neighborhoods at appropriate locations within the urban residential areas.

#### c. Industrial Areas

The United States Enrichment Corporation (USEC) 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 justifies a growth area designation.

The Ohio River Triple Rail Megapark is being developed into a large industrial area beginning at the USEC plant and extending east along the Ohio River. This area is where major industrial development will occur over the next decade. The county must identify and provide adequate land in concentrated areas to accommodate industrial development that will assist in providing for a broad and stable economic base conducive to the character of the area. This has become urgent in light of the recent developments at the at the USEC plant. With increased sewer service the I-24/I-24 Loop Exit 11 light industrial development is expanding north and south of the interstate.

The following suggestions should be considered for industrial development:

- Identify and provide adequate land in concentrated areas for industrial uses along major traffic arteries, existing industrial parks, the Ohio and Tennessee Rivers, and railway access points.
- Cooperate with the Paducah Economic Development, Paducah Area Chamber of Commerce, and other industrial development agencies in helping to provide suitable locations for industrial parks for light and heavy industry.
- Establish guidelines to effectively buffer industrial activity from residential areas.
- Encourage the establishment of clean non-polluting types of industries that will constitute a long range community asset.
- Prohibit or strongly discourage new residential development in these identified areas.

#### d. Residential Growth Areas

The remainder of the unincorporated area in the county will be open for either agricultural use, rural residential, or urban residential use except those areas deemed to be within the resource protection areas (floodplain, wetland or other natural areas).

The preferred area for urban residential development should be within or close to the developed areas, where utilities are available. The Planning

Commission should encourage additional residential developments to: (1) be located in centralized compact patterns rather that decentralized sprawled patterns and (2) areas where essential services, public services and facilities are available. Opportunities for more compact residential development including townhouses, condominiums, and apartment buildings should be provided for in urban residential areas.

The Planning Commission should encourage large rural residential development with limited utilities to be rural estate type developments, five (5) acres or more and developed in accordance with the subdivision regulations.

#### Area within available public utilities:

- Urban Residential Areas. Mixed use development of small single family land uses and multi-family land uses with a small amount of non-residential use to provide for commercial and public services close to home to serve the neighborhood.
- Rural Residential Areas. Single family and multi-family land uses. Areas with no public sewers and limited other public utilities rural residential areas. Outside of the area where services are provided, lots will have to be either over one (1) acre to provide adequate land area for septic systems, or be served by an approved neighborhood sewage disposal system.

#### Area without public sanitary sewers:

• Outside the area where public sanitary sewer service is available lots will have to be either one (1) acre to provide adequate land for septic systems, or be served by an approved neighborhood sewage disposal system.

#### e. Resource Protection/Recreational Areas

The Resource Protection Area consists of floodplains, areas prone to flash flooding, and wetlands located throughout the county. These are areas that should remain undeveloped, with the exception of some recreational uses and greenways, and water dependent uses. 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 of the 25 or 50 year floodplain. The primary goal is to ensure that building in floodplains is minimum and no residential development occurs.

Waterfront uses such as ports, industry docks, marine facilities and marinas could continue to be located in floodplains because they need access to the rivers or other water bodies to fulfill their function. Activities in the 100 year floodplain shall be in accordance with Federal, State and local regulations.

Wetlands are areas quite similar to floodplains. The vast majority 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 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.

# CHAPTER TWELVE POLICIES AND PROGRAMS

#### A. Introduction

The following are policies and programs that were developed during the comprehensive planning process. These policies and programs are intended to be implemented and/or considered for future implementation. This chapter is to be used with the Goals and Objectives, Future Land Use, and Implementation chapters to assist in the decision-making process.

#### **B.** General Development

#### **Policy**

Prior to approving any land development, the Planning and Zoning Commission will consider all effects such development may have on adjoining properties.

Future land development will be in a centralized compacted pattern rather than a decentralized sprawled pattern.

Prior to approving any land development, the Planning and Zoning Commission will thoroughly consider the potential environmental problems.

Prior to approving any land development, the Planning and Zoning Commission will encourage and carefully consider public comments and input.

Ensure that new construction and repairs to existing construction is done to established and adopted construction standards.

#### **Program**

Existing or man-made barriers, distance or screening, will be required to buffer adjoining incompatible land uses.

The scope of the technical review process will include provisions for considering potential impacts on the environment, infrastructure, transportation system, historic resources, and other community resources.

### C. Residential Land Use Policy

The Planning and Zoning Commission will carefully review all proposals for residential development to assure high quality subdivisions are developed.

The Planning and Zoning Commission will work to minimize the impact of corridor residential development along highways and roads.

#### **Program**

The Planning and Zoning Commission will utilize the Zoning Ordinances and Subdivision Regulations to insure high quality residential living environments are provided and continue to update and improve the regulations.

When reviewing proposed development plans for future urban residential and rural residential uses; suggestions for these developments contained in the Future Land Use chapter will be carefully considered.

# D. Commercial Development Policy

The Planning and Zoning Commission will carefully consider the overall impact of new commercial development on existing commercial areas.

#### **Program**

Development plan review will be used as a method of reviewing commercial land development to assure such development is well integrated into the community.

When considering commercial development plans the suggestions set forth for commercial development in the Future Land Use chapter will be given due consideration.

## E. Industrial Land Use Policy

The Planning and Zoning Commission will maintain communications with Paducah Economic Development, the Paducah Area Chamber of Commerce and other economic development agencies, working with them to establish well located and serviceable areas for heavy-industrial and light-industrial development.

#### **Program**

When considering heavy and light-industrial plans the suggestions set forth for industrial development in the Future Land Use chapter will be given due consideration.

### F. Environmental Natural Resources Policy

When considering new development and redevelopment the Planning and Zoning Commission will carefully review the impact on the natural environment, in particular 100 year flood areas, wetland and other natural areas.

#### **Program**

When reviewing proposed development plans, the Planning and Zoning Commission will follow the recommendations discussed in the Comprehensive Plan.

# CHAPTER THIRTEEN IMPLEMENTATION

#### A. Introduction

Preparation and implementation of plans for a community require a considerable period of time. During this period, legislative bodies and the citizens will make important decisions affecting the community's future development. The Comprehensive Plan is a guide from which these decisions can be made. As such, the Plan serves the following purposes:

The Plan is a guide for the Planning and Zoning Commission and Fiscal Court when making recommendations and conducting special studies.

The Plan is a guide for use by the legislative bodies when evaluating proposals for physical change and infrastructure improvements.

The Plan is a reference source for information and is helpful to citizens and business in making decisions regarding their own development plans.

Proper implementation of this Comprehensive Plan is an integral part of carrying out the stated goals and objectives. A number of existing techniques will continue to be used, and new techniques or modifications to existing ones should be analyzed to determine if they could be effective in addressing the goals and objectives. This Plan alone does not amend the existing zoning ordinance, subdivision regulations, or other approved regulations that relate to planning and zoning. The purpose of this element is to provide general directions and guidelines to the Planning Commission and the Fiscal Court, in review of existing and development of new planning techniques that may carry out the objectives of the Comprehensive Plan.

#### **B.** Zoning

Zoning regulations are established to insure orderly land use. The zoning ordinance reflects the Comprehensive Plan and a proper use of these regulations will insure development conforms to the considered recommendations of the Plan.

#### C. Subdivision Regulations

The subdivision regulations contain design standards that are to be applied to subdivision proposals to improve public safety and allow proposed development to efficiently fit with past development. Additionally the enforcement of construction quality control at the time of construction can save future tax dollars once the legislative bodies have accepted the improvements for public maintenance.

#### **D. Public Facilities Assessment**

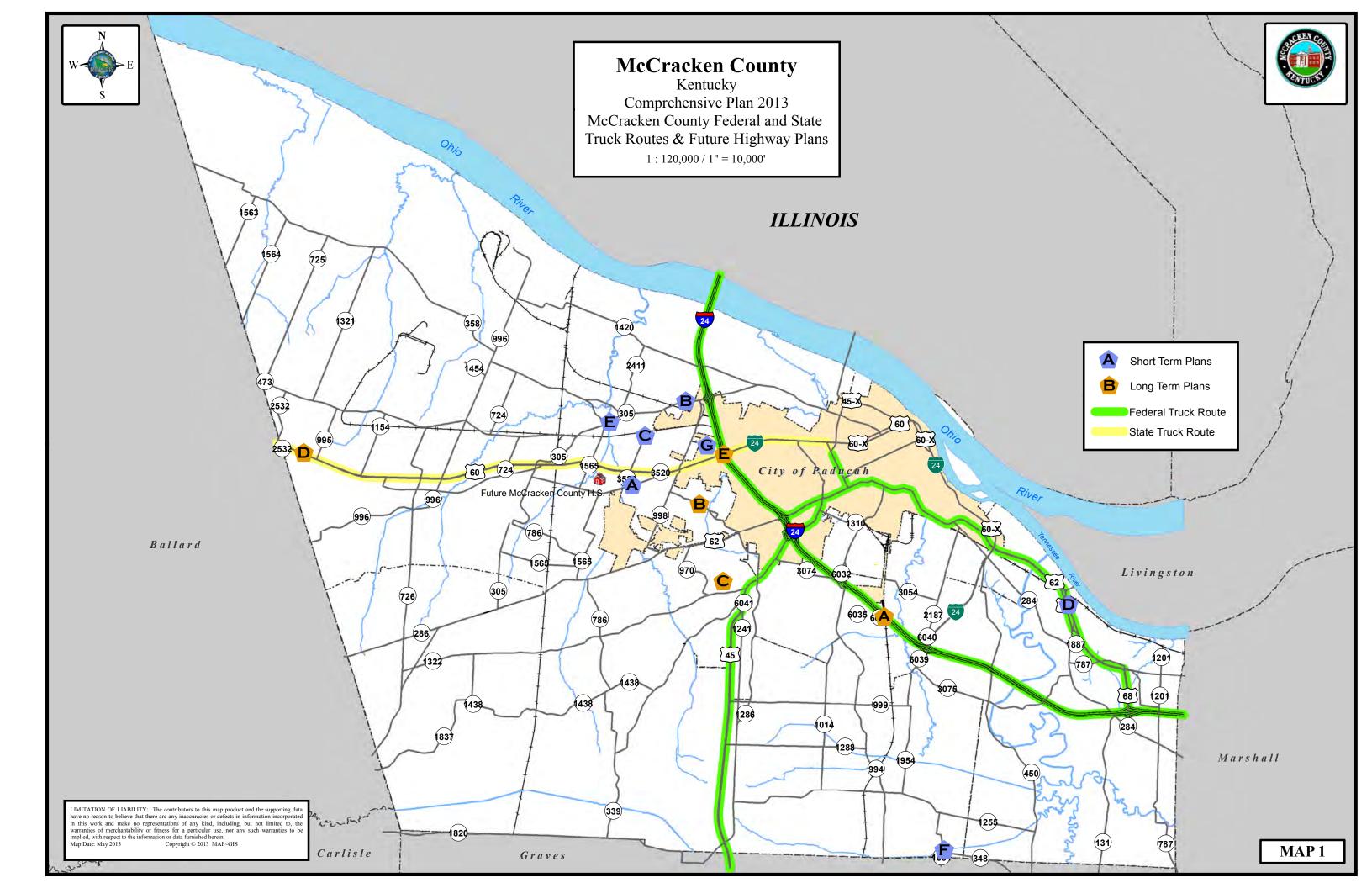
The adequacy of all public facilities should be carefully assessed. The capabilities of roads, sewer (or septic), water, electric, fire protection, police protection, schools, and recreation to support development must be examined. Coordination at the Technical Review stage is the best way to assess the impact a development plan may have on public facilities.

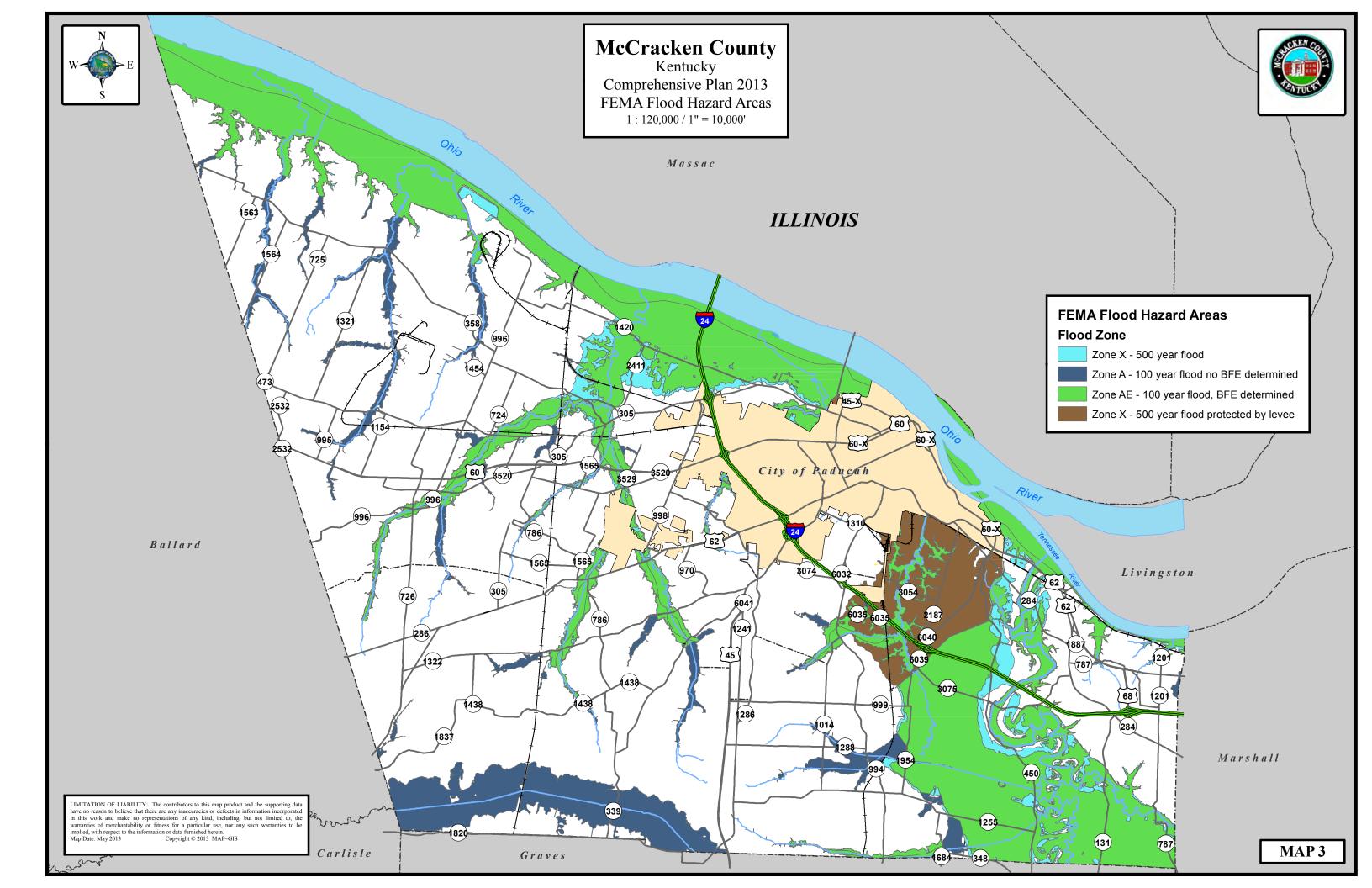
#### E. Codes

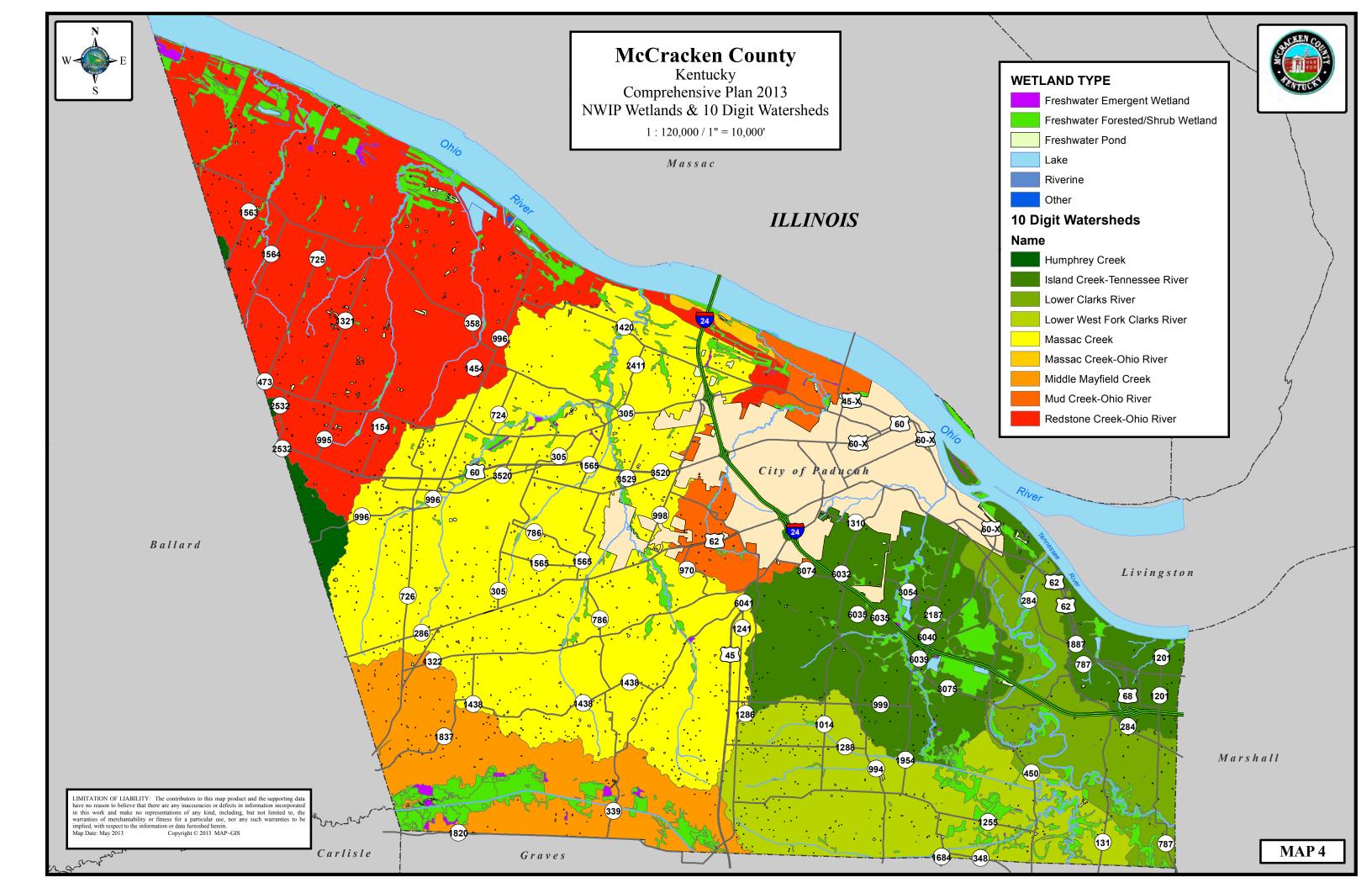
Compliance with housing, building, plumbing, and electrical codes is an effective method for implementing the Comprehensive Plan because it insures adequate standards of health, sanitation, and safety. Many existing and sub-standard structures can be rejuvenated through the enforcement of these codes. More importantly, the codes insure that new construction satisfies established minimum standards of safety and design.

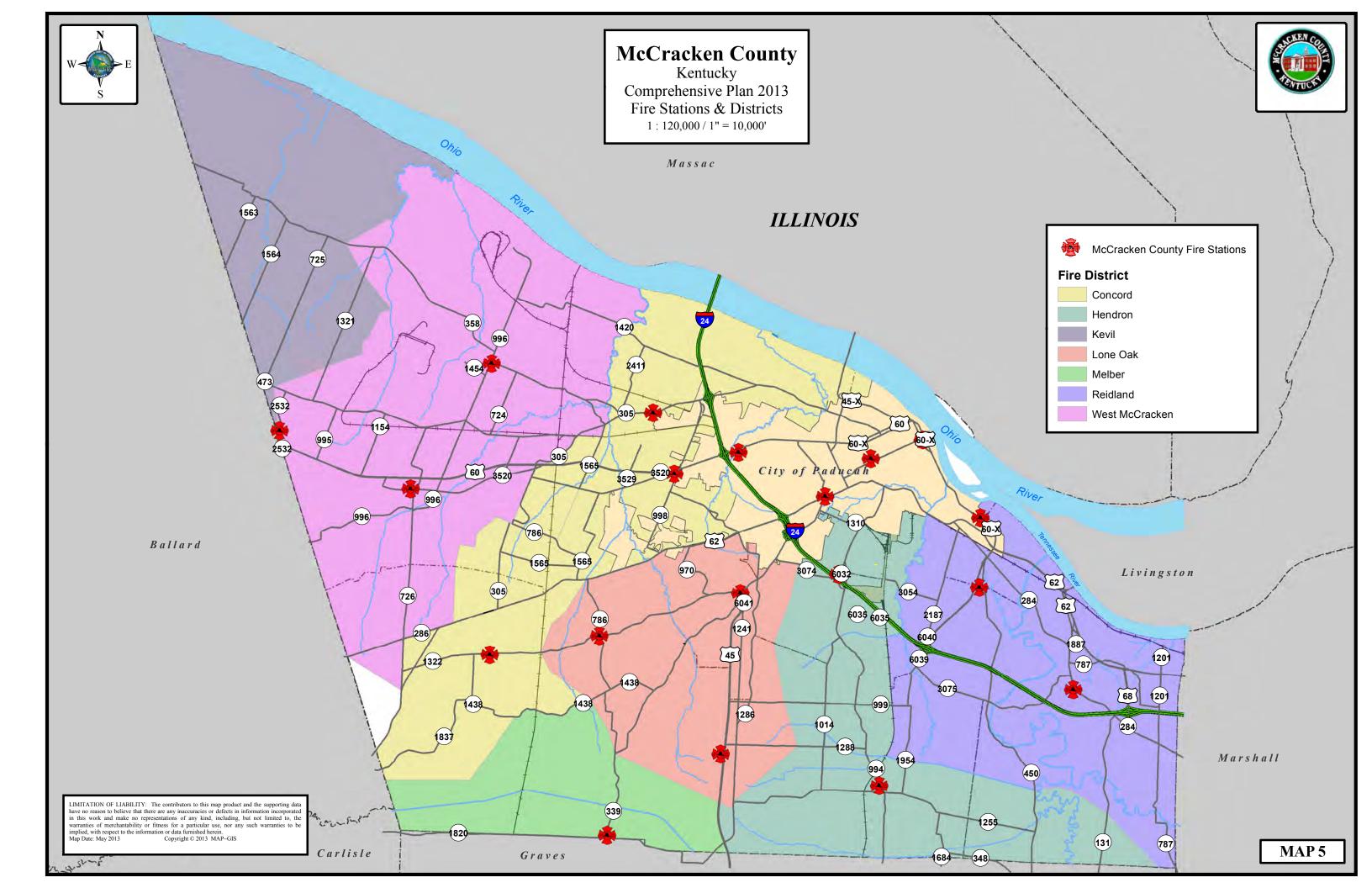
#### F. Conclusion

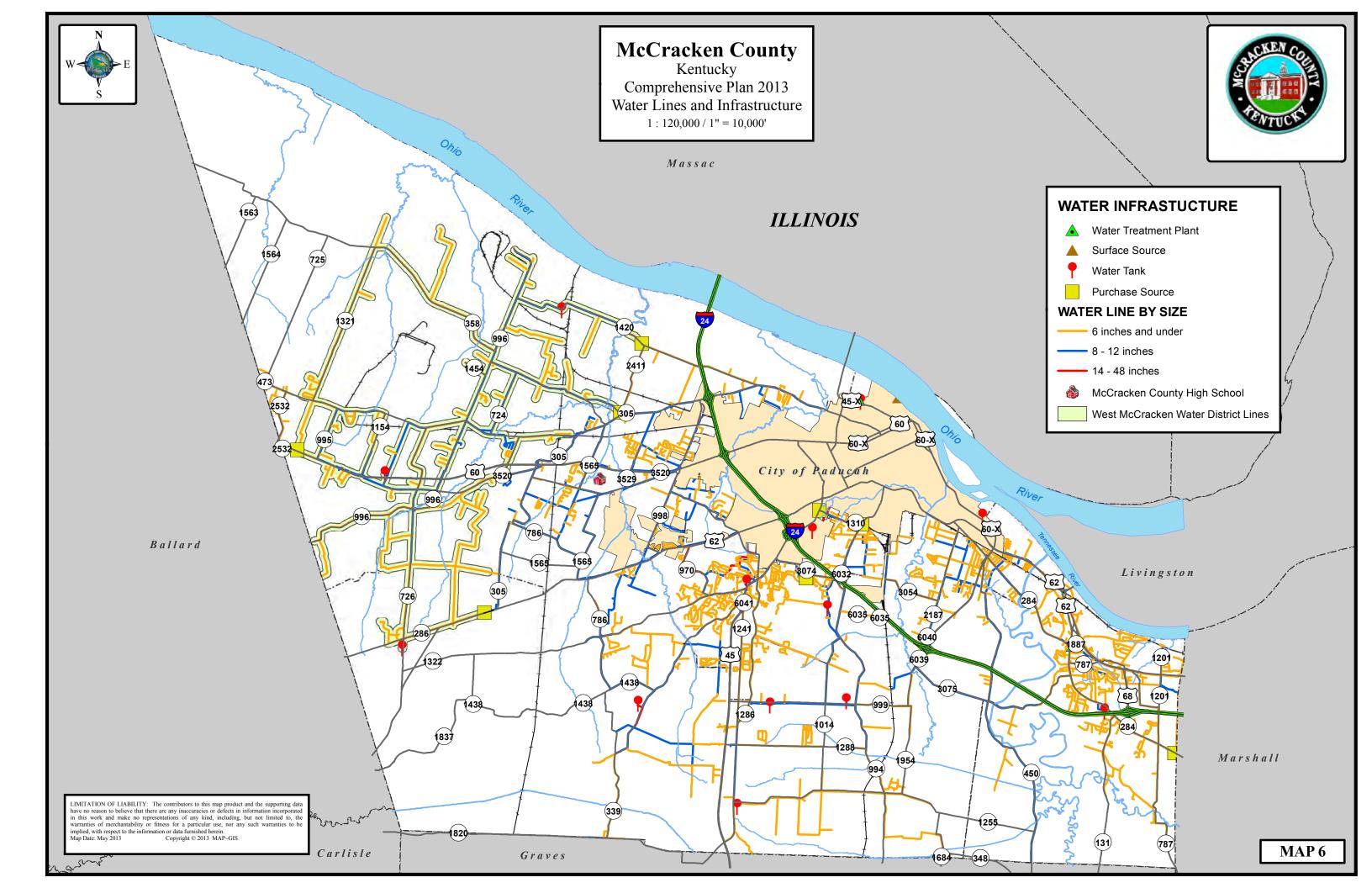
If this Plan is to serve its purpose, the cooperative effort between the development sector, the public, the Planning and Zoning Commission, the Fiscal Court, the City of Paducah and other levels of government must be continued. Each of the sections of this Plan is devoted to an important element of the community's future development. Implementation of the Plan must occur as a staged process with the proper courses of action designed for each planning project. Using input from the general public, and community groups, the Planning and Zoning Commission and the Fiscal Court will make the best appropriate future development decisions.

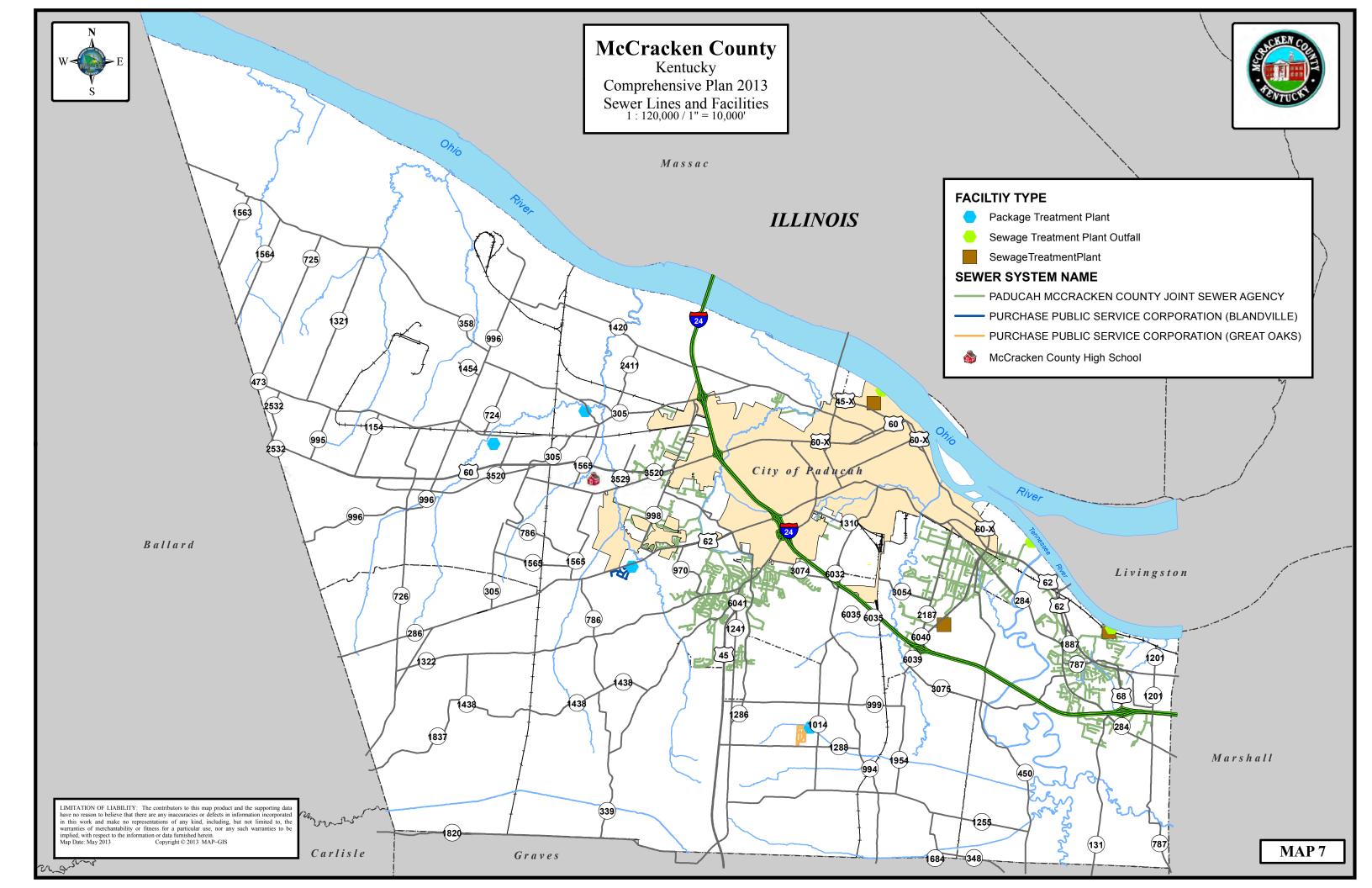


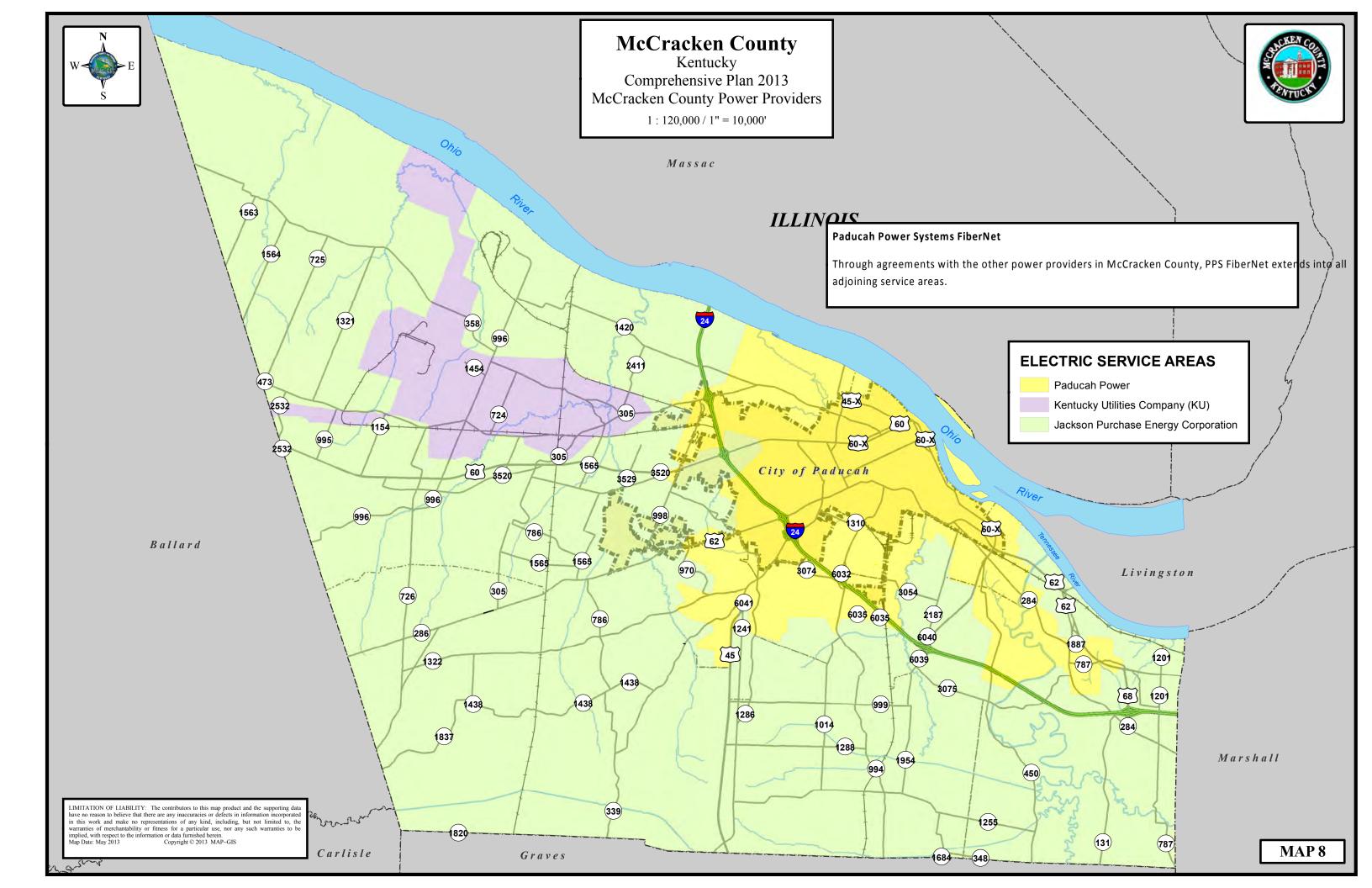


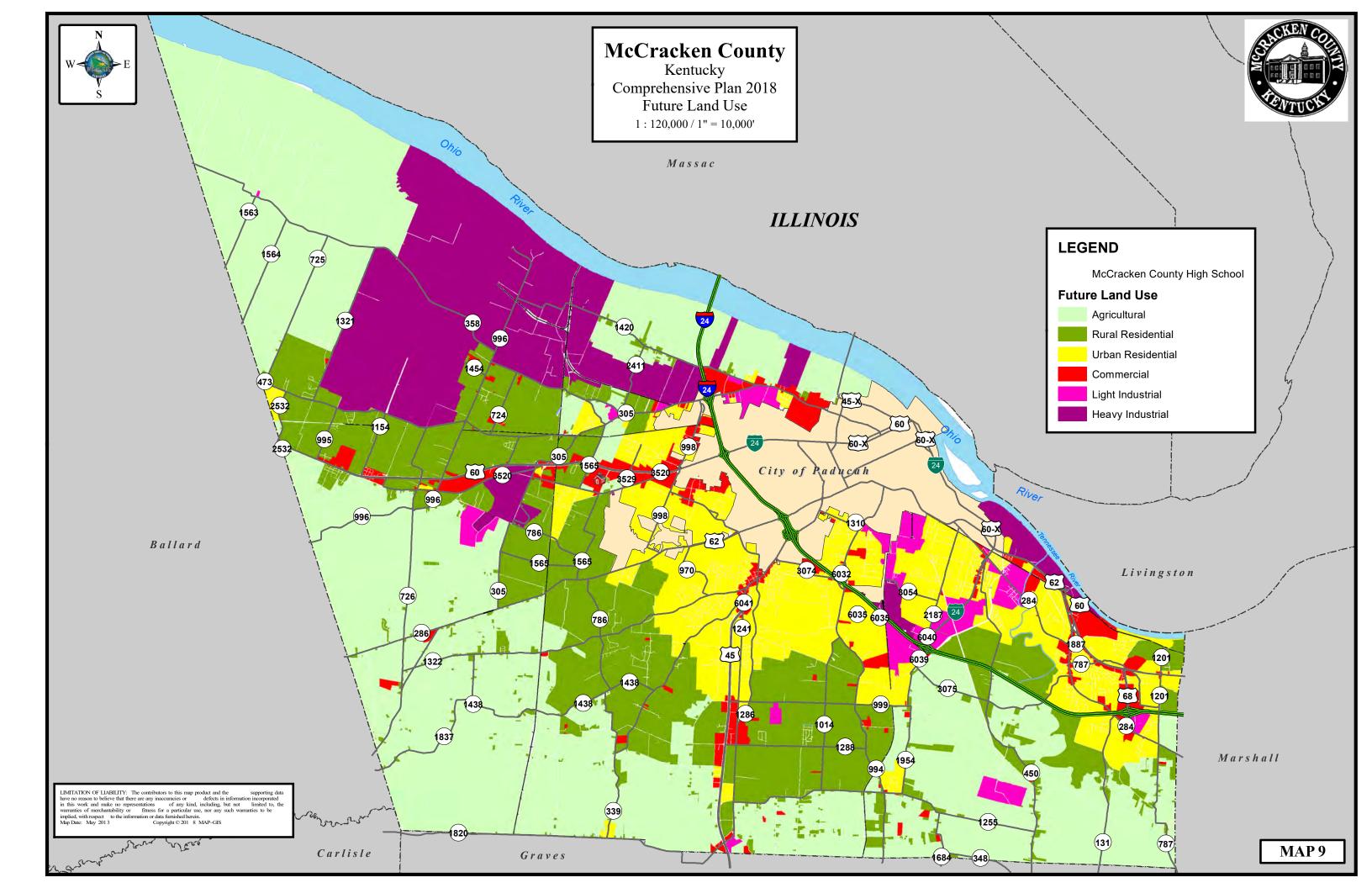












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