

**Comprehensive Plan  
for  
Washington County, Kentucky**

**Prepared by:**

**Washington County Planning Commission Office**

**Technical assistance provided by:**

**Lincoln Trail Area Development District  
P O Box 604, 613 College Street Road  
Elizabethtown KY 42702-0604**

**2019**

**The Lincoln Trail Area Development District does not discriminate on the basis of race, color, reasonable accommodation, including auxiliary aids and services necessary to afford an individual with a disability an equal opportunity to participate in all services, programs, and activities of the agency.**

## Washington County Planning Commission

**Harvey Johnson, Chairperson**

**William Blair**

**Jimmy Carrico**

**Richard Medley**

**Walter Hood**

**Joey Purdom**

**Joseph Floyd**

**TITLE:** Washington County Comprehensive Plan

**AUTHOR:** Washington County Planning Commission  
Lincoln Trail Area Development District

**SUBJECT:** Population Analysis, Housing Analysis, Economic Analysis, Environmental Conditions, Community Facilities, Transportation Plan, and Land Use Plan.

**DATE:** December 17, 2019

**LOCAL PLANNING AGENCY:** Washington County Planning Commission  
P O Box 126  
109 North Cross Main Street  
Springfield KY 40069

**SOURCE OF COPIES:** Washington County Planning Commission

**NUMBER OF PAGES:** 77 along with maps

**ABSTRACT:** The Washington County Base Studies, consisting of a Land Use Analysis, population analysis, and economic analysis, is an essential element in the preparation of the Comprehensive Plan as described in the Kentucky Revised Statutes, Section 100.187 and 100.191. It includes an inventory and analysis of local land uses, population characteristics and growth trends, housing characteristic and growth trends, economic information and trends, and the physical conditions of the county. In addition, it

provides population projections that serve as base information in determining the need for community facilities, public services, and various types of land use. It provides a comprehensive overview of the economic base of the community, indicating past economic trends and potentials for the future.

The Washington County Comprehensive Plan includes the Transportation Plan, Historic Preservation, Community Facilities Plan, and the Land Use Plan. The elements are based upon information provided by the Base Studies. The Statement of Goals and Objectives, as required by Kentucky Revised Statutes 100.187, has been adopted by the Planning Commission and provides the basis for many of the recommendations made in the Comprehensive Plan.

The Comprehensive Plan indicates the most appropriate location for all types of land use which may be anticipated within the Washington County Planning Unit; the nature and extent of street and highway improvements which should occur during the planning period; and the nature and location of those community facilities and services which will be required to serve the population of the planning area for the next twenty years. It is a flexible guide to county development and should be reviewed periodically in order to insure that it represents current conditions and policies within the planning area.

**Resolution Adopting the Comprehensive Plan**

**The Washington County Planning Commission passed this resolution at its December 17<sup>th</sup> regular meeting.**

WHEREAS, the General Assembly of Kentucky, through Kentucky Revised Statutes (KRS) Chapter 100, authorized, the creation of a Planning Commission by municipal government;

WHEREAS, the General Assembly of Kentucky, mandated that when a planning unit is created and appointed, the Planning Commission shall have the duty to prepare a comprehensive plan which will become the publicly adopted guide for future development of the planning unit;

WHEREAS, Washington County created and appointed the Washington County Planning Commission of Washington County, Kentucky;

WHEREAS, the Washington County Planning Commission has undertaken and completed the preparation of the 2019 Comprehensive Plan in accordance with KRS Chapter 100;

WHEREAS, after giving proper notice in accordance with KRS Chapters 100 and 424, a public hearing was held on December 17, 2019.

BE IT THEREFORE RESOLVED, by the Washington County Planning Commission of Washington County, Kentucky at its regularly scheduled meeting on December 17<sup>th</sup> that the 2019 Comprehensive Plan is hereby revised and hereafter adopted.

\_\_\_\_\_  
Washington County Planning Commission  
Chairperson

\_\_\_\_\_  
Witness

# Washington County Comprehensive Plan

## Table of Contents

### Chapter 1. INTRODUCTION

Introduction	9
Purpose	9
Benefits	9
Planning Period and Planning Area	9
Authority	9
Legal Basis of the Comprehensive Plan	10
Contents of the Comprehensive Plan	10
Research Requirements for Comprehensive Plans	11
Nature of the Base Studies	11-12
Statement of Goals and Objectives	12
Community Profile	12
Location	12
History	12-13
Tourism	13-19

### Chapter 2. STATEMENT OF GOALS & OBJECTIVES

Introduction	21
Land Use	21
Goal	21
Objectives	21
Housing	22
Goal	22
Objectives	22
Housing Trends	22
Occupied Housing Units	22-23
Recommendations	23
Community Facilities	24
Goal	24
Objectives	24
Transportation	24
Goal	24
Objectives	24

### Chapter 3. ECONOMIC ANALYSIS

Introduction	26
Employment Trends	26
Civilian Labor Force	26
Unemployment	27
Business Establishments	27

Major Manufacturing Firms	28
Springfield-Washington County Economic Development Authority (SWEDA)	29
Agriculture	29
Per Capita Income	30
<b>Chapter 4. POPULATION ANALYSIS</b>	
Introduction	32
Population Trends	32
Historic Population	32
County and Regional Trends	32-33
Population Distribution	33
Population Characteristics	34
Age	34
Gender	34-35
Age-Gender Composition	35-36
Components of Population Change	36
Population Projections	36-37
<b>Chapter 5. ENVIRONMENTAL CONDITIONS</b>	
Introduction	39
Climate	39
Topography and Geology	40
General Soil Types	40-42
Prime Farmland Soils	42
<b>Chapter 6. COMMUNITY FACILITIES</b>	
Education	44
Inventory of Existing Facilities	44
Area Colleges and Universities	45
Public Facilities	45
Washington County Courthouse	45
Washington County Public Library	46-47
US Post Office	47
Washington County Senior Citizen Center	47
Recreational Facilities	47
Existing Recreational Facilities	47
Additional Recreational Facilities	47-48
Police Protection Facilities	49
Kentucky State Police	49
Sheriff's Department	49
Police Department	49
Fire Protection	49-50
Ambulance Service	50
Enhanced 911	50

Emergency Management	50
Health Department	51
Public Utilities	51
Electricity	51
Natural Gas	51
Water Services	51
Wastewater	51
Solid Waste Management	52-53
Additional County Department/Services	53
Washington County Animal Control	53
Washington County Coroner	54
Dead Livestock Removal Service	54
Washington County Electrical Inspector	54
Washington County Fiscal Court	54
Washington County Road Department	54
Washington County Planning Commission	54
Washington County Occupational Tax	54-55
<b>Chapter 7. LAND USE PLAN</b>	
Introduction	57
Purpose and Scope	57-58
Washington County Land Use Plan	58
Development Standards	58
Residential Development	58-59
Commercial Development	59
Industrial Development	59-60
Cooperative Extension	60
Conclusion	60
<b>Chapter 8. TRANSPORTATION PLAN</b>	
Introduction	62
Purpose	62
Scope and Benefits	62
Traffic Patterns	62-66
Railroads	66
Air Service	67
Regional & Federal Transportation Network	67
Washington County Highways	67
Washington County Road Classifications	68
Planning & Design Criteria	68-69
New Road Design for Residential Land Use	69-70
County Road Improvement Program	70

## **Chapter 9. IMPLEMENTATION**

Introduction	72
Local Leadership	72
Subdivision Regulations	72
Zoning	72-73
The Zoning Process	73
Zoning Map Amendments	74
Capital Improvements Program	74
County Road Improvements Program	74

## **MAP DESCRIPTIONS**

Transportation	75
Functional Classification	75
Projects	75
Surface Types	75
Traffic Flow & Counts	75
Traffic Flow & Crash Density	75
Public Utilities	76
Electric	76
Water	76
Wastewater	76
Communications	76
Cellular Service	76
Land Use	77
Existing	77
Future	77
Other Maps	
Soils	
General Highway	
Flood Plain	
Population Density	

# Chapter 1

## Introduction

## **Chapter 1**

### **Introduction**

A comprehensive plan serves as a framework for official decision-making. At a basic level, it serves as an informational source for citizens, groups and community leaders. It also allows the Washington County Fiscal Court to assess and fulfill its role protecting public health, safety, and welfare and guiding the use of public resources. The plan provides an appraisal of the socioeconomic conditions and physical attributes and develops a forecast of future needs, such as development and/or improvements based upon the expressed desires of the citizens. The methods for fulfillment of the goal and objectives, in turn, are stated in specific project proposals of programs presented in chronological sequence.

The Planning Commission is the official planning body representing Washington County. It presides over land subdivision and makes recommendations to the Washington County Fiscal Court regarding planning policy, development standards, and zoning and subdivision regulations.

### **Purpose**

The purpose of the Comprehensive Plan is to provide the basic elements and data necessary to meet the requirements set forth by Chapter 100 of the Kentucky Revised Statutes (KRS). The Comprehensive Plan also serves as a guide for the future development of the unincorporated areas of Washington County. The implemented plan will provide for local control of the type, timing, and intensity of anticipated growth. The orderly distribution of future development will ensure compatibility with existing physical, institutional and social patterns.

### **Benefits**

The most significant benefit of the Comprehensive Plan will be the projection of future growth in land use, population and the economy. The Planning Commission, Washington County Fiscal Court, and other public agencies can use these projections to anticipate and provide public services and facilities and maximize public and private investments. The private sector can also use the information to anticipate the potential for the investment of private capital within the planning area.

### **Planning Period and Planning Area**

This plan contains various types of projections for a five year period or through the year 2025. This five year period is the limit beyond which it is impossible to make reasonable projections. Shorter projections are subject to fluctuations for various reasons.

The planning area as used in this study includes the unincorporated areas of Washington County. The planning area also extends to surrounding counties, Breckinridge, Grayson, Hardin, LaRue, Marion, and Nelson Counties, comprising the Lincoln Trail Area Development District.

### **Authority**

KRS, Sections 100.187 and 100.191 authorizes the Planning Commission to prepare the base studies. These statutes set forth certain specifications to be satisfied and observed during the original preparation and revision of this study.

### **Legal Basis of the Comprehensive Plan**

The Legal basis for the Washington County Comprehensive Plan is set forth by KRS 100.183, which states:

The planning commission of each unit shall prepare a comprehensive plan, which shall serve as a guide for public and private actions and decisions to assure the development of public and private property in the most appropriate relationships. The elements of the plan may be expressed in works, graphics, or other appropriate forms. They shall be interrelated and each element shall describe how it relates to each of the other elements.

### **Contents of the Comprehensive Plan**

KRS 100.187 mandates the minimum content requirements for comprehensive plans. The minimum elements include the following:

1. A statement of goals and objectives, which shall serve as a guide for the physical development and economic and social well-being of the planning unit.
2. A land use plan element, which shall show proposals for the appropriate, economic, desirable, and feasible pattern for the general location, character, extent, and interrelationship of the manner in which the community should use its public and private land at specified times as far into the future as is reasonable to foresee. Such land uses may cover, without being limited to, public and private, residential, commercial, industrial, agricultural and recreational land uses.
3. A transportation plan element, which shall show proposals for the most desirable, appropriate, economic and feasible pattern for the general location, character, and extent of the channels, routes, and terminals for transportation facilities for the circulation of persons and goods for specified times as far into the future as is reasonable to foresee. Such channels, routes, and terminals may include, without being limited to all classes of highways or streets, railways, airways, waterways; routings for mass transit trucks, etc., and terminals for people, goods or vehicles related to highways, airways, waterways, and railways.
4. A community facilities plan element which shall show proposals for the most desirable, appropriate, economic and feasible pattern for the general location, character, and extent of public and semi-public buildings, land and facilities for specified times as far into the future as is reasonable to foresee. Such facilities may include, without being limited to, parks and recreation; schools and other educational or cultural facilities; libraries; churches; hospitals; social welfare and medical facilities; utilities; fire stations; police stations; jails or other public office or administrative facilities.
5. The comprehensive plan may include any additional elements such as, without being limited to, community renewal, housing, flood control, pollution, conservation, natural resources, and other programs which in the judgment of the planning commission will further serve the purposes of the comprehensive plan.

## **Research Requirements for Comprehensive Plans**

KRS 100.191 sets forth that the elements of a comprehensive plan must be based upon research, analysis, and properties. The minimum research requirements include, but are not limited to the following base studies:

1. An analysis of the general distribution and characteristics of past and present population and a forecast of the extent and character of future population as far into the future as is reasonable to foresee.
2. An economic survey and analysis of the major existing public and private business activities, and forecast of future economic levels, including a forecast of anticipated necessary actions by the community to increase the quality of life or its current and future population through the encouragement of economic development as far into the future as is reasonable to foresee.
3. Research and analysis as to the nature, extent, adequacy, and the needs of the community for the existing land and building use, transportation, and community facilities in terms of their general location, character, and extent.
4. Additional background information for the elements of the comprehensive plan may include any other research, analysis, and properties, which, in the judgement of the planning commission, will further serve the purposes of the comprehensive plan.

## **Nature of the Base Studies**

The base study for this Comprehensive Plan is divided into three major sections. The first section contains an analysis of the population of the planning area, including distribution and characteristics of the present population and population projections. These population statistics are analyzed to develop relevant growth and development policies. The second section of this study contains a detailed description of the economy of the planning area. The economic analysis emphasizes the significant economic trends and provides a basis for the preparation of the Washington County Comprehensive Plan. The third section contains a land use analysis of Washington County. This analysis indicates the extent of the major land uses including agricultural, residential, commercial, industrial, public and semi-public, within the planning area.

The base study will be used in conjunction with other planning studies, such as housing, transportation, and community facilities, to prepare and adopt future development plans for Washington County. The base study will serve three primary purposes:

1. To recognize past and present trends in the overall economy and population of the County.
2. To provide a guide to assist in determining the proper extent and location of future residential, commercial, industrial, schools and recreational areas.
3. To provide an estimate of the future population of the County for use in determining land use requirements and required expansion of facilities.

The base studies will be valuable to Washington County Fiscal Court, Planning Commission, and other administrative agencies responsible for the development of Washington County. The studies also will be useful to business and professional leaders within the planning area.

### **Statement of Goals and Objectives**

By statute, the Washington County Fiscal Court and Planning Commission are required to adopt a statement of goals and objectives. KRS 100.193 states:

The planning commission of each planning unit shall prepare and adopt the statement of goals and objectives to act as a guide for the preparation of the remaining elements and the aids to implementing the plans. The statement shall be presented for consideration, amendment and adoption by the legislative bodies and fiscal courts in the planning unit. During its preparation and that of the other plan elements, it shall be the duty of the planning commission to consult with public officials and agencies, boards of health, school boards, public and private utility companies, civic, educational, and professional and other organizations, and with citizens.

### **Community Profile**

#### Location

Washington County is located in Central Kentucky in the Outer Bluegrass Region. The County is primarily rural and has a population of approximately 12,000 residents. Washington County is bounded by Anderson and Nelson counties on the north, Mercer and Boyle counties to the east, and Marion County to the south. A map of Washington County showing its location within the Commonwealth of Kentucky is enclosed.

Washington County comprises 301 square miles. The entire county lies in the Salt River Watershed. The county landscape features undulating and rolling hills, as well as steep ridges and bluffs that offer a beautiful backdrop to the open farmland and dense woodlands. Creeks and streams form a fairly consistent pattern throughout the county, within the many swales and valleys.

#### History

Most of Washington County's earliest settlers arrived via the Big Road (Wilderness Trace), which originated at the Cumberland Gap and stretched onto Bardstown in Nelson County. Washington County had several early settlements, including Sandusky Station founded in 1776, Cartwright's Station established in 1778 and Parker's Landing (Fredericktown) listed on Filson's 1784 map of Kentucky. By 1785, these communities experienced increased population with the arrival of Maryland Catholics.

Washington County takes pride in its rich religious heritage. Presbyterian, Baptist, Catholic and Methodist congregations were served by the first ministers of their denominations ordained within the geographic area of the future Commonwealth. St. Ann's was established in 1787 and was the earliest church for the Catholic diocese. St. Rose Church and St. Catharine Motherhouse, established in 1806 and 1822 respectively, still illustrate the rich Catholic history

of the area. These historic and architecturally unique structures highlight the development of the first Roman Catholic diocese west of the Alleghenies. By 1790, the Presbyterian, Methodist, and Baptist denominations had organized churches in the city of Springfield, and these religious groups have played a significant role in the city's development as a traditional, close-knit community. The tower of the current Presbyterian Church located in Springfield dates from 1838, while the Pleasant Grove Presbyterian Church, located between Springfield and Willisburg, dates from 1833.

Residents of Washington County also take pride in the Lincoln family heritage of the area. President Lincoln's grandfather, Abraham Sr., brought his family to Washington County in 1782 and settled in the Beech Fork area, approximately five miles north of Springfield. President Lincoln's parents, Thomas Lincoln and Nancy Hanks were married in Washington County, and their original marriage records are in the Washington County Clerk's office. Residents enjoy the many stories and legends passed down from generation to generation relative to the Lincolns' settlement in Washington County. The community is fortunate that the Lincoln family relics and artifacts are still available and maintained at/by Lincoln Homestead State Park or by families in the area.

Washington County remembers the Civil War for both the Union and Confederate troops passed through here on their ways to the Battle of Perryville. Springfield men were among them and many wounded were carried back to Springfield. General Don Carlos Buell had his headquarters in town. It is not surprising that Springfield and Washington County citizens are historically minded.

Washington County, located in central Kentucky and referred to as the "Heart of Kentucky" by residents, is a center of history. Within a thirty-mile radius of Springfield, thousands of tourists travel to witness the history of the first settlers in the "Counties of Kaintuckey." Lebanon, Bardstown, Danville, Harrodsburg and Perryville-cities located in counties surrounding Washington County-all have rich histories in the development of Kentucky.

### Tourism

#### *ABOUT SPRINGFIELD & WASHINGTON COUNTY, KENTUCKY*

Welcome to Springfield, Kentucky, the seat of Washington County, one of the first counties in the Commonwealth and the place where legends and icons found their beginnings. Steeped in tradition and heritage, our illustrious past has given birth to a wide selection of events and attractions which are yours to enjoy and long remember!

Abraham Lincoln-Springfield's Hometown Hero! Springfield is the ancestral home of Abraham Lincoln, our nation's 16<sup>th</sup> President. Several family homes and home sites are accessible to the public, including the Mordecai Lincoln House, home to his favorite uncle.

The 1816 Courthouse on Main Street across from the Abraham Lincoln statue "In Sacred Union" holds the original marriage certificate of Thomas Lincoln and Nancy Hanks. In this building, the

oldest active courthouse in the state of Kentucky, is the Lincoln Legacy Museum. While you're in town, visit the Nancy Hanks' cabin and museum at Lincoln Homestead State Park. Springfield is the birthplace of Giants' Super Bowl winning quarterback and CBS's No.1 NFL analyst, Phil Simms. Explore the Phil Simms Museum at the Springfield Opera House, and spend the night at the estate he lived in, now home to the historic Maple Hill Manor Bed and Breakfast.

Legendary Ernie Brown Jr., a.k.a. Turtleman, known from Animal Planet's Call of the Wildman, was born right here in Washington County, in the quiet town of Mackville. You won't want to miss this stop on your Turtleman Trek along the filming locations of many of his episodes. The very first Dollar General store opened in Springfield, Kentucky on June 1, 1955, making 2015 the neighborhood dollar discount store's 60<sup>th</sup> anniversary. You will find a Dollar General still here today, and many more unique small town shopping treasures.

The elusive location of Matt Groening's 'The Simpsons' may well be Springfield Kentucky. With its iconic Main Street bustling with college life, shops, art, theatre and plenty of local dining options, you will feel like you landed smack-dab in the "Americana" of Simpsons' Springfield. Stop and shop a while, then join the Simpsons family for a photo-op at the Opera House while you are downtown. As Kentucky's Agri/Eco-Tourism Capital at the Crossroads of Adventure, we are the site of the new Kentucky Fiber Trail, linking America's farming past with today's interactive visitor experiences and age-old handicrafts with hands-on yard and needle classes held on the farm.

As for adventure...why not skydive over the Bluegrass, rent and pilot a plane yourself, or stay grounded and marvel at the world's largest radio control jet show. Golf, fish and hunt or take the family and enjoy the award-winning Heart of Kentucky Holiday and Sorghum Festivals. Bring your bike and ride the crossroads of Bike The Kentucky Bourbon Trail<sup>®</sup> and the Trans America Bicycle Trail.

Michter's Whiskey Springfield Farm commits to sustainably sourcing the very best grain possible. Visit Michter's 145-acre farm and operations located in Springfield. After acquiring the land in 2017, Michter's began working with local farmers to farm its own estate grown, non-GMO corn, rye and barley on the property. These grains will be used at Michter's Shively Distillery and Michter's Fort Nelson Distillery in Louisville KY. Currently Michter's has two rickhouses located on the farm within the Industrial Park.

Next stop at our gorgeous vineyard and winery, Horseshoe Bend Vineyard and Winery. To find this place where the grapes grow, the winemakers have created a kind of scavenger hunt along gravel roads with little jesters pointing the way. Relax by the welcoming fire and sip some wine, or join us for a Dine in the Vines event with a special guest culinary chef.

If you are here for business, rest assured, our state-of-the-art facilities and expert staff will gladly accommodate your meeting and convention needs. Awaiting your visit, this friendly town

has a 62 room hotel, a historic Bed & Breakfast, city camping, and many fast food and full service local dining options.

The renovation of the Opera House has sparked all kinds of creativity in downtown Springfield featuring live theatre from Central Kentucky Theatre, a visitor's center, meeting rooms and offices. We invite you to stop by for free maps and area information. And don't forget to log onto Springfield's free Wi-Fi!

Places to eat:

Wendy's	Mi Pueblo 2	Pizza Hut
China King	McDonald's	Snappy Tomato Pizza
Mordecai's	La Fuente	Los Mariachi's
Hardee's	Subway	Parkview IGA Deli

Places to stay:

Springfield Inn  
Maple Hill Manor  
Springfield and Washington County have many lodging options to choose from on Airbnb!

Local Attractions:

1816 Washington County Courthouse  
Abraham Lincoln Sculpture at Washington County Judicial Center  
Barn Quilt Trail  
Barn Tours  
Beech Fork River Canoe Excursions  
Bike The Kentucky Bourbon Trail ®  
Campbell's West Wind Farm  
Central Kentucky Community Theatre  
Footprints to the Park Arboretum  
Heart of Kentucky Holiday Festival  
Heritage Home Furnishings  
Historical Markers App  
Idle Hour Park  
Jets Over Kentucky  
Jumping For Fun  
Kentucky Fiber Trail  
Kentucky's Holy Land Tours  
Kings Country Outfitters  
Let The Spirits Move You Tour-Historical Church & Distillery Tours  
Lincoln Homestead State Pak and Golf Course  
Lincoln Legacy Museum  
Lincoln Suites  
Maple Hill Manor Bed and Breakfast and Alpaca Farm

Mid-Kentucky Chorus  
Mount Zion Covered Bridge  
New Pioneers For A Sustainable Future  
St. Catharine Motherhouse/Dominican Sisters of Peace Heritage Center and Gift Shop  
Skydiving  
Sorghum Festival  
Springfield Cemetery  
Springfield Green Festival  
Springfield Inn  
Springfield Presbyterian Church Pilcher Organ  
St. Rose Catholic Church  
Super Bowl XXI MVP Phil Simms Exhibit  
The Bourbon Chase  
TransAmerica Bike Trail  
U.S. Natural Fibers  
Weaverwood Cabinetry and Furniture  
Whitetail Crossings/Whitetail Manor Hunting Lodge  
Willisburg City Hall  
Willisburg General Store and Deli  
Willisburg Lake

#### WHERE THE LINCOLN LEGACY BEGAN

The “Lincoln Legacy Museum” is about making connections. One is to bring our citizens the connection of this locality to historic American events. The other connection is one of the most beloved and well known presidents of the United States to Washington County. The Lincoln family and their relatives were a pioneer family in the truest sense. They came to Washington County looking for improvement of that dream of self and place, and in that same spirit moved on west. But from here, that dream, and a spark of genius, began with the marriage of Thomas Lincoln and Nancy Hanks, which lead their son to rise to greatness and lead our county through one of its monumental periods. The connection of Washington County and its people to President Abraham Lincoln is firmly acknowledged and celebrated here. - John Downs, Museum Designer. See the film from the Lincoln Legacy Museum narrated by Peter Thomas.

#### Museum Hours

Mondays-Closed

Tuesdays-Closed

Wednesdays –Closed

Thursdays -11:00am to 6:00pm

Fridays – 11:00am to 6:00pm

Saturdays – 11:00am to 6:00pm

Sundays – Noon to 4:00pm

#### **Yearly Events**

*January*

## Martin Luther King Celebration

### *February*

New Pioneers "Empty Bowl Supper"- Old Louisville Store Building  
Chamber of Commerce Gala-Mordecai's

### *March*

Spring ARTportunity  
James Bond III Film Festival: TV and Media Edition-Opera House  
Rotary Pancake Breakfast-Mordecai's

### *April*

HWY 55 Yard Sales  
Springfield Green Festival-Washington County Judicial Center parking lot  
Elizabeth Madox Roberts Conference

### *May*

Springfield Business & Professional Women Wine Tasting

### *June*

Farmers Market Opens  
Bourbon Bike Ride  
Distinguished Young Woman Program

### *July*

Independence Day Celebration & Fireworks  
Springfield Hollywood South Film Festival-All Genre  
Jets Over Kentucky  
Central Kentucky Theatre Launch Party & Awards Gala Opera House  
African American Heritage Golf Scramble  
Manton Music Jam

### *August*

16th African American Heritage Festival  
Rosary Picnic

### *October*

Annual Jim Beam BBQ Championship Cook-Off  
Washington County Sorghum Festival/Praise Fest  
James Bond II Film Festival: Horror Edition-Opera House  
Bourbon Chase-Farmers Market from Noon to Midnight  
Downtown Halloween Trick or Treat Event

### *November*

Christmas Crafters Market & Merchants-Opera House

### *December*

James Bond III Film Festival: Christian Edition-Opera House

Ice Skating Festival with booths

Central Kentucky Community Theatre and Mid-Kentucky Arts have seasonal programming with varied dates every year.

### SPRINGFIELD, KENTUCKY IS FILM READY

Springfield is the place for location assistance and coordination with local personnel and services.

### How can shooting in Springfield save money?

We are a rural community with most locations within walking distance or a short drive of our downtown area. Services are conveniently located and can be accessed within just a few minutes. The metro areas of Lexington and Louisville are both less than an hour away and can provide additional production needs. Additionally, lodging, gas and food are generally more cost efficient than our larger cities.

### INCENTIVES

For complete information on how filming in our area is good for your bottom line, please visit the Kentucky Film Office at [www.filmoffice.ky.gov](http://www.filmoffice.ky.gov).

### LOCATION

Springfield is the seat of Washington County, the first county in the Commonwealth of Kentucky. Our community has a deep and rich history that is evident in our well-preserved buildings and unique countryside. You'll find pre-Civil War homes, centuries old rock walls, gently rolling hills, rivers and lakes that support nesting bald eagles and blue herons, and sunsets that will take your breath away. We are also the geographical center of the state, conveniently located at the crossroads of several state highways. While just on the outlying areas of the "big cities", you'll be surprised at the abundance of sparkling fresh air and clean water.

### WEATHER

What's the weather like in Springfield? We enjoy four distinct seasons, with none being too extreme. We do have some hot and muggy days in the summer, but they are tempered with frequent cold fronts that bring a little rain and cool breezes. The autumn season is a favorite for most, as a spectacular show of fall colors rivals any in the country. Our winters tend to come a little later in the year, with snow around January or February. The roads are always quickly maintained and fluctuating temperatures can cause a quick melt-off. Spring is when you can witness real Kentucky bluegrass! When the morning sun rises and hits the dew, a deep blue hue appears. It's something you'll never forget.

## CONTACT US

After your initial contact with the Kentucky Film Office, we are more than happy to show you around and answer questions. Please call or email with your arrival date, information and type of locations you are seeking and we'll get back with you right away; City of Springfield (859)336-5440; Springfield Tourism Commission (859)336-5412 Ext. 1.

# Chapter 2

## Statement of Goals & Objectives

## **Chapter 2**

### **Introduction**

The statement of goals and objectives includes policy proposals for the overall development of the area. Goals consist of long-range, generalized proposals based upon community decision making and reflect broad social, economic or physical conditions, which may be realized through a variety of methods. The zoning process is one tool for attaining the county's goals. Objectives are shorter-range, more limited and precise aims, purposes or poles endorsed by the community for purpose of attaining the goals. The following goals and objectives represent a summarization of ideas emphasizing necessary changes, existing deficiencies and future needs of Washington County.

### **Land Use**

#### Goal

To designate and protect sufficient land to meet the anticipated needs of Washington County for each type of land use (agricultural, residential, commercial, and industrial) for the next ten years, and to ensure that the different types of land uses are developed in such a way as to be compatible with one another.

#### Objectives

1. Adopt and implement the Comprehensive Plan for Washington County.
2. Establish a Subdivision Regulation and Zoning Ordinance to ensure compatibility with Comprehensive Plan.
3. Follow the Land Use Plan when considering implementation, amendments or changes to the Zoning Ordinance.
4. Designate and encourage growth areas, which utilize the existing and proposed utility systems and services most efficiently.
5. Avoid development in areas designated as flood prone, unless preventative measures are taken, in areas in excess of fifteen (15) percent slope or other sensitive areas such as sinkholes or areas with unsuitable soil types.
6. Require measures to reduce and contain runoff from development, to ensure adequate drainage and to avoid development in areas with poor soils.
7. Require measures to reduce water, air and land pollution.
8. Require good transitions and buffers such as a screening between and uses of varying density or intensity.
9. Preserve existing neighborhoods and housing.
10. Direct growth to existing vacant areas and discourage "strip" type commercial or residential development.
11. Conserve prime agricultural land (Class I, II, & III) through sound planning and zoning procedures in order to protect these areas from residential, commercial, industrial or other development.
12. Provide adequate land of suitable type and location to accommodate industrial growth.
13. Preserve the historical integrity of buildings and areas in the county.
14. Coordinate the implementation of the Land Use, Housing, Transportation and Community Facilities Plans.

## **Housing**

Housing is an integral component of the social and physical environment of any community. The provision of adequate housing should be regarded as a concept of the overall planning program. Although a challenging goal, the provision of sound and affordable housing for all citizens of Washington County can be aided by the implementation of the comprehensive planning program.

The purpose of the housing element of the Comprehensive Plan is to analyze the current housing conditions in Washington County and to suggest strategies to improve the existing housing stock and provide for appropriate types of new housing in the future. This element includes statistical summaries of housing information from the Bureau of the Census and recommendations for future housing directions.

### Goal

To develop housing and residential areas providing safe, sound and decent housing for all families and individuals providing for both private ownership and rental at affordable prices.

### Objectives

1. Adopt and implement the Housing Element of the Comprehensive Plan.
2. Improve and conserve the quality of new and existing housing through the enforcement of Subdivision Regulations, any Zoning Ordinance, building permits and building codes.
3. Encourage the development of both single and multifamily housing in locations served by existing and proposed utility facilities and discourage new “strip” residential developments in rural areas.
4. Encourage the placement of mobile homes for residential purposes, and ensure that they conform to the provisions of the Zoning Ordinance, Building Permits and codes.
5. Encourage innovative, energy efficient and low-cost residential development of varying types and densities in suitable areas.
6. Require all residential areas to be properly oriented into the neighborhood and larger community.
7. Encourage and provide for assisted owner and rental housing units for the area’s low-income and elderly population.

## **Housing Trends**

### Occupied Housing Units

Over the past 17 years, Washington County’s housing stock has increased. During the same period, the county’s population also increased.

Washington County experienced the greatest numerical growth in renter-occupied housing units-an increase of 134 units. However, owner-occupied housing comprises the largest percentage of housing in the county. This housing typically represents single-family detached homes as well as mobile homes in the county. Something to note is that in the 17-year period, the percentage of owner-occupied units actually decreased by 5%. Renter-occupied housing

units comprised 20.6% of the total housing units. Vacant units now make up 12.3% of the total housing stock.

This analysis indicated growth in the overall housing market in Washington County. This trend may continue as the county’s population is projected to grow through 2030.

<b>Housing Units by Tenure, 2000-2017</b>				
<b>Category</b>	<b>2000</b>	<b>2010</b>	<b>2017 Estimate</b>	<b>% Change 2000-2017</b>
Owner	3296	3451	3585	9%
Renter	825	922	1056	28%
Vacant	421	537	631	50%
Total	4542	5044	5138	13%

Source: US Census

Washington County’s housing pattern also reflects an increase in the number of mobile home units in the county. Such affordable options allow many first-time householders a chance to establish a home at a time when national wage levels fail to keep up with cost-of living increases.

Approximately 30.7% of all owner-occupied housing units in Washington County are valued between \$50,000 and \$99,999. The median value of owner-occupied housing units in Washington County is \$105,600.

**Recommendations**

With the rising land and housing prices, steps should be taken to help reduce these costs. Such actions will benefit both buyers and renters, in particular the young, first-time purchasers. Innovative approaches will also help the local economy by stimulating the construction industry. Washington County also should implement strategies and measures to ensure that smaller, energy efficient, and innovative housing types are encouraged by a county Zoning Ordinance, subdivision regulations, and other development guides.

Other specific housing recommendations include:

1. Adopt zoning regulations that allow reduced lot sizes in appropriate zones.
2. Adopt zero lot line regulation to allow separate ownership of duplex housing units.
3. Allow the construction of townhouse units for private ownership in appropriate zones.
4. Allow rental housing units in upper-story levels of commercial buildings within business districts.
5. Develop Planned Unit Development regulations to allow flexibility in lot sizes, housing types, and land uses and require submission of an integrated development plan.
6. Allow the establishment, location, and use of manufactured housing and mobile homes for residential purposes and ensure their conformance with the provisions a Zoning Ordinance, building codes, KRS 227.550, and other local, state, and federal codes, regulations, and rules.

## **Community Facilities**

### Goal

To provide functional and efficient public facilities, utilities and services to all county residents through the development, improvement and extension of existing and proposed systems.

### Objectives

1. Implement recommendations of the Community Facilities Elements of the Comprehensive Plan.
2. Ensure that all types of development take place keeping the need for adequate facilities for its residents always in mind.
3. Provide for adequate areas for the development of community facilities of all types.
4. Allow for the integration of community facilities into existing and proposed development areas.
5. Evaluate the impact of proposed development on existing community facilities.
6. Require the necessary community facilities to be incorporated into each type of proposed development.
7. Coordinate the implementation of the Land Use, Housing, Transportation and Community Facilities Plan.

## **Transportation**

### Goal

To provide an integrated system of streets and highways designed to effectively channel traffic throughout the area in order to ensure the safety, convenience and economy of the residents.

### Objectives

1. Follow the recommendations of the Transportation Plan in the construction of new, and the extension of existing, streets and roads in accordance with the standards of the Subdivision Regulations.
2. Provide adequate parking facilities, at proper locations, to serve the various types of development proposed for the area.
3. Ensure that the impact of each new proposed development on the existing and proposed transportation system is properly evaluated in order to ensure that the development is compatible with the system.

The Washington County Fiscal Court adopts the statement of goals and objectives. The goals and objectives should be considered when developing and amending the base studies and Comprehensive Plan because the goals and objectives are the criteria for the framework for the planning elements.

# Chapter 3

## Economic Analysis

### Chapter 3 Introduction

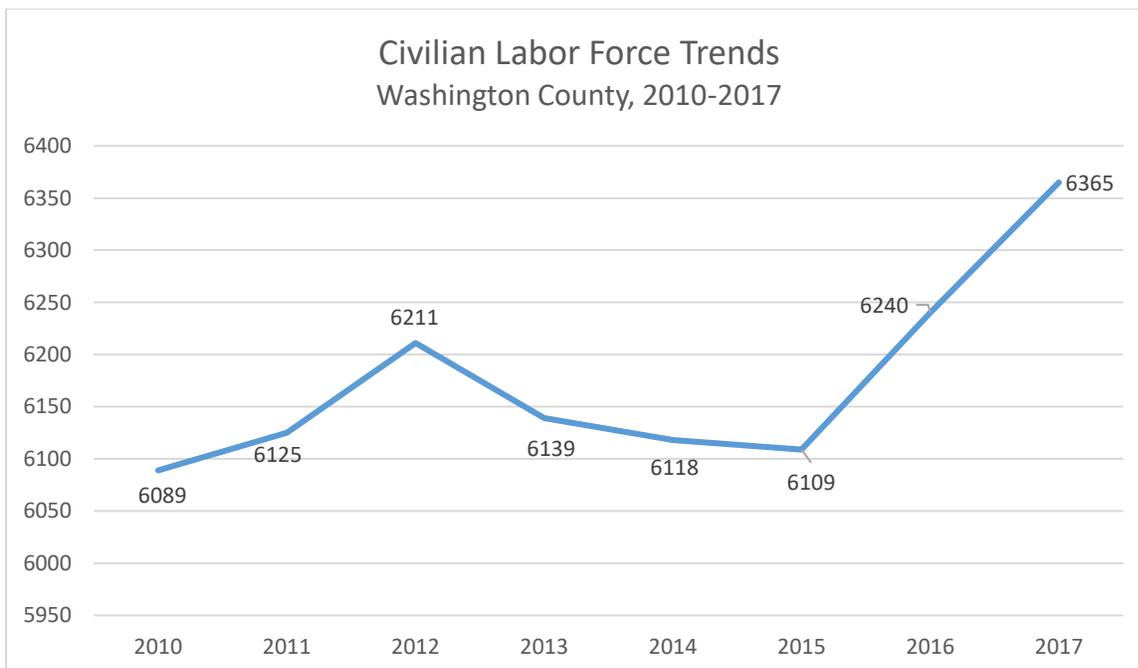
The purpose of an economic base study is to help communities create policies and programs that can lead to steady growth over time. This analysis is vital to future land use planning because it described the essential components comprising the local economy and forecasting economic growth opportunities. The extent of economic activity and demand for goods and service influences future land development.

This analysis provides sufficient information for preparing other elements of the Comprehensive Plan and provides substantial information concerning past, present, and future economic trends in Washington County.

### Employment Trends

#### Civilian Labor Force

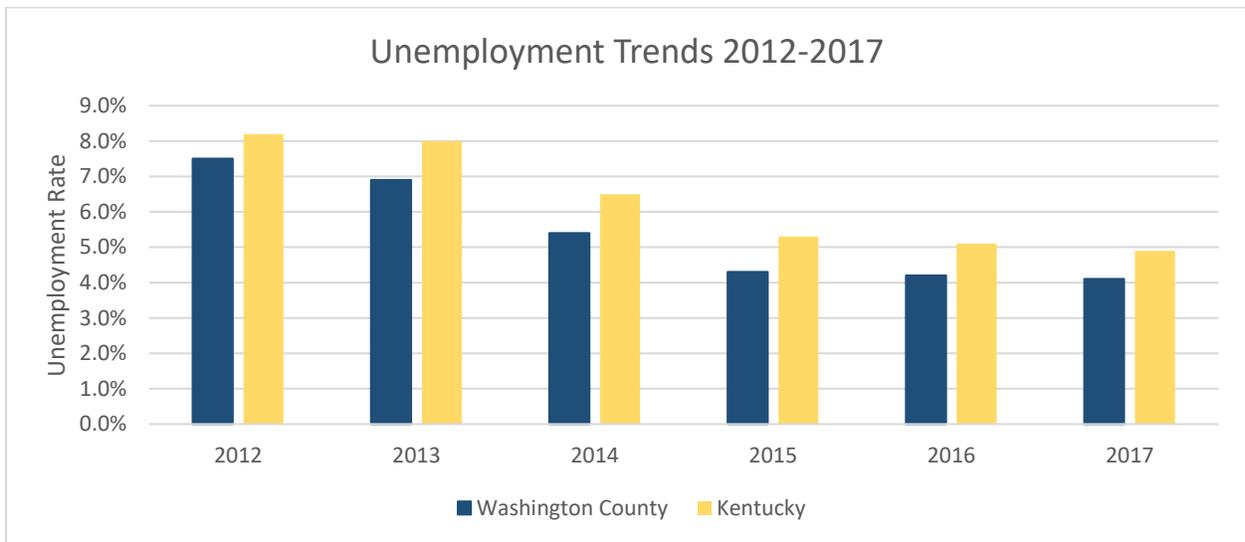
The Civilian Labor Force chart below illustrates the labor force status in Washington County between 2010 and 2017. Labor force data is most commonly categorized as employed persons, unemployed persons, and those individuals not in the labor force. In 2017 the civilian labor force in Washington County was estimated at 6,365 workers, an increase of 4.3% from 2010.



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

## Unemployment

The Unemployment Trends chart compares the unemployment pattern of Washington County to the state of Kentucky since 2012. Washington County is experiencing a 10-year high in labor force and a 10-year low in unemployment. This trend of high labor force and low unemployment benefits the local economy; however, it may also result in difficulty of fostering additional employment with a limited labor supply. A sufficient labor supply must be available to permit continued economic expansion. Currently, Washington County has an estimated labor supply of 2,634 persons available for industrial jobs in the local labor market. Labor market counties are composed of counties which exist within the sixty (60) minute drive range of Washington County. Between 2014 and 2017, Washington County had 690 young person's reach 18 years of age, and these young persons should potentially be available for employment.



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

## **Business Establishments**

Major sources of employment in Washington County are divided into various types of business establishments by major economic divisions. The following table illustrates the localized business climate and level of employment within Washington County and the labor market area. Manufacturing is the largest sector of employment in Washington County, with 28.3%, while Trade, Transportation and Utilities was the largest sector of employment for the labor market area. Total employment in Washington County totaled 4,069, and 156,834 for the labor market area.

<b>Employment by Major Industry by Place of Work, 2017</b>				
	<b>Washington County</b>		<b>Labor Market Area</b>	
	<b>Employment</b>	<b>Percent</b>	<b>Employment</b>	<b>Percent</b>
Total All Industries	4,069	100.0	156,834	100.0
Total Private Industries	2,831	69.6	115,825	73.9
Natural Resources and Mining	64	1.6	616	0.4
Construction	237	5.8	5,665	3.6
Manufacturing	1,151	28.3	27,067	17.3
Trade, Transportation and Utilities	467	11.5	32,259	20.6
Information	9	0.2	1,317	0.8
Financial Activities	91	2.2	4,683	3.0
Professional and Business Services	80	2.0	11,356	7.2
Education and Health Services	415	10.2	15,198	9.7
Leisure and Hospitality	191	4.7	13,735	8.8
Other Services and Unclassified	126	3.1	3,927	2.5

Source: JobsE, Chmura Economics

#### Major Manufacturing Firms

A large portion of Washington County's employment is in the manufacturing sector. The following table lists the top 20 manufacturing and service and technology firms in Washington County.

<b>Top 20 by Employment (Manufacturing &amp; Service &amp; Technology Firms Only)</b>			
<b>Firm</b>	<b>Product(s)/Service(s)</b>	<b>Emp.</b>	<b>Year Established</b>
<b><i>Springfield</i></b>			
All Weather Insulation Company LLC	Manufacture and sales of cellulose insulation and hydro seeding mulch	10	1978
Alltech Inc.	Spray drying operation for natural animal feed additives	60	2002
Barber Cabinet Co Inc	Wooden laminated & custom made vanities & kitchen cabinets	43	1948
Bluegrass Dairy & Food Inc	Dairy & food products	82	1999
Boone Sheet Metal Inc	Sheet metal fabricating	3	1991
Concept Packaging Group	Corrugated paperboard, corrugated plastic, wood packaging, and other packaging materials, contract packaging,	3	2005

	distribution, kit packaging, inventory management		
INOAC Group North American LLC	Automobile armrest & interior plastic parts, seat trim components, instrument panel components, medical/surgical components	465	1991
Johnson Products LLC	Distributors of fiberglass and metal building insulation	7	1978
Joseph Thomas True Candles	Fragrance products; candles, botanicals, room sprays, etc.	1	2009
LB Manufacturing	Robotic and manual MIG welding of carbon and stainless steels, resistance (spot) welding, resistance seam welding, automotive class assembly, light and medium stamping	69	1998
Toyotomi America Corp	Automotive after-market products; automotive stampings; sunroof frames	505	1998
Source: Kentucky Cabinet for Economic Development (11/15/2008)			

**Springfield-Washington County Economic Development Authority (SWEDA)**

Washington County will continue to experience employment growth in the near future. The local economy has benefited from expansion of existing industries and enhanced local employment opportunities during the past few years. SWEDA also recently sold 170 acres in the Springfield-Washington County Commerce Center, for one new project, and two expansion projects.

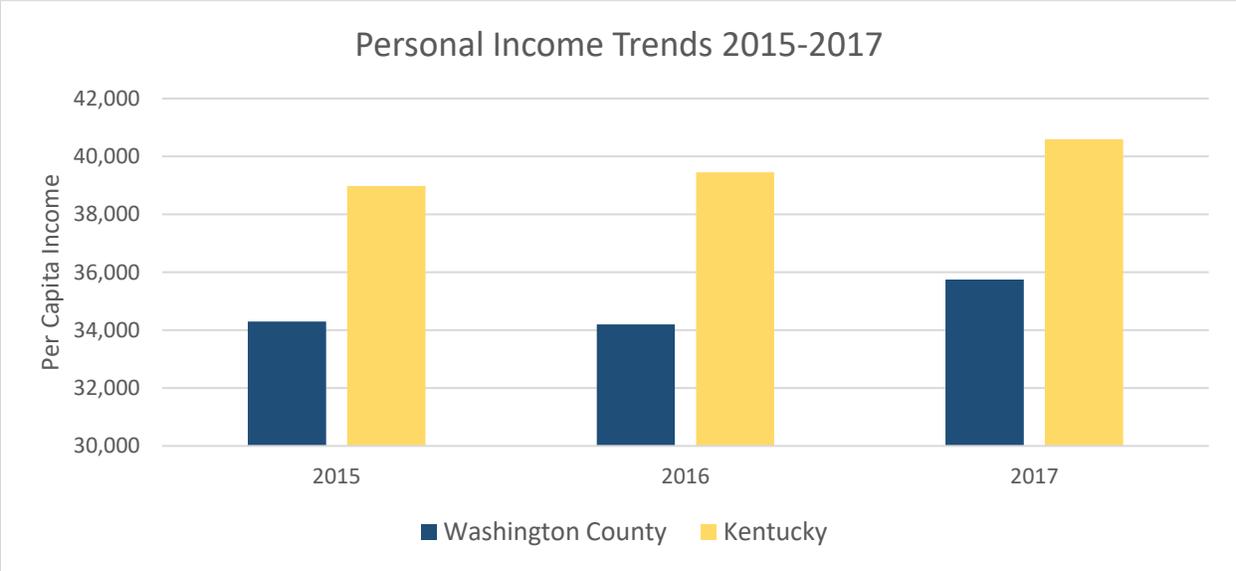
**Agriculture**

Agriculture production has influenced and continues to effect Washington County’s local economy. Washington County farms have declined in number from 1982 to 2012. The following table shows the changes in farm acreage and number of farms. Such losses could be attributed to a decrease in farm employment and personal income directly attributable to farming. Total acreage farmed also declined from 1982-2012. The county’s farm acreage decreased from 84% in 1982 to 73% in 2012.

Washington County	1982	1987	1992	1997	2002	2007	2012	% Change 1982-2012
Number of Farms	1,191	1,182	1,137	1,142	1,119	1,119	1,011	-15.2
Land in Farms (acres)	161,758	169,310	165,391	162,741	149,739	162,993	140,948	-12.9
Average Size (acres)	136	143	145	143	134	146	139	-2.2
Total County Acreage	192,582	192,582	192,582	192,582	192,582	192,582	192,582	N/A
Percent Farmed	84%	88%	86%	85%	78%	85%	73%	-11.0

**Per Capita Income**

The following chart compared Washington County’s per capita income to that of the state average for 2015-2017. Washington County is behind the state average, but it ranks 45<sup>th</sup> out of 120 counties in this category. Per capita income is the total personal income divided by every man, woman and child, in the county.



# Chapter 4

## Population Analysis

## Chapter 4 Introduction

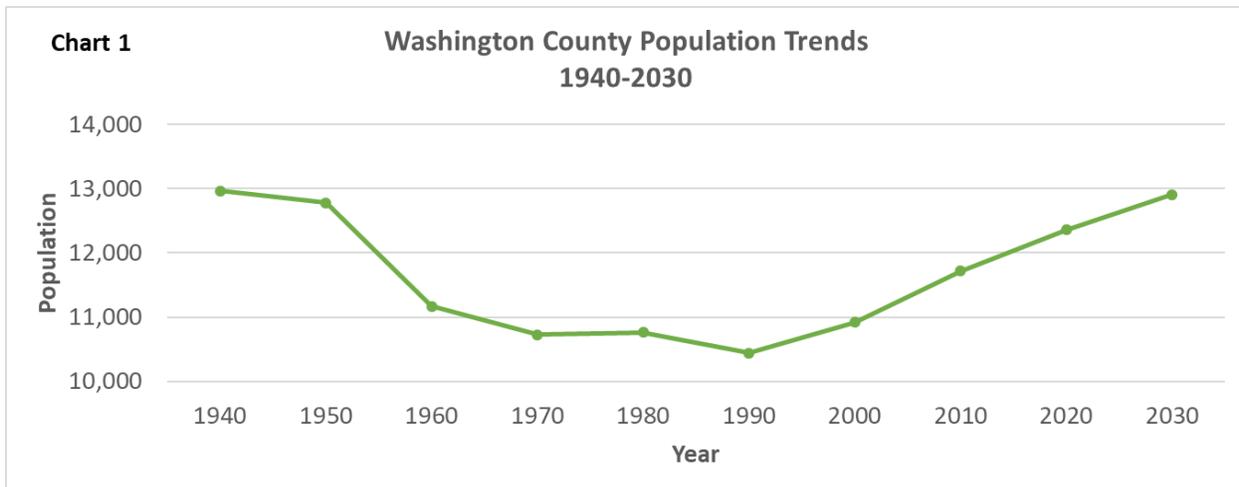
A fundamental element of a comprehensive plan is an analysis of the past, present, and future population of the planning area. This analysis includes the general distribution and characteristics of the Washington County population and a forecast of the extent and character of future populations. These populations will be useful to determine the future population, type of population, and needs of the community with respect to this population.

This population analysis is adequate for purposes or preparing other elements of the comprehensive plan and provides substantial information concerning the population of Washington County and its communities. Additional detailed information is available from the Washington County Planning Commission, Lincoln Trail Area Development District, and Kentucky State Data Center.

### Population Trends

#### Historic Population

To understand future population projections, it is necessary to examine historic population trends for an area. Chart 1 (below) illustrates the change in population in Washington County from 1940 to 2010 and extends to the projected population for 2030. The chart indicates a decline in population from 1940-1990 with a sharp decline in population taking place after 1950. Post 1990, the population of Washington County began to grow at a steady rate.



Source: *US Census and Kentucky State Data Center*

#### County and Regional Trends

Since 1970, Washington County has experienced an overall increase in population of 12.6% as highlighted in Table 1. The Lincoln Trail Region has grown rapidly in the same time period, as Kentucky overall grew 38.8%. The 2018 estimate Census population for Washington County is 12,084, an increase of 3.1 percent from the 2010 Census.

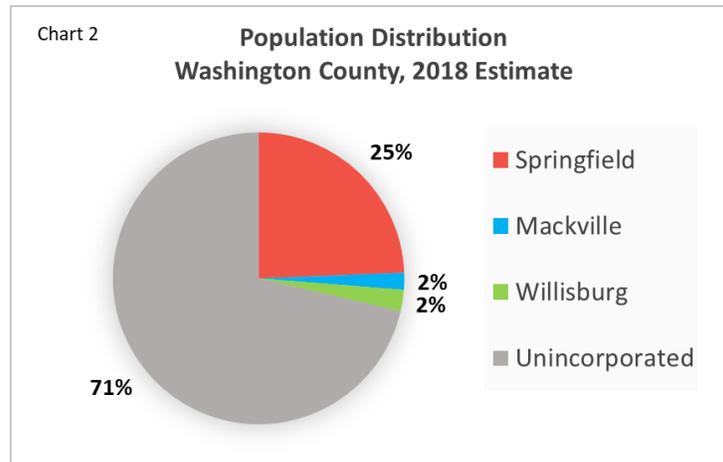
Counties	1970	1980	1990	2000	2010	2018 Estimate	% Change (1970-2018)
Breckinridge	14,789	16,861	16,312	18,648	20,059	20,388	37.9%
Grayson	16,445	20,854	21,050	24,053	25,746	26,321	60.1%
Hardin	78,421	88,917	89,240	94,174	105,543	110,356	40.7%
Larue	10,672	11,922	11,697	13,373	14,193	14,307	25.4%
Marion	16,714	17,910	16,499	18,212	19,820	19,404	13.9%
Meade	18,796	22,854	24,170	26,349	28,602	28,715	52.8%
Nelson	23,477	27,584	29,710	37,477	43,437	45,851	95.3%
Washington	10,728	10,764	10,441	10,918	11,717	12,084	12.6%
Lincoln Trail ADD	181,284	208,882	219,101	238,337	269,117	277,426	53.0%
Kentucky	3,218,706	3,660,777	3,685,296	4,041,769	4,339,367	4,468,402	38.8%

Source: US Census and Kentucky State Data Center

### Population Distribution

Chart 2 shows the distribution of population within Washington County. Both incorporated and unincorporated areas of the county have experienced growth during the period 2010-2018. Overall, in 2018 it was estimated that 71% of residents of Washington County lived in unincorporated areas. The Cities of Mackville and Willisburg each account for 2% of the total population. The City of Springfield, the county seat, comprises the remaining 25% of the population.

Strong suburban growth patterns nationally have continued since the 1950s. Within the Lincoln Trail region, suburbia has extended to include rural areas in counties with reasonable access to employment and services. This pattern—the proliferation of exurban growth—has implications for the county. This type of growth typically puts a proportionally greater cost on services; as residences are spread over the subsequently larger geographic area than traditional urban or suburban patterns.

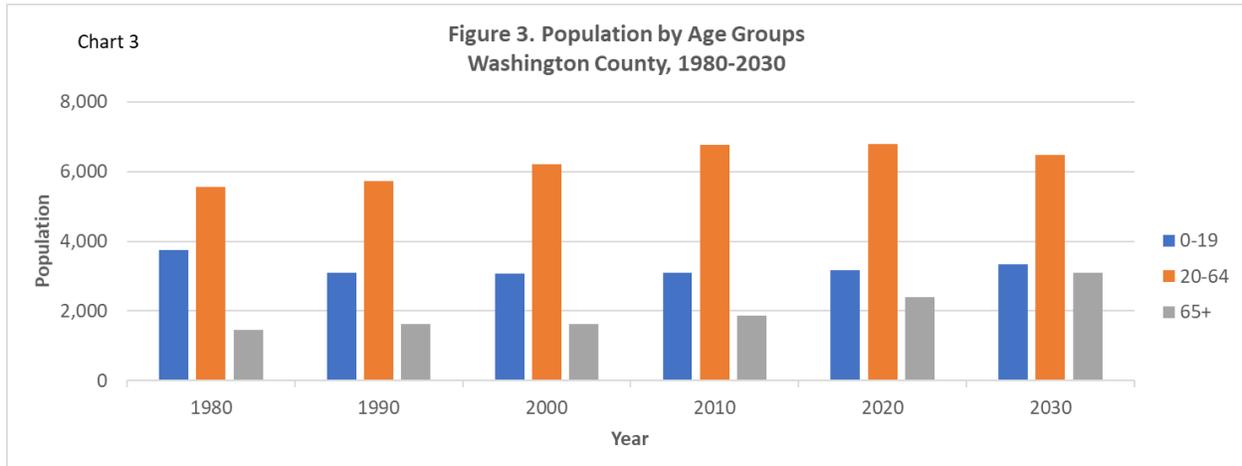


Source: US Census and Kentucky State Data Center

## Population Characteristics

### Age

Washington County's population has continued to age and has followed national trends in recent decades. Chart 3 displays the county pattern and shows the projected figures for 2020 and 2030.



Source: US Census and Kentucky State Data Center

As projected, Washington County will continue to have greater numbers of people over the age of 65. By the year 2030, the 65-age group is expected to increase by 68 percent to 3,088 people. A decrease of 4% is projected for the 20 to 64 age group (to 6,488 people). For comparison, the under 20-year old age group is projected to increase by 7.5% to 3,328 people by the year 2030. Nationally, the over 65 age group is expected to increase, and the under 18 age group is expected to decline.

As the population continues to age, markets may shift as larger percentages of people shift their service and housing demands and personal needs change.

### Gender

Over the past 20 years, the overall gender makeup of Washington County has shifted to more closely reflect statewide trends. Table 2 illustrates the gender trends between 1970 and 2020. The regional proportion of females to males has and will continue to shift toward the statewide norm. Washington County exhibits a pattern of higher proportion of females to males. This pattern is projected to continue for the next thirty years. The examination of general age categories and gender patterns provides a more meaningful and definitive tool for projecting future growth.

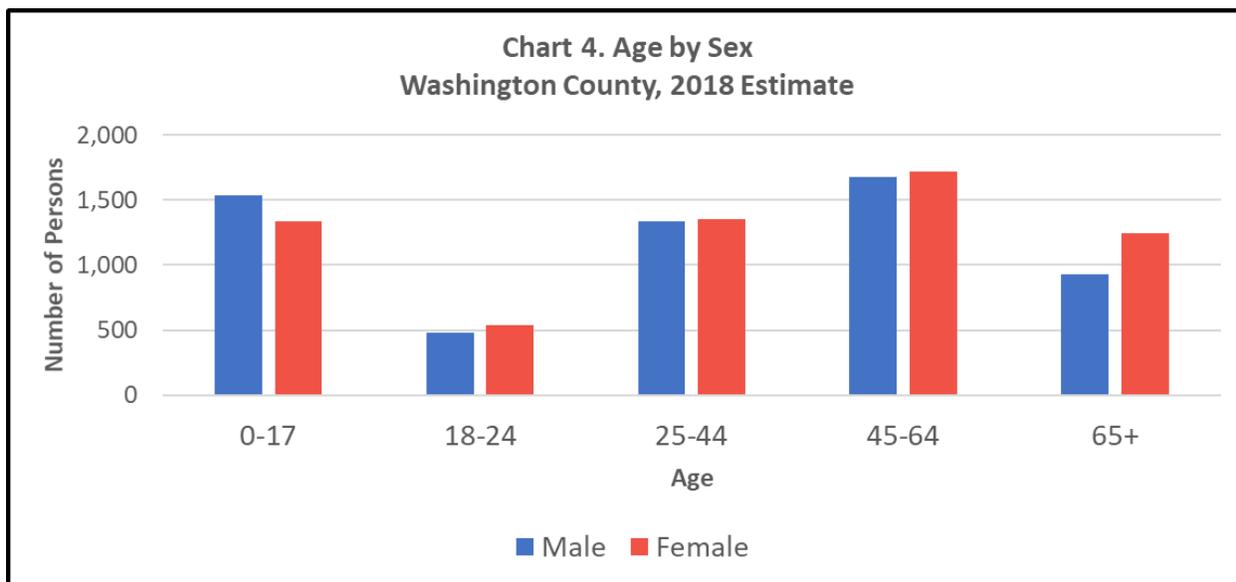
Year	Washington Male %	Washington Female %	LTADD Male %	LTADD Female %	KY Male %	KY Female %
1980	48.80%	51.20%	52.80%	47.20%	48.90%	51.10%
1990	47.90%	52.10%	50.50%	49.50%	48.50%	51.50%
2000	49.10%	50.90%	49.90%	50.1	48.90%	51.10%
2010	49.00%	51.00%	50.00%	50.00%	49.20%	50.80%
2020	48.60%	51.40%	49.70%	50.30%	49.30%	50.70%
2030	48.00%	52.00%	49.70%	50.30%	49.30%	50.70%

Source: US Census and Kentucky State Data Center

### Age-Gender Composition

The age-sex composition of the population has a substantial influence on the capacity or potential for population growth in future years. In addition, the present age-sex composition is influenced by the growth trends of the past. This population characteristic is significant for determining the needs of the planning area, both present and future.

These population statistics simply indicate the growing predominance of the older age group among the population. The analysis also indicates a growing number of females remaining in the community or area after the males have left for military service or to attain employment in other parts of the state or nation. The increasing urbanization of Washington County and the relative property development will affect these figures in the future and will tend to consistently reduce the out-migration of both males and females. The increasing number of older persons in the population indicates a significant need to recognize this population segment and provide programs and facilities designed for them. Chart 4 reveals the 2018 Census estimates.



Source: US Census and Kentucky State Data Center

Chart 5 (below) illustrates these population characteristics by age and sex into a population pyramid. This graph readily the aging process occurring in Washington County’s population as a percentage of the total population.

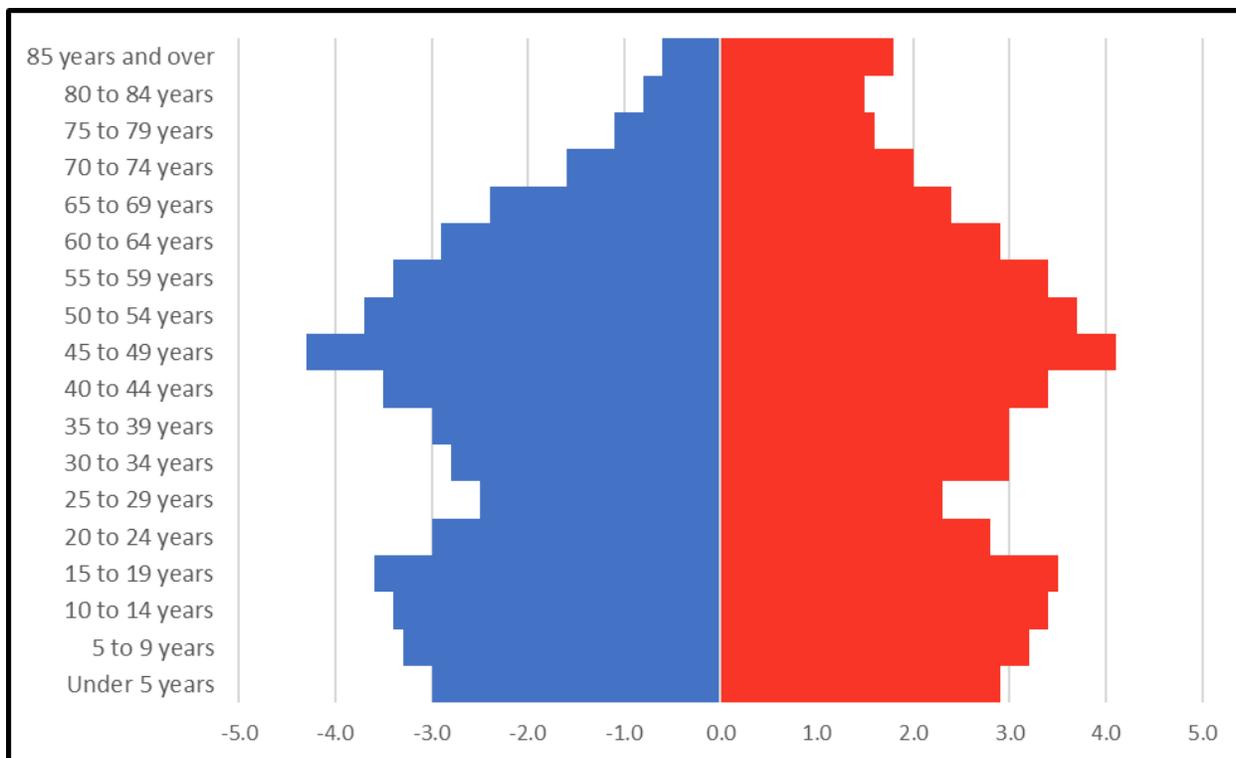


Chart 5 - Source: *US Census 2010*

### Components of Population Change

Overall population change is a result of four factors. First, as the population increases with births, it also experiences declines due to deaths. More important to overall short-term growth is the influx of people moving into an area to live (immigrants) and loss of people who move away from the area (emigrants). These four factors acting independently result in two overall trends. The balance between births and deaths is called “natural increase”. The balance of in-migration and out-migration is called “net migration”. Therefore, population change is the overall result of natural increase and net migration. The pattern of migration can have an immediate short-term demand on services and community facilities as well as impacts on the local and regional economy.

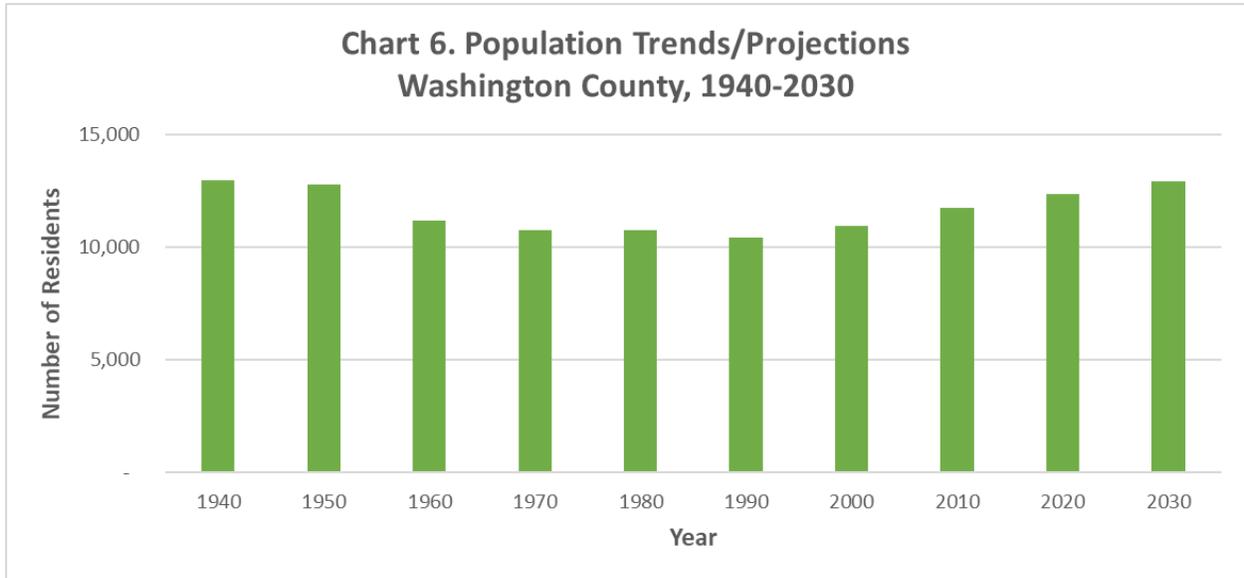
Statewide, population growth is increasingly dependent on migration. The rate of natural increase is declining as birth levels remain stable or decline, and number of deaths is increasing with the gradual aging of the population. Migration, however, is difficult to forecast and can be an elusive factor of growth projections.

### Population Projections

The Kentucky State Data Center uses natural increase and net migration rate data when projecting growth rates and population change for counties. Information is maintained for pertinent age and other specific groups, and projections are generated for base series, moderate, and high growth levels. Additional factors influencing growth are local, regional,

statewide, and national economic trends, events, and investments. Although the projections are based on sound scientific methods, outside factors can and do influence net migration patterns and often have a heavier influence on actual growth or decline for the short term.

Washington County's population is projected to increase at a rate of 6.6 percent from the 2010 census to 2030 to approximately 12,904 residents. Chart 6 illustrates future growth projections for the county. This level growth combined with housing unit trends or average household size should result in an increase in demand for housing to accommodate the additional residents.



Source: *US Census and Kentucky State Data Center*

# Chapter 5

# Environmental

# Conditions

## **Chapter 5**

### **Introduction**

The type and degree of development in a community is dependent on the physiographic features of the area. The terrain, soils, watercourses and other natural resources either prohibit or encourage varying development patterns. The county's existing and anticipated infrastructure, transportation networks, community facilities and physiographic features influence the shape of future development and redevelopment. Soil associated with certain geographic areas may be restrictive in terms of sewage disposal or the availability of water. Topography also affects growth, and a community's steep hillsides and flood prone areas should not be develop in an effort to minimize and avoid natural hazards.

This chapter examines specific environmental features and conditions in Washington County and examines how these features and conditions may limit or encourage growth development.

### **Climate**

The climate in Washington County is marked by four seasons and brings a refreshing variety of weather conditions and events. No month averages below freezing in winter or above 90 degrees in summer. Average temperatures range from 32 degrees in January to 79 degrees in July.

In Washington County, summers are hot in the valleys and slightly cooler on the hills, and winters are moderately cold. Rains are fairly heavy and occur year-round. Snow falls nearly every winter, but the snow cover usually lasts only a few days.

Precipitation is well distributed throughout the year with an average of 125 days. The total annual precipitation is 48 inches. Of this, 22 inches, or 46 percent, usually falls in April through September. The growing season for most crops falls within this period. The rainfall in April through September is less than 21 inches. Thunderstorms occur on or about 45 days of the year, and mostly during the summer months. Seasonal snowfall averages about 16 inches per year. On an average of 3 days, at least 1 inch of snow is on the ground during the winter months.

The average relative humidity in midafternoon is about 60 percent, humidity is higher at night, and the average humidity at dawn is about 80 percent. The sun shines 65 percent of the time possible in summer and 45 percent in the winter. Prevailing winds are from the south/southwest providing moderate temperature levels. The average wind speed occurs highest in the spring at 10 miles per hour. However, wind patterns vary and come from all directions on different occasions throughout the year. During the winter months, cold fronts with winds from the north occur and bring occasional snow events. During late summer and the early fall months, calm conditions dominate for as much as 20 to 30 percent of the time.

The region's growing season hovers at about 200 days (above 32 degrees F°) in length, which provides for a fairly long harvest cycle. This relatively long season allows the abundant farm crops to be produced within the area.

## **Topography and Geology**

An area's topography and geology is important in planning efforts because they affect land use development. Bedrock types and depths affect the construction costs of sewage facilities. Geological characteristics also have a bearing on the availability of ground water resources. The permeability and porosity of subsurface materials influence ground water supplies.

Washington County lies in the Outer Bluegrass physiographic region of central Kentucky. Broad ridgetops and slightly sloping hills characterize this area. Washington County is located entirely within the watershed of the Salt River and has fertile farms and pastures situated between the numerous hillsides of the county.

The Mississippian geologic period formed most of Washington County. The major division of this geologic period is the Chester and Meramec. Its initial formation occurred when large humid swamps covered North America. The main characteristic is limestone with some sandstone, shale, and coal. Perhaps the most distinctive topographic feature is the series of hills and alternating depressions, some of which contain sinkholes.

## **General Soil Types**

A critical factor for determining suitable development patterns and particular uses of land is soil type. Soil is the product of forces of weathering and physical development acting on the parent material deposited or accumulated by geologic episodes. The characteristic of the soil are by-products of five factors: physical and mineralogical composition of the parent materials, climate under which the soil evolved, the plant and animal life (present and past) on the soil, degree of slope or lay of the land, and amount of time the soil has been present. Soil typing provides information about the area's potential water, sand, gravel supply, drainage, runoff, erosion, and suitability for earth moving and foundations and suitability for agriculture and forestry.

General soil information is useful in evaluating potential areas for residential, commercial, industrial and recreational uses and identifying alternative routes for roads, streets, highways, pipelines and underground cables. Important factors in determining the soil limitations for specific purposes, in particular the transmission and collection of sewage and the amount of stream water runoff, are slope, depth to bedrock, stability, and permeability.

The Natural Resources Conservation Service performed the determination of soil types and characteristics for Washington County and its incorporated cities. For planning purposes, the soil types were grouped into categories called soil associations. A soil association is an area that possesses a distinctive pattern of soils and most often contains one or two major soil types with minor types also prevalent. Three basic soil associations have been identified in Washington County.

The Lowell-Faywood-Shelbyville association is located throughout the central and western part of Washington County. It covers 38 percent of the county's land area. These soils are deep, gently sloping to moderately steep upland ridges, are well drained and have clay or loamy

subsoil. The Lowell-Faywood-Shelbyville association is primarily used for cultivated crops, pasture, and hay. The steeper soils are better suited for hay and pasture.

Lowell soils are deep and are gently sloping to moderately steep. They formed in material weathered from limestone interbedded with thin layers of shale and siltstone. This soil type is found in the Cities of Springfield, Mackville, and Willisburg. These soils are considered suitable for most urban uses. However, there are possible limitations for this soil type, including moderately slow permeability, high clay content, depth to bedrock and moderate shrink-swell potential. Certain engineering techniques can help reduce these limitations for development purposes. Faywood soils are moderately deep and are sloping to very steep. They occur on side slopes. They formed in material weathered from limestone interbedded with thin layers of shale and siltstone. The steepness of slope and slow permeability make this soil type unsuited for cultivated crops or most urban uses.

Shelbyville soils are deep, well-drained, gently sloping on broad ridgetops in the central and southern parts of the county. This soil is well suited for most urban uses; however, it is poorly suited to septic tank absorption fields because of moderately slow permeability in the lower part of the subsoil.

The Fairmount-Shrouds-Faywood association makes up about 11 percent of the county. The soils in this association are shallow and moderately deep, well drained has a clayey subsoil and is found on steep to gently sloping uplands.

Fairmount soils are mostly on steep hillsides. The surface layer is dark brown silty clay loam, and the subsoil is dark grayish brown silty clay. These soils are shallow and permeability is moderately slow or slow.

Shrouds soils are mostly on gently sloping to sloping ridgetops and moderately steep to steep upper hillsides. The surface layer is brown silt loam, and the subsoil is yellowish brown silty clay in the upper part, light olive brown clay in the middle part, and mottled yellowish brown, light olive, and light brownish gray silty clay loam in the lower part. Shrouds soils are moderately deep and permeability is slow.

Faywood soils are mostly on moderately steep and steep hillsides. The surface layer is brown silty clay loam, and the subsoil is yellowish brown clay in the upper part and yellowish brown clay mottled in shades of brown in the lower part. Faywood soils moderately deep and permeability is moderate or moderately slow.

The Eden-Lowell soil association makes up about 51 percent of the county. These soils are moderately deep and deep, well drained and that has clayey subsoil. The Eden-Lowell soils are found on steep to gently sloping uplands. These soils are poorly suited for urban uses.

Eden soils are mostly on steep hillsides and sloping, narrow ridges. The surface layer is dark yellowish brown silt clay loam, and the subsoil is yellowish brown clay in the upper part and

light olive brown flaggy silty clay in the lower part. These soils are moderately deep and permeability is slow.

**Prime Farmland Soils**

The US Department of Agriculture recognizes prime farmland as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, and fiber and oilseed crops and are available for these uses. Prime farmland can be cropland, pasture, rangeland, forest land and other land but not urban built-up land or water.

The soils considered prime for farmland have the soil quality, growing season and moisture supply needed to economically produce sustained high yields of crops when treated and managed according to acceptable farming practices. Typically, prime farmland soils have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content and few or no rocks. They are permeable to water and air. Prime farmland soils are not excessively erodible or saturated with water for a long time. They either do not flood frequently or are protected from flooding.

About 39,920 acres or 21 percent of Washington County meets the soil requirements for prime farmland. Areas of prime farmland are scattered throughout the county.

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

Map Symbol	Soil Names
BeB	Beasley silt loam, 2 to 6 percent slope
Bo	Boonesboro silt loam, occasionally flooded
CrB	Crider silt loam, 2 to 6 percent slope
Du	Dunning silty clay loam, frequently floods
EkA	Elk silt loam, 0 to 2 percent slope
EkB	Elk silt loam, 2 to 6 percent slope
FdB	Faywood silt loam, 2 to 6 percent slope
La	Lawrence silt loam (where drained)
LoB	Lowell silt loam, 2 to 6 percent slope
Ne	Newart silt loam, frequently floods
NhB	Nicholson silt loam, 2 to 6 percent
No	Nolin silt loam, occasionally floods
OtA	Otwell silt loam, 0 to 2 percent slope
OtB	Otwell silt loam, 2 to 6 percent slope
SeB	Shelbyville silt loam, 2 to 6 percent slope
ShB	Shrouts silt loam, 2 to 6 percent slope

# Chapter 6

## Community Facilities

## Chapter 6 Education

### Inventory of Existing Facilities

The Washington County School System is comprised of four public schools, and St. Dominic offers the only private school located in the county. Table 10 illustrates public and private school enrollment trends in Washington County. The Washington County School District provides traditional educational and innovative programs, including preschool, gifted education, advanced placement classes, dual credit options, and after school programs. In addition to a diverse curriculum, the school system has a 1:2 computer to student ratio and 15:1 pupil to teacher ratio.

The school system has completed several building projects to improve services to the county over the last several years. A new Washington County High School was built in 2015. Washington County Elementary School was recently renovated in 2017. The Washington County TEL Center was recently renovated in 2018 and houses the alternative program grades 6-12 (Commander Academy) and additional high school course offerings.

St. Dominic School is a nurturing and professional community of faculty, staff, students and parents who work together for the spiritual, academic, social, physical and emotional growth of every child. The school strives to create an atmosphere where parents, the first and foremost educators of children, work with teachers as partners in the development of the whole child. They are committed to providing students with the skills needed to grow, serve others, make a difference in the world, and to become active participants in the global society of the 21<sup>st</sup> century.

The U.S. Department of Education named St. Dominic School one of four non-public schools for the 2019 National Blue Ribbon Schools awarded in Kentucky.

St. Dominic was recognized for overall academic and program excellence. The Council for American Private Education administers the National Blue Ribbon Schools Program for private schools on behalf of the U.S. Department of Education.

<b>Name</b>	<b>Location</b>	<b>Enrollment</b>	<b>Grades</b>	<b>Construction</b>
Commander Academy	Springfield	50	6-12	Renovated 2018
North Washington Elementary	Willisburg	546	Preschool-8	1997
St. Dominic Elementary School	Springfield	213	Preschool-8	1929
Washington County Elementary School	Springfield	438	Preschool-5	Renovated 2017
Washington County Middle School	Springfield	174	6-8	2005
Washington County High School	Springfield	531	9-12	2015

Source: Table 10. Washington County School District 2019

### Area Colleges and Universities

Washington County is also served by numerous higher education facilities in the Lincoln Trail and Bluegrass regions. Table 11 shows higher education facilities near Washington County.

<b>Name</b>	<b>Location Miles/Distance</b>	<b>Enrollment Spring</b>	<b>Highest Degree Conferred</b>
Elizabethtown Community & Technical College Springfield Campus	Springfield (1.4)	350	Associate
Elizabethtown Community & Technical College	Elizabethtown (45)	3561	Associate
Bellarmino University	Louisville (57)	3761	Masters
Jefferson Community College	Louisville (58)	6448	Associate
University of Louisville	Louisville (55)	21795	Doctorate, M.D., D.M.D., J.D.
Campbellsville University	Campbellsville (28)	8056	Masters
Centre College	Danville (25)	1450	Baccalaureate
Asbury University	Wilmore (42)	1973	Baccalaureate
University of Kentucky	Lexington (55)	29737	Doctorate, M.D., D.M.D., J.D.
Transylvania University	Lexington (55)	968	Baccalaureate
Midway University	Midway (58)	1217	Baccalaureate
Lindsey Wilson College	Columbia (47)	2563	Baccalaureate
Kentucky State University	Frankfort (51)	1926	Masters
Spalding University	Louisville (58)	2071	Doctorate

Source: Council on Postsecondary Education Database

### **Public Facilities**

Many public buildings are necessary to serve the community. These public structures include fire stations, post offices, schools, parks, municipal and county offices, and other public sites, buildings and structures, and should be located as conveniently and efficiently as possible to serve the citizenry. In Washington County, most of the public facilities are in the county seat of Springfield.

### Washington County Courthouse

The Washington County Courthouse is located on the corner of Main and Cross Streets. This historic structure was built in 1816 and is the oldest courthouse in continuous use in the Commonwealth. The building is a two-story, Colonial structure with a basement. The County Judge/Executive and County Treasurer are located on the second floor of this structure. The Fiscal Court meetings are held in the original courtroom of the first floor. Additionally the first floor houses the Abraham Lincoln Legacy Museum.

The Courthouse Annex was built by the Works Progress Association in 1939 and houses several offices including the Planning Office, County Clerk Office, and State Employment Services.

### Washington County Public Library

The nucleus of the Washington County Public Library was actually planted in September of 1955 by Miss Margaret Willis. Three counties shared “a green truck” with one driver, Mrs. Gertrude Smith, taking reading material to the public in rural areas. In April 1962, the “green truck” was exchanged for a larger bookmobile; however, the needs of the people could not be satisfactorily supported. In September 1963, a sample library was set up in two very small rooms at the old L&N Depot building.

Washington County, as of July 2, 1964, became an established Public Library District. The library was moved to larger quarters in the Burns building on West Main Street, where it opened its doors on October 13, 1964. Early in the year of 1965, the Library Board secured an option on a lot of East Main Street between Carey & Son’s Funeral Home and the Telephone Company office. On April 14, the ground was broken for a “one story Colonial type building with a basement room under the rear portion.” The total cost of this building, equipment, and lot was approximately \$119,000.

In 2012, the Washington County Public Library purchased a parcel of land located between Fairgrounds Lane and Haydon Alley on US 150-West Main Street. The library was awarded a Public Library Facilities Construction Grant from the state in 2015. On September 28, 2015 ground was broken at 333 West Main Street in Springfield for the new 10,360 square foot library. An official ribbon cutting ceremony was held on November 1, 2017...celebrating 50 years of a library facility in Washington County.

Located at 333 West Main Street in Springfield, your Washington County Public Library is open Monday, Tuesdays, Wednesdays and Thursdays from 10:00AM to 8:00PM, Fridays from 10:00AM to 5:00PM, and Saturdays from 10:00AM to 3:00PM. The following are a few of our regular programs offered throughout the year. Tales for Tots (storytime for ages 1 to 3) is offered on Mondays from 10:00AM to 10:30AM, and on Wednesdays from 1:00PM to 2:00PM. Laugh & Learn (storytime for ages 3 to 6) is offered on Tuesdays from 5:00PM to 5:30PM, and 6:00PM to 6:30PM. Game On! (PlayStation 4 gameplay) is offered for our teenage patrons on Tuesdays from 4:00PM to 6:00PM. Main Street Readers (book club discussion group for adults) is offered the second Thursday of each month from 5:00PM to 6:00PM. Murder & Mayhem (a murder mystery book club) is offered every fourth Thursday, every other month from 5:00pm to 6:00PM.

The library offers an outstanding collection of the latest popular books, audio books, movies and music for our patrons to checkout. Through our website, patrons, may also access the same popular titles in digital formats suitable for play or viewing on home computers, tablets, e-readers and smartphones. The library has a knowledgeable staff that is always ready to help. Staff can assist patrons in navigating our reference and genealogy sections, or show them how to download an e-book to their smartphones. The library also provide several computer stations spread throughout the library dedicated to each age group, and Wi-Fi coverage for those who decide to bring their own devices. The library also has a bookmobile that provides topnotch service to all easily accessible areas within Washington County.

The Washington County Public Library's mission is to serve our community by recognizing the power of information and the joy of discovery, and to provide a variety of quality resources and programs to meet user needs.

#### U.S. Post Office

In most cases, post offices are leased, rather than federally owned because leasing provides flexibility. The location of federal buildings is dependent upon a demonstrated need rather than a basic standard.

Washington County has three U.S. Post Offices. The main county post office is situated on East Main Street in Springfield, and two smaller post offices are located in Mackville and Willisburg.

#### Washington County Senior Citizen Center

Constructed in 1998, the Washington County Senior Citizen Center provides a safe meeting place for the community's elderly population. This facility contains over 3,000 square feet and affords opportunities for the provision of services and programs for the growing senior population. Mackville Community Development, Inc. also operates a community center featuring senior programming and activities.

### **Recreational Facilities**

#### Existing Recreational Facilities

In recent years, Washington County and its incorporated cities have done a commendable job of maintaining, developing, and improving park facilities. The county has a wide variety of public and private recreational facilities. The City of Springfield has improved and expanded the activities and facilities at Idle Hour Park, and this facility is multi-faceted and offers a wide variety of recreational opportunities.

#### Additional Recreational Facilities

Federal, state, and private recreational facilities and open space within the Lincoln Trail region also serve Washington County. Four major recreational areas are owned by federal agencies: Rough River Reservoir (3,000 acres), Nolin River Wildlife Area (1,950 acres) Fort Knox Military Reservation (52,000 acres), and the Abraham Lincoln Birthplace National Historic Site (117 acres). The state owns and manages Yellowbank Wildlife Management Area (4,000 acres), Rough River Dam State Park (378 acres), My Old Kentucky Home State Park (235 acres) and Lincoln Homestead State Park (135 acres). Over 18,000 acres of recreational land is privately owned; however, many larger sites, over 5,000 acres, are closed to the public. Lincoln Homestead State Park, located five miles north of Springfield, has an 18-hole golf course and many other recreational facilities and activities.

**Recreational Areas in Washington County**

**Major Facilities and Features**

Name of Area	Location	Ownership	Total (acre)	Water (acre)	Land (acre)	Baseball	Softball	Basketball	Football	Tennis	Volleyball	Soccer	Golf	Playground	Picnicking	Camping	Swimming	Boating	Fishing	Hiking Trails	Walking Trails	Historic Sites	
Armory	Springfield	County	3		3			X															
Camp Calvary Christian Park	Mackville	Private	400	6	394	X	X	X			X				X				X				
Fredericktown Park	Fredericktown	County	7		7	X	X			X	X			X	X						X		
Idle Hour Park	Springfield	County	25		25	X	X	X		X	X		X	X	X						X		
Lincoln Homestead Lake	Springfield	State		5															X				
Lincoln Homestead State Park	Springfield	State	150		150								X	X	X								X
Mackville Community Center/Park	Mackville	City	11			X								X							X	X	
Mooreville Covered Bridge	Mooreville	County	3																				X
North Washington School	Willisburg	County	30					X				X											
Springfield Reservoir	Springfield	County		23															X				
St. Dominic School	Springfield	Private	3		3			X															
St. Rose Priory	Washington County	Private	495		495							X											
Washington County Board of Education	Springfield	County	8		8					X													
Washington County High School	Springfield	County	40		40				X														
Willisburg Lake	Willisburg	City	330	150	180																		X
Willisburg Park	Willisburg	City	25		25																		X

## **Public Police Protection**

Police protection for residents of Springfield and Washington County is provided by three (3) agencies: the Kentucky State Police, City of Springfield Police Department and Washington County Sheriff's Department. Providing the citizens of Springfield with a safe and harmonious environment in which to live, work and raise their families is the goal of the City's public safety program. The City realizes the importance of giving citizens the peace of mind that comes from knowing that all people, personal property, and businesses are safe and protected. An increase in population and/or property values requires a comparable increase in the public safety program. This important service must be supported at a level that keeps it flexible and responsive to community needs.

### Kentucky State Police

Kentucky State Police Post 15 is located in Columbia, KY. Post 15 is responsible for detecting, investigating, and apprehending individuals who violate laws, including those pertaining to illicit drugs and those who attempt to divert legitimate drugs for an illegal use. The Branch will maintain a liaison with other law enforcement agencies at local, state and federal levels and develop future strategies combating illegal drug activity within its geographical area.

Kentucky State Police Post 15 serves the following Kentucky Counties: Adair, Casey, Clinton, Cumberland, Green, Marion, Metcalfe, Monroe, Russell, Taylor and Washington. The Columbia Department is a full service post which enforces motor vehicle and traffic laws, performs criminal and complaint investigations, as well as coordinating the collection of information with local and federal law enforcement agencies.

### Sheriff's Department

The Sheriff's Department employs one (1) sheriff and five (5) full-time deputies. Department hours are from 8:00am to 4:30pm on weekdays; however, either the Sheriff or Sheriff's deputies are on call twenty four (24) hours a day, seven (7) days per week. The Sheriff's office currently utilizes six (6) patrol cars. In addition to its law enforcement activities, the Sheriff's Department also administers the D.A.R.E. (Drug Abuse Resistance Education) Program. They implement this program in the school by promoting the D.A.R.E. curriculum to assist young people in resisting substance abuse.

### Police Department

The schedules of the officers are staggered so that the City has someone on duty at all times. The countywide dispatching office is located at the main police station. The office is open twenty-four (24) hours a day to dispatch all state, county, and city police, as well as the fire and ambulance services. In addition to law enforcement activities, the Department also administers the D. A. R. E. (Drug Abuse Resistance Education) Program.

### Fire Protection

Adequate fire protection is an essential service within any community, often saving lives and property. Manpower, equipment, and a good emergency response system are important considerations, not only for county residents but also for prospective residents and businesses.

Fire insurance ratings and the associated insurance premiums are calculated according to the level of operation of each fire department. All fire departments are voluntary. It is important to note that the county has signed a Mutual Aid Agreement with the state to provide or receive assistance from other counties in the event of an emergency.

#### Ambulance Service

The Washington County Ambulance is an Advanced Life Support Service that employs 12 full-time personnel and 14 part-time personnel. The mission of the Washington County Ambulance Service is to provide the highest quality, pre-hospital care for the residents in Washington County. In addition to providing medical services to the community, the ambulance service performs a variety of educational services to the school systems, ride-along training to the vocational school and treatment for injuries at football games. Personnel also speak to various community organizations and offer classes.

#### Enhanced 911

Currently there is one (1) employee in the office of the Enhanced 911 system which is located at the Police Department. The primary responsibility of the Enhanced 911 Coordinator is to ensure that all residential, commercial, and industrial structures within the city and county are properly addressed with numbers displayed. Addressing efforts involve coordination with the post office and Bellsouth. A county ordinance requires each residence to have an address posted on the structure or entrance of driveway. All posted numbers must be readable from the road. In the future it is recommended that each address structure in the city is identified through a Global Positioning System (GPS) in order to more accurately assign addresses. These coordinates could then be used as a basis to establish a GIS mapping system for the county.

#### Emergency Management

Kentucky law requires each county and city to maintain an Emergency Management Department to serve the public safety interest of the local government. The primary function of the Washington County Emergency Management is the development of a comprehensive management program including an Emergency Operations Plan. The comprehensive emergency management program addresses the mitigation of, preparedness for, response to and recovery from major threats to public safety, resulting from emergencies and disasters that cause, or threaten to cause, loss of life, serious injury, significant damage to property, or major harm to public health or the environment. This department provides a variety of services to the community including disaster planning, public education for civic groups and schools, promotes weather safety and serves as the advisor to the county's Emergency Planning Committee. However, the senior officials in the county (Judge/Executive and Mayors) are in charge of establishing an Emergency Operations Center and all decision making in the event of an emergency or natural disaster. Although not a primary response agency, the EM officer coordinates the actions of the emergency response community. Additionally, flood plan data is provided within Emergency Management.

## **Health Department**

The Health Department serves as a medical clinic. The health department offers a variety of general services, women's services, children's services, diabetes control, tuberculosis screening, health education, vital statistics, sexually transmitted diseases, and a Women, Infants, and Children (WIC) Program which is federally funded. In addition, they offer some environmental programs such as public food services, on-site waste disposal, rodent and varmint control, rabies and nuisance control, radon testing, and private water supply testing.

## **Public Utilities**

The purpose of the public utility program is to provide the citizens with adequate water, gas, electricity, sewer, and garbage disposal. A public utilities program insures adequate potable water supply for consumption and commercial use, means of removal and treatment of sewage and garbage to prevent disease and contamination, and means to enhance and enjoy the amenities of a modern life. Public utilities are one of the larger public expenditures, both in initial capital outlay and continued maintenance and improvements. The county should develop effective and efficient programs of utility service for the present and future.

Upon completion of the Springfield Bypass, demand for services along the corridor will increase. Proper design and development of utility lines, utility rights-of-way, and increase of capacity should encourage economic development along bypass areas.

## Electricity

Electricity is supplied by the Kentucky Utilities Company, an electric generation and transmission company. The Salt River Rural Electric Cooperative Corporation, The Fox Creek Rural Electric Cooperative Corporation, and Inter-County Rural Electric Cooperative Corporation also serve Washington County. These three companies use The East Kentucky Power Cooperative as their source of power.

## Natural Gas

Atmos Gas Company provides natural gas service to Springfield.

## Water Services

Springfield and Washington County are served by Springfield Water and Sewer Department distribution system. The plant was updated in 2012 from 2 mill. to 3 mill.

The Water Treatment Plant is located at 603 West Main Street, beside the water/sewer office. Willisburg Lake is the primary water source. The current treatment capacity is 2,000,000 gallons per day. The plant was originally constructed in 1974 and updated in 1992. In August 2002, the commission instituted a Sewer Inflow/Infiltration Program. Inflow is defined as location where large amounts of storm water runoff may enter into the sewer collection system. Some sources of inflow include large holes in the collection system, missing sewer cleanout caps, missing manhole covers and household guttering being connected to sewer laterals. Current capacity of the plant is 3,000,000 gallons per day. We are only permitted to draw 2,000,000 gallons per day out of Willisburg Lake.

Infiltration is defined as locations where ground water may seep into the sewer collection system. Some sources of infiltration include deteriorating clay sewer laterals, broke or cracked lateral lines and main lines and leaking manholes.

This program involves determining sources of inflow and infiltration and removing such sources as is cost effective. The first step, completed in August and September 2002, involved smoke testing the entire sewer collection system. Some problems identified were gutters connected to the sewer lateral lines, broken or missing sewer cleanout caps, leaking sewer lateral lines and leaking sewer main lines.

The second step involved conducting flow monitoring. This required installing flow meters in selected manholes throughout the collection system to record the flow over a period of 3-4 weeks. This, combined with rainfall data for that period, was used to determine which sections of the collection system are prone to high levels of inflow and/or infiltration.

The third step involved some light cleaning of the sewer mains and putting a closed circuit camera through selected sections of main to determine the condition of the main as well as any blockages or intrusion of tree roots. This step was completed in April 2003.

The fourth step involves a visual inspection of each manhole and a GPS location for each manhole in the collection system to determine the condition of the manhole. As of July 2011, we had:

- 4757 customers (93% residential, 7% commercial and industrial)
- 20% of our customers enrolled in the Automatic Bank Draft Payment Program
- The average residence uses 4,800 gallons per month
- 13 employees (water department) and 4 employees (sewer department)

### Wastewater

The Wastewater Treatment Plant is located at 182 Bloomfield Road. In 1997 an SBR (Sequencing Batch Reactor) was installed, which was a retrofit to the previously used oxidation ditches. The treatment capacity is 880,000 gallons per day with a peak flow of 1,700,000 gallons per day. The average daily flow is 650,000 gallons. This plant is the first municipality in the state of Kentucky to use the SBR process. There are some industries in the state that also use the SBR process.

### Solid Waste Management

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

Division of Washington County includes the City of Springfield. The Washington County Fiscal Court is responsible for implementing the Solid Waste Management.

The County currently has a full-time Solid Waste Coordinator and a municipal universal solid waste collection system, established by ordinance. Residents have door-to-door collection and access to recycling facilities. All waste haulers must have a permit to operate and must file quarterly reports to the county in order for the solid waste coordinator to verify that solid waste is being disposed of in a permitted landfill. This information is also used to complete annual reports that must be submitted to the Division of Waste Management.

The Solid Waste Coordinator administers Washington County's Solid Waste Program, in accordance with established governmental laws and ordinances within the framework of the General Status and Fiscal Court policies. The administration is overseen through the general supervision of the County Judge Executive, and is evaluated through conferences, reports, and independent reports. Responsibilities include:

- Enforcing ordinance directives
- Identifying non-participants, and taking appropriate actions
- Expanding, overseeing, and documenting all recycling activity
- Overseeing inmate laborers and solid waste employees
- Coordinating, identifying, and cleaning all identified open dump sites
- Establishing public education programs regarding waste management issues for civic, school, and community groups
- Annually documenting and reporting solid waste issues to the state

The Solid Waste Coordinator oversees the Washington County Recycling Center and the Washington County Transfer Station. The Washington County Recycling Center accepts plastics, paper products, including cardboard, newspapers, magazines and books and etc. Their hours of operation are Monday through Friday 8am to 3pm. The Washington County Transfer Station accepts all metals and white goods or appliances for recycling. The transfer station accepts bulky items and yard waste. They do not accept tires or weekly solid waste. Their hours of operation are Monday through Friday 8am to 3pm and Saturdays 8am to 12pm.

### **Additional County Department/Services**

#### Washington County Animal Control

The Washington County Animal Control's mission is to provide services that safeguard public health, humanely house and care for animals in its charge, protect the animals in the community from abuse and neglect, provide citizens with information concerning responsible animal ownership.

### Washington County Coroner

The principal duty of the County Coroner is to determine cause of death. In the case of deaths occurring from natural circumstances, the extent of inquiry into the death is left to the discretion of the coroner who may authorize the physician of record to sign the death certificate.

### Dead Livestock Removal Service

The County established a service whose primary duty is to safely remove and dispose of dead livestock. Callers should be prepared to provide their name and phone number, the location of the animal to be removed, the nearest cross street to the animal's location, and the type of animal. There is a fee for this service.

### Washington County Electrical Inspector

Washington County Fiscal Court has contracted a County Electrical Inspector. Applications for inspections can be obtained from either the County Judge Executive's Office or from the county's website: [www.washingtoncountky.com](http://www.washingtoncountky.com). Inspections are performed on Wednesdays and Fridays only. Before an inspection can occur, completed forms must be returned to the County Judge Executive's Office.

### Washington County Fiscal Court

The Fiscal Court is responsible for setting policy, enacting ordinances, approving the county budget, and voting on all fiscal matters which pertain to a variety of services including road, public safety, parks and recreation, and human services. County residents are invited and encouraged to attend all Fiscal Court Meetings. The Fiscal Court meets twice a month at 9:00am in the 1816 Courthouse on the 2<sup>nd</sup> Monday and 4<sup>th</sup> Friday.

### Washington County Road Department

The Washington County Road Department maintains 230 miles of roads and employs eight (8) personnel. Responsibilities include winter snow/ice removal, installing culverts, and pipes, trimming roadside trees, road paving, mowing rights of way on county roads, sign placement and repair, maintaining ditches, patching road potholes, and performing general road repairs.

### Washington County Planning Commission

Responsibilities of the Washington County Planning Commission include enforcing subdivision regulations, preparing and reviewing the five (5) year comprehensive plan, reviewing plats that divide property before they are filed with the County Clerk's Office, and special studies as needed to do future planning for Washington County.

### Washington County Occupation Tax

The duties of the Tax Administrator are to collect and enforce the Washington County Occupational and Net Profit License Fee Ordinance as directed by the Fiscal Court. Occupational taxes are withheld from gross wages earned on a quarterly basis at the current rate of 0.75%. Net profit taxes are collected from the net profits of all business ventures, including public and private business, farms and farming operations, lessors of rental property and independent

contractors. The net profit taxes collected annually are based on Federal tax returns. The current tax rate is 0.75%. Persons doing business in Washington County are required to complete an Occupational License Application as well.

# Chapter 7

## Land Use Plan

## **Chapter 7**

### **Introduction**

The Land Use Plan is the most important element in the Comprehensive Plan. This plan provides a foundation for the physical development of the county. It indicates the area where residential development or growth should occur, as well as the areas within which related commercial and industrial functions should be located. It provides for an orderly pattern of development instead of the chaotic and inefficient pattern of land use generally associated with an unplanned community. It can eliminate the conflicts that occur when incompatible land uses are located in close proximity without an intervening buffer or transitional area or when non-residential traffic is routed through a residential neighborhood. The proper location and design of all land uses within a community will insure the economical and efficient provision of public facilities and services, reduction of traffic congestion, protection and enhancement of property values, enhancement of the appearance of the community, safety of all inhabitants of the planning area, and insure a quality of life for all citizens.

### **Purpose and Scope**

The purpose of the Land Use Plan is to delineate and recommend the most appropriate and desirable uses of land within the semi-urban and rural areas of Washington County and to accommodate those uses which can reasonably be expected during the next 29 years. It is intended to establish a beneficial and harmonious relationship between such uses and to insure the orderly growth of the community. The land immediately adjacent to the corporate limits of any city and particularly within the Springfield urban area must be taken into consideration during the county planning because it is likely this area will become annexed in the near future. This area also may be the recipient of municipal services, such as sanitary sewer service, during the interim period. It is also the area within the county, which will require the greatest consideration during the planning period. Planning cannot cease when a municipal boundary is reached. The planning process must include both the community and entire area that influences or is influenced by the municipality involved.

A Land Use Plan should provide a flexible guide for community development, rather than a rigid form or standard with which such development must conform. The Land Use Plan is subject to change and may be amended to reflect physical, transportation, economic, social, or other changes at the local, state, and national levels.

By state statutes, the Land Use Plan therefore must be reviewed every five years. The Planning Commission should initiate the review process and adopt land use and development policies to insure conformance with the Land Use Plan during the intervening period.

This plan places less emphasis upon static map areas and more emphasis upon policies, principles, and objectives, developed and discussed during a series of meetings held by the Planning Commission's representative and consultants. The policies, principles and objectives that guide the development of the planning area should be flexible to allow for adaptation to the changing needs of a community and to accommodate the proposals and concepts of private enterprise.

Planning is essentially a “people process”. Any planning process will succeed or fail on the basis of the relationships between various agencies and individuals and upon the support of the elected officials. The Planning Commission recognizes the significance of this process and developed this plan in terms of the human elements involved and worked with all interested agencies, organizations, and individuals within the planning area.

### **Washington County Land Use Plan**

Two important factors that affect the county’s land use and economy are agriculture and future industrial development. Agricultural production has influenced and continues to effect Washington County’s local economy. Farming accounted for approximately 13.1 percent of the county’s employment in 1990. Agriculture produces jobs and products, but it also affects local retail and service establishments geared toward agricultural producers and their local needs.

The formation of the Springfield-Washington County Economic Development Authority (SWEDA) has resulted in the recruitment of new industries and employment. The cooperative efforts between the City of Springfield and Washington County to attract business and industry are a positive step toward boosting the economy and attracting new jobs. These initiatives may spur economic development in the unincorporated areas of the county.

Washington County has experienced an increase in residential development within its unincorporated areas, and this trend is apt to continue. All new residential development in the county should be approved by the issuance of permits and compliance with the federal floodplain development guidelines.

### Development Standards

Each type of land use within a community or planning area should be developed in accordance with certain principles, standards, or location and developmental criteria. These standards will insure convenience, provide the greatest safety and insure the lowest ultimate cost to the public. The Planning Commission has recommended the following principles or standards for development within the county.

#### *Residential Development*

To protect against the formation of new blighted areas and to provide required public services at the lowest possible cost, new residential development should occur within areas appropriate for such development and should occur in accordance with desirable development standards. When considering new residential development or zoning map amendments for residential districts, the following principles or standards should be followed:

1. Residential areas should be located on land that is well drained, free from the danger of flooding, in close proximity to other developed areas and which has a sub-surface soil condition which is suitable for such development.
2. Residential areas should be free from the adverse effects and influences of encroaching incompatible uses.

3. Residential areas should have a street system that will discourage through and non-residential traffic and which will provide convenient access to neighborhood facilities as well as to adjoining major thoroughfares.

In addition, a continuing program of residential improvement on both community and county levels, including conservation, rehabilitation and beautification should be developed and instituted.

#### *Commercial Development*

The Planning Commission's objective is for commercial development to be located in areas where it is economically feasible to operate a business. The Planning Commission's objectives also include encouraging establishments that provide goods and services in a clean, attractive, safe and convenient manner.

When considering new commercial development or zoning map amendment for commercial zoning, the Planning Commission will observe the following principles or standards:

1. Protect the investments of existing and future commercial concentrations through the application of sound planning principles.
2. Protect residential neighborhoods from the depreciation of property values that would result from the intrusion of undesirable commercial area or uses.
3. Assure the maximum traffic capacity of arterial streets and highways through the proper location, grouping, and design of commercial uses.
4. Improve the economic base and tax structure of the planning area through the promotion of healthy and stable commercial concentrations.
5. Encourage attractiveness and compatibility by designing commercial areas that are integrated with adjacent residential areas through the liberal use of landscaping treatment.
6. Assure traffic safety by locating and designing commercial areas that have safe and convenient access, provide off-street parking, and separate vehicular from pedestrian traffic.
7. Provide for sufficient flexibility within the Comprehensive Plan and adopt planning policies to provide for and encourage new commercial development, and recognize the changing demands for this type of land use.
8. Assure the health and welfare of residents by making screening and/or buzzer zones mandatory where commercial development is allowed in close proximity to residential areas.

These general development principles encourage commercial developments that are properly located and constructed for the best possible use of the property involved.

#### *Industrial Development*

Washington County's industrial development needs may be satisfied through efforts of the Springfield-Washington County Economic Development Authority (SWEDA). The Planning

Commission supports SWEDA's efforts and encourages industrial development where it is economically feasible to manufacture and when the industry can provide goods, services, and employment in an attractive, convenient, and safe manner. The Planning Commission's goal is to encourage a variety and range of industrial sites with respect to size, location, transportation and infrastructure availability, and compatible surrounding land uses.

When considering new industrial development or a zoning map amendment to permit such development, the Planning Commission will observe the following principles or standards:

1. Protect industrial land from encroachment by non-industrial uses.
2. Provide for and encourage the elimination of industrial nuisances.
3. Adopt development standards that will prevent environmental pollution.
4. Encourage industrial parks and planned industrial uses.
5. Provide development standards that are flexible enough to permit industrial uses to adapt to new technological developments.
6. Provide for industrial access roads and adequate routes to adjoining major streets and highways.
7. Provide for and require the provision of adequate municipal services such as sanitary sewer, water, and police and fire protection.
8. Protect residents by requiring buffer zones or screening between industrial and residential development as a requisite to a zoning change.

### **Cooperative Extension**

The University of Kentucky is a land grant partner with Washington County through the Cooperative Extension Service. The Washington County Extension Service provides county agents, advisory council members and volunteer leaders to assist all residents of the county to build better communities and improve quality of life.

### **Conclusion**

Washington County is now on the threshold of a new era. New types of commercial development have occurred and will continue to occur in the future. The next 5 years, or the planning period embraced by this plan, will be important and challenging years for the governmental, business, and professional leaders and citizens within the County. While it may be a considerable period of time before every citizen within the planning period will benefit from the increased economic, social and cultural opportunities resulting from well-planned growth, the plans initiated, accomplished, and implemented will be reflected in the orderly development and efficient public investment.

The Comprehensive Plan recommendations are only a few issues to be addressed during the next 5 years. Washington County will realize other demands and needs created by unanticipated developments within the planning area in the future. These demands and needs will not be satisfied without proper implementation of the recommendations set forth in this planning document.

# Chapter 8

# Transportation Plan

## **Chapter 8**

### **Introduction**

The Transportation Plan is one of the elements in the Comprehensive Plan. This plan includes all elements of the transportation system within the planning area, including vehicular, rail, and air transportation. This plan places primary emphasis on vehicular transportation and the major thoroughfare system within the planning area. The system permits traffic to circulate within the planning area and is generally the key to the potential growth of the area. The adequacy of this transportation system, development and performance of all land use, and human activity within a planning area are dependent upon the adequacy of the vehicular transportation system. As the community develops, it will experience significant changes. The transportation needs of a particular area differ from those served by the original system. New road construction and alteration of existing transportation facilities involve significant public expenditures by local, state, and federal governments. Therefore, communities should develop a transportation plan that assists with minimizing duplications and oversights in the construction and improvements of transportation facilities.

### **Purpose**

The purpose of the Transportation Plan is to analyze the present traffic circulation system, project future demands on the transportation network, and make proposals that will provide for the future needs of the planning area.

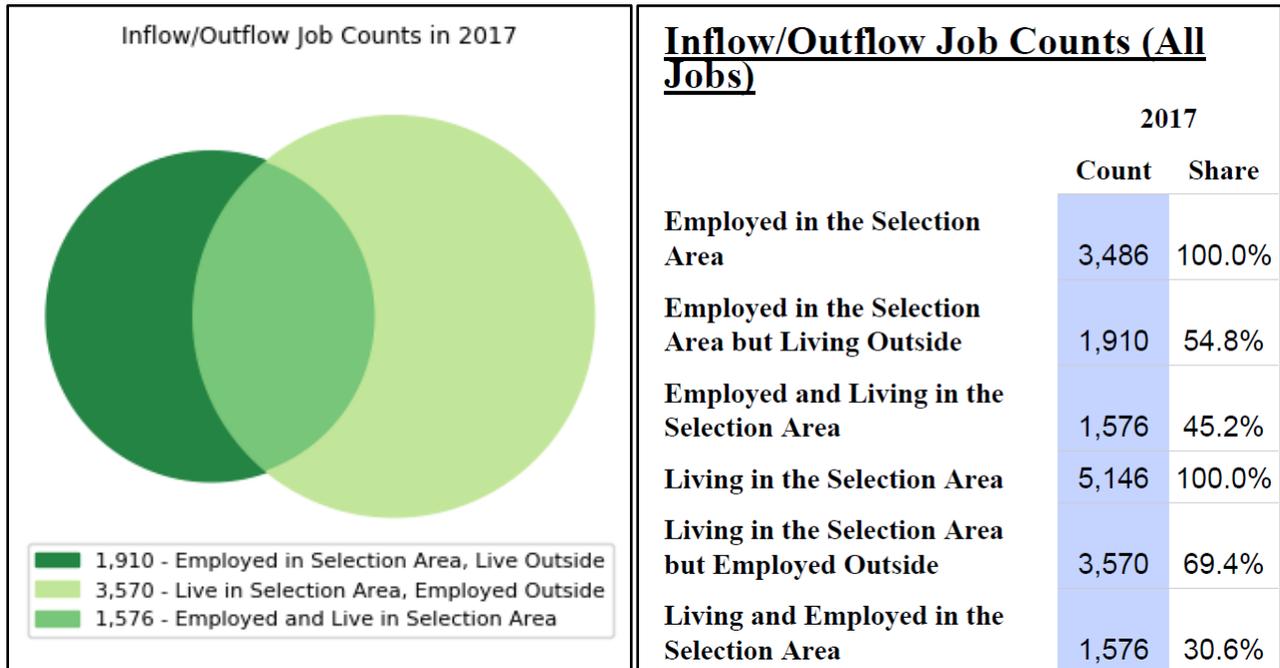
### **Scope and Benefits**

This Transportation Plan provides specific solutions to traffic problems. It also provides for the proper distribution of specific land uses, recommends transportation systems to facilitate movement between land uses, and increases the safety and value of the land uses. This plan will enhance the utilization of community facilities by improving accessibility and safety. The scope of this plan generally is limited to major highways, arterial routes and collector streets within the planning area. Such consideration of these streets not within the major category will help determine their importance in the future. This plan does not include proposals for residential streets or other minor streets expected to remain within this category during the planning period.

### **Traffic Patterns**

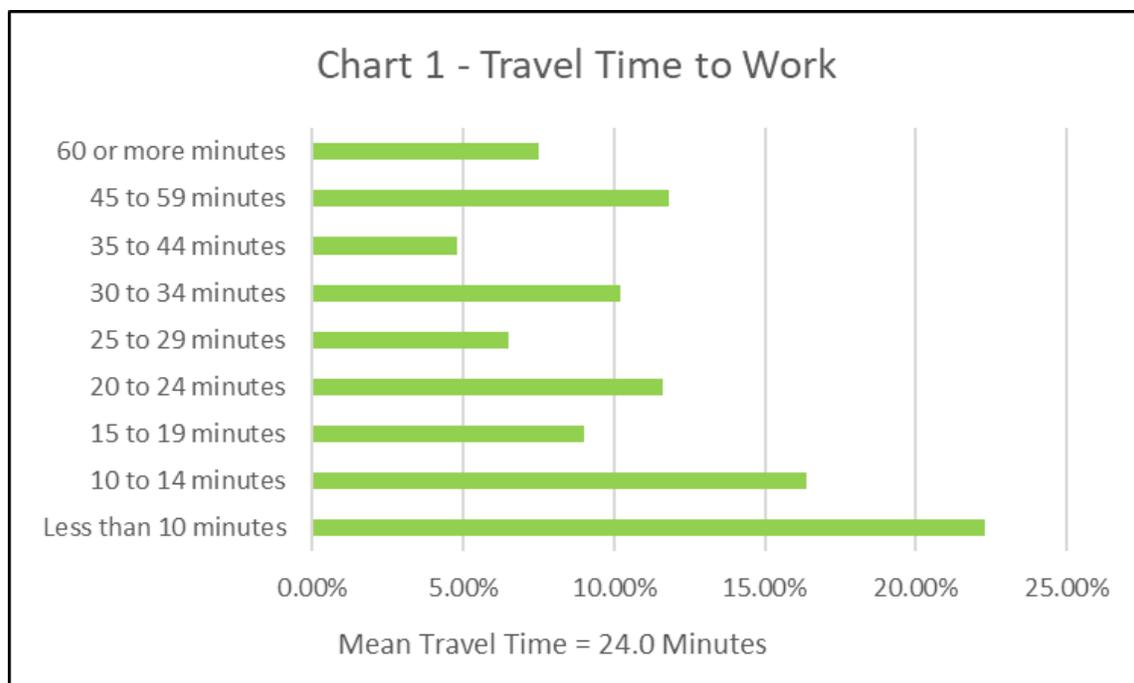
The combination of commuting patterns and characteristics of commuter travel is essential for planning highway improvements and developing transportation services. Designing programs to ease traffic problems during peak periods, conserve energy, and reduce pollution is also important. This analysis provides the basis for determining travel locations and purposes in describing the geographic patterns of commuter travel and volume of travel in each flow between origins and destinations, such as suburban counties to central cities, or county to county. Figure 1 illustrates commuting patterns in Washington County in 2017. Of all county employed residents, only 30.6% were employed within Washington County. 69.4% traveled outside of the county.

Figure 1 – Inflow/Outflow of Jobs vs Residents



Source: U.S. Census Bureau Data 2017, Longitudinal-Employer Household Dynamics Origin-Destination Employment Statistics (2002-2017).

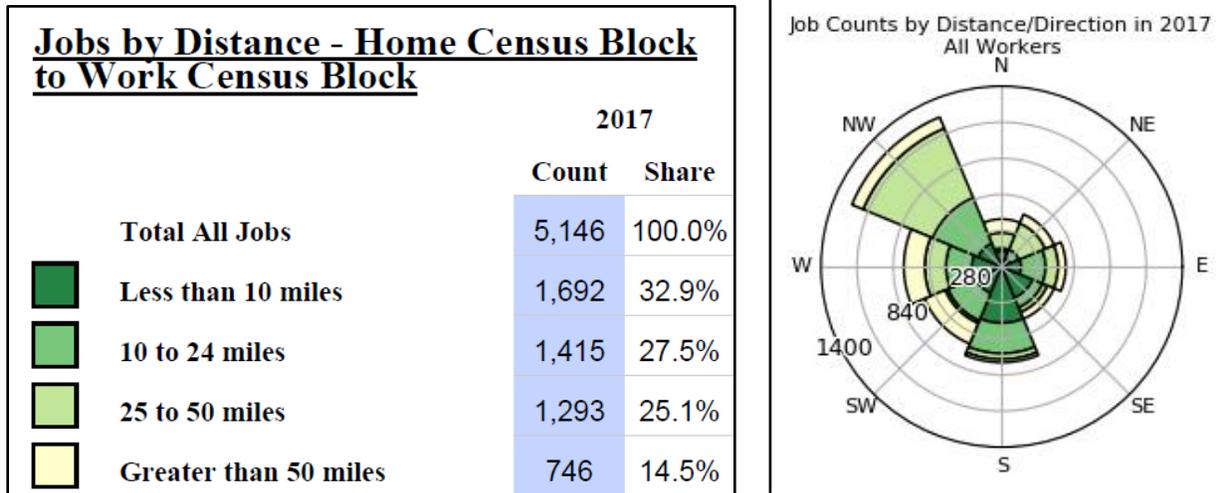
An important commuting characteristic is the amount of time workers spend in a vehicle. Of the workers residing in the county; the mean travel time was 24 minutes and 7.5% commuted an hour or more one way as presented below.



Source: U.S. Census Bureau Data 2017 5 Year American Community Survey.

Where these workers are traveling to and from can provide insights for planning a transportation network. An understanding of their mode of travel is also important and analysis of this information should be considered when making decisions regarding growth areas.

Figure 2 – Distance and Direction of Travel to Work



Source: U.S. Census Bureau Data 2017, Longitudinal-Employer Household Dynamics Origin-Destination Employment Statistics (2002-2017).

Figure 2 provided details on the distance traveled by county employed residents to their job. It also notes that most of the longer distance travels tend to be west to northwest in direction.

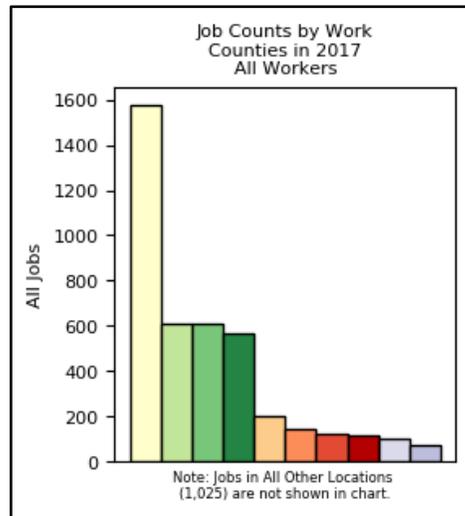
The illustration below provides details on where these employed county residents travel to work.

Figure 3 – Where Washington County Residents Work

**Jobs Counts by Counties Where Workers are Employed - All Jobs**

2017

	Count	Share
All Counties	5,146	100.0%
Washington County, KY	1,576	30.6%
Jefferson County, KY	612	11.9%
Nelson County, KY	611	11.9%
Marion County, KY	565	11.0%
Boyle County, KY	203	3.9%
Hardin County, KY	147	2.9%
Fayette County, KY	122	2.4%
Mercer County, KY	115	2.2%
Franklin County, KY	101	2.0%
Warren County, KY	69	1.3%
All Other Locations	1,025	19.9%



Source: U.S. Census Bureau Data 2017, Longitudinal-Employer Household Dynamics Origin-Destination Employment Statistics (2002-2017).

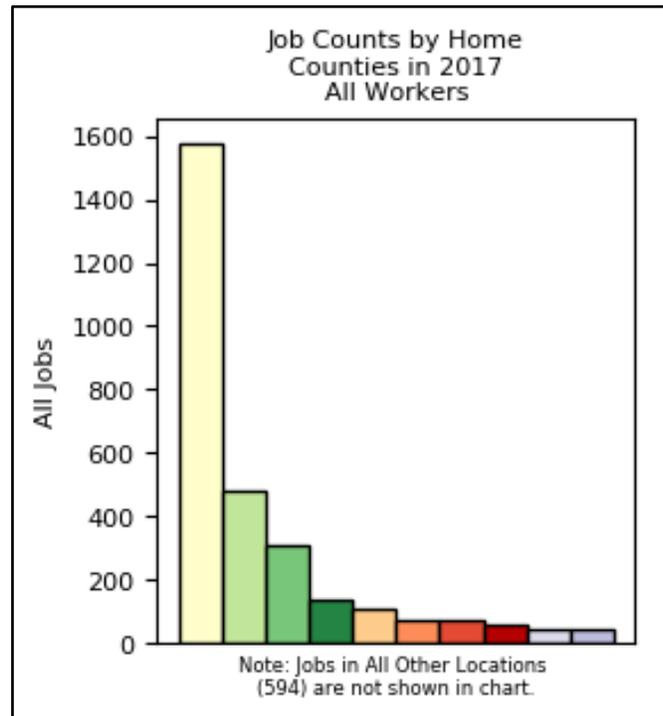
The other aspect is the person’s place of residence who are employed in the county. This is portrayed in Figure 4.

Figure 4 – Where Washington County Employees Live

**Jobs Counts by Counties Where Workers Live - All Jobs**

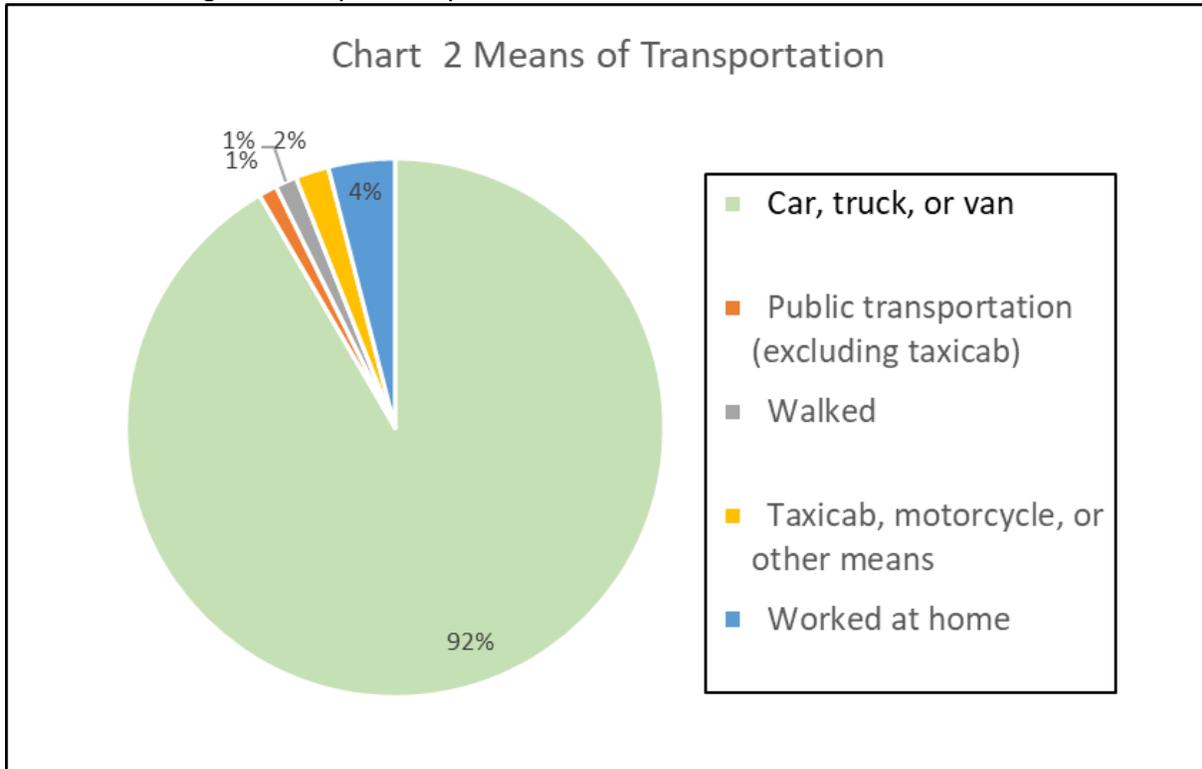
2017

	Count	Share
All Counties	3,486	100.0%
Washington County, KY	1,576	45.2%
Marion County, KY	477	13.7%
Nelson County, KY	308	8.8%
Boyle County, KY	137	3.9%
Taylor County, KY	111	3.2%
Mercer County, KY	72	2.1%
Jefferson County, KY	69	2.0%
Hardin County, KY	57	1.6%
Anderson County, KY	45	1.3%
Fayette County, KY	40	1.1%
All Other Locations	594	17.0%



Source: U.S. Census Bureau Data 2017, Longitudinal-Employer Household Dynamics Origin-Destination Employment Statistics (2002-2017).

The means of transport also plays a factor. Chart 2 provides this information. Note that of the 92% that use a car, truck or van to commute, 82% drove alone, leaving 10% who carpooled. This is an average of 1.06 persons per vehicle.



Source: U.S. Census Bureau Data 2017 5 Year American Community Survey.

Traffic patterns depend on many variables, such as trip generators and trip attractors. These trip generators and attractors include, but are not limited to:

<u>Trip Generators</u>	<u>Trip Attractors</u>
Population	Commercial Areas
Residential Densities	Employment Centers
Auto Ownership	Recreation Facilities
Employed Labor Force	School Enrollment
School Enrollment	Civic Facilities
Extent of Public Services	Transportation

Anticipated traffic generators within Washington County include all primary and secondary schools and commercial and industrial areas in Springfield. Virtually all of the traffic flows between these generators and residential districts within the planning area.

### **Railroads**

R.J. Corman Railroad Corporation, a branch line railroad, provides the nearest rail service to Springfield. R.J. Corman Railroad is located 17 miles northwest of Springfield in Bardstown. The nearest intermodal facilities are located in Louisville, Kentucky.

### **Air Service**

The Lebanon-Springfield Airport is the nearest air service facility. Located 4 miles south of Springfield, the Lebanon-Springfield Airport has one paved runway of 5,000 feet in length and offers airfreight service and occasional commercial service. The nearest scheduled commercial airline service is the Blue Grass Airport in Lexington with 1.3 million annual departures/arrivals. The nearest international airport is located in Louisville. The Louisville International Airport serves over 3.8 million passengers annually from many of the nation's major airline companies. It also is the third busiest cargo airport in the United States due to the location of the UPS World Hub there.

### **Regional and Federal Transportation Network**

The regional and national transportation network affects Washington County's land use development. The existing regional and national transportation network includes:

Interstate 65 is a national freeway beginning in Chicago, Illinois to the north and ending in Mobile, Alabama on the Gulf of Mexico. This expressway links the metropolitan Louisville area with Nashville, Tennessee, and services both the Mammoth Cave National Park and Bowling Green urban area. At Elizabethtown, I-65 connects with the Bluegrass Parkway and the Western Kentucky Parkway.

The Bluegrass Parkway is a state parkway connecting Lexington to the east at I-65 near Elizabethtown in the west. The Parkway interchanges with KY 555 in Washington County 15 miles north of Springfield.

The Western Kentucky Parkway aka I-69 begins at Elizabethtown and connects with I-24 near Eddyville in Western Kentucky.

Interstate 64 is a national freeway which enters Kentucky in Louisville and exits Kentucky near Ashland, at the West Virginia border. Its nearest access point to Washington County is at its junction with I-75 in Lexington.

### **Washington County Highways**

Washington County has a total of 490 miles of roadways. The county maintains 236 miles and the Kentucky Department of Highways maintains 215 miles. The remaining are 19 miles of city streets and 20 miles of private roads that are addressed for E911 purposes.

U.S. Highway 150 and Kentucky Routes 55 and 555 converge in Springfield. U.S. 150 and Kentucky 555 are rated as an "AAA" (80,000 pound gross load limit) and serve as an outlet around the downtown area on the west side. Kentucky 55 is rated "AAA" from its intersection with Bypass 555 south to Lebanon, a distance of 9 miles. Kentucky 55, north of Springfield, and Kentucky 152 west of Springfield are rated "AA" (62,000-pound gross load limit). The completion of the US 150 Bypass along the north side of Springfield in 2011 has allowed traffic to bypass downtown congestion.

## **Washington County Road Classifications**

The following classifications for the roads in Washington County have been determined for planning purposes by the Federal Highways Administration and used by the Washington County Planning Commission. Information used to classify the roads were primarily traffic counts, road characteristics, state classifications, and other considerations. The Washington County Road Classification Map should be consulted for specific locations of road classifications.

**Arterial** -An arterial is a street or highway designed to carry major traffic loads through and within the planning area. Arterials carry the highest volume of traffic and much of this traffic has moderate to long trip length. For arterials in Washington County, the concept of access to abutting land should be subordinate to the movement of major traffic loads. The arterials designated in Washington County are U.S. Highway 150, KY Highway 555 (from U.S. 150 to Marion County line), and Bluegrass Parkway.

**Major Collectors** - A major collector is a street or highway that carries moderate traffic loads within the planning area. Collectors gather traffic from local streets and empty that traffic into arterials. Collectors usually are located on the outer perimeter of residential neighborhoods. They provide access and mobility within residential, commercial and industrial areas. The major collectors designated in Washington County include Highway 555 (from U.S. 150 to Nelson County line), KY Highway 433, KY Highway 438, and KY Highway 152.

**Minor Collectors** - A minor collector is a street which gathers traffic from local streets and funnels it into other minor collectors, major collectors or arterials. Minor collectors normally run through residential, commercial or industrial areas gathering the traffic from the local streets.

Both land access and traffic movements are important functions of minor collectors. The following roads are designated as Minor Collectors in Washington County: KY Highway 529, KY Highway 458, KY Highway 1796, KY Highway 53, KY Highway 1586, KY Highway 442, KY 2758, KY Highway 1404, KY Highway 429, KY Highway 1183, and KY Highway 1872.

**Local Streets and Roads** - A local street or road is a street which has the primary function of providing land access and has a low traffic volume. Local roads typically comprise the largest portion of total mileage within an area, but carry only a minor portion of the total vehicle miles traveled. Local streets offer the lowest level of traffic mobility and thru-traffic movement is often discouraged by design.

## **Planning & Design Criteria**

A system of roadways should provide the blueprint for the logical and desirable development of the planning area and facilitate the safe and efficient movement of goods and people. The specific criteria the Planning Commission will use to determine the relationship between land use and major streets and roads include the following:

1. A variety of street and roads should be provided, designed to serve specific needs and relationships between various land uses and traffic patterns within the

planning area. These include arterials, major and minor collectors and local streets and roads.

2. Safe and convenient access should be provided to all developed or readily developable property in the planning area.
3. Roadways, carrying the capacity of arterial road systems, should be maintained by prohibiting, when necessary, the storage of vehicles on the roadway and limiting side street intersections to intervals of six hundred feet. The movement of traffic is the primary function of the arterial road system and vehicle storage and land access are incidental and subordinate uses of arterial roads.
4. Each road system and its terminal facilities such as parking and aisles, will be designed with sufficient capacity to accommodate anticipated traffic volumes based on the density of existing and planned land use.
5. Density of land use should be controlled to preclude traffic volume on any arterial or major collector from exceeding its designed capacity. Conversely, when it is deemed advisable to increase the density of development in a specific area, the capacity of adjacent arterials and collectors should also be increased to keep the anticipated increase in traffic volume compatible with road capacity.
6. Arterial and collector streets should be planned to direct industrial and commercial traffic away from residential streets, elementary schools, neighborhood playgrounds and other facilities that generate pedestrian traffic, in order to protect foot traffic from through vehicular traffic.
7. Arterial and collector roads should be designed to provide easy access to all public and quasi-public facilities, particularly schools and parks.
8. Arterial and major collector roads and streets should be designed to separate incompatible land uses whenever possible.
9. To ensure public safety, pedestrian walkways and sidewalks should be provided within neighborhoods and along streets, especially those leading to and from schools and community parks.

### **New Road Design for Residential Land Use**

To avoid future road problems, it is essential that new roads be properly designed to handle expected future traffic volumes. These requirements not only promote road safety but also assure adequate access for fire and rescue vehicles and adequate vehicular circulation. The following road design standards should be applied in subdivision development:

1. Roads should be designed to minimize the visual size and scale of the development and help discourage excessive speed.
2. Street widths and alignments should be carefully scaled to neighborhood size and be patterned after the character of existing residential streets.
3. The amount of road pavement should be minimized through efficient layout and design.
4. Access from a primary road to the site must be adequate, must have the capacity to handle traffic generated by the proposed project, and will not endanger the safety of the general public.

5. Direct automobile links should be made to the existing communities to emphasize the connections between existing and new development.

### **County Road Improvement Program**

The County Road Improvement Program is the planning of road improvement. This program identifies the transportation needs of the county and schedules actual construction. This planning process should be a continuous activity. The goal of the county road improvement program is to practice efficient road management and to provide adequate, safe, and economical road travel. The program should be carried out in six steps: inventory, classification, measurement of road improvements, financial planning, priority analysis, and program assembly.

Upon implementation, the county should undertake a program evaluation and develop additional programs for road maintenance and improvements.

During the statewide transportation planning process known as SHIFT (Strategic Highway Investment Formula for Tomorrow), two significant highway projects in Washington County were selected to improve safety and mobility of the county.

1. KY-55, which is a part of Heartland Parkway and connects the Bluegrass Parkway to the Cumberland Parkway, will be widened and modernized from the Marion/Washington County line North to US-150X in Springfield. This reconstruction project is slightly over 4.5 miles in length and is expected to cost approximately \$4.85 million.
2. US-150 will be modernized and widened from west of Fredericktown Rd (KY-1872) to mile point 6.557 which is near the former St. Catharine College. This reconstruction project is slightly over 6 miles in length and is expected to cost approximately \$20.3 million.

# Chapter 9

# Implementation

## **Chapter 9**

### **Introduction**

The recommendations in the Comprehensive Plan are based upon research and analysis and should be implemented by dividing the county into designated zones restricted as to the type of land use permitted and density of development. Implementation is also accomplished by the use of subdivision regulations and capital improvement programs. Each planning decision, whether it is traffic flow in proposed subdivisions or zoning map amendment, must be guided by the Comprehensive Plan. It is also necessary that any and all development guides or regulations be coordinated with the Comprehensive Plan to ensure consistency and compatibility.

### **Local Leadership**

The key to implementation of planning policies rests with the Washington County Fiscal Court. The local governing body adopts the County's goals and objectives, approves zoning map amendments, adopts the subdivision regulations, and in general, guides the County's growth. Therefore, the Washington County Fiscal Court and Washington County Planning Commission should maintain a close affiliation in order to coordinate and fulfill the goals of the county.

### **Subdivision Regulations**

Washington County Subdivision Regulations provide a means to ensure that land development takes place in accordance with the local goals and objectives. Subdivision regulations control and direct the separation of one or more parcels of land from a larger parcel and establish standards for development. A well-designed subdivision has two very important functions within the overall development of a community. The subdivision is a plot of land divided into sections or lots and is where residents of the community can build their homes. The subdivision also serves as an extension of the community's orderly growth. Thus, subdivisions only fulfill their primary functions with an appropriate circulation pattern integrating streets, homes, and utilities into the existing community.

Community leaders, acting through the planning commissions, must strive to insure that all subdivision proposals have allowed for the proper integration of the subdivision into the community. This subdivision review should include basic traffic considerations to insure that the circulation system provides access to individual property, accommodates traffic, allows for easy access of maintenance and emergency equipment, and is logically related to local topography.

### **Zoning**

Washington County does not have a zoning ordinance. This is an implementation tool that separates various land uses, such as residential, commercial, industrial, and agriculture into districts and establishes a set of permitted uses and regulations for each district. The zoning ordinance may further subdivide districts to provide for various intensities of use. The zoning ordinance imposes controls, setbacks, height, lot size, parking, signage, and other development elements appropriate to each district.

The zoning ordinance should provide for an appropriate number of zoning districts, including but not limited to:

1. Agricultural districts for farming activities and single-family residential uses with restricts, as well as some related commercial and industrial uses, are usually permitted.
2. Residential districts restricted to single-family detached houses and multi-family units of two or more dwellings per lot. A number of residential districts may be established to provide different densities of dwellings per acre.
3. Commercial districts for differing intensities of activities, such as neighborhood business, highway business and general business districts.
4. Industrial districts differentiated by a heavy or light designation.
5. Special use districts for mobile homes, planned unit development, historic preservation, or other uses.

Other sections of the ordinance include the official zoning map, general regulations, definitions, and administration and enforcement guidelines.

### **The Zoning Process**

Kentucky Revised Statutes outlines the procedure for reviewing zoning decisions. These regulations stress the importance of basing zoning decisions on the recommendation and guidelines contained in the Comprehensive Plan. KRS 100.201 states:

*Except as provided in Subsection (2) of KRS 100.137, when the planning commission and legislative bodies have adopted the statement of goals and objectives, and the planning commission has additionally adopted at least the land use element for the planning unit, the various legislative bodies and fiscal courts of the cities and counties, which are members of the unit may enact land use regulations, including zoning or other kinds of growth management on an interim or permanent basis to promote public health, safety, morals and general welfare of the planning unit, to facilitate orderly and harmonious development and the visual or historical character of the unit, and to regulate the density of population and intensity of land use in order to provide for adequate light and air. Land use and zoning regulations may be employed to provide for adequate light and air. Also, land use and zoning regulations may be employed to provide for vehicle parking and loading space, as well as to facilitate fire and police protection, and to prevent the overcrowding of land, blight, danger, and congestion in the circulation of people and commodities, and the loss of life, health, or property from fire, flood or other dangers. Land use and zoning regulations may also be employed to protect airports, highways, and other transportation facilities, public facilities, schools, and public grounds, historical districts, central business districts, prime agricultural land and other natural resources, and other specific areas of the planning unit which need special protection by the planning unit.*

### **Zoning Map Amendments**

Should the County adopt a Zoning Ordinance, the Ordinance would be comprised of two parts: text and map. While zoning map amendments are more common than text amendments, both can be amended within compliance with notification and public hearing requirements set forth of by Kentucky Revised Statutes.

Most Planning Commission business consists of zoning map amendments, and KRS 100.212 sets forth the procedures for zoning map amendments. KRS 100.213 dictates the relationship between zoning map amendments and Comprehensive Plan and mandates the following process:

1. Before any map amendment is granted, the planning commission or the legislative body or fiscal court must find that the map amendment is in agreement with the adopted comprehensive plan, or, in the absence of such a finding, that one or more of the following apply, and such finding shall be recorded in the minutes and records of the planning commission or the legislative body or fiscal court.
  - (a) That the existing zoning classification given to the property is inappropriate and that the proposed zoning classification is appropriate.
  - (b) That there have been major changes of an economic, physical or social nature within the area involved which were not anticipated in the adopted comprehensive plan and which have substantially altered the basic character of such area.

### **Capital Improvements Program**

The capital improvements program is a project priority listing for the construction of roads, bridges, schools, utilities, parks, and other public facilities, services, and infrastructure in the comprehensive plan. Washington County should consider the development of a capital improvements program because the timing of public projects affects the timing of surrounding land development. Scheduling public improvements can be an important factor in preventing uneconomical and unplanned development in the County.

### **County Road Improvements Program**

The County Road Improvement Program is the planning of road improvement. This program identifies the transportation needs of the County and schedules actual construction. This planning process should be a continuous activity.

The goal of the county road improvement program is to practice efficient road management and to provide adequate, safe, and economical road travel. The program should be carried out in six steps: inventory, classification, measurement of road improvements, financial planning, priority analysis, and program assembly.

Upon implementation, the County should undertake a program evaluation and develop additional programs for road maintenance and improvements.

## MAP DESCRIPTIONS

### Transportation

#### Functional Classification

This map illustrated the defined Functional Classifications as defined by the US Federal Highway Administration. The Functional Classification allows customers to understand how the different roadway segments make up an interdependent hierarchical network of arterial, collector, and local roads for efficiently moving traffic through the system. It also helps planners and engineers increase travel efficiency and cost effectiveness as they design, build and maintain these roads. Source: Kentucky Transportation Cabinet, 2019.

#### Projects

This map highlights the current projects that are in the KYTC's Continuous Highways Analysis Framework (CHAF). CHAF is an application enabling users to collect, track and analyze identified transportation needs. CHAF also provides a means to sponsor, score and rank projects as part of the Strategic Highway Investment Formula for Tomorrow (SHIFT). This program is run through the KYTC's Regional Transportation Program, KYTC's District Field Offices and the Area Development Districts throughout the state. Source: KYTC 2019.

#### Surface Types

This map illustrated the surface material of all roads in the County. It is based on the KYTC Centerline Road program. Source: KYTC 2019.

#### Traffic Flow & Counts

This map provides data on Average Annual Daily Traffic Counts (AADT) for many major road segments based on data from both permanent and temporary count stations. The Traffic Flow is illustrated by color and line thickness to highlight higher flows. The individual count stations show the county total and the year of that value. 129 count stations were used with dates ranging from 2010 thru 2018. Source: KYTC 2019.

#### Crash Density

This map illustrates crash density based on three factors; total crashes, injuries as result of crash, and deaths as result of crash. For each crash data point, the individual factors were assigned a value as follows:

Crash =1      Injury= 5x Number of injuries      Death=10x Number of deaths

Each point's data was summed to provide a value for each "crash". This data was then presented as an "elevation heat" map to illustrate areas of higher vs. lower density to highlight areas for potential focus of concern. The dataset included 4,725 data points for the timeframe April 1, 2004 –June 30, 2019. It is overlain with the Traffic Count Flow data that was also presented in the Traffic Map to relate the travel density to the crash density. Source: Crash Data from Kentucky State Police modified as described. Traffic Flow from KYTC.

## **Public Utilities**

### Electric

This map illustrates the approximate coverage areas of the various electric utilities that provide service to Washington County. The data is sourced from the Kentucky Public Service Commission, 2018. Four utilities provide coverage over portions of the County:

Blue Grass Energy Cooperative Corp.  
Inter-County Energy Cooperative  
Kentucky Utilities Company  
Salt River Elective Cooperative

### Water

This map presents the service areas and line coverage for portable water for the County. It also displays major components of the systems that lie within the County, to include: Lines, Tanks and Treatment Facilities. Four utilities provide water service in the County. They include:

Bardstown Municipal Water Department  
North Mercer Water District  
South Anderson Water District  
Springfield Water & Sewer Commission

Source: Kentucky Infrastructure Authority, 2019.

### Wastewater

This map shows the treatment system for the City of Springfield. Treatment is primarily provided within the corporate limits with a few minor exceptions. The remaining portion of the County uses septic systems. Source: Kentucky Infrastructure Authority, 2019.

## **Communications**

### Cellular Service

This map displays the location of cell towers in and near Washington County. They are highlighted by the “Call Sign” which is based on their location and the owner of the antennas. Their approximate ideal coverage zones are illustrated by the colored corresponding hachured overlays. This dataset is extracted from the FCC Universal Licensing System Database and corresponding contours showing coverage area in the Cellular Aggregate Call Sign Service Area Boundary (SAB) layer. Source from the Federal Communications Commission, 2018.

KNKN795, KENTUCKY RSA 4 CELLULAR GENERAL PARTNERSHIP D/B/A BLUEGRASS CELLULAR  
KNKN940, DC KENTUCKY NEWS CO, LLC  
KNKN964, NEW CINGULAR WIRELESS PCS, LLC  
KNKQ346, NEW CINGULAR WIRELESS PCS, LLC

## **Land Use**

### Existing

This map provides a general land use category breakout of Washington County. Note that while the county does not have zoning, it does have subdivision regulations in place. The City of Springfield has zoning within its corporate limits. The land use is based on Washington County PVA Parcel Data, circa 2019. It has been modified as reviewed by the County Planning Commission to reflect its current land use. The land use is broken out by the following categories:

- Commercial
- Industrial
- Institutional
- Recreational
- Residential
- Transportation
- Utilities

In addition, Conservation Easements from various sources to include the USDA NCRS and Kentucky Department of Agriculture are illustrated.

### Future

This map provides a prospective future land use breakout of Washington County. Note that while the county does not currently have zoning, it does have subdivision regulations in place. The City of Springfield has zoning within its corporate limits. The land use is based on Washington County PVA Parcel Data, circa 2019. It has been modified as reviewed by the County Planning Commission to reflect its current land use.

## **OTHER MAPS**

- Soils
- General Highway
- Flood Plain
- Population Density (3)