



## LAFAYETTE COUNTY, MISSOURI

# COMPREHENSIVE DEVELOPMENT PLAN UPDATE 2003 - 2020



### Lafayette County Comprehensive Plan Guiding Principles

- ✓ Preserve and protect agricultural resources and rural character
- ✓ Direct most new development in or around incorporated areas
- ✓ Ensure that Urban Service Area development supports city growth plans
- ✓ Allow rural residential development in unsewered areas with adequate roads
  - ✓ Direct most non-urban lots to rural residential areas
  - ✓ Strictly limit development in the Agricultural/Resources Tier
- ✓ Ensure that new development funds its full share of infrastructure costs

“Growth for the sake of growth is the  
ideology of the cancer cell”  
- Edward Abbey

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## Table of Contents

Table of Contents .....	iii
List of Exhibits .....	iv
List of Maps.....	v
Chapter I. Introduction .....	1
1. Purpose of the Plan .....	1
2. Using This Plan.....	2
3. Statutory Requirements.....	3
4. Planning Process .....	3
Chapter II. Existing Community .....	7
1. Role of the Natural Environment.....	7
2. Role of the Built Environment.....	23
3. Role of Social and Economic Trends.....	34
4. Growth Assessment .....	46
Chapter III. Community Growth Goals & Policies .....	47
1. Desired Community Qualities in 2020.....	47
2. Key Planning Issues .....	47
3. Public Policy Structure.....	50
Chapter IV. Implementation & Benchmarks .....	68
1. Implementation .....	68
2. Annual Review & Monitoring .....	68
3. Future Land Use Plan Amendments .....	68
4. Policy Review & Amendment .....	69
5. Relationship to Budget.....	69
6. Description of Implementation Tools .....	69
7. Plan Implementation Program .....	71
Appendix A: LESA Example .....	75
Appendix B: Maps.....	78

## List of Exhibits

Exhibit 1: Planning Process.....	6
Exhibit 2: Location Map.....	9
Exhibit 3: Temperatures and Precipitation (1971-2000).....	10
Exhibit 4: Low, High, and Mean Temperatures.....	10
Exhibit 5: Monthly Mean Precipitation.....	11
Exhibit 6: Floodplain Data.....	12
Exhibit 7: NFIP Participation.....	12
Exhibit 8: Soil Types.....	14
Exhibit 9: Soil Productivity Class.....	17
Exhibit 10: Acres Planted by Crop (1990-2001).....	18
Exhibit 11: Acres Planted by Crop.....	18
Exhibit 12: Bushel Yield per Acre (1990-1998).....	19
Exhibit 13: Head of Livestock (1990-2001).....	19
Exhibit 14: Farm Tenure & Acreage (1950-1997).....	20
Exhibit 15: Farm Operators Occupation (1987-2002).....	21
Exhibit 16: Threatened and Endangered Animal Species in Missouri.....	22
Exhibit 17: Threatened and Endangered Plant Species in Missouri.....	22
Exhibit 18: Land Use by Acres (1995).....	24
Exhibit 19: Zoning by Acres, 2000.....	24
Exhibit 20: 2000 Housing Occupancy.....	25
Exhibit 21: 1990 & 2000 Dwelling Units per Structure.....	25
Exhibit 22: Single Family Dwelling Permit Data Table (1990-2000).....	26
Exhibit 23: Single Family Dwelling Permit Data Graph (1990-2000).....	27
Exhibit 25: Public/Semi-Public Water Systems.....	29
Exhibit 26: CPWSD No. 2 Users and Supply.....	30
Exhibit 27: CPWSD No. 2 Suppliers (2000-01).....	30
Exhibit 28: School Enrollment by District.....	31
Exhibit 29: Students per Classroom Teacher (1996-2001).....	32
Exhibit 30: High School Drop-Out Rates*.....	32
Exhibit 31: Historical and Projected Population (1900-2020).....	35
Exhibit 32: Total County Population (1900 – 2020).....	36
Exhibit 33: City and County Population.....	36
Exhibit 34: City and County Population Change.....	37
Exhibit 35: 2010 Projected Population Age Distribution.....	38
Exhibit 36: 2020 Projected Population Age Distribution.....	38

Exhibit 37: 1990 & 2000 Dependency Ratios .....	39
Exhibit 38: 1990 & 2000 Race and Hispanic & Latino Population .....	40
Exhibit 39: 1990 & 2000 Household Characteristics .....	41
Exhibit 40: Employment by Industry .....	42
Exhibit 41: Labor Force (1990-2001) .....	43
Exhibit 42: Educational Attainment, 1990 and 2000 .....	43
Exhibit 43: Median Household Income.....	44
Exhibit 44: Per Capita Income .....	44
Exhibit 45: Poverty Profile.....	45
Exhibit 46: Bank Deposits.....	45
Exhibit 47: Residential Growth Calculations .....	46
Exhibit 48: Growth Tiers & Corresponding Zoning Districts.....	52
Exhibit 49: Tier Facilities and Minimum Improvements Standards .....	53
Exhibit 50: Future Land Use Categories .....	54
Exhibit 51: Functional Road Classes.....	65
Exhibit 52: Design Characteristics by Functional Road Classification.....	66
Exhibit 53: Plan Implementation Program .....	73

### **List of Maps**

Map 1: County Base Map.....	79
Map 2: Topography .....	80
Map 3: Hydrology .....	81
Map 4: Soils.....	82
Map 4b: Prime Agricultural Lands.....	83
Map 5: Land Use .....	84
Map 6: Zoning .....	85
Map 7: Road Districts.....	86
Map 8: Traffic Counts .....	87
Map 9: Public Water Supply Districts.....	88
Map 10: School Districts .....	89
Map 11: Population Change (1990-2000) .....	90
Map 12: Growth Tiers .....	91
Map 13: Future Land Use Map .....	92

## Chapter I. Introduction

### 1. Purpose of the Plan

Lafayette County resides on the edge of the constantly expanding Kansas City Metropolitan region. In recent years, this expansion, which previously and continuously consumes neighboring Jackson County and suburbs therein, has begun to strongly influence development patterns in Lafayette County. Cities and rural areas within Lafayette County, located in the southwest near Jackson County, have experienced population growth and accompanying rural residential sprawl. Finite land resources and public infrastructure are being inefficiently used at the expense of existing levels of public service while placing upward pressure on taxes and conflicting with agricultural uses.

Prior to the development of this document, planning for this impending change occurred in 1987 with the adoption of the “Lafayette County Comprehensive Guide Plan”, which was premeditated to serve as a guide until the year 2007. The 1987 Plan provided a policy framework to guide local government decisions relating to issues related of land use, infrastructure, community image and commercial development. Since the completion of the 1987 Plan, the built environment of the County has evolved prompting the need to revisit and revise County land use and infrastructure planning goals and policies. This document embodies a collective vision for Lafayette County’s future development patterns. This vision seeks to accommodate population growth in the most efficient, unobtrusive and beneficial manner possible for current and future citizens. Upon the outset of developing this Plan, a gathering of citizens articulated a statement that succinctly expressed this community vision.

### “Harmony in Growth”

Building from the clear guidance of this vision statement, this plan sets forth a discernible course of action, which if followed will accomplish the following goals:

*Establish a Consensus Vision* – Development of the plan employed a number of meaningful citizen participation tool to create a collective community vision and approach to effectuate the community’s desired quality of life within the built environment.

- *Guide Land Use* – A significant number of recommendations within the plan relate to the changing private and public use of land. Consistent with the vision statement, land use guidance seeks to allow and preserve an appropriate mix of agriculture, residential, commercial and industrial uses in such a manner as to not cause nuisances, contribute to a livable community and use existing public investment in infrastructure efficiently without placing a burden on the fiscal health of taxpayers.

*Guide Public Investment* – Land use changes profoundly influence public investments in infrastructure and services. The demand for local public goods is adjunct to land use change and infrastructure standards modifications. Within the Plan, suggested public infrastructure investment and finance policies are invariably linked to proposed land use patterns and existing infrastructure capacity.

*Encourages Inter-jurisdictional Communication* – Lafayette County encompasses several municipalities and public facility districts that have a significant interest and exert influence over development activities within and adjacent to their boundaries. The Plan promotes coordination, cooperation and communication between the County and these entities for the betterment of both parties as well as the rural and urban citizens of the County.

*Establish a Course of Action* – In addition to goals, objectives and strategies, the plan explicitly charts a course of action to implement the County vision. Community leaders scrutinized numerous growth management and financing tools and techniques to craft an acceptable implementation program indicating who shall undertake the action and a proposed time of completion.

*Sets Benchmarks* – Measuring the success of the policies and actions advocated herein is imperative to determining the success of County activities. The plan provides basic benchmarks that if monitored can provide insight to the effectiveness of the County's implementation activities to bring the Plan to fruition. Benchmark evaluation provides testimony for future Plan amendments and the alteration of implementation strategies and activities.

## 2. Using This Plan

Many observers of local government planning have noted that many comprehensive plans are completed and then placed on the shelf. Planning without action is a futile endeavor. The Plan will not implement itself. Implementation responsibility lies with the citizens of Lafayette County and in particular the elected officials, appointed officials and staff of the County. The aforementioned course of action clearly indicates what steps the County must take to move towards the preferred development pattern. The County staff should review development applications, infrastructure plans, infrastructure standards, development regulations and make budget recommendations against the policies contained herein. The Planning Commission should review applications before them for consistency against the plan and advocate fiscal appropriations to implement the plan. County Commissioners establish many local laws, policies and programs that effect the natural and built environment of the County. Among these include: zoning and subdivision regulations, health codes, capital improvements programs (CIP), annual budget, infrastructure standards and numerous policies, all of which should be considered under the guise of the Comprehensive Plan.

Although the County government has little direct influence over the affairs of municipalities, rural service providers and landowners, these stakeholders play an important role in plan implementation. To the greatest extent possible, the County should coordinate rural growth decisions with cities to ensure compatibility and efficiency with the cities future growth pattern. This coordination is best

implemented through an intergovernmental agreement to formalize rights, responsibilities and procedures for coordination in the cities sphere of influence. Rural service providers, primarily rural water districts, should be consulted with when a development proposal and infrastructure improvements are considered. The availability of public services is a key determinant for development approval through the County Planning Commission and County Commission. Private individuals, entities and their agents should consider the provisions of the Comprehensive Plan prior to investing in property or making development proposals.

### 3. Statutory Requirements

Establishment of policies embodied within the Comprehensive Plan must adhere to procedural and content specific requirements set forth in State enabling legislation that authorizes the County to adopt and implement land use and infrastructure controls. Prior to embarking in the planning process, State law must be reviewed to establish parameters under which the planning process and resulting document must conform.

The 1987 Plan was created pursuant to Sections 64.510 and 64.550 which establish the means for second and third class Counties to prepare and adopt a “County Plan”. Prior to 1984, the electorate of the County granted the County Commission approval to provide for the creation, modification and implementation of a County Plan applying over the unincorporated regions of the County. The Lafayette County Commission created the Planning Commission for the purpose of preparing and administering the County Plan. Once the Planning Commission has developed a plan, a duly publicized public hearing must be held after which the Planning Commission may adopt the plan by resolution requiring a simple majority of the full membership. Once adopted an attested copy of the plan must be certified to the County Commission, Recorder of Deeds, and clerk of each incorporated area completely or partially covered by the plan.

State statutes provide guidance on the content of the plan and stipulates that at a minimum the plan must be developed so as to:

- conserve the natural resources of the county;
- insure efficient expenditure of public funds; and
- promote the health, safety, convenience, prosperity and general welfare of the inhabitants.

### 4. Planning Process

The establishment of far reaching public policy requires substantial study and consideration before enactment. As such, the Plan was developed over a year long process that examined numerous attributes of the County, drew upon local knowledge and customize implementation to suit local needs. Understanding the manner in which this Plan was developed provides awareness to the breadth of community conviction supporting the goals and means of the Plan. The underlying premise of this plan is to accommodate in a harmonious fashion anticipated future growth on the edge of the Kansas City metropolitan growth engine. While this is a reactionary rather than



proactive doctrine, this planning approach is a prototypical. The general planning process utilized for this study is shown in **Exhibit 1**. Lafayette County's employed planning process consummated the validity of the Plan by basing recommendations on grassroots desires, locally acceptable development patterns and politically feasible implementation.

- **Existing Conditions Analysis** - In order to plan for the future, you need to know where you've been and determine where you want to go. As is common with most planning processes, the development of the Lafayette County Comprehensive Development Plan began with an assessment of the existing physical, economic, social and fiscal conditions that prevail within the County. Baseline data concerning the existing conditions were collected from numerous sources including Federal, State and local government agencies and service providers. Review of this data, confirmed local assertions concerning growth in the County and illustrated opportunities afforded the County to address issues. An accumulation of this data is located in Chapter II of this Plan.
- **Citizen Input** – A series of public workshops were conducted to provide a forum for public education, discussion and value gathering. Two workshops were held:

November 15, 2001 – Odessa

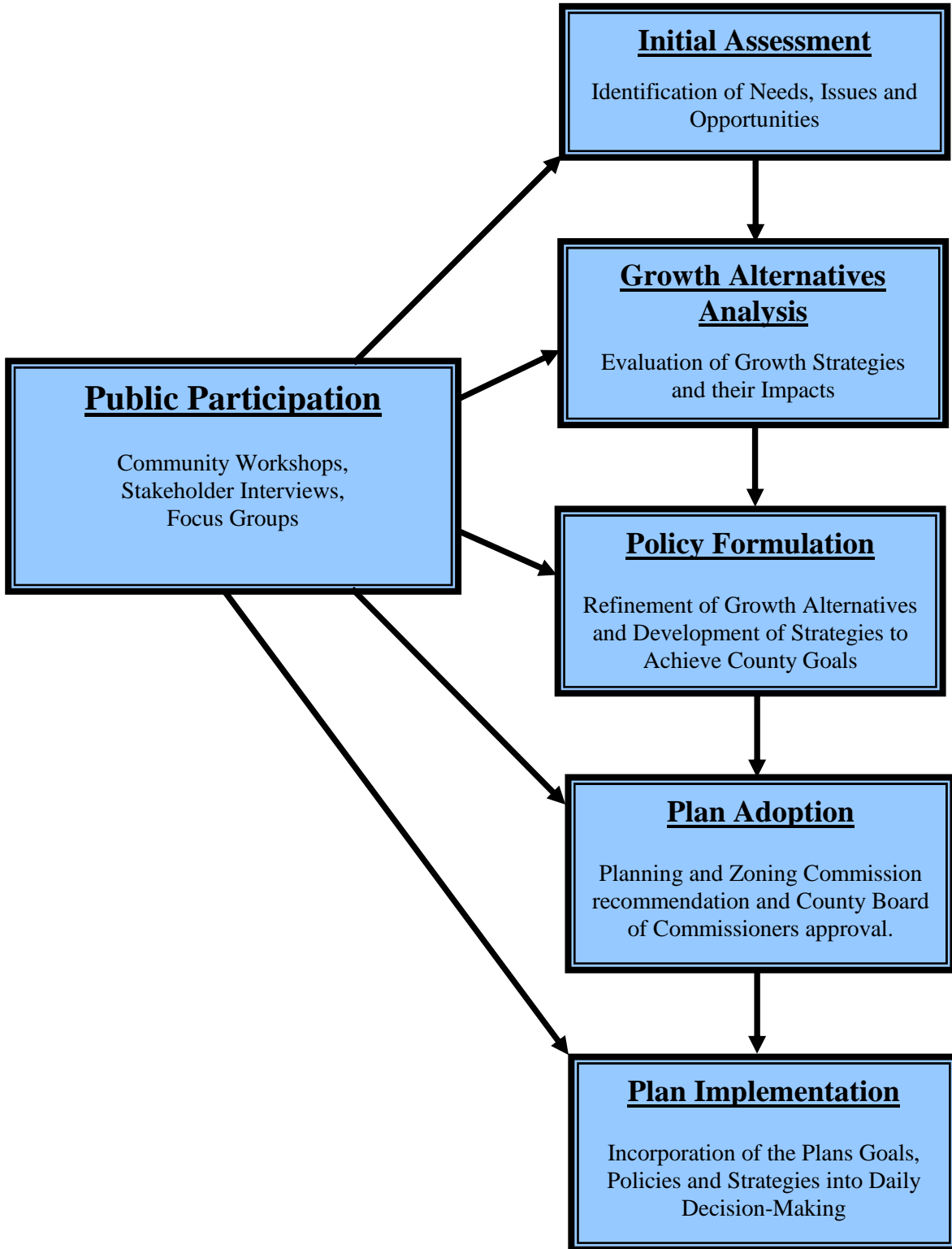
January 31, 2002 – Alma

The workshops featured a number of questions to be discussed with fellow citizens in small groups. After a period of discussion, the small groups shared their responses with the entire group. Comments generated through the workshop aided the development of the plan issues, goals and objectives.

- **Goals, Objectives and Policies Setting** – The goals, objectives, policies, and strategies were developed and refined over the course of 2002 to 2004 by the Planning and Zoning Commission as they considered growth pressures facing Lafayette County and citizen input.
- **Public Hearings** – In conformance with state statutes, Lafayette County held public hearings for Plan review and adoption by the Planning Commission and County Commissioner. Public hearings offer a formal setting in which the public can provide testimony regarding the Comprehensive Plan. The Planning and Zoning Commission held Comprehensive Plan public hearings on the following dates:
  - March 1, 7:00 p.m. – 8:30 p.m. Wellington High School Cafeteria, Wellington
  - March 3 6:00 p.m. – 7:30 p.m. Courthouse, Lexington Circuit Courtroom
  - March 8 6:30 p.m. – 8:30 p.m. Odessa High School Auditorium, Odessa
  - March 10 6:00 p.m. – 7:30 p.m. Laf. County C-1 Administration Building, Higginsville
  - March 14 6:00 p.m. - 7:30 p.m. Concordia High School Library, Concordia
  - March 14 8:00 p.m. – 9:30 p.m. Santa Fe High School Cafeteria, Alma
  - March 17 7:00 p.m. – 8:30 p.m. Corder VFW, Corder
- **Revaluation and Amendment** – This Plan is intended to be fluid amendable document that

should be modified as conditions and needs change within the County. However, any amendment to this Plan should be thoroughly considered before modifications are made.

*Exhibit 1: Planning Process*



## Chapter II. Existing Community

The word “community” invokes numerous intermingled meanings. Before a community can plan for it’s future, it must examine where it’s been and develop a likely scenario of where it wants to go. Lafayette County’s community fabric is defined by many physical, economic and social characteristics. While every aspect of community contributes to quality of life, for practical purposes the development of this Plan focuses on attributes that directly influence land use, infrastructure and fiscal matters. Chapter II examines natural, manmade, social and economic factors having the most direct relationship to achievement of the visions to harmonize in growth. Examination of these variables will explain the current situation and provide insight into modifications that are necessary to arrive at the desired outcomes.

### **community**

1. A group of people living in the same locality and under the same government.
2. The district or locality in which such a group lives.
3. A group of people having common interests.
4. Similarity or identity.
5. Sharing, participation, and fellowship.
6. Society as a whole; the public.
7. A group of plants and animals living and interacting with one another in a specific region under relatively similar environmental conditions.
8. The region occupied by a group of interacting organisms.

### 1. Role of the Natural Environment

The physical characteristics and natural environment provide both opportunities and constraints to land development in Lafayette County. Primary considerations are the County=s soils, flood prone areas along major drainageways, conservation areas and water quality. The natural environment establishes steadfast parameters under which development is possible and to what extent development can degrade basic quality of life elements.

The following assessment provides an overview of the environmental conditions, resources and issues that form a foundation for the County=s growth management initiatives. Although the use of land for agriculture is a manmade phenomenon, agriculture will be discussed in this section due to its intimate relationship with environmental factors.

**Primary environmental concerns include soil and water quality, floodplains and conservation areas.**

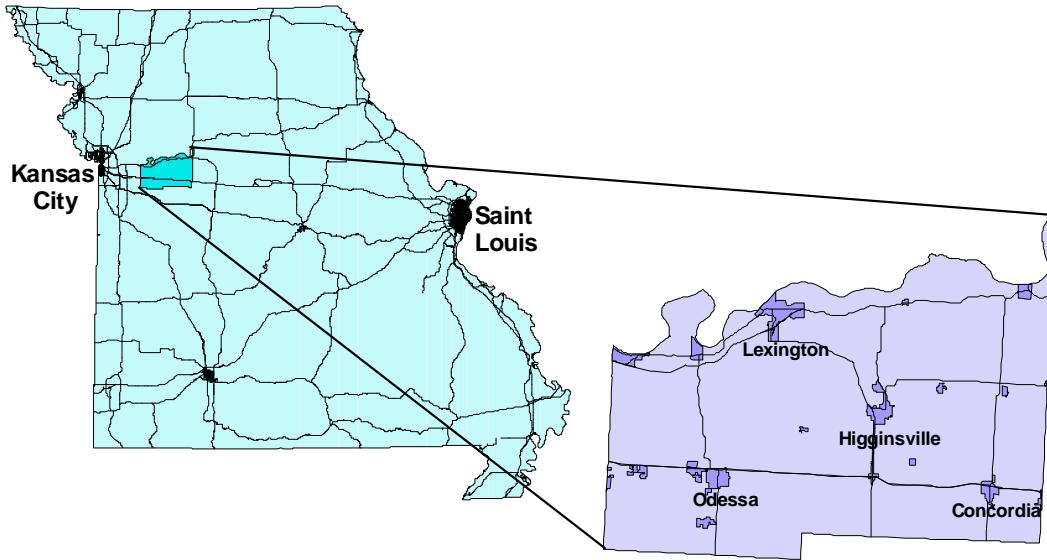
### Geographic Setting and General Information

Lafayette County encompasses approximately 639 sq. miles (404,160 acres) in west central Missouri within the Lower Missouri River Valley (**Exhibit 2**). The Missouri River borders the county to the north adjacent to Ray (northwest) and Carroll (northeast) Counties. Other neighboring jurisdictions include: Jackson County (west), Saline County (east) and Johnson County (south). The west border of the County is approximately 25 miles east of downtown Kansas City and the east border is approximately 200 miles west of downtown St. Louis along Interstate 70 (I-70).

A number of towns form the economic and social centers of the County, namely: Alma, Aullville, Bates City, Blackburn, Concordia, Corder, Dover, Emma, Higginsville, Lake Lafayette, Lexington, Mayview, Napoleon, Odessa, Waverly and Wellington (**Map 1**). Historically, these incorporated communities functioned as hubs for a significant agriculture industry. In the early 1800's, Lafayette County was a link along the route from St. Louis to Fort Osage (near Independence) and played host to fur trappers, pioneers and others heading west. In the middle 1800's, towns were established at regular intervals throughout the County to accommodate the limited mobility of agriculture products and to take advantage of improvements along rail and water transportation routes. A source of water was also a critical factor in the location of frontier towns.

The County seat of Lexington, located on the north central border, was the site of Jack's Ferry along the road from Blufton to Fort Osage. Travel along the north side of the Missouri River was restricted by Indian treaty and the south side of the river was on a bluff. Most travelers would cross the river at Jack's Ferry, from north to south, engage in commerce and continue west. Many frontier entrepreneurs cultivated opportunities in young Lafayette County. The City of Lexington was incorporated in 1822 and is a focal point for historical events. As a port along the Missouri River and a major frontier route, the city has many historically significant sites. Due in part to its strategic location, the city was the scene of the Battle of Lexington during the Civil War, which left a prominent scar on the courthouse.

With the mechanization of agriculture and introduction of the automobile to the transportation mix in the early 1900's, social and economic trends shifted towards a slow decline in agriculture's supremacy in the local economy, although agriculture remains a major activity. Lafayette County has followed the nationwide trend of fewer farmers, larger farms and more jobs in the service and retail sectors. The phenomenon of suburban sprawl, which began after World War II, is knocking on Lafayette County's western flank due to the expanding influence of the Kansas City Metropolitan area in Jackson County. Population growth and the accompanying pressures on public services, land uses, infrastructure, historical sites and natural resources represent the next major shift in the County's environment. The manner in which these impending changes are accommodated will have broad consequences for all who live, work, play and invest in Lafayette County.

*Exhibit 2: Location Map*Topography/Geology

There are three primary topographical features in the County. Most of the land is characterized as a gentle sloping plain with a few hills. Across the plain traverse a number of small to moderate sized streams with occasional small lakes. Along the Missouri River in the north, there are flat wide river bottomlands bordered to the south by ridges that rise to the sloping plain lands. The ridges contain gullies and are eroded due to water flow over land to the Missouri River.

As illustrated in **Map 2**, the elevation of the County ranges from 1,083 feet above sea level to 639 feet. Lower elevations occur along the Missouri River alluvial plain while the higher elevations occur on isolated uplands on the plains.

Climate

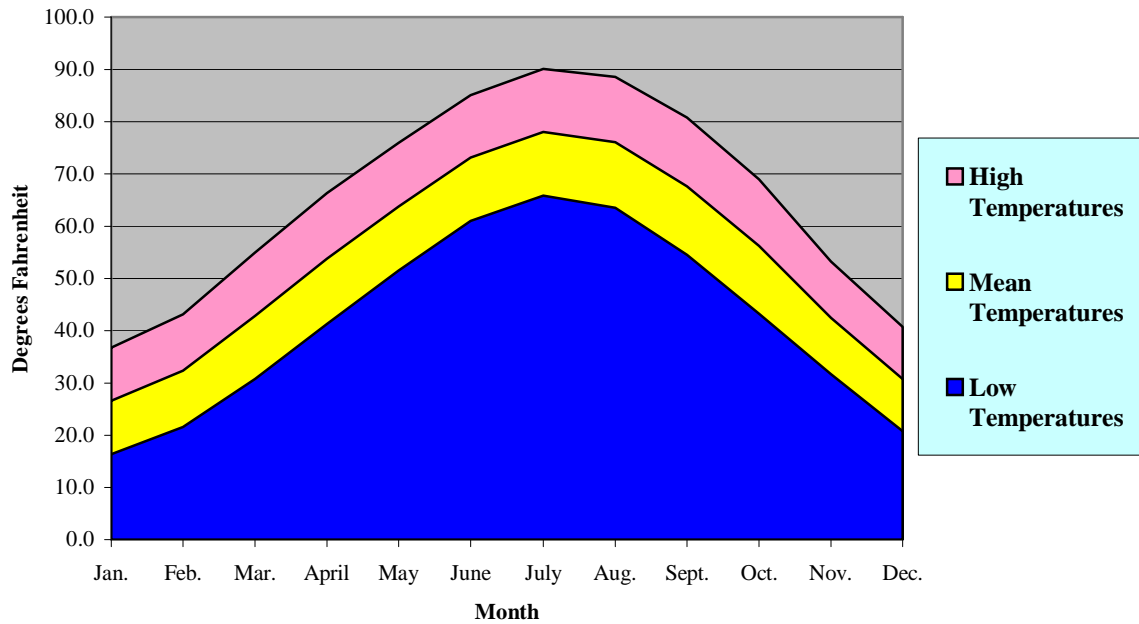
Lafayette County climate is characterized by generally mild weather with significant fluctuations in temperature. Average low temperatures range from 16.4°F in January and 65.8°F in July (**Exhibits 3 & 4**). Average high temperatures range from 36.7°F in January and 90.1°F in July. The annual mean temperature is 53.7°F. Mean precipitation ranges from a low of 1.47 inches in January to 4.85 inches in May (**Exhibit 5**). The prevailing winds are from the south and southwest in the summer and from the north and northwest in the winter. Significant weather events occur in the form of high winds, heavy rains, electrical storms, large hail, tornadoes, freezing rain and occasional flooding.

**Exhibit 3: Temperatures and Precipitation (1971-2000)**

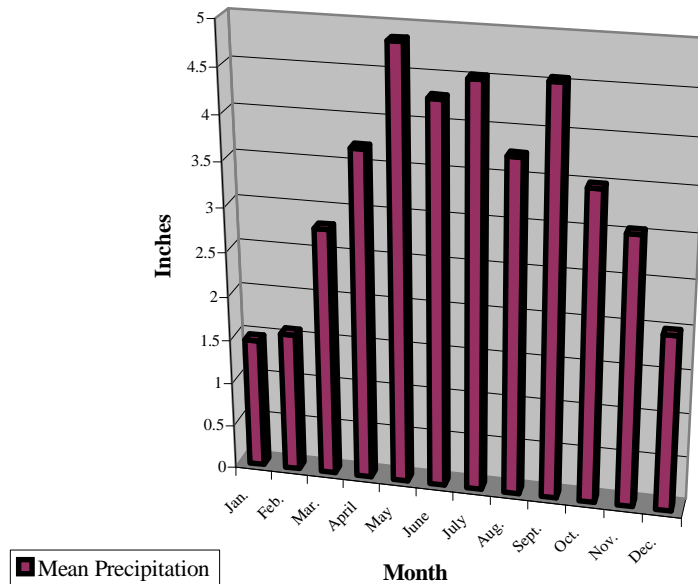
Month	Average Minimum Temp.	Average Maximum Temp.	Mean Temp.	Mean Precip.
Jan.	16.4	36.7	26.6	1.47
Feb.	21.5	43.1	32.3	1.58
Mar.	30.8	55.0	42.9	2.81
April	41.3	66.3	53.8	3.71
May	51.6	76.0	63.8	4.85
June	61.1	85.1	73.1	4.29
July	65.8	90.1	78.0	4.52
Aug.	63.5	88.6	76.1	3.75
Sept.	54.5	80.8	67.7	4.55
Oct.	43.3	69.0	56.2	3.49
Nov.	31.7	53.3	42.5	3.04
Dec.	20.8	40.8	30.8	1.99
Annual	41.9	65.4	53.7	40.05

Source: University of Missouri - Missouri Climate Center (<http://www.missouri.edu>).

**Exhibit 4: Low, High, and Mean Temperatures**



Source: University of Missouri - Missouri Climate Center (<http://www.missouri.edu>).

***Exhibit 5: Monthly Mean Precipitation***

Source: University of Missouri - Missouri Climate Center (<http://www.missouri.edu>).

**Drainage/Floodplains**

The upland plains are drained through a series of natural drainage channels that carry storm water to creeks, streams and rivers. Along these drainage ways numerous ponds aid in water retention for agriculture operations. Most of Lafayette County's streams flow in a generally northeasterly direction to the Missouri River. Davis Creek, located in the southern portion of the County, flows eastward into the Blackwater Creek in Saline County.

**Map 3** depicts the 100-year floodplain. The Federal Emergency Management Agency issued the Flood Insurance Rate Maps (FIRM) for Lafayette County on September 4, 1986. Land within the 100-year floodplain which comprises 14.5% of Lafayette County, has a 1% chance of flooding in any given year (**Exhibit 6**). Within the 100-year floodplain lies the floodway, which accommodates high volume high velocity floodwater during a flood event. Typically, construction within the floodway is prohibited due to an extreme risk of flood damage and loss of life. Development within the 100-year floodplain must meet floodproofing requirements.

**Exhibit 7** shows jurisdictions in Lafayette County that either participate in the National Flood Insurance Program (NFIP) or have been sanctioned by FEMA. The NFIP has two basic components: insurance and local regulations. Jurisdictions participate in the NFIP through the adoption and enforcement of FEMA approved floodplain regulations. As a result of jurisdictional participation, property owners within the jurisdiction may purchase flood insurance at a rate that is lower than is



available through private insurance companies. Any property purchased with federally backed financing is required to purchase flood insurance if the property is within the 100-year floodplain.

***Exhibit 6: Floodplain Data***

	<b>Acres</b>	<b>Percent</b>
100-Year Floodplain	58,723	14.53%
Not in Floodplain	338,818	83.83%
Incorporated City	6,619	1.64%
<b>Totals</b>	<b>404,160</b>	<b>100.00%</b>
Floodway	12,134	3.00%

Source: State Emergency Management Agency ([www.sema.state.mo.us](http://www.sema.state.mo.us)).

***Exhibit 7: NFIP Participation***

<b>Jurisdiction</b>	<b>Date of Program Entry</b>	<b>Current Effective Map</b>
Concordia	02/09/79	NSFHA*
Emma	03/25/77	03/25/77
Higginsville	08/04/83	NSFHA
Lexington	11/07/01	11/07/01
Odessa	04/11/79	NSFHA
Napoleon	Not In Program	06/11/76
Lafayette County	09/04/86	09/04/86

\*No Special Flood Hazard Areas (NSFHA)

Source: Federal Emergency Management Agency ([www.fema.gov](http://www.fema.gov))

**Water Quality**

No water quality data currently are available. However, the quality of surface and groundwater impacts the quality of life of Lafayette County citizens. The water quality of nearby communities is diminished by run off from streets and parking lots, lawn fertilizers and pesticides, sewer discharges and other sources. Within agriculture production regions, water quality can be diminished by animal waste runoff, excessive application and runoff of agriculture chemical, lack of buffer strips along drainage ways, lack of terracing of fields, failing on-site wastewater treatment systems and illegal dumping.

**Soils**

Soil formations are a product of the parent rock material, climate, vegetation, topography and time. Variations in these factors slowly form soil types with different properties. Lafayette County's parent rock material consists of alluvial deposits of limestone, sandstone, and shale. Some parent material consists of wind transported silt and alluvial material transported by natural water flow. Prairie grass vegetation creates a dark colored soils developed under forest tends to be lighter in

color. Both characteristics are located within Lafayette County and indicate a mixed vegetative cover, which has been influenced by fluctuations of climate over the past 150,000 years. The gentle sloping topography allows for slow water runoff and greater percolation, which creates distinctive layers within the soil and influences the depth of soils. Most soils in Lafayette County belong to the five soil associations described below (**Map 4 & Exhibit 8**). Land is that well suited to agriculture is shown in **Map 4b**.

**Exhibit 8: Soil Types**

<b>Soil Type</b>	<b>Acres</b>	<b>Percent</b>
Blackoar and Otter silt loams	40,750	10.1%
Booker silty clay	430	0.1%
Bremer silt loam	4,350	1.1%
Colo silty clay loam	4,400	1.1%
Dockery silt loam	300	0.1%
Haynie silt loam	4,100	1.0%
Higginsville silty loam	70,200	17.4%
Hodge loamy fine sand	1,800	0.4%
Kennebec silt loam	7,600	1.9%
Knox silt loam	33,500	8.3%
Leslie silt loam	5,000	1.2%
Leta silty loam	3,700	0.9%
Macksburg silty loam	28,800	7.1%
Mandeville silt loam	2,750	0.7%
Marshall silt loam	84,650	20.9%
McGirk silt loam	5,000	1.2%
Minden silt loam	12,900	3.2%
Modale silt loam	520	0.1%
Moniteau silt loam	580	0.1%
Myrick silty clay	1,250	0.3%
Nodaway silt loam	3,550	0.9%
Polo silt loam	5,350	1.3%
Ray silt loam	760	0.2%
Riverwash	1,100	0.3%
Sampsel silty clay loam	25,760	6.4%
Sarpy fine sand	375	0.1%
Snead silty clay loam	1,900	0.5%
Sogn silty clay loam	6,050	1.5%
Waldron silty clay loam	2,200	0.5%
Waubonsie and Haynie soils	2,300	0.6%
Winfield silt loam	38,050	9.4%
Zook silty clay loam	540	0.1%
Water	3,200	0.8%
Mine pits and dumps	445	0.1%
<b>Total Acres Evaluated</b>	<b>404,160</b>	<b>100.0%</b>

Source: Soil Survey of Lafayette County, Missouri: USDA SCS, February 1975.

*Haynie-Leta Association*

Located along the south and east alluvial plains of the Missouri River, soils of this association are generally flat with varying degrees of drainage. Soils are dark grayish brown with loamy and clayey consistencies to a depth of 3 feet. Clay content limits permeability in some locations. There are isolated pockets of sand material, which may be suitable for industrial use. Primary crops include corn, soybeans and alfalfa. Soils in the Haynie-Leta Association make up approximately 5% of the land area in Lafayette County.

#### *Knox-Marshall Association*

Located on the river hills adjacent south of the Missouri River alluvial plain, this loamy soil association is moderately to steeply sloped with gullies and ravines. These soils are comprised of wind deposited loess with depths ranging from 10 to 90 feet. Soils are well drained and subject to erosion. Agricultural pursuits include raising livestock, growing crops, fruit trees and limited timber production. The principal fruits are apples and peaches. Approximately 12% of the County consists of soils of the Knox-Marshall Association.

#### *Marshall-Higginsville Association*

This soil association is commonly located on the upland plains along ridges and hillsides. These soils cover a large are of the County except the northern edge and southwest corner. These loamy soils are gently to strongly sloping and are well drained except on flat uplands where they may be poorly drained. Sheet erosion is common. The soils base material is silty loess ranging in depth from 8 feet in the southern portions of the County to 90 feet in the extreme northern part of the County. Growing grain crops, raising livestock and dairying are common agriculture pursuits supported by the Marshall-Higginsville soil association. These soils are the most prominent in Lafayette County comprising 62% of the land surface.

#### *Blackoar-Otter-Nodaway Association*

Soils of this association make up the wide alluvial plains of the Davis and Salty Creeks in the southeastern portion of the County. These soils are loamy, moderately permeable, and either poorly or moderately drained. Only 3% of the County has these soil types, which are typically used for the growing of crops.

#### *Winfield-Sampsel Association*

Located in the western and southern portions of the County, this association consists of soils that are primarily gentle sloping, moderately drained and moderately permeable. However, Sampsel soils located on hillsides are slowly permeable and somewhat poorly drained. Parent material consists of either loess to a depth of 3 feet or shale residuum to a depth of 4 feet. Limestone quarries of varying size and activity are located within this soil association. The raising of livestock is prominent although crops such as corn, soybeans and grain sorghum are planted. The Winfield-Sampsel association constitutes 18% of the County.

The permeability and shrink-swell potential of soils impact what activities are best suited to the soils type. Approximately 67.5% of the County soils present significant limitations to the on-site treatment of wastewater due to slope, shallow soils and or low permeability. In general, soils classified described as “silty clay” have a high shrink-swell potential, which can be detrimental to the long-term stability of building foundations underground utilities. Shrink-well potential describes a soil type’s propensity to retain and lose moisture that will contract the volume of the soil.

The USDA – NRCS in the 1975 soil survey ranked soil types by their suitability for field crops through capability groupings. The rankings account for soil limitations for use cropland, risk of damage to the soil when cultivated and the way soil responds to treatment. The following list describes the general characteristics for each class and illustrates the hierarchy of soil types based on agriculture productivity with Class I soils being best suited for field crop cultivation.

- Class I soils have few limitations that restrict their use.
- Class II soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.
- Class III soils have severe limitations that reduce the choice of plants, require special conservation practices, or both.
- Class IV soils have very severe limitations that reduce the choice of plants, require very careful management, or both.
- Class V soils are not likely to erode but have other limitations, impractical to remove, that limit their use largely to pasture, range, woodland, or wildlife.
- Class VI soils have severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture or range, woodland, or wildlife.
- Class VII soils have very severe limitations that make them unsuited to cultivation and that restrict their use largely to pasture or range, woodland, or wildlife.
- Class VIII soils and landforms have limitations that preclude their use for commercial plants and restrict their use to recreation, wildlife, water supply, or to esthetic purposes.

**Exhibit 9** shows the soil types by class and acres located in Lafayette County. Prime farmland soils in Class I and II are a significant indicator of farm profitability and comprise 43.5% of the County’s soils. With all other variables held constant, prime farmland soils yield more bushels per acre than marginal soils. Therefore, conversion of prime farmland to non-agriculture uses is a greater detriment to the local agriculture industry than conversion of less productive soils. Marginal Class III soils make up 37.5%.

***Exhibit 9: Soil Productivity Class***

<b>Agriculture Productivity Class</b>	<b>Acres</b>	<b>Percent</b>
Class I	16,010	4.0%
Class II	159,720	39.5%
Class III	151,310	37.4%
Class IV	48,375	12.0%
Class V	1,250	0.3%
Class VI	9,400	2.3%
Class VII	14,450	3.6%
Class VIII	0	0.0%
Unclassified	3,645	0.9%
<b>Totals</b>	<b>404,160</b>	<b>100.0%</b>

*Source: Soil Survey of Lafayette County, Missouri: USDA SCS, February 1975.*

**Prime Agricultural Land and Farming**

Lafayette County's primary use of land is agriculture. The economic climate for agriculture consists of a complex matrix of physical, social and economic variables, some of which are beyond the influence of local forces. Local determinants of agriculture viability consist of soils, labor, water supply, agriculture support activities (storage, transportation, equipment, financing, etc...) and land conversion pressures among other items. Basic characteristics of the existing agricultural environment are described in this section.

**Products**

**Exhibits 10 & 11** shows the acres planted to specified crops annually since 1990. The total number of acres planted remained relatively constant during the 1990's and averages 210,000 acres annually.

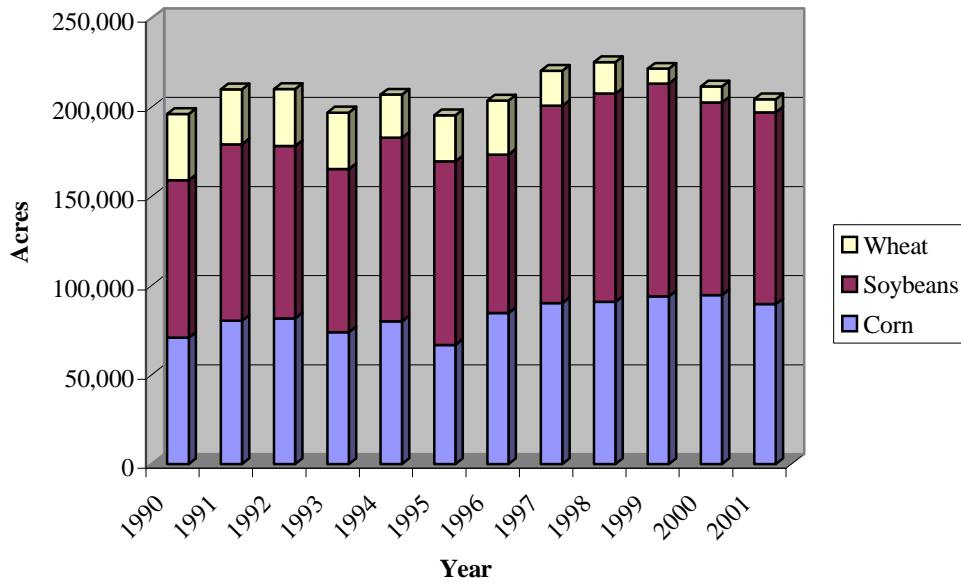
The planting of wheat has tapered off 1996 while corn and soybeans are the primary crops planted. Sorghum and oats play a minor role in the local agriculture economy with insignificant acres being planted. The Missouri Agricultural Statistics Service indicates that among 114 Missouri counties reporting in 1998-1999, Lafayette County ranked 6<sup>th</sup> in corn, 12<sup>th</sup> in soybean production and 29<sup>th</sup> in wheat production. Approximately 30,000 acres of land is harvested for hay, alfalfa and silage annually.

**Exhibit 10: Acres Planted by Crop (1990-2001)**

Year	Corn	Soybeans	Wheat	Sorghum	Oats	Totals
1990	70,800	88,300	37,200	1,200	0	197,500
1991	80,400	98,900	30,700	1,200	800	212,000
1992	81,700	96,700	31,800	1,500	1,700	213,400
1993	73,900	91,500	31,700	1,300	0	198,400
1994	80,100	102,900	24,100	900	0	208,000
1995	66,900	102,900	25,700	1,800	0	197,300
1996	84,700	88,900	30,200	1,200	0	205,000
1997	90,400	110,400	19,800	1,000	0	221,600
1998	90,900	116,800	17,600	0	0	225,300
1999	94,000	119,300	8,300	0	0	221,600
2000	94,700	108,100	9,000	0	0	211,800
2001	89,700	107,500	7,300	0	0	204,500

Source: USDA - NASS (<http://www.usda.gov/nass/pubs/histdata.htm>).

**Exhibit 11: Acres Planted by Crop**



**Exhibit 12** shows the yield per acre of the four significant crops grown in Lafayette County. Countywide fertilizer application remained relatively constant between 1990 and 1998 with an average of 11,830 tons of Nitrogen, 3,847 tons of Phosphate and 4,392 tons of Potash. The total market value of crops produced in the County has steadily increased and equaled \$57,633,000 in 1997.

**Exhibit 12: Bushel Yield per Acre (1990-1998)**

Year	Corn	Soybeans	Wheat	Sorghum
1990	105.2	33.0	38.8	73.7
1991	73.6	32.0	43.4	70.4
1992	143.0	45.4	52.0	100.0
1993	97.3	39.1	38.7	61.6
1994	128.5	45.0	53.6	76.4
1995	98.6	32.3	42.8	50.1
1996	151.0	45.2	35.9	81.8
1997	118.1	41.0	59.8	87.8
1998	127.6	40.7	53.1	0.0

Source: Missouri Agricultural Statistics Service.

There are some minor forestry operations, orchards and four certified growing nurseries in the County. There are 12 certified retail and wholesale nursery operations in Lafayette County.

In addition to the cultivation of crops, the raising of livestock contributes greatly to the local agriculture economy. **Exhibit 13** indicates the primary livestock raised in Lafayette County. There are small commercial inventories of sheep, lamb and chickens on fewer than 100 farms. Lafayette County ranked 10<sup>th</sup> in hog and 30<sup>th</sup> in cattle production of the 114 Missouri counties reported in 1998-1999. The number of milk cows has steadily declined from 2,000 head in 1991 to 950 head in 2001. Market value of livestock products sold in the County tallied \$50,258,000 in 1997 after a stagnant period between 1978 and 1992 when the figure hovered around \$40,000,000.

**Exhibit 13: Head of Livestock (1990-2001)**

Year	All Cattle	Beef Cows	Milk Cows	Hogs
1990	48,900	17,700	1,900	101,900
1991	49,500	18,200	2,000	99,900
1992	50,300	19,600	1,900	101,000
1993	53,200	20,300	1,700	108,300
1994	55,100	20,700	1,650	115,000
1995	54,500	19,900	1,600	102,000
1996	55,000	19,900	1,550	90,500
1997	54,800	18,400	1,600	68,700
1998	51,700	17,600	1,550	63,700
1999	52,400	18,100	1,200	57,000
2000	51,700	17,700	1,000	*
2001	47,500	17,800	950	*

Source: USDA - NASS (<http://www.usda.gov/nass/pubs/histdata.htm>).

\* Data not available.



### *Farms and Farmers*

Farms in Lafayette County have followed a nationwide trend with a decreasing number of farms that are getting larger. This shift from agriculture to agribusiness is propelled by greater efficiencies in farming techniques and equipment along with a cultural shift from the rural agrarian to suburbanite. **Exhibit 14** illustrates that since 1950 the number of farms has decreased while the acreage per farm has increased. The total acreage occupied by farms has slightly decreased over this same time period indicating the encroachment of non-agricultural uses and conservation of less productive land. It is interesting to note that while the total number of farms has decreased significantly, the part owner farms have only decreased slightly. This suggests more part time farmers and partnership farms.

According to the 1990 U.S. Census 1,124 people over the age of 16 were employed in the agriculture, forestry and fishing industrial category while 1,062 indicated that their occupation was agriculture, forestry and fishing. **Exhibit 15** provides further data illustrating the fewer number of people engaged in farming and the need to supplement farm income through non-farm employment.

***Exhibit 14: Farm Tenure & Acreage (1950-1997)***

Year	Farms	Full Owner	Part Owner	Tenant	Acreage Per Farm	Total Acres
1950	2,548	1,407	433	708	147.4	375,480
1954	2,444	1,396	448	600	152.5	372,749
1959	2,151	1,212	462	477	173.3	372,740
1964	1,886	1,042	488	356	193.0	363,955
1969	1,973	1,263	417	293	195.1	384,904
1974	1,750	1,060	449	241	215.0	376,280
1978	1,635	990	416	229	220.0	359,679
1982	1,599	958	432	209	223.3	357,017
1987	1,465	843	442	180	240.3	352,054
1992	1,312	734	431	147	271.5	356,164
1997	1,215	679	406	130	287.5	349,265
2002	1,286	789	403	94	282.0	363,186

*Source: 1950-1997 data from Missouri Agricultural Statistics Service. 2002 Data from USDA Agricultural Statistics Service*

***Exhibit 15: Farm Operators Occupation (1987-2002)***

Year	Principal Occupation	
	Farming	Other
1987	810	655
1992	712	600
1997	632	583
2002	883	453
Year	Days Worked Off Farm	
	Any	More than 200
1987	775	542
1992	670	493
1997	655	456
2002	712	501

*Source: 1987, 1992 and 1997 data from Office of Social and Economic Data Analysis, University of Missouri. (www.osdeda.missouri.edu). 2002 data from USDA Statistics Service.*

**Wildlife and Vegetation**

Native vegetation is primarily tall prairie grasses and deciduous forests. Cultivated land sustains environment for quail, dove, pheasant, turkey, meadowlark, field sparrow, red winged blackbird, cottontail rabbit, red fox and woodchuck. Woodland creatures include ruffed grouse, woodchuck, thrush, vireo, scarlet tanager, squirrel, gray fox, white tailed deer and raccoon. Wetlands are inhabited by duck, rail, heron, shore birds, mink, muskrat and beaver. Common fish such as bass, catfish, crappie and sunfish can be found in water bodies. Trout live in rivers of the region. Non-agricultural vegetation consists of tall prairie grasses and deciduous forests.

**Exhibit 16 & 17** list the threatened and endangered species found within Missouri. While many of these plants and animals do not range in Lafayette County, the Pallid Sturgeon likely resides in the Missouri River along the County's northern border and the Indiana Bat's identified summer range includes Lafayette County. According to the U.S. Fish and Wildlife Service, the pallid sturgeon's natural habitat is near the bottom of large rivers with high turbidity and a diversity of depths and velocities. The Indiana bat spends the winter in limestone caves and in the summer can be found under bridges, in old buildings, and under loose bark and in the hollows of trees.

**Exhibit 16: Threatened and Endangered Animal Species in Missouri**

Common Name	Scientific Name	First Listed	Listing Status
Ozark cavefish	Amblyopsis rosae	11/01/84	T
Piping Plover	Charadrius melodus	12/11/85	E, T
Ozark big-eared bat	Corynorhinus (Plecotus) townsendii ingens	11/30/79	E
Curtis pearlymussel	Epioblasma florentina curtisii	06/14/76	E
Niangua darter	Etheostoma nianguae	06/12/85	T
Pink mucket (pearlymussel)	Lampsilis abrupta	06/14/76	E
Higgins eye (pearlymussel)	Lampsilis higginsii	06/14/76	E
Scaleshell mussel	Leptodea leptodon	10/09/01	E
Gray bat	Myotis grisescens	04/28/76	E
<b>Indiana bat*</b>	Myotis sodalis	03/11/67	E
Topeka shiner	Notropis topeka (tristis)	12/15/98	E
Neosho madtom	Noturus placidus	05/22/90	T
Fat pocketbook	Potamilus capax	06/14/76	E
Eastern puma (cougar)	Puma (Felis) concolor cougar	06/04/73	E
<b>Pallid sturgeon*</b>	Scaphirhynchus albus	09/06/90	E
Least tern	Sterna antillarum	05/28/85	E

Source: U.S. Fish and Wildlife Service (<http://endangered.fws.gov>).

\*Range in Lafayette County, Missouri by U.S. Fish & Wildlife Service

E = Endangered, T = Threatened

**Exhibit 17: Threatened and Endangered Plant Species in Missouri**

Common Name	Scientific Name	First Listed	Listing Status
Mead's milkweed	Asclepias meadii	09/01/88	T
Decurrent false aster	Boltonia decurrens	11/14/88	T
No common name	Geocarpon minimum	06/16/87	T
Virginia sneezeweed	Helenium virginicum	11/03/98	T
Missouri bladderpod	Lesquerella filiformis	01/08/87	E
Pondberry	Lindera melissifolia	07/31/86	E
Western prairie fringed orchid	Platanthera praeclara	09/28/89	T
Running buffalo clover	Trifolium stoloniferum	06/05/87	E

Source: U.S. Fish and Wildlife Service (<http://endangered.fws.gov>).

E = Endangered, T = Threatened

**Mineral Resources**

Mineral resources are limited to coal, sand, gravel, stone and clay. Few resource extraction companies operate in the County. Several coal mines were abandoned by the 1970's. Due to the ground subsidence and open shaft hazards, seven of these abandoned mine sites are identified as "problem areas" by the Missouri Department of Natural Resources. These sites are eligible for reclamation funding through the Abandoned Mine Lands program. This program provides funding

for reclamation activities to protect the public health, safety and general welfare. In 1996, 7 shafts were reclaimed in Higginsville and 2 shafts were reclaimed in Lexington in 1997.

In the western part of the County, limestone quarries produce crushed limestone. Many limestone quarries are inactive.

### Summary of Natural Environment

Lafayette County's rural physical environment provides numerous benefits to the community. Prudent use of physical resources has many economic, cultural and environmental benefits for county residents. Preservation of high quality agricultural resources (soil, water, investments) promotes a healthy agriculture industry, limited demand for public services and aesthetic assets attributed to the rural countryside. Environmental assets such as clean water, soil and air directly contribute to an attractive quality of life sought by new residents, new businesses and visitors. Policies established through the planning process should make best use of natural assets by accommodating healthy land use patterns through regulatory, design and infrastructure standards.

## 2. Role of the Built Environment

The built environment consists of physical construction and modification of land and vegetation to accommodate human activity. Examples of items in the built environment include, but are not limited to: buildings, signs, roads, airports, potable water systems, wastewater facilities, fire stations, schools, electric utilities and solid waste facilities. The existing condition and location of homes, businesses and infrastructure play a pivotal role in the future location of additional development. Although local zoning is not part of built environment per se, its direct influence over land use facilitates discussion of both congruently.

### Land Use and Zoning

The existing land use of the County continues to be rural for the County as a whole (**Exhibit 18 & Map 5**). Cropland and pastureland comprises over half of the total land area (55.7%) while forested land covers 27.1% of the land surface. **Exhibit 19 & Map 6** indicates the County zoning districts by acreage. The overwhelming majority of land in the County (93%) is in the Agriculture (A) zoning district, while over 11,500 acres (2.9%) are zoned for Rural Estates (RE) development. The Agriculture zoning district allows the splitting of land into 25-acre parcels provided configuration standards are met. Every legal parcel is allocated one home. The RE district requires a minimum 1.5 acre parcel size. Most of the RE zoning is in the southwestern part of the county. Commercial and industrial zoned areas are congregated along I-70 interchanges.

**Exhibit 18: Land Use by Acres (1995)**

Land Use Category	Acres	Percent
Residential	19,027	4.71%
Commercial	5,801	1.44%
Industrial	691	0.17%
Transportation & Communication	14,283	3.53%
Urban	2,968	0.73%
Cropland & Pasture	225,132	55.70%
Orchards, Groves, Vineyards, Nurseries	8,210	2.03%
Confined Animal Feeding Operations	320	0.08%
Other Agriculture	1,904	0.47%
Forested	109,569	27.11%
Water Bodies	9,699	2.40%
Wetlands	1,115	0.28%
Strip Mines, Quarries and Gravel Pits	1502	0.37%
Transitional Areas	3938	0.97%
Total	404,160	100.00%

Source: Center for Agriculture, Resources and Environmental Systems, University of Missouri ([www.cares.missouri.edu](http://www.cares.missouri.edu)).

**Exhibit 19: Zoning by Acres, 2000**

Zoning	Acres	Percentage
Agriculture (AG)	375,572	92.93%
Residential Agriculture (RA)	912	0.23%
Rural Estates (RE)	11,535	2.85%
Single Family Dwelling (R-1)	25	0.01%
Local Business (B-1)	18	0.00%
General Business (B-2)	504	0.12%
Light Industrial (M-1)	791	0.20%
Heavy Industrial (M-2)	631	0.16%
Municipal Authority	14,172	3.51%
Total	404,160	100.00%

Source: Lafayette County Planning and Zoning Department, 2000 Plat Book.

**Housing and Residential Development**

Prior to determining future housing needs, a review of the existing nature of the existing housing stock provides a baseline understanding of the housing market and characteristics of dwellings. It is also useful to compare the housing characteristics of Lafayette County to those of the State and nation in order to understand the niche held by the local stock. A majority of the homes in Lafayette County are owner occupied. **Exhibit 20** provides the occupancy of housing for the County, State and nation as of 2000. The percent of owner occupied housing in Lafayette County (69.1%) exceeds that of Missouri (63.2%) and the nation (60.2%). The proportion of renter occupied and vacant housing units were lower than the State's and nation's.

**Exhibit 20: 2000 Housing Occupancy**

2000 Housing Tenure	Lafayette County		Missouri		United States	
	Housing Units	Percent	Housing Units	Percent	Housing Units	Percent
Owner Occupied	9,473	69.11%	1,542,149	63.15%	69,815,753	60.24%
Renter Occupied	3,096	22.59%	652,445	26.72%	35,664,348	30.77%
Vacant	1,138	8.30%	247,423	10.13%	10,424,540	8.99%
Totals Units	13,707	100.00%	2,442,017	100.00%	115,904,641	100.00%
1990 Housing Tenure	Lafayette County		Missouri		United States	
	Housing Units	Percent	Housing Units	Percent	Housing Units	Percent
Owner Occupied	8,697	67.84%	1,348,733	61.33%	59,031,378	57.72%
Renter Occupied	3,035	23.67%	612,473	27.85%	32,916,032	32.19%
Vacant	1,088	8.49%	237,923	10.82%	10,316,268	10.09%
Totals Units	12,820	100.00%	2,199,129	100.00%	102,263,678	100.00%

Source: 2000 U.S. Census ([www.census.gov](http://www.census.gov)).

The high rate of homeownership is also reflected in the type of residential structures in the housing stock. Owner occupied housing tends to be single-family homes detached from other dwellings and buildings. In 1990 (**Exhibit 21**), single unit detached homes accounted for 73.5 of all permanent residential dwellings. In addition, mobile home's and trailer's, which are typically detached from other structures, constituted 14.8% of all dwelling units. Duplex, triplex, townhouses, apartments, group homes, and convalescent centers made up a meager 11.7% of all housing units.

**Exhibit 21: 1990 & 2000 Dwelling Units per Structure**

Structures	1990		2000	
	Units	Percent of Units	Units	Percent of Units
1-unit detached	9,426	73.53%	10,366	75.63%
1-unit attached	80	0.62%	122	0.89%
2 to 4 units	907	7.07%	1,087	7.93%
5 to 9 units	161	1.26%	234	1.71%
10 or more units	351	2.74%	171	1.25%
Mobile home, trailer, or other	1,895	14.78%	1,727	12.60%
Total Units	12,820	100.00%	13,707	100.00%

Source: 1990 & 2000 U.S. Census ([www.census.gov](http://www.census.gov)).

Single-family building activity in unincorporated Lafayette County has exhibited a moderately increasing growth rate during the 1990 – 2000 decade (**Exhibit 22**). Early in the last decade (1990-1993) approximately 70 new single-family homes were issued building permits a year (**Exhibit 23**). After 1993, the number of permits issued began to rise to with an average of 93 issued per year. There was a total of 120 permits issued in 1999. **Exhibit 24** shows that within the unincorporated County, 72% of all new homes were built on land zoned Agriculture (AG) while only 25% located in rural residential zoned land. This trend suggests that land use conflicts between commercial

agriculture and residential uses are likely intensify as increasing numbers of urbanities move to rural areas. Farmers don't move from the city to the country. Additional rural residences increase traffic on gravel roads that overtime become difficult to maintain in an acceptable condition.

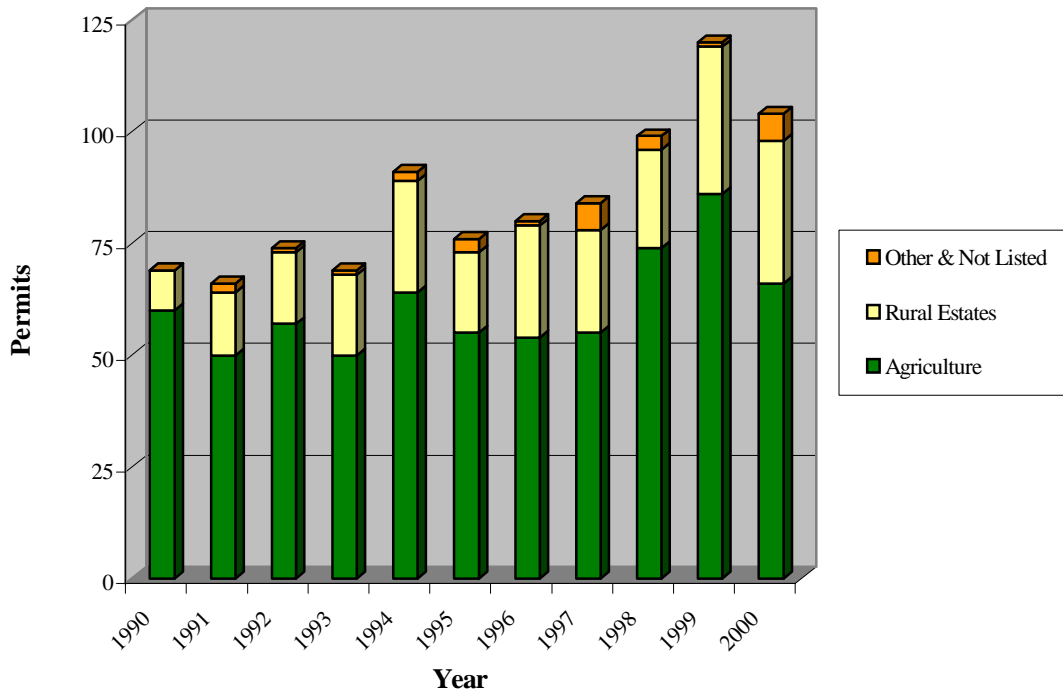
**Exhibit 22: Single Family Dwelling Permit Data Table (1990-2000)**

Year	Zoning District							Totals	Other and Not Listed
	AG	RA	RE	R-1	B-2	M-1	Not Listed		
1990	60	0	9	0	0	0	0	69	0
1991	50	0	14	0	0	0	2	66	2
1992	57	0	16	0	0	0	1	74	1
1993	50	0	18	0	0	0	1	69	1
1994	64	0	25	0	0	0	2	91	2
1995	55	0	18	0	2	0	1	76	3
1996	54	0	25	0	0	0	1	80	1
1997	55	0	23	5	0	0	1	84	6
1998	74	0	22	1	0	0	2	99	3
1999	86	0	33	1	0	0	0	120	1
2000	66	5	32	0	0	0	1	104	6
<b>Totals</b>	671	5	235	7	2	0	12	932	26

Source: Lafayette County Planning and Zoning Department. Note: The RA zoning district was created in 1999.

### Public Facilities and Utilities

People's daily activities and structures to house those activities require utilities to ensure they are functional, safe, healthy and convenient. The crucial nature of public facilities and utilities directly impacts where and to what extent human activities may be carried out. For example, the number of homes that can be built on a specific parcel of land, while providing an acceptable level of water, wastewater, transportation and electrical service, is determined by the capacity of public facilities to provide essential services. Establishing a method to incorporate the fundamental land use and services nexus into local government decision making is the essence of comprehensive planning. This section provides baseline data on the full range of public facilities and utilities currently operating in Lafayette County.

**Exhibit 23: Single Family Dwelling Permit Data Graph (1990-2000)**

Source: Lafayette County Planning and Zoning Department.

## Transportation

### *Roads*

The road transportation system consists of a general grid pattern of State highways and mostly local section line roads. Interstate 70 traverses east and west across the southern half of the county and has 8 interchanges providing access to Bates City, Odessa, Higginsville, Concordia, and Emma. U.S. Highway 24 runs approximately parallel with the Missouri River and provides a vital east/west route connecting cities (Napoleon, Wellington, Lexington, Dover and Waverly) in the north of the County along with destinations outside of the County. State Highway 13 runs north from the south central part of the County to Higginsville at which point it veers to the northwest to Lexington. MoDOT is in the process of rerouting and upgrading this highway. The primary north/south route in the east part of the County is Highway 23, which connects Concordia, Alma and Waverly. State Highway 131 serves the west portion of the County running through Odessa, Lake Lafayette, and Wellington. Twelve road districts (**Map 7**) maintain local roads that serve the rural areas and facilitate agriculture access. Most surfaces consist of gravel and are well maintained. Due to the hilly terrain most roadways have little need for ditches and have narrow travel surfaces.

Road district funding for maintenance of roads is derived through an ad valorem tax assessment collected through the County and distributed to the districts. Road districts that have little traffic derive sufficient funds for maintenance while districts with a significant amount of traffic may struggle to keep roads in a safe condition. Although the amount of maintenance to keep roads safe



will vary for each road segment based on soils, flooding, topography, construction standard and road base material, the prominent factor for road degradation is traffic volume. It is not uncommon for gravel road maintenance to become futile when traffic counts exceed 400 average daily trips (ADT's). **Map 8** shows traffic counts for State and Federal highways in Lafayette County.

### *Rail*

The City of Lexington, located on the northern edge of the County, is serviced by a Union Pacific spur, which comes through Myrick to the west of Lexington. Amtrak passenger rail service is regionally available at Sedalia, Warrensburg, Lee's Summit, Independence and Kansas City.

### *Air Transportation*

There are two public airports located within Lafayette County. The Higginsville Industrial Municipal Airport (elev. 830' msl), located 2 miles east of Higginsville, is owned by the City of Higginsville. The runway is a 3,000 ft. long and 60 ft. width asphalt surface with a rubberized friction seal coat. Single wheel planes are limited to 12,500 lbs while double wheel planes are limited to 16,000 lbs. The airport was inspected by State of Missouri aeronautical personnel on September 25, 1998. There are 10 single engine aircraft based at the airport, which handles an average of 46 operations a week.

The Harry S. Truman Regional Airport (elev. 860 ft. msl) is located 2 miles west of Bates City in the western edge of the County. Owned and operated by White Holdings, Ltd., the airport consists of a gravel 4,400 ft. long and 70 ft. wide runway in fair condition. Twenty single engine aircraft are based at the airport, which accommodates an average of 38 weekly operations.

The Lexington Municipal Airport (elev. 691 msl) is located in Ray County and provides numerous services including flight instructions, sky diving, aircraft rental and aerial surveying. The airport has three turf runways (3,100' x 125' & (2) 2,250' x 125') and hosts an average of 34 daily operations.

The Kansas City International Airport (KCI) is approximately 55 miles away from the county seat of Lexington and provides commercial and passenger service with an average of 598 operations a day. Over 15 passenger airlines and 8 cargo airlines utilize KCI.

### Water

According to the Environmental Protection Agency (EPA) there are 15 public/semi-public water systems providing potable water to the residents of Lafayette County (**Exhibit 25**). Ten of these systems are operated by incorporated cities with the exception of Lexington, which is served by the U.S. Water Company – Lexington, Mo, a private company. There are 3 mobile home parks served by a collective potable water distribution system. The water systems receive supply from a mix of surface and ground water. Ten systems purchase water from other systems.

*Exhibit 25: Public/Semi-Public Water Systems*

Water System Name	Population Served	Primary Water Source Type
Alma	446	Purchased surface water
Ballerina Park Home Community	550	Purchased ground water
Bates City	290	Purchased ground water
Concordia	2,600	Surface water
Corder	483	Purchased surface water
Emma	280	Purchased surface water
Higginsville	4,700	Surface water
I-70 Mobile City Mobile Home Park	300	Purchased ground water
Consolidated Public Water District #2	5,000	Purchased surface water
Consolidated Public Water District #1	7,750	Purchased ground water
Mayview	279	Purchased surface water
Odessa	3,695	Surface water
U.S. Water Company - Lexington, MO	5,200	Surface water
Waverly	841	Ground water
Wellington	779	Purchased ground water

Source: U.S. Environmental Protection Agency ([www.epa.gov](http://www.epa.gov)).

None of the city systems serve significant areas outside their municipal boundary. City water service outside municipal boundaries is limited. The City of Odessa<sup>1</sup> only provides water outside their city limits to properties that historically received service and does not serve new customers without voluntary annexation requests.

**Map 9** depicts the boundaries of the two Consolidated Public Water Supply Districts (CPWSD) that serve rural areas and line sizes through out the County. Consolidated Public Water Supply District (CPWSD) No. 1 approximately serves the western third of the County, which has experienced significant rural estate residential development. A majority of CPWSD No. 1's system serves rural Jackson County adjacent to the Kansas City Metropolitan area. CPWSD No. 1 has trunk lines over 8 inches in diameter around Bates City and Oak Grove from which 6 to 8 inches lines radiate to the south, north and east. A web of lines smaller than 6 inches in diameter, serves most parts of the district in Lafayette County. These smaller lines cannot provide adequate volumes for fire suppression. Additionally, as more users connect, adequate supplies for normal use will be difficult to distribute in these smaller lines.

CPWSD No. 2 serves the eastern two-thirds of the County with a delivery system consisting of 6 to 8 inch main lines feeding smaller lines. There are isolated pockets in the district without direct access to lines. Since 1994, the number of users and water demands have steadily increased (**Exhibit 26**).

<sup>1</sup> Notes from discussion with Wade Sanders, City Administrator on June 6, 2002.

CPWSD No. 2 purchases water from Higginsville, Concordia, Lexington, Corder and Marshall (**Exhibit 27**).

**Exhibit 26: CPWSD No. 2 Users and Supply**

Year	Users*	Water Purchased (Gallons)
1994	2,017	183,654,210
1995	2,040	179,554,452
1996	2,066	189,278,372
1997	2,066	195,600,256
1998	2,103	191,783,775
1999	2,123	198,107,124
2000	2,166	190,028,350
2001	2,184	198,141,833

Source: CPWSD No. 2, Letter from Dennis Knipmeyer dated February 12, 2002.

**Exhibit 27: CPWSD No. 2 Suppliers (2000-01)**

Supplier	2000		2001	
	Gallons	Percent	Gallons	Percent
Higginsville	67,968,440	35.77%	90,906,833	45.88%
Concordia	48,805,300	25.68%	28,406,500	14.34%
Lexington	1,839,200	0.97%	2,032,700	1.03%
Corder	585,310	0.31%	543,800	0.27%
Marshall	70,830,100	37.27%	76,252,000	38.48%
Totals	190,028,350	100.00%	198,141,833	100.00%

Source: CPWSD No. 2, Letter from Dennis Knipmeyer dated February 12, 2002.

### Wastewater

Countywide there are 66 wastewater facilities permitted by EPA for discharge. A majority of these facilities are related to commercial wastewater. Fourteen of these facilities are public sewerage systems operated by the following cities: Alma, Concordia, Corder, Emma, Higginsville, Lexington, Mayview, Odessa, Waverly and Wellington. Higginsville has 4 permitted facilities and Odessa has 2. In addition, Berry Hill Estates and the I-70 Mobile Community Mobile Home Park operate wastewater facilities. Most rural areas rely on private on-site wastewater facilities (septic tank, lateral field, infiltration, stabilization pond, etc...).

### Parks and Recreation

Although the County does not own and operate public parks, there are significant park and recreation facilities in the County. The Missouri Department of Conservation manages five Conservation Areas where the public can hunt, fish, camp, hike and participate in additional outdoor activities. Total land within the conservation areas (Baltimore Bend, Ferguson-Herold, Cecil G. Grove Memorial, Maple Leaf Lake and Sni-A-Bar) amounts to 2,167 acres including grassland, forested land, cropland and wetland. From 1937 to 1976, most of the funding for conservation areas statewide was

generated from hunting, fishing and trapping permit fees. However, the program was expanded in 1976 and a 1/8<sup>th</sup> of 1% sales tax was passed to fund further conservation area development.

The Cities of Concordia, Higginsville and Odessa operate public parks that reside outside their municipal boundaries. The Concordia City Lake Area (a.k.a. Edwin A. Pape Lake) includes 210 acres of forestland, 208 acres of grassland and 245 acres of water bodies. City fishing permits are required as well as permission to hunt. The Higginsville City Lake encompasses 50 acres of forestland, 520 acres of grassland and two fishing lakes with a total area of 190 acres. Odessa City Lake covers 60 forested acres, 190 acres of grassland and lakes of 105 acres. Additional facilities at the city's lakes include: boat docks, boat ramps, parking facilities, pavilions, picnic tables and restroom facilities. Americans with Disabilities Act (ADA) compliant facilities are available.

### Schools

Eight public school districts serve citizens in Lafayette County. The districts of Oak Grove R-VI and Richmond R-XVI serve relatively small areas in the southwest and northwest portions of the County, respectively. The remaining six districts serve large areas of the County as depicted in **Map 10**. Between the 1996-97 and 2000-01 school years, four (Lafayette County, Concordia, Lexington and Santa Fe) of the six districts serving most of the County experienced a decrease in enrollment while Odessa and Wellington-Napoleon gained students (**Exhibit 28**).

**Exhibit 28: School Enrollment by District**

School District	Year				
	1996-97	1997-98	1998-99	1999-00	2000-01
Lafayette County C-I	1,141	1,133	1,069	1,058	1,050
Concordia R-II	486	481	470	460	460
Lexington R-V	1,172	1,191	1,174	1,137	1,140
Odessa R-VII	2,202	2,267	2,297	2,365	2,367
Wellington-Napoleon R-IX	413	425	417	390	420
Santa Fe R-X	430	435	399	397	399

Source: Missouri Department of Elementary and Secondary Education ([www.dese.state.mo.us](http://www.dese.state.mo.us)).

A common measure of a school's service level is the number of students per classroom teacher, which shows the potential for individual student attention from teachers. **Exhibit 29** compares the average number of students per classroom teacher for the school districts serving significant portions of Lafayette County. All districts were have been below the state figure during the 2000-01 school year except the Odessa district with 20 pupils per classroom teacher. The effectiveness of the educational system is frequently measured in terms of the high school drop-out rate. **Exhibit 30** indicates the drop-out rates for Lafayette County School Districts and with Missouri. The drop out rate fluctuates greatly due to the small numbers of students enrolled, but it is clear that Lexington and to a lesser extent Odessa and Lafayette County C-I have had drop-out problems during the 1999-00 and 2000-01 school years.

**Exhibit 29: Students per Classroom Teacher (1996-2001)**

School District	1996-97	1997-98	1998-99	1999-00	2000-01
Missouri	19	19	19	18	18
Lafayette County C-I	19	19	18	17	17
Concordia R-II	19	18	17	17	16
Lexington R-V	18	17	17	17	17
Odessa R-VII	21	20	21	21	20
Wellington-Napoleon R-IX	15	16	15	13	13
Santa Fe R-X	18	18	16	17	16

Source: Missouri Department of Elementary and Secondary Education ([www.dese.state.mo.us](http://www.dese.state.mo.us)).

**Exhibit 30: High School Drop-Out Rates\***

School District	1996-97	1997-98	1998-99	1999-00	2000-01
Missouri	5.5	5.0	4.7	4.3	4.5
Lafayette County C-I	1.4	2.0	3.4	1.2	6.3
Concordia R-II	1.0	3.8	5.1	2.3	1.1
Lexington R-V	7.7	4.7	4.1	9.8	12.4
Odessa R-VII	2.7	4.8	3.6	5.0	6.7
Wellington-Napoleon R-IX	0.7	2.4	1.7	3.0	4.5
Santa Fe R-X	2.8	3.3	5.7	4.4	0.7

Source: Missouri Department of Elementary and Secondary Education ([www.dese.state.mo.us](http://www.dese.state.mo.us)).

\* As a percentage of total enrollment.

Opened in 1975 as an affiliate to the Lexington R-V school district, the Lex La-Ray Technical Center provides vocational training for juniors and seniors in high school and adults from Lafayette and Ray Counties. As of June 2002,<sup>2</sup> approximately 300 high school students and 50 post secondary students were enrolled. Areas of study include numerous agriculture, automotive, business, medical, and building trade classes.

Lafayette County is centrally located between three public 4-year universities: Central Missouri State University (Warrensburg), the University of Missouri (Columbia) and the University of Missouri at Kansas City (Kansas City). Missouri Valley College, a private 4-year liberal arts college, is located in Marshall. The closest 4-year liberal arts university is Central Missouri State University (CMSU) in Warrensburg in neighboring Johnson County to the south. Nearly 11,500 students attend CMSU. With nearly 150 areas of study, CMSU is designated Missouri's lead institution for professional technology programs. Additional offerings are available at the numerous private colleges in the Kansas City metropolitan area.

<sup>2</sup> E-mail from Charlie Houseworth, Director; June 13, 2002.

### Cultural Resources

There are 5 libraries in Lafayette County in the Trails-Regional library system headquartered in Warrensburg, Missouri. These branches include: Concordia (18,591 vol.), Corder (8,202 vol.), Lexington (30,848 vol.), Odessa (19,379 vol.) and Waverly (7,493 vol.). The Trails-Regional library system serves Lafayette and Johnson Counties and is tax supported. In addition, the City of Higginsville owns and operates the Robertson Memorial Library (20,000 vol.).

### Health Care

Health Midwest, a regional non-profit health care organization based in Kansas City, operates the Lafayette Regional Health Center. The Lafayette Regional Health Center is located in Lexington and has a 49-bed acute care hospital offering inpatient and outpatient services, as well as a 24-hour Emergency Center. There are 14 active physicians on staff and over 60 other doctors who see patients at the clinics on a regular basis. In addition to physicians, Lafayette Regional Health Center employs about 200 people. As of 1997, there were 24 active private practice physicians of which 16 were primary care physicians. There were 4 full time equivalent (FTE) general private practitioners and 9 FTE family practitioners.

The Western Missouri Medical Center (WMMC), located at Warrensburg in neighboring Johnson County to the south, is a fully accredited acute care facility with 103 beds. WMMC offers inpatient and outpatient services with over 40 doctors on staff. Fitzgibbon Hospital, located in Marshall, is an accredited acute care facility with 60 beds. St. Mary's Hospital in Blue Springs offers a fully-accredited acute care hospital with 139 beds. In addition to these facilities, Lafayette County's proximity to the Kansas City metropolitan area allows for specialized treatment within a reasonable distance.

### Summary of Built Environment

Anticipated growth will place demands on existing and future infrastructure and public services. As rural residential growth occurs, rural gravel roads will experience degradation and higher maintenance costs, which in some cases may lead to road surfacing upgrades. Road upgrades are costly to tax payers. Rural water systems, schools, policing and emergency services will also be effected by new growth. Directing growth to areas where existing infrastructure can best accommodate new users is imperative to County fiscal responsibility. Existing residences and businesses should not be responsible for costs attributed to new growth. Directing new growth to cities takes advantage of existing public infrastructure investments with a minimal impact on County taxpayers.

### 3. Role of Social and Economic Trends

The common notion of “economics” is narrowly focused on business investment, interest rates, gross national product, the Dow Jones Industrial average and trade deficits. While these are significant macroeconomic indicators, they fail to convey the true meaning of economics, which is essentially a social phenomenon. Individuals act to fulfill their physical, material and emotional needs. The true economy is defined through interactions between individuals within a society seeking to maximize fulfillment of their needs. Many of these basic social and personal needs can be addressed through the exchange of goods and services called commerce. However, there are many quality of life assets that satisfy physical and emotional needs of the community and are therefore part of economy. Not all demands of the economy are generated by people within the County, but the local population’s urge to fulfill their needs is the primary influence shaping the local economy.

Within Lafayette County, the social characteristics of the population place demands on the use of land, public facilities, public services, businesses, industries and the environment. The nature of these demands have a role in determining when, where and how public and private resources are used. For example, a population showing an increase in elderly individuals suggests increasing demand for retirement housing, passive recreational activities, health care and expanded service related activities. Shifts in demand attributed to social characteristics directly implicate shifts in land use and infrastructure needs. The remainder of this Chapter explores varying dynamic social and economic trends that will influence the community in years to come.

**economy**

1. a. Careful, thrifty management of resources, such as money, materials, or labor.  
b. An example or result of such management; a saving.
2. a. The system or range of economic activity in a country, region, or community.  
b. A specific type of economic system.
3. Efficient, sparing, or conservative use.
4. The least expensive class of accommodations, especially on an airplane.

**social**

1. a. Living together in communities.  
b. Of or relating to communal living.  
c. Of or relating to human society and its modes of organization.
2. Living together in organized groups or similar close aggregates.

### Population Growth

After a period of slow population decline between 1900 and 1950, the total population of Lafayette County has steadily risen from a low of 25,272 people in 1950 to 32,960 in 2000 (**Exhibits 31 & 32**). Between 1900 and 1950, the population declined by 6,407 residents (a 20.2% loss). However, the gradual increase in population over the next 50-year period (1950–2000) would more than recoup. The latter 50 years experience a cumulative increase of 7,688 (30.4%) for a net centennial gain of 1,281 residents.

Within metropolitan fringe communities, it is not uncommon to experience an accelerating population expansion rate. Current trends coupled with proximity to the population growth and suburbanization in neighboring Jackson County, suggest continued population growth. Available projections suggest an increase of 2,154 and 2,177 for the decades proceeding 1910 and 1920, respectively. By 2020 the projected population is 37,291 people, a 4,331 (13.1%) increase from 2000.

***Exhibit 31: Historical and Projected Population (1900-2020)***

Year	County	Period Change
1900	31,679	
1910	30,154	-1,525
1920	30,006	-148
1930	29,259	-747
1940	27,856	-1,403
1950	25,272	-2,584
1960	25,274	2
1970	26,626	1,352
1980	29,925	3,299
1990	31,107	1,182
2000	32,960	1,853
2010 <sup>3</sup>	35,114	2,154
2020 <sup>4</sup>	37,291	2,177

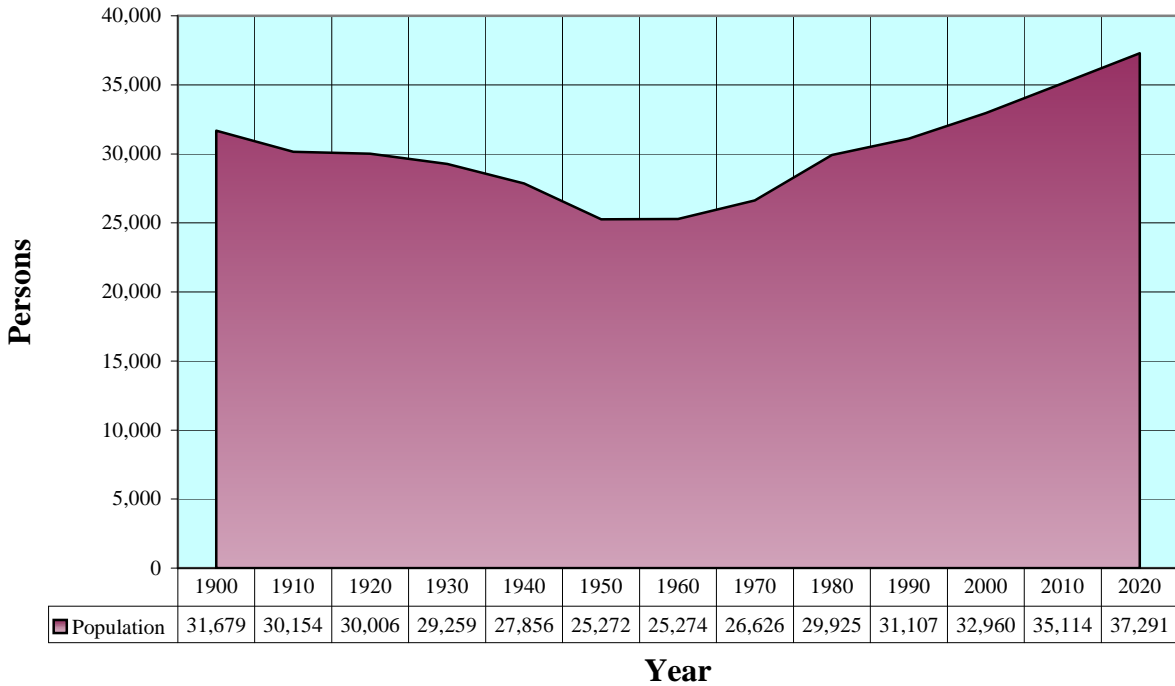
**Map 11** shows the population change from 1990 to 2000 by census tract. In general, population growth occurred in the western portion of the County with the greatest change occurring in the southwest. The township along I-70 through the eastern part of the County also saw growth. Population losses were recorded in the eastern half of the County except for the census tracts along I-70. This demonstrates that suburbanization in the southwest of the County.

**Exhibits 33 & 34** show the rural and city population along with the change over the 1990's. Lafayette County does not have a dominant urban center but has 4 small cities with population above 2,000 (Concordia, Higginsville, Lexington and Odessa) and 10 small towns with a population below 1,000. During the 1990's the percent of County population living outside of incorporated jurisdictions rose from 37.9% to 39.5%. The small cities saw mixed population growth trends with a sharp decrease in Lexington (-11.4%), literally no change in Higginsville (-0.23), modest growth in Concordia (9.3%) and a significant population increase in Odessa (30.4%). Small towns as a whole lost approximately 3.0% in the 1990's.

<sup>3</sup> Projections by the Missouri Office of Administration.



**Exhibit 32: Total County Population (1900 – 2020)**



**Exhibit 33: City and County Population**

Jurisdiction	1990	2000
Unincorporated Lafayette County	11,785	13,006
Alma	446	399
Aullville	72	86
Bates City	197	245
Blackburn	308	284
Concordia	2,160	2,360
Corder	485	427
Dover	115	108
Higginsville	4,693	4,682
Lexington	5,023	4,453
Mayview	279	294
Napoleon	233	208
Odessa	3,695	4,818
Waverly	837	806
Wellington	779	784
Total City Population	19,322	19,954
Total County Population	31,107	32,960

Source: U.S. Census Bureau (www.census.gov).

**Exhibit 34: City and County Population Change**

Jurisdiction	1990		2000		1990-2000
	Number	Percent	Number	Percent	Percent Change
Lafayette County	11,785	37.89%	13,006	39.46%	10.36%
Concordia	2,160	6.94%	2,360	7.16%	9.26%
Higginsville	4,693	15.09%	4,682	14.21%	-0.23%
Lexington	5,023	16.15%	4,453	13.51%	-11.35%
Odessa	3,695	11.88%	4,818	14.62%	30.39%
Small Towns	3,751	12.06%	3,641	11.05%	-2.93%
Total Population	31,107	100.00%	32,960	100.00%	5.96%

Source: Calculated by Planning Works, LLC with data from U.S. Census Bureau ([www.census.gov](http://www.census.gov)).

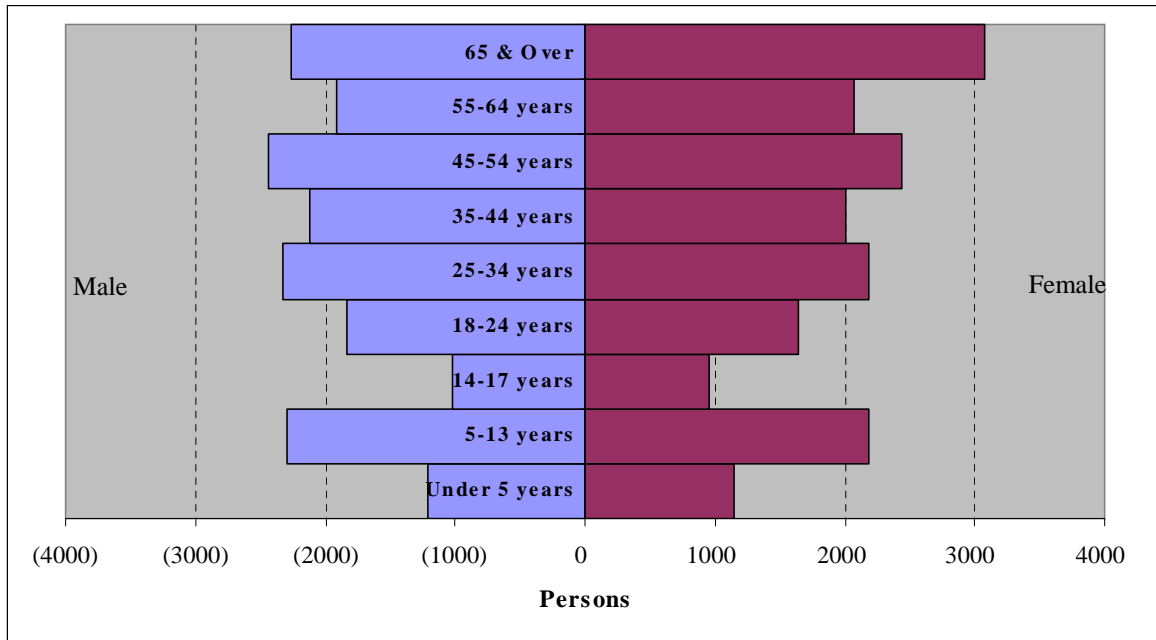
### Age Distribution

An individual's demands on the local economy are largely a function of their stage in life. Therefore, the age distribution of population indicates community preferences. For instance, a local population with a high disproportionate number of people between the ages of 55 to 75 would indicate a significant reliance on medical services, retirement housing choices and passive recreational opportunities. A younger population translates into a need for active recreational facilities and schools. Age composition is another consideration when analyzing the future use of infrastructure, land and fiscal resources.

**Exhibits 35 & 36** indicate an increasing proportion of older residents. According to projections issued by the University of Missouri and the Missouri State Census Data Center, the Lafayette County citizens aged 65 and over will comprise 15.2% (5,339) of the population by 2010 and 17.0% (6,350) by 2020. This is a common trend among rural counties where agriculture continues to be a significant economic activity. Successive generations from farm families find their livelihood in pursuits other than the family farm. Without willing successors for the farm operation, the current farmer remains on the land. Those who retire from the farm tend to remain in the County if a reasonable level of health care, assisted living, and related services are available.

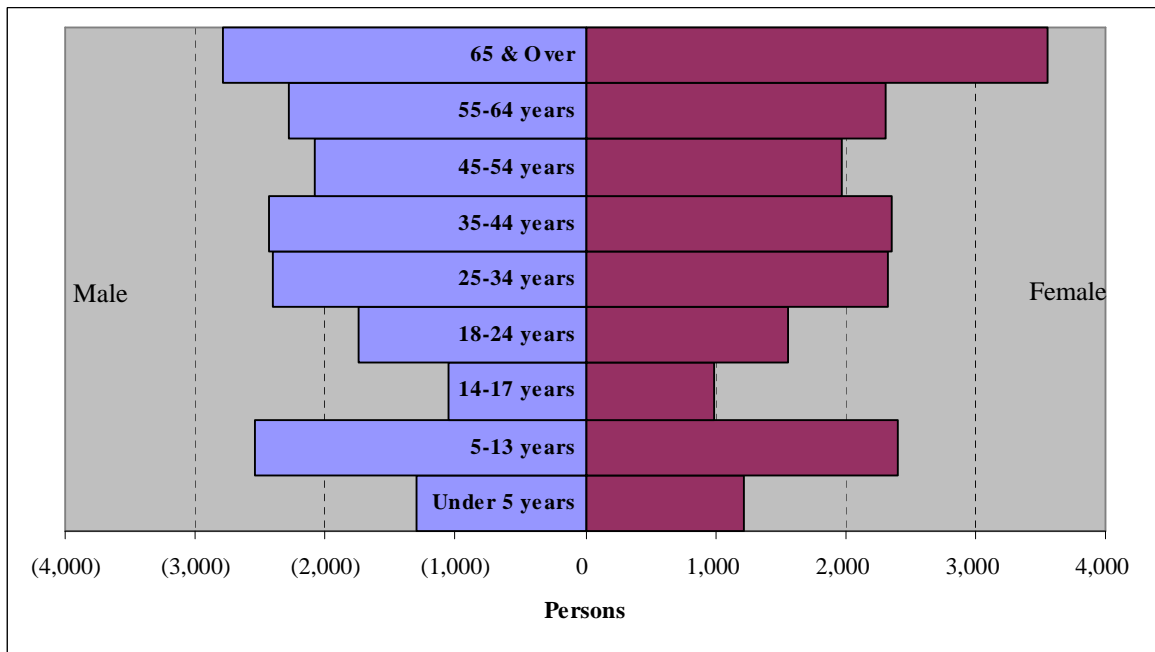
The same projection figures show a small increase in the population under the age of 18 with 25.1% (8,812) in 2010 and 25.5% (9,495) in 2020. The working age cohorts between 18 and 64 show a corresponding drop relative to the increase in the aged population. The working age group is projected to drop from 59.7% (20,963) in 2010 to 57.5% (21,446) by 2020. While these are common trends in rural jurisdictions, the shifts are not extreme. Nonetheless, they indicate that a smaller proportion of the population will be working to support services for increased proportions of school age children and seniors.

**Exhibit 35: 2010 Projected Population Age Distribution**



Source: University of Missouri Extension, Office of Social and Economic Data Analysis in Cooperation with the Missouri State Census Data Center

**Exhibit 36: 2020 Projected Population Age Distribution**



Source: University of Missouri Extension, Office of Social and Economic Data Analysis in Cooperation with the Missouri State Census Data Center

**Exhibit 37** compares dependency ratios for Lafayette County, Missouri, and the country. Dependency ratios indicate the balance between the number of people in their working years who in

general contribute to the workforce compared to the youth or aged who are in general dependent on the working cohorts to provide local goods and services. As of 2000, Lafayette County had lower youth and aged dependency rates than Missouri and the United States. However, as indicated in the previous paragraph, it is likely that the youth and aged portions of the population will increase over the next few decades, which will increase the dependency ratios of Lafayette County.

**Exhibit 37: 1990 & 2000 Dependency Ratios**

1990 Age Group	Lafayette County		Missouri		United States	
	Number	Percent	Number	Percent	Number	Percent
Youth (0-19)	9,114	28.72%	1,484,184	29.00%	72,113,988	29.00%
Working (20-64)	16,833	55.87%	3,069,171	59.98%	152,248,477	61.22%
Aged (65+)	5,160	15.41%	498,708	9.75%	21,130,096	8.50%
Total Population	31,107	100.00%	5,117,073	100.00%	281,421,906	100.00%
Youth Dependency	1.85		2.07		2.06	
Aged Dependency	3.26		6.15		4.74	
2000 Age Group	Lafayette County		Missouri		United States	
	Number	Percent	Number	Percent	Number	Percent
Youth (0-19)	9,465	28.72%	1,594,172	28.49%	80,473,265	28.60%
Working (20-64)	18,416	55.87%	3,245,660	58.01%	165,956,888	58.97%
Aged (65+)	5,079	15.41%	755,379	13.50%	34,991,753	12.43%
Total Population	32,960	100.00%	5,595,211	100.00%	281,421,906	100.00%
Youth Dependency	1.95		2.04		2.06	
Aged Dependency	3.63		4.30		4.74	

Source: 2000 U.S. Census ([www.census.gov](http://www.census.gov)),  
Ratios calculated by Planning Works.

### Racial Composition

Lafayette has a racially homogenous population with over 95.5% of the population being White. A mere 2.3% of the population is Black and African American. People identified as Hispanic & Latino in all races account for only 1.2% of the population. **Exhibit 38** shows that the White race represents 84.9% of the Missouri population and 75.1% of the United States population. Missouri has nearly twice (2.1%) the percentage of Hispanic and Latinos as Lafayette County, yet the United States has ten times the percentage (12.5%).

**Exhibit 38: 1990 & 2000 Race and Hispanic & Latino Population**

2000 Race	Lafayette County		Missouri		United States	
	Number	Percent	Number	Percent	Number	Percent
White	31,485	95.52%	4,748,083	84.86%	211,460,626	75.14%
Black & African-American	749	2.27%	629,391	11.25%	34,658,190	12.32%
Indian & Alaska Native	96	0.29%	25,076	0.45%	2,475,956	0.88%
Asian	82	0.25%	61,595	1.10%	10,242,998	3.64%
Hawaiian & Pacific Islander	9	0.03%	3,178	0.06%	398,835	0.14%
Other	169	0.51%	45,827	0.82%	15,359,073	5.46%
Two or more Races	370	1.12%	82,061	1.47%	6,826,228	2.43%
<b>Totals</b>	<b>32,960</b>	<b>100.00%</b>	<b>5,595,211</b>	<b>100.00%</b>	<b>281,421,906</b>	<b>100.00%</b>
Hispanic & Latino (all races)	386	1.17%	118,592	2.12%	35,305,818	12.50%
1990 Race	Lafayette County		Missouri		United States	
	Number	Percent	Number	Percent	Number	Percent
White	29,976	96.36%	4,486,228	87.67%	199,686,070	80.29%
Black & African-American	880	2.83%	548,208	10.71%	29,986,060	12.06%
Indian & Alaska Native	106	0.34%	19,835	0.39%	1,959,234	0.79%
Asian or Pacific Islander	69	0.22%	41,277	0.81%	7,273,662	2.92%
Other	76	0.24%	21,525	0.42%	9,804,847	3.94%
<b>Totals</b>	<b>31,107</b>	<b>100.00%</b>	<b>5,117,073</b>	<b>100.00%</b>	<b>248,709,873</b>	<b>100.00%</b>
Hispanic & Latino (all races)	219	0.70%	61,702	1.21%	22,354,059	8.99%

Source: 2000 and 1990 U.S. Census ([www.census.gov](http://www.census.gov)).

Note: The 2000 Census divided the previous "Asian or Pacific Islander" category into two separate categories and added "Two or More Races" as a new category.

### Household Demographics

Household composition in Lafayette County differs from that of Missouri and the nation (**Exhibit 39**). In comparison to the State and nation, Lafayette County has a higher percent of family households (72.4%), higher percentage of married couple households (59.3%), and lower female head of households (9.4%). A significant number (1,412) of people over the age of 65 were living alone in the year 2000, which accounted for 11.2% of all households. The average household in Lafayette County has 2.55 people.

**Exhibit 39: 1990 & 2000 Household Characteristics**

2000 Household Characteristic	Lafayette County		Missouri		United States	
	Number	Percent	Number	Percent	Number	Percent
Total Households	12,569	100.00%	2,194,594	100.00%	105,480,101	100.00%
Family Households	9,095	72.36%	1,476,516	67.28%	71,787,347	68.06%
Married-Couples	7,456	59.32%	1,140,866	51.99%	54,493,232	51.66%
Female Head of Household	1,177	9.36%	253,760	11.56%	12,900,103	12.23%
Non-family Households	3,474	27.64%	718,078	32.72%	33,692,754	31.94%
Householder 65 years and over living alone	1,412	11.23%	225,631	10.28%	9,722,857	9.22%
People Per Household	2.55		2.48		2.59	
1990 Household Characteristics	Lafayette County		Missouri		United States	
	Number	Percent	Number	Percent	Number	Percent
Total Households	11,732	100.00%	1,961,206	100.00%	91,947,410	100.00%
Family Households	8,570	73.05%	1,368,334	69.77%	64,517,947	70.17%
Married-Couples	7,299	62.21%	1,104,723	56.33%	50,708,322	55.15%
Female Head of Household	921	7.85%	208,175	10.61%	10,666,043	11.60%
Non-family Households	3,162	26.95%	592,872	30.23%	27,429,463	29.83%
Householder 65 years and over living alone	1,714	14.61%	221,516	11.29%	8,824,845	9.60%
People Per Household	2.32		2.54		2.63	

Source: 2000 and 1990 U.S. Census ([www.census.gov](http://www.census.gov)).

### Employment and Work Force

Lafayette County is experiencing a shifting economic base. Historically, agriculture was the primary economic activity that supported a host of businesses in other sectors. Agriculture's influence in the local economy has steadily declined for many decades while other sectors have grown. Recent trends indicate that Lafayette County's work force is being employed increasingly in most industry classifications (**Exhibit 40**). Agriculture, forestry and fishing employment dropped 3.5% between the years 1990 and 1999. Over this same period employment gains (as a percentage of total employment) occurred in the construction (0.9%), wholesale trade (0.6%), retail trade (1.34%), FIRE (1.32%), and services (0.7%). The most significant percentage change in a single sector occurred in the FIRE (Finance, insurance and real estate) which went from 660 to 950 employed, an increase of nearly 44%. Employment in the manufacturing sector declined as a percent of total employment by almost 1.4%. Average monthly 1<sup>st</sup> Quarter employment in 2000 was 15,794 signifying continued employment growth.<sup>4</sup>

<sup>4</sup> Missouri Department of Economic Development, Labor Market Information Section ([www.mo.works.state.mo.us](http://www.mo.works.state.mo.us)).

**Exhibit 40: Employment by Industry**

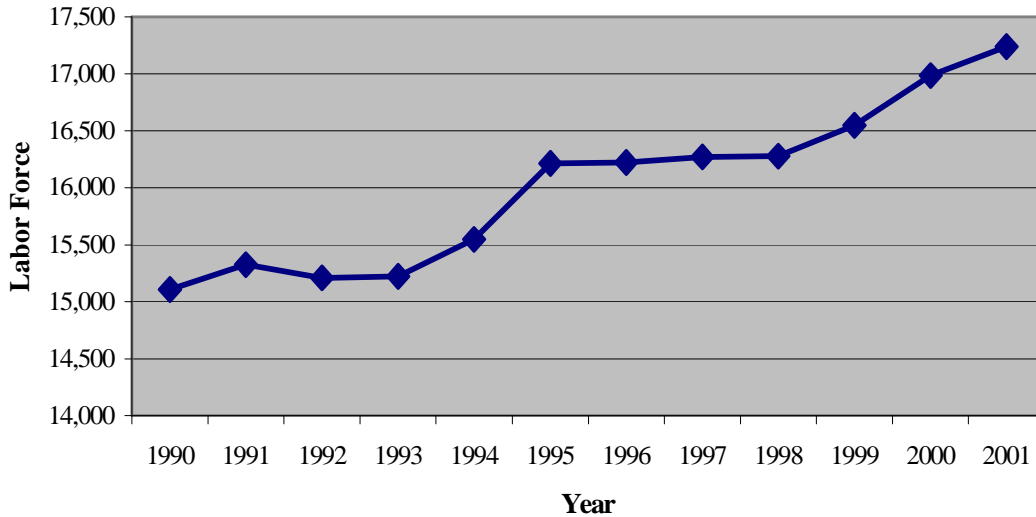
Industry	1990		1999	
	Number	Percent	Number	Percent
Agriculture, Forestry and Fishing	2,008	15.24%	1,758	11.72%
Mining	15	0.11%	0	0.00%
Construction	759	5.76%	994	6.63%
Manufacturing	1,337	10.15%	1,317	8.78%
Transportation and Public Utilities	530	4.02%	599	3.99%
Wholesale Trade	411	3.12%	559	3.73%
Retail Trade	2,395	18.18%	2,929	19.52%
Finance, Insurance and Real Estate (FIRE)	660	5.01%	950	6.33%
Services	2,962	22.48%	3,473	23.15%
Government	2,100	15.94%	2,423	16.15%
Total	13,177	100.00%	15,002	100.00%

Source: Missouri State Census Data Center ([www.oseda.missouri.edu](http://www.oseda.missouri.edu)).

The shifts in economic activity within Lafayette County have not been drastic but they do mirror the national trend towards retail, service and information based activities. Many of the jobs held by Lafayette County residents are in neighboring Jackson County and the Kansas City metropolitan area. In 1990, 40.7% of employed Lafayette residents worked in other counties with 28.2% working in Jackson County. Of those employed in Lafayette County, 16.1% live in other counties. The average travel time to workplace in the year 1990 was 24.5 minutes. By 2000, average travel time to work had increased to 28.3 minutes. Greater separation between home and work increases the number of vehicle miles traveled, which equates to greater demands on public funded road construction and maintenance. It also means greater commute times and less family time.

The labor force within Lafayette County numbered 17,686 in March of 2002 with an unemployment rate of 5.3%. Historical labor force growth is shown in **Exhibit 41**. The education and skill level of the labor force has a direct relationship to the type of businesses in the community and the income level of residents. **Exhibit 42** indicates the education level attained by people over 25 years of age for Lafayette County and Missouri. The percent of County residents (35.2%) who completed high school yet did not seek higher education was significantly higher than Missouri (27.6%) and the nation (29.5%). In 2000, the percent of Lafayette County residents who completed a bachelor's degree or higher was only 11.5%, well below Missouri (18.2%) and the nation (25.1%). This relative lack of post secondary education is common in rural America and reflects both the type of jobs available to the populace and the aging population.

**Exhibit 41: Labor Force (1990-2001)**



Source: Missouri Works ([www.mo.works.state.mo.us](http://www.mo.works.state.mo.us)).

**Exhibit 42: Educational Attainment, 1990 and 2000**

	Lafayette County				Missouri			
	2000		1990		2000		1990	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Persons 25 years and over	26,250		20,215		4,314,001		3,291,579	
Less than 9th grade	1,629	6.21%	2,872	14.21%	237,618	5.51%	380,613	11.56%
9th to 12th grade, no diploma	7,145	27.22%	2,967	14.68%	1,120,572	25.98%	477,755	14.51%
High school graduate	9,240	35.20%	8,465	41.87%	1,189,670	27.58%	1,090,940	33.14%
Some college or Associates degree	5,210	19.85%	3,590	17.76%	981,665	22.76%	756,510	22.98%
College graduate or Professional degree	3,026	11.53%	2,321	11.48%	784,476	18.18%	585,761	17.80%
Percent high school graduate or higher	66.58%		71.12%		68.52%		73.92%	
Percent bachelor's degree or higher	11.53%		11.48%		18.18%		17.80%	

Source: U.S. Census ([www.census.gov](http://www.census.gov)).

**Income and Poverty**

The population’s ability to attain housing, transportation, sustenance and other needs is reflected through income and poverty. Deficiencies in income coupled with housing and employment opportunities provide insight into adjustments in economic development and development activities to meet and enhance demand.



**Exhibit 43** indicates recent trends in the median household income (actual dollars) in Lafayette County. Median household income has increased in absolute terms. When compared to the income of the State as a whole, Lafayette County has steadily closed the gap and as of 1997-98 the median household income was 96.5% of the State figure.

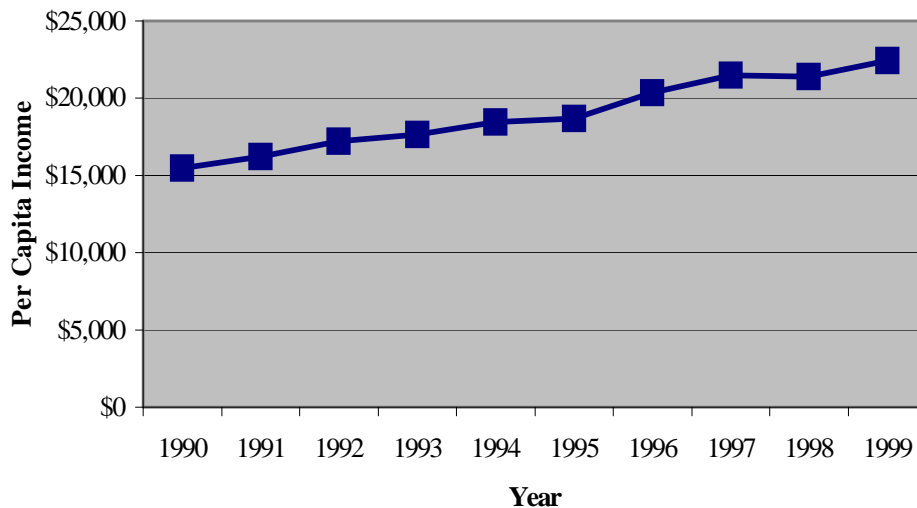
**Exhibit 43: Median Household Income**

Year	Actual Dollars	Ratio
1989-90	\$24,669	93.6
1995-96	\$30,079	94.9
1997-98	\$33,304	96.5

Source: Office of Social and Economic Data Analysis, Missouri State Census Data Center ([www.oseda.missouri.edu](http://www.oseda.missouri.edu)).

Per Capita Income (PCI) in Lafayette County has steadily grown since 1990 (**Exhibit 44**). Due to inflation, a long-term increase in PCI is expected. However, the rate of increase outpaced inflation, which is reflected in the increased median household income ratio and decreasing poverty indicators.

The Office of Social and Economic Data Analysis at the University of Missouri periodically releases poverty estimates. **Exhibit 45** shows that the number of persons in poverty has decreased over the past decade along with a decrease in the number of children in poverty. A parallel trend was reported between 1995 and 1997 during which the percent of children in poverty decreased from 16.0% to 14.9%<sup>5</sup>. Lafayette County has a lower percentage of persons in poverty (8.8%) than the State as a whole (11.7%).



**Exhibit 44: Per Capita Income**

Source: Office of Social and Economic Data Analysis, Missouri State Census Data Center ([www.oseda.missouri.edu](http://www.oseda.missouri.edu)).

<sup>5</sup> Kids Count in Missouri, A Report of Citizens for Missouri's Children ([www.oseda.missouri.edu/kidscount](http://www.oseda.missouri.edu/kidscount)).

**Exhibit 45: Poverty Profile**

	Year	Number	Percent of Total Cohort Population
Poor Persons	1989-90	3,697	12.2%
	1995-96	3,871	12.1%
	1997-98	3,483	10.8%
	2000	2,816	8.8%
Poor aged 5-17	1989-90	1,015	17.1%
	1995-96	1,057	16.6%
	1997-98	951	14.4%
	2000	919	10.8%

Source: Office of Social and Economic Data Analysis, Missouri State Census Data Center ([www.oseda.missouri.edu](http://www.oseda.missouri.edu)).

Decreasing poverty in Lafayette County is also suggested in a 16.5% decrease in food stamp recipients, a 2.8% decrease in free/reduced school lunches and a 46.5% decrease in family assistance between 1990 and 1999.

Lafayette County bank deposits grew through the 1990's and leveled off in 2000. As indicated in **Exhibit 46**, the total bank deposits increased from \$341,027 in 1990 to \$543,752 in 2000, which ranked 18<sup>th</sup> highest of all 114 Missouri Counties. The per capita deposits figure also ranked 18<sup>th</sup>.

**Exhibit 46: Bank Deposits**

Year	Total Deposits		Per Capita Deposits	
	Amount (\$000)	Rank	Amount	Rank
1990	\$341,027	16	\$10,973	24
1997	\$498,995	17	\$15,363	27
1999	\$542,985	18	\$16,549	18
2000	\$543,752	18	\$16,497	18

Source: Federal Deposit Insurance Corporation.

**Summary of Social and Economic Trends**

It is anticipated that Lafayette County's citizens will grow in number with subtle shifts in age and race composition. The number of elderly and school aged children are projected to grow slightly along with cultural and racial diversity. Incoming populations will likely secure employment in the services, retail, and FIRE sectors while agriculture will slowly employ fewer people. However, agriculture will remain a significant activity in Lafayette County. The number of Lafayette County residents working in neighboring Jackson County will likely continue to increase unless significant employers move to the County or existing industry expands. If current trends continue, the population will become more educated and increase their earnings.

#### 4. Growth Assessment

The Growth Assessment explores historical and recent trends in population, income, poverty, employment and growth issues, and is based on the U.S. Census Bureau, University of Missouri, local and other reliable data sources. A growing human population also denotes a growing demand for varying types of housing, commerce, jobs, transportation, educational services and public goods. The essence of economics is to provide for human needs in the most efficient manner. An assessment of future needs provides a necessary parameter to guide the allocation and use of infrastructure, land and fiscal resources of the County in an economical manner.

Since 1960, Lafayette County has experienced population growth, which is expected to continue. New residents need a place to live, work, shop and play. Coordinating land uses and infrastructure to accommodate growth in a logical and efficient manner will minimize conflicts and public service costs. While residential growth within the cities allows for efficient service provision, some will seek rural housing alternatives. Rural housing often strains rural infrastructure, negatively effect agricultural operations and can hinder orderly city growth. Commercial and industrial development should take advantage of I-70 interchange access and/or locate within municipalities.

Planning to accommodate the needs of future residents cannot be accomplished without evaluating the likely amount of population growth to occur during the planning period. The Missouri Office of Administration projected Lafayette County's population to reach 37,291 by 2020 (**Exhibit 31**). This equates to a 13.1% increase of the year 2000 population.

Based on the aforementioned population projections and data collected in the 2000 U.S. Census, future housing needs can be projected. **Exhibit 47** shows that approximately 1,700 new dwelling units will be needed by 2020 to house the population. Future demand for housing opportunities may be accommodated within incorporated towns as well as in rural areas. The location of future growth will have direct impacts on the costs of public services, agricultural operations and the character of the County.

Commercial and, to a lesser extent, industrial uses will be established to provide for local needs and will take advantage of the County's interstate access. Highway oriented commercial uses will seek interstate access while neighborhood commercial uses will gravitate to population centers with visibility and access.

##### ***Exhibit 47: Residential Growth Calculations***

Total Population Change 2000 - 2020	4,331
Persons per Household	2.55
Dwelling Units Needed	1,698

*Source: Calculated by Planning Works.*

## Chapter III. Community Growth Goals & Policies

### 1. Desired Community Qualities in 2020

One of the primary objectives of the citizen participation sessions was to determine what desired community characteristics should be strived for over the next several years. Participating citizenry clearly articulated numerous preferred qualities, from which the community can be described as having:

- a thriving agricultural industry;
- healthy, small town/rural character;
- growth in employment opportunities; and
- a high quality transportation system.

### 2. Key Planning Issues

In addition to fettering out desired community qualities, the citizen workshops were designed to identify key concerns of farmers, ranchers, rural residents, city residents, developers, realtors, business owners, cities, other service providers and other County interest groups. Participants, meeting in small discussion groups, were asked to identify key challenges facing the County and to recommend strategies to address those issues. The key issues identified by workshop participants were:

#### Growth and Economic Issues

***Recognize the important role of agriculture in the local economy.*** In addition to playing a dominant role in the character and culture of Lafayette County, agriculture plays a vital economic role. The County should protect this industry from inappropriate residential encroachment and excessive regulatory barriers.

***Promote selective and collaborative economic growth.*** The County should help cities retain existing businesses and attract quality businesses that create new jobs. In doing so, the County should focus on maintaining its solid agricultural base, educating residents to attract high quality employment opportunities, and target incentives to businesses offering stable jobs that pay a good living wage.

***Plan for appropriate land uses.*** The Plan should designate appropriate residential and non-residential land uses at appropriate densities throughout the County. It should recognize distinct demands and conditions in different areas (e.g., high residential growth in the western portion of the County and relatively low growth in the eastern portion), and provide a predictable guide for property owners and decision makers. New development should be compatible with existing and planned uses of adjacent property.

***Coordinate growth decisions with existing and planned facilities and services.*** The County should ensure that new development has access to adequate public facilities (e.g., roads, water, sewers, schools, fire protection). This will require coordination with the cities of Lafayette County and other service providers.

***Protecting future city growth areas.*** In addition to ensuring that new development has access to facilities and services, the County should ensure that the new development does not create an obstacle to the rational growth of communities. By coordinating with cities, the County can facilitate city growth and the extension of water and wastewater systems

***Capitalize on the I-70 corridor.*** I-70 is both an asset and a liability in Lafayette County. It provides valuable access for parcels located near interchanges. Currently, upgrades are needed to improve the safety and capacity of the freeway. As the County plans for future development, it should recognize the value created near interchanges but be careful to ensure that corridor development does not damage nearby communities.

***Preserve rural and small town characters.*** Lafayette County's assets include the small town flavor of its communities and the rural character of the balance of the County. Residents place a high priority on preserving these traits as the County grows.

***Maintain fiscal integrity.*** Growth is desirable only if it improves the health and welfare of existing residents. To keep existing residents from being saddled with higher taxes, new growth should be required to pay its own way.

#### Transportation Issues

***Maintain roads.*** The condition of roads affects the quality of most residents' lives on a daily basis. Maintenance of existing roads should remain a high priority. In some areas, the surface condition is the primary concern and in other areas, road dust is the issue.

***Upgrade roads and bridges.*** In many cases, particularly in the Southwest portion of the County, increased traffic has created demands for additional hard surface roads. Throughout the County, the maintenance and upgrading of bridges is an issue of safety and convenience. Additionally, the County should continue efforts to improve visibility and traffic safety, particularly along its paved roads.

***Fund road maintenance and upgrades.*** The quality of roads must be balanced against the ability to fund future road maintenance and upgrades. Absent additional sources of revenue, road districts will continue to be limited in their ability to fund maintenance and upgrades. Funds should be targeted to those areas with the greatest needs, but there also should be some geographic equity, so portions of the County are not neglected.

***Increase MODOT support to:***

- ***Upgrade I-70.*** Heavy traffic volumes on I-70 have generated safety, capacity and maintenance challenges. Residents seek upgrades to this freeway for safety and convenience.
- ***Upgrade Hwy. 13.*** Hwy. 13 will create a vital north-south highway linkage through Lexington and Higginsville.
- ***Provide better linkages to 50 Hwy.***

**Natural Resource and Recreation Issues**

***Preserve most productive farmland.*** Agriculture contributes to the local economy and is an important element of the County's character. Preferential property tax rates help farm and ranch operators, but the County could do more to protect the most viable ground, including zoning to preclude residential encroachment on agricultural lands, protecting the land with the best soils and supporting uses that are complementary to agricultural operations.

***Protect environmental assets.*** The County's wildlife, woodlands and streams are assets that should be retained as the County's "green infrastructure." Subdivision design should maintain green spaces along floodplains and other stream corridors. Other, larger areas should be conserved in public or private preserves that may also be usable as parkland.

***Conserve rural aesthetic.*** Open space is an important element of rural character. The County's plan should identify a range of strategies to retain the rural character in both agricultural and rural residential areas. Conservation subdivisions, buffer strips, exclusive agricultural zoning and livestock operations should be considered.

**Health and Safety Issues**

***Be prepared for emergencies.*** 9-11 raised everyone's consciousness of the need to be prepared for the unexpected. Disaster preparedness will involve coordination between many city, County, state and federal agencies.

***Keep up with law enforcement needs.*** As growth pressures have increased, so has crime. A two-pronged program of crime prevention and law enforcement is essential to address this issue that requires an active partnership between citizens and law enforcement agencies. Having sufficient jail capacity is one aspect of this issue that concerns County residents.

***Health care availability.*** Rural America has had an increasingly difficult time retaining adequate hospital beds and physicians as the health care industry has contracted to improve its efficiency. The size of the County has led to fragmented social and health service provision. The County needs to improve coordination between providers while continuing to provide services to a widely dispersed population.

### Community Issues

**Maintain quality leadership.** Good government depends on dedicated elected officials and many other volunteers for various boards and commissions. Keeping an informed and involved electorate is a challenging, but essential task.

**Provide for attainable housing.** As urban area residents move into the County, housing prices will increase, as will the challenge of finding housing units at prices that the median income family can afford. County coordination with the cities, state and private developers is essential to ensure that an adequate supply of affordable housing is maintained in Lafayette County.

**Support family life.** Families are a basic element of the small-town and rural life. Public policy should help maintain families by ensuring that there are adequate housing, employment, recreational and cultural opportunities to sustain families.

### 3. Public Policy Structure

Plan goals, objectives and policies form Lafayette County's statement of public purpose and intent regarding land use, infrastructure, services, and fiscal impacts of growth. Goals, objectives and policies serve distinct functions within the plan's public policy framework as described in the following definitions.

**Goal** - description of a desired state of affairs for the community in the future. Goals are the broad public purposes toward which policies and programs are directed. Generally, more than one set of actions (policies) may be needed to achieve each goal. In this Plan, goals are phrased to express the desired results of the Plan; they complete the sentence "Our goal is ...".

**Objective** - individual accomplishments which, taken together, will enable the County to achieve Goals.

**Policy** - statements of government intent against which individual actions and decisions are evaluated. Policies typically indicate the agency primarily responsible for implementing the policy.

### Growth Tiers

Within Lafayette County there are general land use patterns that are herein defined as "Growth Tiers." Growth tiers represent regions where existing land use patterns, infrastructure, service levels and municipal influence have historically and will continue to impact the form of development. Specific objectives and policies apply to each tier. Four growth tiers are delineated in **Map 12** and described below. All mapped tier boundaries are intended to follow the closest property line, section line or aliquot (quarter of a quarter-section) boundary line.

***Tier I: Urban Service Areas (USAs)*** - USAs include land around cities having centralized sewer systems that is planned for urban development with a full range of urban services by the year 2020. City land use plans should define USA boundaries. For cities with centralized sewer service that lack adopted, long-range growth plans, a ½ mile buffer around the existing city limits defines a area in which certain USA objectives and policies apply. USA development is planned at urban densities subject to the availability adequate urban levels of services. Rural estate and other residential development shall be limited in areas with existing or planned centralized sewer service so cities may grow in the most efficient and coordinated manner possible. City/County coordination of public investment and development approval is necessary to fulfill desired urban growth. Areas surrounding cities that lack centralized sewer service are designated as Tier II, Rural Residential.

***Tier II: Rural Residential (RR)*** – Tier II accommodates more than enough development potential to accommodate projected rural residential growth projected through the year 2020. The rural residential tier encompasses a large area in the southwest portion of the County. It also surrounds each of the cities in Lafayette County that lack centralized sewer service. It is characterized by large lot rural residential development intermingled with agricultural uses. As continued rural residential development occurs, there will be a significant increased demand for roads, water, emergency services, schools and other public services and infrastructure. The amount and timing of rural development will be subject to the availability of adequate public facilities. Land within the Rural Residential Tier generally is located within ½ mile of a paved state highway.

***Tier III: Highway Commercial Nodes (HCN)*** – Highway interchanges foster highway oriented commercial development that primarily serves regional and interstate automobile travelers. Policies applicable to commercial development within Tier IV require adequate facilities and improvements to create safe, functional and attractive convenience shopping.

***Tier IV: Agricultural/Resource (A)*** – The Agricultural/Resource tier is intended to support ongoing agricultural operations and preserve valuable natural resources. Policies within this tier allow sparse residential development to minimize negative impacts on agricultural operations and to minimize the demand for public services and infrastructure. Commercial uses are limited to agricultural related services and home occupations.

While the growth tiers are defined by land uses and not zoning, individual zoning districts may be appropriate for some growth tiers but not appropriate for others. **Exhibit 48** lists the zoning districts most appropriate for use in each growth tier, based on the objectives described above.



**Exhibit 48: Growth Tiers & Corresponding Zoning Districts**

Growth Tier	Appropriate Zoning Districts (1)
I Urban Tier	A Agricultural District R Single-Family Dwelling District R-1 Single-Family Dwelling District R-2 Two-Family Dwelling District R-3 Multiple-Family Dwelling District B-0 Office & Service Business District B-1 Local Business District B-2 General Business District M-1 Light Industrial District M-2 Heavy Industrial District
II Rural Residential Tier	A Agricultural District RA Residential Agriculture RE Rural Estates (2)
III Highway Commercial Tier	A Agricultural District B-1 Local Business District B-2 General Business District M-1 Light Industrial District
IV Agricultural/Resources Tier	A Agricultural District

- (1) All zoning districts will be reviewed for consistency with the comprehensive plan. In particular, the RA, R-1, R-2 and R-3 zoning districts are likely to be modified or eliminated.
- (2) Rural estates zoning may be limited by lack of adequate soils to accommodate septic systems. A minimum lot size of three (3) acres should be required for systems using individual septic systems.

**Exhibit 49** indicates the general level of public service, infrastructure and on-site improvements required prior to or concurrently with development within each tier specific requirements are clarified. The provisions of this table’s recommendations will be implemented through the land development regulations. Criteria, may be absolute requirements, such as the requirements for legal access and utilities, or they may be factors to be considered when evaluating the suitability of a specific proposal, such as those established for fire/emergency medical service response times,

**Exhibit 49: Tier Facilities and Minimum Improvements Standards**

Facilities/Improvements	Tier I - USA	Tier II - RR	Tier IV - HCN	Tier III - A
<b>Public Infrastructure and Services</b>				
Legal Access	✓	✓	✓	✓
Grants of Right-of-Way and Easements	✓	✓	✓	✓
Road Access Surface				
Paved	✓	✓ 1	✓	
Gravel				✓
Earth				2
Parks and Recreation	3			
Electricity	✓	✓	✓	✓
Wastewater				
Centralized Service	✓		✓	
On-Site Systems (4)		✓	✓	✓
Water				
Centralized Service	✓	✓	✓	7
Individual Well				✓
Fire Protection 8				
Fire Flow	✓	5	✓	
6 Minute Response Time for Fire and EMS	✓	✓	✓	
<b>On-Site Improvements</b>				
Curbs, Gutters, Sidewalks	3			
Hard Surface Parking	3		✓	
Shared Parking	3		✓	
Drainage Detention/Retention Facility	3	✓ 9	✓	
Landscaping	3		✓	
Buffering (6)	3	✓	✓	✓

1. Paved internal subdivision roads are required and must allow for public service access. Access to subdivisions may be gravel, subject to adequate facility requirements in policy PUB 1.2 and appropriate fees pursuant to policy PUB 1.1 (see page 63 of this plan).
2. Earth road access only allowed for field entrances only. Earth road access is prohibited for residential and other non-agricultural use access.
3. New development must meet or exceed the standard established by the applicable City.
4. The suitability of on-site wastewater systems is subject to soil conditions, slopes and other site constraints.
5. Where fire flow is not available by using the centralized water system, development is required to provide adequate on-site storage and pumping facilities as indicated by the responsible fire district.
6. Buffering standards differ for different uses in each tier (See policy RR 2.2).
7. May be required to hook on to water if available.
8. This is one factor to be considered in the County's development regulations
9. Subject to applicable state and county development regulations.

Future Land Uses

**Exhibit 50** describes land use categories used in the Future Land Use Plan (**Map 13**). The Future Land Use Plan and the Tier Map shall guide decisions on site specific development proposals. Zoning decisions shall be consistent with the Future Land Use Plan and Growth Tier Map. Infrastructure requirements shall be consistent with applicable tier policies. Public service providers should use the plan to guide infrastructure improvements to accommodate future growth. The location and capacity of public service improvements may be determined by comparing existing land use and service demands with the proposed land use pattern.

*Exhibit 50: Future Land Use Categories*

Category	Permitted Land Uses	Density	Location
Urban Mix	Residential, commercial, industrial and other land use types in varying mixtures as appropriate for the adjacent City.	Subject to City plans and availability of public facilities.	Within the USA's provided the property is annexed or provided with urban services.
Rural Residential	Single-family detached residential dwellings, conservation subdivisions and neighborhood services.	1 dwelling unit per 3 acres.	Within the southwest and northwest portions of the County where public water and transportation infrastructure are adequate.
Highway Commercial	Regional commercial trade services, retail and offices serving the traveling public, large employment centers; regional research and development; and indoor warehousing.	Lot sizes dependent on proposed development	Near highway interchanges and select intersections of paved arterial roads.
Agricultural Resources	Agricultural production, very low-density residences, conservation subdivisions, home occupations, agriculture services, direct marketing of agriculture products and neighborhood services.	1 dwelling unit per 25 acres, with a density bonus of not more than 20 percent to be established in the development regulations for the establishment for conservation subdivisions.	The entire County, excluding USA's, Highway interchanges, and rural residential areas located in the southwest and northwest portions of the County.
Industrial	Low intensity industrial, business park and warehouse development.	Lot sizes dependent on proposed development	Adjacent to arterial roads with adequate capacity in USAs and Highway Commercial Areas.

## Goals, Objectives and Policies

### **Land Use Goal**

**Foster a safe, convenient, attractive, compatible and fiscally responsible land use pattern that includes a variety of housing, recreational and commercial opportunities while respecting agriculture and unique community assets such as historic sites and environmentally sensitive areas.**

### **Countywide Growth Objectives and Policies**

- GR 1: Ensure that new development is compatible with existing and planned uses of surrounding properties.
- Policy 1.1: Use the land use categories in **Exhibit 50** for future land use planning. The “Typical Land Uses” column lists examples and should not be considered all-inclusive. Residential densities are expressed in dwelling units per gross acre of a project.
- Policy 1.2: Use the Future Land Use Map in (**Map 13**) to guide land use and development decisions. Zoning decisions shall be consistent with the adopted Future Land Use Map and the other policies of this plan. The Future Land Use Map does not affect existing subdivisions or permitted development. While the map may indicate a particular land use type, the County shall consider the adequacy of infrastructure and the character of the area before approving zoning or other development proposals.
- Policy 1.3: Maintain the Future Land Use Map and map adopted Plan amendments as they occur.
- GR 2: Require that adequate public facilities and services be available at an acceptable level of service concurrent with development.
- Policy 2.1: Review development applications for conformance with the facilities and improvement standards set forth in **Exhibit 49** for the Growth Tier in which the proposed development is located and applicable development regulations.
- Policy 2.2: Require development applications in tier I, II, and IV to include an analysis of the developments infrastructure and service demands relative to the available capacity.

- Policy 2.3: Require development to pay its proportional share of public facilities and services based on the demand created by the development.
- Policy 2.4: Provide developers with a menu of acceptable options to equitably provide adequate public facilities. Finance options may include:
- Development Agreements;
  - Neighborhood Improvement Districts;
  - Other legal and appropriate exactions.
- Policy 2.5: Require developers to provide financial assurances that on-site improvements are constructed and maintained to an acceptable standard in conformance with **Exhibit 49**. Assurances may be in the form of:
- an irrevocable letter of credit;
  - an escrow agreement;
  - a surety bond; or
  - a cash deposit.
- Policy 2.6: Review and help coordinate capital improvement plans of the road districts, school districts and water districts with growth trends and approvals as requested (*See Objective PUB 3 on page 64 of this plan*).
- GR 3: Eliminate structural, electrical, mechanical and plumbing hazards and ensure that new housing is built and maintained in a manner that ensures the safety of the occupants.
- Policy 3.1: Require dilapidated residential structures to be rehabilitated, or demolished and properly disposed.

### **Tier I – Urban Service Area Objectives**

- USA 1: Establish Urban Service Areas (USAs) around each city to ensure that new development is consistent with the rational growth of communities.
- Policy 1.1: Require land uses and the intensity of development within USAs to be consistent with the land use plan mutually adopted by the County and applicable City.
- Policy 1.2: Require urban and suburban development within the USAs to conform to improvement standards mutually agreed to by the applicable City and County.
- Policy 1.3: For cities without adopted plans, provide the opportunity to comment on development proposals located within their USA.

Policy 1.4: In areas that can not be developed to urban standards within 3 years of a development application, allow interim development within the USA that is consistent with the agriculture areas (1 dwelling per 25 acres) to minimize construction, septic tanks and land fragmentation within the USA.

USA 2: Coordinate public infrastructure improvement requirements with the cities within their respective USAs.

Policy 2.1: Coordinate infrastructure and drainage improvements with the cities and other service providers to ensure efficient use of public funds.

Policy 2.2: Establish a USA development review process in which city review of development proposals ensures consistency with mutually adopted land uses, densities, improvement standards and levels of service.

Policy 2.3: Establish a process to enable cities, school districts and other service providers to comment on the adequacy of facilities prior to County approval of USA development.

USA 3: Facilitate the creation of a diverse housing stock within existing communities that caters to different household needs preferences.

Policy 3.1: Ensure that USAs provide sufficient land for projected growth of the cities and that USA land use plans allow a mix of dwelling unit types.

Policy 3.2: Direct affordable housing projects to cities or planned districts in the USAs that have centralized water and/or wastewater systems, paved access, and access to employment opportunities.

## **Tier II – Rural Residential Objectives**

RR 1: Reduce the proportion of countywide growth in the unincorporated areas.

Policy 1.1: Maintain rural residential densities between 1 dwelling per 1.5 acres and 1 dwelling per 10 acres. Lot sizes smaller than 3 acres should be limited to conservation subdivisions and developments served by centralized or community sewer systems.

Policy 1.2: Require rural residential development to comply with the public facility and improvement standards established in **Exhibit 49**, including:

- Centralized water service may be through the County Public Water Service District or by an on-site water system that serves the lots within the subdivision through the appropriate water district.

- Gravel street access is an adequate until traffic volume exceeds 400 Average Daily Trips (ADT). When traffic volume exceeds 400 ADT, phased development must advance improvements or contribute to road improvements through a development agreement with the County.
- Developers must enter into a 2-year maintenance agreement for newly created public roads within the subdivision. Private roads must be maintained by the Home Owner's Association of the applicable subdivision.
- Fire flow standards may be met by installing hydrants to the water district lines where adequate pressure exists or by the construction and maintenance of on-site water storage.

Policy 1.3: Prior to expanding rural residential areas, ensure that at least 70% of existing rural residential areas have been developed.

Policy 1.4: Develop LESA-based suitability criteria to avoid the premature development of rural residential land.

RR 2: Ensure that residential uses are compatible with neighboring uses.

Policy 2.1: Review all development proposals for conformance with the Future Land Use Plan (**Map 13**).

Policy 2.2: Require residential development adjacent to agriculture uses to provide vegetative buffers, windbreaks and other means of mitigating potential incompatibilities to avoid interference with existing agricultural operations.

Policy 2.3: Limit commercial activity within the Tier II – Rural Residential Tier to home occupations, direct marketing of agricultural products and neighborhood scale commercial services at intersections of 2 paved roads.

### **Tier III – Highway Commercial Nodes (HCN) Objectives**

HCN 1: Establish highway oriented commercial districts at I-70 interchanges to provide retail and service opportunities for regional and long distance motorists.

Policy 1.1 Establish interchange highway commercial districts that are designed:

- as nodes in close proximity to interchanges rather than strips;
- in scale and intensity appropriate to road and public service capacity;
- to accommodate uses that primarily serve the traveling public and the surface transportation industry; and

- with landscaping, signage control, hard surface parking and loading, stormwater retention, architectural and performance standards that result in attractive amenities.

Policy 1.2 Make approval of highway-oriented commercial development contingent upon meeting the public facility and service standards within Tier IV as specified in **Exhibit 49**.

#### **Tier IV – Agricultural Lands Objectives**

AG 1: Minimize negative impacts on agriculture operations from non-agricultural uses.

Policy 1.1: Adopt local right-to-farm measures including:

- an “Agriculture Use Notice” to be administered when a building permit is sought, and
- an “Agriculture Management Easement” which must accompany a final plat to indemnify agriculture operations from incidental nuisances generated by generally accepted agricultural practices.

Policy 1.2: Retain the current residential densities allowed under the Agriculture (A) zoning district at one dwelling per 25 acres. Evaluate the use of density-based zoning to allow smaller lots in rural areas, provided that:

- the overall density does not exceed 1 dwelling per 25 acres except subject to conservation subdivision provisions that retain at least 70 percent of the site for agricultural, resource or open space uses;
- the development does not diminish the rural character of the Agricultural/Resources Tier; and
- density based zoning does not stimulate over-development in the rural tier.

Policy 1.3: Encourage new non-agriculture uses in the agriculture areas to plant a vegetative buffer between the use and agricultural operations.

Policy 1.4: Allow commercial activities that are commonly accessory to and support the viability of agricultural operations in agriculture areas.

AG 2: Protect the most agriculturally productive soils from conversion to non-agriculture pursuits.

Policy 2.1: Develop and implement a Land Evaluation and Site Assessment (LESA)<sup>6</sup> system to review conservation subdivision applications impacts on prime agricultural soils along with other relevant factors.

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<sup>6</sup> LESA systems are described in more detail beginning on page 85; an example of a LESA system is provided in Appendix A.



Policy 2.2: Minimize development within 100-year floodplains.

## **Economic Goal**

**Create a local economy that provides varied employment and trade opportunities built upon efficient and equitable use of Lafayette County's cultural, natural, built and human resources.**

### Objectives

Econ 1: Retain agriculture's viability within Lafayette County by preserving and promoting agriculture as a vital component to the local economy.

Policy 1.1: Minimize encroachment of non-agriculture uses into predominantly rural agriculture areas and mitigate the impacts of encroachment where it occurs.

Policy 1.2: Limit infrastructure improvements within rural agricultural areas to those projects necessary to serve agricultural needs and to resolve compelling threats to the public health and safety.

Policy 1.3: Support economic development initiatives that expand the diversity of agriculture products, production methods and marketing efforts.

Econ 2: Encourage development of non-farm employment within cities to support their roles as energetic centers of diverse commercial and industrial activity.

Policy 2.1: Support labor force enhancement efforts that focus on education and training to attract investment and job creation within our communities.

Policy 2.2: Encourage employment opportunities within cities to provide stability and a decent living wage through targeted performance-based incentives.

Policy 2.3: Coordinate with cities and economic development interests to explore opportunities for joint development of a business and industrial park.

Policy 2.4: Limit commercial zoning in unincorporated areas to facilities that serve the needs of rural residents to regional businesses at highway interchanges.

Econ 3: Create safe, attractive and functional highway-oriented commercial areas that capitalize on regional transportation access without detracting from the economic vitality of cities.

Policy 3.1: Participate in state transportation planning to improve the condition, capacity and safety of I-70 and its interchanges.

Econ 4: Increase the diversity of employment opportunities that meet the needs and capabilities of local residents.

- Policy 4.1: Coordinate with local school districts and colleges to encourage businesses and governmental entities to extend internship and apprentice opportunities to local students.
- Policy 4.2: Identify and target recruitment efforts to businesses that are complementary to the existing industrial base.
- Policy 4.3: Facilitate discussions with cities to locate and develop an industrial park in the I-70 corridor that will provide opportunities for long-term employment growth.

### **Physical Environment Goal**

**Ensure that development decisions minimize degradation of natural resources and promote a clean, safe and aesthetically pleasing environment for all current and future citizens.**

#### Objectives

Env 1: Protect land adjacent to lakes, rivers, streams and wetlands.

- Policy 1.1: Limit construction within 100-year floodplains to necessary infrastructure development.
- Policy 1.2: Require vegetative buffers and natural stormwater filtration systems for all non-agricultural development adjacent to water and major drainage ways.
- Policy 1.3: Encourage the use of vegetative buffers, terracing and other stormwater management techniques that improve the quality of stormwater runoff and limit stream contamination.

Env 2: Establish development standards that minimize the impact of human activity on the natural environment.

- Policy 2.1: Encourage development codes and site planning requirements to integrate reasonable open spaces for conservation, recreation and drainage purposes.
- Policy 2.2: Encourage the retention of specimen trees during site preparation for construction and other development activities.
- Policy 2.3: Support recycling, composting and other legitimate solid waste reduction activities.

Env 3: Support long-term conservation of land resources.

Policy 3.1: Encourage the placement of conservation easements, deed restrictions and other mechanisms that preserve land resources in conformance with the Future Land Use Plan.

Policy 3.2: Provide technical support to any person or entity wishing to conserve land resources by providing property data, land use monitoring and educational materials on land conservation tools and practices.

### **Public Facilities and Services Goal**

**Ensure that public services, facilities and utilities support community life in a safe, effective and efficient manner, while justly allocating the costs of providing these public goods.**

Objectives:

Pub 1: Ensure that new development has access to adequate public facilities and that new development pays its fair share of public improvement costs.

Policy 1.1: Require new development to pay for its proportional share of new facilities and infrastructure capacity costs based on the demand created by the development.

Policy 1.2: Require the availability of adequate public facilities to serve the development as a condition of development application approval.

Pub 2: Increase coordination between rural service providers.

Policy 2.1: Notify public service providers of pending development applications and County infrastructure projects and invite comment to coordinate service provider activities.

Policy 2.2: Notify public service providers of development application decisions.

Policy 2.3: Coordinate with public service providers to develop complementary CIPs that are consistent with Plan, projected growth and development decisions.

Pub 3: Coordinate with the school districts to promote high quality educational opportunities and effective and prudent use of school resources.

- Policy 3.1: Forward major development applications to school districts to enable schools to plan for needed capacity.
- Policy 3.2: Forward annual development summaries to school districts to facilitate school planning.
- Policy 3.3: Coordinate with school districts on siting decisions to ensure that adequate facilities will be available to future schools.

### **Transportation Goal**

**Provide and maintain a rural transportation system that emphasizes safety, cost effectiveness and connectivity while remaining consummate to a rural agricultural based land use pattern.**

#### Objectives:

- Tran 1: Address transportation safety, capacity and adequacy in the development decision-making process.
  - Policy 1.1: Require traffic impact studies as part of the development applications for projects that will significantly impact street system safety and capacity.
  - Policy 1.2: Provide Road Districts detailed development project descriptions and ample opportunity to give input to decision-makers.
  - Policy 1.3: Ensure that the County's development regulations adequately address traffic safety and capacity issues.
- Tran 2: Coordinate with the Road Districts to ensure that road construction and maintenance is consistent with existing and future traffic patterns.
  - Policy 2.1: Coordinate with the Road Districts to conduct a comprehensive road inventory of the County to assemble and maintain data on surfaces, widths, conditions, traffic counts and other relevant data. Based on this inventory and future traffic demand calculated from the Future Land Use Plan, the functionality of each roadway should be determined and appropriate right-of-way and improvement standards established. Functional road classifications are described in **Exhibit 51**.

*Exhibit 51: Functional Road Classes*

Road Classification	Function	Character of Road
Principal Arterial	Link communities and urban centers; carry high volumes of traffic at relatively high speeds.	Continuous traffic flow along paved roads with points of access being tightly controlled. Access from individual residential lots is limited, new rural and urban residential development will not provide direct access from individual lots smaller than 10 acres.
Minor Arterials	Link principal arterials and communities, providing moderate volumes of traffic at moderate speeds	Continuous traffic flow along paved roads with periodic controlled intersections. Access from individual residential lots is limited, new rural and urban residential development will not provide direct access from individual lots smaller than 10 acres.
Major Collector	Link important uses within the County to each other; carry moderate volumes of traffic at low speeds; collect the traffic from local roads.	Continuous paved roadway designed to carry traffic to arterial roads. Access to major collector roads along section lines should be limited to subdivision entry roads.
Minor Collector	Link local roads; carry low volumes of traffic at low speeds; collect traffic from local roads.	Continuous un-paved roadway through a township; designed to carry traffic to paved collector or arterial roads. Minor collectors will become major collectors when average daily traffic exceeds 400 vehicles per day.
Local	Provide access to individual lots; carry low volumes of traffic at low speed.	Discontinuous; designed to discourage use by through traffic; stop signs at most intersections. Unpaved, except within urban density subdivisions or when private roads.

Policy 2.2: Coordinate with road districts to codify road design standards. Initially, new road projects should be designed in accordance with the standards established in **Exhibit 52**, which may be modified when the standards are codified.

Policy 2.3: Require right-of-way dedications through the platting process and ensure that the right-of-way allows for the installation of utilities and drainage facilities.

Policy 2.4: Evaluate the equity and effectiveness of the County's current road improvement system.

**Exhibit 52: Design Characteristics by Functional Road**

Design Characteristic	Functional Road Classification				
	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local
Traffic Lanes	2 to 4 12' lanes	2 to 4 12' lanes	2 to 4 11' lanes	2 11' lanes	2
Design Capacity (average vehicles per day)	based on configuration	based on configuration	<6,000	<400	<100
Minimum Right-of- Way* (feet)	120	110	100	80	60
Typical Speed Limit* (miles per hour)	35 to 55	35 to 55	30 to 55	25 to 45	25 to 45
Pavement Type	paved	paved	paved	paved or gravel	gravel
Driveway Access	limited	limited	limited, 300 ft. minimum separation	limited, 300 ft. minimum separation	unlimited

\* Right-of-way and speed limits depend on terrain, visibility, road alignment and adjacent development.

Tran 3: Require development to design and construct adequate internal road systems that are integrated with the existing and future roads and consistent with the County's thoroughfare plan.

Policy 3.1: Require platted right-of-way to extend to the adjacent property boundaries to enhance access and connectivity between development projects.

Policy 3.2: Require that internal local subdivision roads, whether dedicated for public maintenance or other entity approved by the County, be constructed to the adopted minimum road standards.

Policy 3.3: Internal subdivision roads may be privately owned and maintained by a Home Owners Association or other entity approved by the County, provided that public services may use the right-of-way.

## **Community Image Goal**

**Create an environment that nurtures pride within the community and conveys a positive healthy image to residents, visitors and travelers.**

### Objectives

CI 1: Create and preserve aesthetically pleasing transportation corridors.

Policy 1.1: Adopted landscaping standards that require commercial establishments to provide landscaped parking facilities.

Policy 1.2: Require screening of outdoor storage materials.

Policy 1.3: Establish commercial sign standards to minimize negative aesthetic impacts in commercial areas as permitted by state law.

Policy 1.4: Support the incorporation of aesthetically pleasing design elements into State and Federal transportation projects within Lafayette County.

CI 2: Preserve, promote and enhance historic sites, structures and other community assets that define Lafayette County's heritage.

Policy 2.1: Review development proposal impacts on the historic assets of Lafayette County as part of the decision-making process.

Policy 2.2: Coordinate with local and state historic preservation interests to conduct and disseminate an inventory of local historic assets and advise property owners of historic preservation incentives available from the Missouri Department of Natural Resources.



## **Chapter IV. Implementation & Benchmarks**

### **1. Implementation**

Lafayette County's Comprehensive Development Plan is intended to be a dynamic document -- one that responds to changing needs and conditions. To assess the Plan's effectiveness in responding to changing conditions, the County will need to monitor actions affecting the Plan. As a result of these monitoring efforts or private development requests, the County will need to amend the Plan periodically. However, amendments should not be made lightly. The County Commission and Planning Commission members should consider each proposed amendment carefully to determine whether or not it is consistent with the Plan's goals and policies. In addition, the cumulative effect of several minor changes may be a change in policy direction. For this reason, amendments must be evaluated in terms of their significance to overall County policy.

This Chapter describes the processes to annually review, monitor and amend the Plan and the Future Land Use Plan. A detailed amendment process should be incorporated into the County's development regulations.

### **2. Annual Review & Monitoring**

Prior to development of each budget, the County Commission should:

- measure the County's success in achieving plan goals through the recommended strategies of the implementation program discussed at the end of this Chapter;
- propose strategies to be pursued under the coming year's budget;
- identify unlisted strategies that will achieve Plan goals;
- evaluate growth trends and compare those trends to Plan projections; and
- summarize development actions that affect the Plan's provisions.

This annual review should include statements identifying the County's progress in achieving the goals of the Plan, the impact of the Plan on service provision, and proposed programs to help achieve the goals. The annual review should be used as a tool to help set budgetary priorities.

### **3. Future Land Use Plan Amendments**

The Future Land Use Plan is intended to guide public and private development and land use decisions. The intent of this Plan is for the County to adopt a formal amendment process that will be codified in the County's development regulations. Future land use amendments are anticipated as growth occurs and market conditions change. While land use amendments may occur more frequently than policy changes, they should not occur more than twice per year. By limiting opportunities to amend the Future Land Use Plan, the County will reduce the potential for incremental land use changes to result in unintended policy shifts.

#### 4. Policy Review & Amendment

To ensure that the Plan remains an effective guide for decision-makers, the County should conduct periodic major evaluations of the Plan goals and policies. These evaluations should be conducted every three to five years, depending on the rate of change in the community, and should consider the following:

- Progress in implementing the Plan;
- Analysis of Plan benchmarks;
- Changes in conditions that form the basis of the Plan;
- Fiscal conditions and the ability to finance public investments recommended by the Plan;
- Community support for the Plan's goals and policies; and
- Changes in State or federal laws that affect the County's tools for Plan implementation.

The major review process should encourage input from businesses, neighborhood groups, developers, the County's, cities' and other community interests through the Planning Commission. Comprehensive Development Plan amendments that appear appropriate as a result of this review would be processed according to the adopted Plan amendment process.

#### 5. Relationship to Budget

The annual budget is one of the most potent tools for plan implementation because it sets priorities for action each year. Capital and operational funding decisions should directly reflect the goals and policies of this Plan. The Plan should serve as the basis for the staff's recommended work programs and a focus for the Commission's discussion of priorities from year to year. County staff should review the Plan goals and implementation programs and recommend appropriate strategies to achieve the Plan goals in a manner that is consistent with Plan policies.

If specific Plan recommendations are not funded, the County Commission should evaluate whether they should be omitted from the Plan. When there is a conflict between budget priorities and the goals and policies of this Plan, the Commission should consider whether those goals or policies remain valid. If they are valid, then the Commission should reevaluate budget priorities.

#### 6. Description of Implementation Tools

The Plan Implementation Program identifies a number of tools available to Lafayette County that may be employed to bring the goals, objectives and policies of the plan to fruition. These implementation tools are inter-related and work together providing continuity and breadth to the implementation program.

##### Development Regulations

On a day-to-day basis, the development regulations (zoning and subdivision regulations) are the most important tools for Plan implementation. The Future Land Use Plan and the growth related goals are

achieved through a myriad of incremental decisions about specific development projects. Because the Master Plan does not carry the force of law, the County must effect Plan policies through a variety of actions, including amendments to the County subdivision and zoning regulations. Updates to these development regulations should be consistent with the Master Plan to ensure that incremental actions on development requests support the Plan's goals, policies and recommendations.

#### Land Evaluation and Site Assessment System (LESA)

Land Evaluation and Site Assessment (LESA) systems were originally devised in 1981 by the Soil Conservation Service to assist in the evaluation of land for suitability for agriculture use. Many local jurisdictions (predominately Counties) have implemented LESA systems as part of the development review process. Most locally adopted LESA systems are used to evaluate agricultural suitability and conversely a property's likelihood of conversion to non-agricultural use. Most systems include an evaluation based on the soil's capability to produce food and fiber (land evaluation) and a review of non-soil variables that affect the property's use (site assessment). Non-soil variables would include:

- the level of public services available;
- adjacent land use;
- land base fragmentation;
- land costs, land use plans;
- proximity to city jurisdictions and Urban Service Areas (USA's); and
- floodplains, and other factors.

A point system is devised which can be weighted to provide emphasis on local concerns. For instance, if a community's primary goal is to protect the best prime soils, the soil rating would be a large part of the overall total points. If the community is concerned with directing rural residential growth to areas served by adequate public facilities, service availability and quality would be a highly weighed variables. The Saline County, Kansas LESA criteria are described in **Appendix A** as an example of this type of tool.

#### Capital Improvements Plan

The long-range CIP is an important planning tool to ensure that the County has planned the most cost effective facilities and to determine whether the County will have the capability to fund needed public facilities. The long-range CIP should reflect the size, approximate location and estimated costs of improvements needed to serve anticipated growth for the next 15 to 20 years. This plan is not an engineering document, but should provide enough specificity to determine which costs are required to remedy existing deficiencies and which costs provide new capacity that will be demanded by new development. The long-range CIP should establish the basis for the County's development fees. The long-range CIP should be updated at least once every five years or when significant changes to the base systems modify the County's long-term capital investment strategies (*e.g.*, changes in service areas, significant changes in the Future Land Use Plan, changes in service demand or delivery patterns).

The CIP should list short-term projects needed to maintain existing levels of service, with each project being assigned a budget and a time frame for completion. The CIP also should delineate the proportion of project costs that is designed to provide new capacity and the proportion that is required to fund existing deficiencies. This delineation will enable the County to quantify the capital costs associated with new development and to monitor the expenditure of development fees. The five-year CIP should be updated annually to reflect the County's budgetary decisions.

#### Inter-governmental Agreements

Inter-governmental agreements (IGAs) are essentially treaties between two or more units of government for the mutual benefit of all parties. Within the context of this plan, an agreement between the County and cities could address growth within the Urban Service Areas. Such an agreement could establish each party's rights, responsibilities and recourse within a cooperative growth management process designed to implement the Urban Service Area policies of this plan. Items typically addressed in local government IGA's include: development review authority, annexation processes, infrastructure projects, building and related codes, public safety mutual aid agreements and IGA administrative procedures.

#### Adequate Public Facilities Ordinance

An Adequate Public Facilities Ordinance (APFO) or requirement provides that public facilities and services must be available when needed to serve new development at an adopted Level of Service (LOS). APFO's can require availability and adequacy for any type of public facility (roads, water, wastewater, public safety, schools, etc...) prior to development or make development conditional upon public facilities. If development is contingent upon meeting APFO requirements, the local jurisdiction may provide for the payment of an impact fee or other financial surety to make necessary improvements to comply with the adopted level of service.

## 7. Plan Implementation Program

The Comprehensive Plan requires on-going action to achieve its goals. **Exhibit 53**, the Plan Implementation Program, provides an initial listing of tasks required to carry out the goals and policies of the plan, which are listed in **Chapter III**. This program should be updated on an annual basis to reflect County accomplishments and to incorporate new program proposals. The Plan Implementation Program is a tool for establishing budgetary priorities. Programs that are not funded in the recommended years should be evaluated for removal from the list or to be shifted back for later implementation. Programs that are completed should be removed from the list. The Plan Implementation Program is intended to be the most dynamic component of the plan. Through annual updates, the County can ensure that the plan continues to serve the community effectively.

The list of implementation strategies provides the following information in each column:

**Task** - the identification number for the implementation strategy.

**Action** - the specific strategy being recommended to implement the Plan.

**Tool** - the document or action necessary to carry-out the strategy.

**Priority/Schedule** - a ranking of importance based on its priority relative to other similarly-classed strategies. The ranking abbreviations are labeled in the following manner:

- 1 = To occur now
- 2 = To occur within two (2) years
- 3 = To occur within five (5) years
- 4 = To occur within ten (10) years

**Responsible Entity** - the person, department or agency that is primarily responsible for performing the strategy.

**Budgetary Impact** - indicates the relative fiscal impact of the specific strategy on the City's budget. The ranking abbreviations are labeled in the following manner:

Low = Little or no fiscal impact on the County's budget

Mod = Some fiscal impact, but feasible to be funded within one to two fiscal periods

High = May have significant cost, but may provide opportunities for the use of alternative revenue sources.

**Exhibit 53: Plan Implementation Program**

<b>Task #</b>	<b>Action</b>	<b>Tool</b>	<b>Schedule/ Priority</b>	<b>Responsible Entity</b>	<b>Budgetary Impact</b>
1	Incorporate land use and infrastructure guidance provided by the Comprehensive Plan into Planning Commission and County Commission staff reports.	Staff Reports	1, On-going	County Staff	LOW
2	Forward development application copies to local governments and service providers so that they may comment on service capacity and demand related to the proposed development.	Notification	1, On-going	County Staff Service Providers	LOW
3	Review staffing and funding levels for the Planning and Zoning Department and budget for any necessary changes.	Budget	1	County Staff	LOW/MOD
4	Revise the Planning and Zoning Regulations to incorporate the following provisions: a) Zoning districts consistent with the Comprehensive Plan and <b>Exhibit 49</b> ; b) Zoning review criteria to reflect Comprehensive Plan policies; c) Procedures and criteria to amend the Future Land Use Plan; d) A LESA System to aid in the review of zoning applications from AG to residential zoning districts; e) Level of service standards and require that adequate public facilities be available concurrent with final development approvals; f) Conservation subdivision design standards; g) An "Agriculture Use Notice" administered with building permits; h) Subdivision plats to include a "Resource Management Easement" to recognize adjacent landowners right-to-farm; i) Buffers between residential and agricultural uses and between residential and large scale commercial uses; j) Development agreement standards and processes and require development to pay its proportionate share of infrastructure and facility improvements; k) Streamline development regulations to provide greater predictability and assurance that Plan policies will be accomplished; l) Facility impact and drainage studies; m) Financial assurances for on-site improvements; n) Guidelines for the creation of a Home Owners' Association as part of the platting process; o) Minimum right-of-way widths and other design standards be consistent with the future use of existing and proposed roads and require; p) Dedications of road right-of-way and easements (utility, conservation, drainage, etc...) through the platting process; q) Standards for shared driveways to maintain rural character and limit road access points.	Development Regulations	2	Planning Commission, County Commission	MOD
5	Adopt an inter-governmental agreement with cities to establish mutually acceptable standards and procedures for development activity within USAs.	IGA	2	Planning Commission, County Commission, City Planning, Boards of Alderman	LOW

<b>Task #</b>	<b>Action</b>	<b>Tool</b>	<b>Schedule/ Priority</b>	<b>Responsible Entity</b>	<b>Budgetary Impact</b>
6	Provide government representatives, service providers, the development community and the general public an annual planning and development report summarizing development activity, infrastructure improvements and progress in the implementation of the Comprehensive Plan.	Annual Report	2, annually	County Staff	LOW
7	Hold Planning Commissioner training sessions on an annual basis to promote better decision-making and the generation of new approaches.	Training	2, annually	County Staff Planning Commission	LOW
8	In conjunction with the Road Districts, establish minimum road construction standards by functional type and require all roadway improvements to be consistent with adopted standards.	Development Regulations	2	County Staff, County Commission, Road Districts	LOW
9	Review the Comprehensive Plan and make amendments as necessary.	Comp. Plan	3, on-going	Planning Commission, County Commission	LOW
10	Conduct a road system inventory to collect data, identify deficient road segments, prioritize improvements and establish a demand-based funding system. Maintenance and revision of the inventory must be on-going.	Facilities Plan	3, on-going	Road Districts County Staff	MOD
11	Coordinate with cities, economic development interests and the development community to establish an economic plan or commission.	Economic Development	3	County, Cities, Economic Development	MOD/HIGH
12	Evaluate provision of building inspection services for non-agriculture construction by: <ul style="list-style-type: none"> <li>• Adopting appropriate Uniform Building, Electrical and Plumbing code; and</li> <li>• Hiring sufficient building inspection staff; or</li> <li>• Contracting with a private building inspector; or</li> <li>• Contracting with a City to provide services in the unincorporated areas.</li> </ul>	Building Codes	4, on-going	Planning Commission, County Commission	MOD
15	Support local NRCS and other educational programs relating to preservation of agricultural land, environmental protection and best management practices for agriculture.	Public Education	4	County Commission	LOW

## Appendix A: LESA Example

A Land Evaluation and Site Assessment system may be used to determine the appropriateness of proposed residential developments. This example LESA System evaluates the suitability of the site for development based on the following site assessment criteria:

### Percent of area in agricultural use within one mile B

0 points	All land is in agricultural use
4 points	90% of the land is in agricultural use
5 points	50% of the land is in agricultural use
9 points	40% of the land is in agricultural use
10 points	All land is in other than agricultural use

This factor assumes it is undesirable to scatter non-agricultural uses with an area primarily utilized for agricultural purposes. Such scattering interferes with agricultural operations and increases county costs to provide services. This factor is concerned with the broader and long-term impact of agricultural land conversion on Agricultural infrastructure@ and county services. The proposed conversion of land to non-agricultural use in an area primarily devoted to agriculture would earn fewer points than a similar proposal surrounded by non-agricultural uses.

### Distance from City or Village B

0 points	Over 3 miles from the City or Village
0 points	Over 1 mile from all others
5 points	1 to 3 miles from the City or Village
10 points	2 to 1 mile from any City or Village
15 points	Under 2 mile from any City or Village
20 points	Abuts city limits of any City or Village

A site adjacent to a city or urban area is more viable for non-agricultural use than a site located many miles from the nearest city or urban area. Cities of a greater existing size or historic growth may justify a wider radius in this criteria.

### Land use adjacent to the site B

0 points	The site is surrounded by agricultural uses
5 points	One side of the site is in a non-agricultural use
10 points	Two sides of the site are in a non-agricultural use
15 points	Three sides of the site are in a non-agricultural use
20 points	All land adjacent to the site is in non-agricultural use

The presumption of this factor is that a site immediately surrounded by non-agricultural uses is going to be more difficult to maintain as a viable agricultural operation than a site surrounded by agricultural uses. Therefore, given a choice, it is wiser to allow conversion of the site with adjacent non-agricultural uses. This factor is concerned with the immediate area



of the site. Lower points would be given to a proposal which would be surrounded by agricultural uses than a proposal surrounded by non-agricultural uses.

#### Compatibility with the Future Land Use Plan B

0 points	The site and surrounding area is planned and zoned for agricultural use
10 points	The site is planned and zoned for agricultural use, but adjacent land is planned for non-agricultural use
20 points	The site is planned for conversion to non-agricultural use
30 points	The site is planned for conversion to non-agricultural use and the surrounding land is zoned for non-agricultural use or the site is planned and zoned for non-agricultural use

The LESA system favors development that is consistent with Future Land Use Plan and zoning regulations.

#### Availability of Potable Water B

0 points	Rural Water District service not available
30 points	Rural Water District service is available
	or
	there is an approved collective system for the development

Water availability has emerged as a vital factor for an area's ability to support non-agricultural land uses. It is preferred that an existing public water source be used. Some commercial and industrial uses may not warrant mandatory rural water service.

#### Compatibility of proposed use with surrounding use B

0 points	Not compatible with surrounding uses
5 points	Conflicts with uses on three (3) sides
10 points	Conflicts with uses on two (2) sides
15 points	Conflicts with uses on one (1) side
20 points	Compatible with surrounding uses

The maximum points will be given if the proposed use will be compatible with existing neighboring uses. The less compatible, the fewer points given. The concept promotes the clustering of similar uses, or at least uses that would not conflict with each other.

#### Road Surfacing B

0 points	Over 3 miles to a hard surface road
10 points	Between 2 and 3 miles to a hard surface road
20 points	Between 1 and 2 miles to a hard surface road
30 points	Less than 1 mile to a hard surface road

A change in use from agricultural to non-agricultural creates a higher volume of traffic and increases maintenance costs. Therefore, a proposed use's distance to a bituminous hard surface road should be taken into consideration when determining if a site could sustain a non-agricultural use. More points are granted for closer proximity to a hard surface road.

## Degree to which the site's soils are limited for septic systems B

0 points	Severe
5 points	Moderate
10 points	Slight

This factor assesses the limitations of the site's soils for the effective disposal of wastewater on site. Limitations may be due to lack of permeability, shallow groundwater, shallow bedrock, or other characteristics that interfere with the absorption of treated effluent.

## Degree to which the site's soils are limited for basements and slabs B

0 points	Severe
5 points	Moderate
10 points	Slight

This factor assesses the soils types limitations for the construction of basements and slabs. A soil's composition determines the degree to which it shrinks and swells. The shrink and swell of the soil directly effects the cost of home construction, particularly on the basement or slab of a structure. Structures in severe shrink and swell soils will likely experience long-term structural damage.

## Environment/historic factors B

0 points	The site should not be converted to another use because of adverse environmental factors
10 points	There are no environmental factors to consider

If, because of environmental factors (floodplains or historic areas), the site should not be developed, and if the land could be used for some agricultural purpose, the maximum points should be given.

## Distance from rural fire station (RFD) B

0 points	Over 4 miles to the nearest RFD station
5 points	Between 2 and 4 miles to the nearest RFD station
10 points	Less than 2 miles to the nearest RFD station

Fire protection is a prominent issue for all development. The distance of the RFD station to the fire primarily determines fire district response times. Obviously, the closer the use is to the station, the quicker the response time and the decreased chance for substantial damage. The closer the proposed non-agriculture use is to the RFD station, the greater the points awarded for this variable.

## **Appendix B: Maps**

***Map 1: County Base Map***

*Map 2: Topography*

*Map 3: Hydrology*

*Map 4: Soils*

*Map 4b: Prime Agricultural Lands*



*Map 5: Land Use*

***Map 6: Zoning***

***Map 7: Road Districts***

***Map 8: Traffic Counts***

***Map 9: Public Water Supply Districts***

***Map 10: School Districts***

***Map 11: Population Change (1990-2000)***

*Map 12: Growth Tiers*



***Map 13: Future Land Use Map***