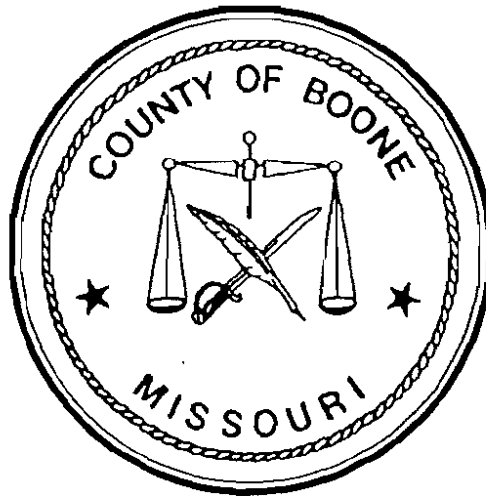


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# Boone County Master Plan

*Prepared for*  
Boone County, Missouri



*Prepared by*  
Booker Associates, Inc.  
St. Louis, Missouri

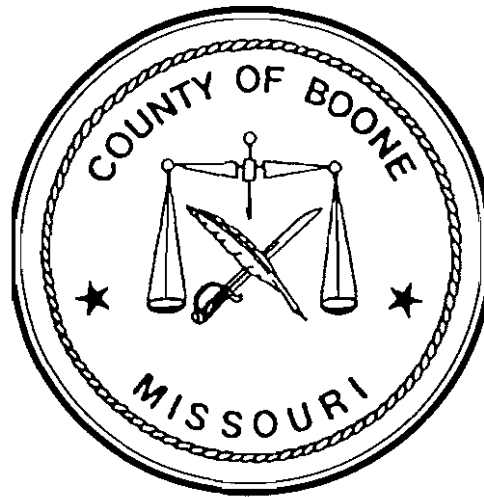
*October 1996*

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# Boone County Master Plan

*Prepared for*  
Boone County, Missouri



*Prepared by*  
Booker Associates, Inc.  
St. Louis, Missouri

*October 1996*  
*Booker Project No. D-3795*

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Karen M. Miller, District I Commissioner  
Linda Vogt, District II Commissioner

**LONG RANGE PLANNING STEERING COMMITTEE**

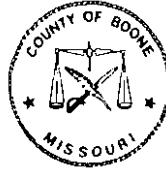
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# Boone County Commission

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October 1996

During the last decade of the Twentieth Century, Boone County began to experience accelerated growth. Acknowledging that the county's Master Plan had been adopted in 1973 and was seriously out of date, the Boone County Commission assembled a group and assigned them the task of updating the Master Plan.

Comprised of county residents from all walks of life, the Long Range Planning Steering Committee was formed to guide the County on the arduous task of developing a revised Master Plan.

The Long Range Planning Steering Committee formed the nucleus for a number of subcommittees that performed extensive research that was suitable for inclusion in the Master Plan.

While it is an easy task to list all of the members that made up the Long Range Planning Steering Committee, it is virtually impossible to adequately recognize the time and dedication that have been invested into this document. Additionally, the various subcommittees and resources used during this process should be acknowledged.

Regretfully, it would require a separate publication to list every individual that participated. Suffice it to say that the citizens of Boone County are indebted to the services of all those who have participated in this process.

Finally, we would like to express our appreciation to the Boone County Historical Society and the Boone County Agricultural and Mechanical Society for the generous use of their facilities.

Don Stamper

Presiding Commissioner

Karen M. Miller

District I

Linda Vogt

District II



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BOONE COUNTY MASTER PLAN

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## Executive Summary

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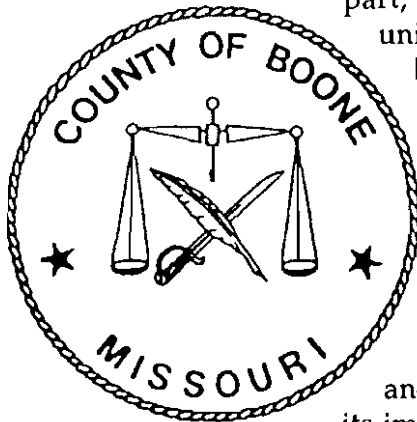
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## Executive Summary

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The 1996 Boone County Master Plan is the culmination of the most concentrated, large-scale planning effort in Boone County in many years. Nevertheless, it should be thought of as part of a continuum of planning that has both preceded it and will follow in its wake. As described in its text, Boone County is a “work in progress,” the planning for which proceeds, necessarily, in multiple arenas through time. This Boone County Master Plan is a milestone on this planning continuum as well as a window into the future.

This document marks only the second time that Boone County has taken stock of itself from an overall planning prospective. It supersedes the 1973 Comprehensive Plan but, otherwise, by itself, can change little. For the most part, the Boone County Master Plan is oriented toward unincorporated portions of Boone County. It renews the legal basis for zoning outside local municipalities but does not rezone any property. It provides general land use, planning, and development guidance as well as suggests changes to Boone County’s current zoning ordinance and subdivision regulations. Although the Boone County Master Plan addresses numerous current and longer-range concerns, its fundamental usefulness ultimately depends upon the commitment of elected officials, Boone County and other governmental staff, and citizens of all kind to its implementation.



Much of the Boone County Master Plan is descriptive and analytical, purposefully intended to “set the stage” by relating the historical, physical, and socio-economic contexts of Boone County. It is noteworthy, for example, that Boone County’s development regulations and planning are relatively recent, less than 25 years old. The fact that most Boone County residents live in incorporated communities is significant in that other governmental entities have

primary planning and development responsibilities for these populations. In any case, there is a fundamental need to understand that many of Boone County's 687 square miles are not conducive to intense development by virtue of steep slopes, Karst topography, wetlands, and unsuitable soils, among other factors. Chapters 1 through 3 chart a wide range of both natural and manmade influences that shape and constrain Boone County's development.

Chapter 4, Transportation, includes narrative and pictorial materials relating to existing conditions. It also notes prospective projects of Boone County and the Missouri Department of Transportation (MoDOT, formerly the Missouri Highway and Transportation Department) that constitute the bulk of Boone County's Transportation Plan. This represents a practical, pragmatic approach to transportation inasmuch as Boone County has only limited funding available beyond the current gravel road paving effort for a few selected roadway improvement projects. Boone County's local municipalities have their own agendas and funding problems. In northeastern Boone County, the Centralia Special Road District has a very limited capacity. MoDOT is, obviously, the most important provider of county-wide transportation services but it, too, is seriously underfunded. In any case, Federal Government funding is likely to be tougher to secure. Moreover, most of it will have to be subjected to the ISTEA/CATSO/NEPA processes.

Transportation is both a reflection and a mainspring of Boone County's future development. However, other infrastructure is critical as well. Chapter 5 deals extensively with public water supplies and observes that service levels vary widely, a potential development constraint. Supplier consolidation has occurred and more is anticipated.

Wastewater disposal issues are arguably more urgent. Boone Countians will have to ultimately decide how much money they are prepared to pay in taxes and/or fees to better handle these problems around Columbia and elsewhere. With regard to stormwater management, the Boone County Master Plan suggests that stormwater requirements should be reviewed in unincorporated areas inasmuch as expanding urbanization tends to intensify stormwater problems.

Chapter 6 describes the profusion of governmental entities and quasi-governmental service providers in Boone County. It is natural that different political entities with different constituencies have different priorities. Local governmental restructuring may occur but the inevitable expansion of the City of Columbia by electoral and/or voluntary annexations should be anticipated. In any case, turf battles, limited resources, miscommunications, and conflicting agendas, among other factors, may continue to underscore the need for intergovernmental coordination. Within this context, better information sharing, in-person and in "cyberspace" as recommended by this document, are modest but "doable" initiatives. Adoption of a common Boone County Geographic Information System (GIS) standard should occur as quickly as possible.

Chapters 7 and 8 are at the core of the Boone County Master Plan and its planning process. The 39 guiding principles, goals, and objectives statements in Chapter 7 constitute a comprehensive series of detailed recommendations that reflect the collective wisdom and sentiments of the Boone County planning workshop participants, Boone County officials, and the planning consultants. These recommendations are highlighted in the concluding pages of this Executive Summary. By themselves, they represent a formidable amount of work for Boone County staff and others to accomplish.

The “sufficiency of resources” development standard advanced in Chapter 8 echoes and reinforces Boone County’s 1995 revisions of its subdivision regulations. Moreover, the imposition of Boone County developmental impact fees, assuming the passage of State of Missouri enabling legislation, could help reduce the “hidden” public costs of new development. The implementation of these concepts, in conjunction with the Future Land Use Plan, will allow Boone County to have more effective management of its growth in unincorporated areas than heretofore has been possible.

As previously suggested, planning is a recurring, dynamic process. Notwithstanding future reviews, revisions, and updates of the Boone County Master Plan, much more will be required. In that regard, it is suggested that Boone County launch a long-term “visioning” process, “Boone County 2020.” Part of this effort needs to relate to the City of Columbia’s special role. A fundamental reality of Boone County life is that Columbia is the dominant local municipal jurisdiction and, under certain circumstances, will increase this dominance. In addition, Boone County needs to have an ongoing Capital Improvements Program.



## Plan Recommendations

The recommendations outlined below for the most part have been derived from the set of goals and objectives that resulted from three community planning workshops held early in the master planning process. These recommendations fall into the following categories: General Planning; Growth Management and Land Use; Transportation; Inter-governmental Coordination; Environment; Parks, Recreation and Open Space; and Community Heritage. Key recommendations associated with each are:

### **General Planning**

- Bi-annually review actions undertaken to implement the Boone County Master Plan. Assess the need for changes in the implementation process and/or Master Plan revisions. Allocate budget and/or manpower to accomplish any necessary revisions and updating every four years.
- Evaluate and revise land use control mechanisms to reflect policies in the Master Plan.
- Encourage and facilitate participation in training programs dealing with planning, zoning, and related issues for the Planning and Zoning Commission, Zoning Board of Adjustment, and the County Commissioners.
- Use task forces to develop problem-solving recommendations.
- Prepare and annually update a five-year Boone County Capital Improvements Program to better prioritize and schedule expenditures for capital improvements.

## Growth Management and Land Use

- Provide opportunities for a mix of lifestyles and living environments and allow for a variety of land uses for the Boone County community. These include agriculture and rural uses, a range of housing densities, a variety of commercial land uses, and industrial park development. (Generalized future land use recommendations are presented in Exhibit VIII.)
- Develop land use around a pattern of existing urban service areas.
- Encourage developer investment in those areas already exhibiting urban/suburban characteristics.
- Address the means to bring facilities and services to adequate capacities prior to project approval.
- Consider the cumulative impacts of development when evaluating land use and development plans.
- Facilitate growth by means other than subsidizing private developers. Development should be promoted through the use of market forces, offering location, land availability, and community quality of life as incentives.
- Facilitate the growth and development of the Columbia Regional Airport as an economic asset for the region.
- Encourage the development of vocational/technical continuing education for all Boone County workers to support business investment, expand job opportunities, and enhance the local wage base.
- Support the preservation of the agricultural industry in Boone County.

## Transportation

- Work for the implementation of the transportation projects described in Chapter 4.
- Make the improvement of existing roadways in both urban and rural areas the highest transportation priority. Unsafe conditions should be addressed as quickly as possible.
- Planning for new roads in all urban service areas and in the Columbia Area Transportation Study Organization (CATSO) Metropolitan Planning Organization (MPO) area should be accomplished through municipal/Boone County cooperation.
- The right-of-way for new roads should be acquired by dedication as negotiated whenever possible.
- Encourage the development of bicycle pathway systems in urban areas. Planning for new roads and road improvement projects should incorporate bikeways, wherever feasible, in order to develop a linked system.
- Encourage the Missouri Department of Transportation to develop bikeways along state secondary highways in rural areas.

## Intergovernmental Coordination

- Improve intergovernmental communication between various service providers such as municipalities, water districts, the sewer district, utility providers, school districts, fire districts, and the Columbia Area Transportation Study Organization.
- Encourage formal intergovernmental agreements dealing with service delivery issues.

## Environment

- Protect sensitive environmental features and systems such as groundwater, sinkholes, floodplains, and wetlands.
- Formulate and adopt a scenic road policy.
- Encourage the development of environmentally clean industries.

## Parks/Recreation/Open Space

- Appoint a Boone County park board to further identify and meet the needs for parks, recreation, and open space.
- Study Boone County park, recreation and facility needs, focusing upon cooperative efforts with the municipalities and school districts. State and Federal Government grants, user fees, land donations, and sales taxes and property taxes should be evaluated as funding sources.

## Community Heritage

- Perpetuate pride and the recognition of Boone County's history and cultural diversity.
- Support community-based programs and other efforts intended to provide education and increase appreciation of the Boone County community.

Boone County is fortunate to be, by and large, a prosperous and thriving area. However, sustained growth can generate a series of obvious, and sometimes less obvious, problems and concerns that require effective and concerted actions. No single effort such as the Boone County Master Plan can ask, let alone answer, all the pertinent questions. Nevertheless, this document and the process that created it represent important landmarks in the ongoing evolution of Boone County's development.

BOONE COUNTY MASTER PLAN

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# 1.0 Introduction

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# 1.0 Introduction

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## 1.1 Planning Context

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Boone County has emerged as one of Missouri's most dynamic political jurisdictions. For most of its long history, it was predominantly rural in its outlook, home to an important urban center at its core, but overall an agricultural and rustic environment. Its transformation to a modern mid-Missouri population and economic powerhouse accelerated during the long boom following World War II. As growth has altered Boone County, an expanding population's expectations have changed significantly. The Boone County Master Plan is a response to the demands of Boone County residents to better manage anticipated future growth.

Master plans guide the physical development of an area. The focus of the Boone County Master Plan is future land use and the provision of supporting infrastructure. The legal basis for counties to create such a master plan is provided by applicable Missouri Statutes (RsMo 64.815) which, in part, state:

"The county planning commission shall prepare an official master plan of the county for the purpose of bringing about coordinated physical development in accordance with the present and future needs. The official master plan shall be developed so as to conserve the natural resources of the county, to insure efficient expenditure of public funds and to promote the health, safety, convenience, prosperity and general welfare of the inhabitants...The county commission, upon the recommendation of the county planning commission, may adopt the official master plan in whole or in part and may subsequently amend or extend the adopted plan or portion thereof..."

The Boone County Master Plan is oriented toward the unincorporated portions of Boone County. Incorporated communities such as Ashland, Centralia, Columbia, Hallsville, Harrisburg, Hartsburg, McBaine, Rocheport and Sturgeon, are indispensable elements of Boone County's life, growth and well-being. However, each of them, within their respective jurisdictions, takes precedence over the County Government in planning, land use, zoning, developmental, and transportation matters. The degree to which they choose to conscientiously exercise these prerogatives varies. Nevertheless, the Boone County Commission recognizes Boone County's limited role relative to the developmental agenda of any of these communities. Therefore, this document does not attempt to formulate planning policy for those political entities that, by law, are entitled to do it for themselves.

Basically, the Boone County Master Plan is intended to serve as a policy guide for the non-incorporated portions of Boone County. Obviously, it cannot anticipate all the developmental situations or issues that may occur. Nevertheless, traditional master plans outline development goals, objectives and recommendations that can provide a rational policy context for making critical decisions. The Boone County Master Plan is Boone County's adopted declaration of its policies to shape its future development.

Master plans and zoning are sometimes confused with zoning maps and ordinances. Master plans usually analyze existing concerns and describe future land use as well as present plans for infrastructure development. Moreover, they constitute much of the legal basis for local zoning.

Zoning is one of the principal legal tools used to implement master plan recommendations. Zoning regulations impose rights and restrictions for specific parcels of land. By force of law, zoning designates uses, densities, and lot requirements by classifying all property. Boone County has existing zoning regulations and a zoning map which mandates land uses and places all unincorporated properties into particular zoning classifications. Its subdivision regulations, additional land use control mechanisms, constitute yet another tool used to implement the master plan by setting standards and procedures for the subdivision of property.

It is important to note that the adoption of the Boone County Master Plan will not automatically change either the existing zoning or subdivision regulations that are already in effect in Boone County. Rather, for example, this document is intended to serve as a guide for decision-makers when a request to change the zoning classification of a piece of property is made in light of those regulations that are legally in force. Possible zoning and subdivision regulations changes are discussed in Section 8.2. Other decisions made by Boone County, such as the development of public infrastructure, should be in general conformance with this document as well.

The Boone County Master Plan's principal value will be in its daily use. The process of planning for Boone County is ongoing. The creation and adoption of this document is only one step in this evolutionary process. Critical work will continue as the Boone County Commission, Boone County Planning and Zoning Commission, County Government officials, property owners, developers, and citizens strive to implement the Boone County Master Plan.



## 1.2 Location of Boone County

One of Boone County's primary distinguishing characteristics is its strategic location near the center of Missouri. The central business district of its county seat, Columbia, is only 131 miles from downtown St. Louis, 126 miles from downtown Kansas City, and 31 miles north of central Jefferson City. Boone County's access to key centers around Missouri has greatly contributed to its growth as an economic, educational and cultural cornerstone of mid-Missouri.

Boone County's 687 square miles straddle Interstate Highway 70, one of America's major east-west roadways. This affords rapid vehicular transportation to and from Missouri's two largest metropolises as well as across the breadth of the contiguous United States. Quick and easy access to Jefferson City, Missouri's capital, via U. S. Highway 63 has also benefitted the area. Many individuals are choosing to live in Boone County while working in Jefferson City. Without question, Boone County's central location will continue to be one of its most significant assets underlying the future growth and development of the area.

Historically, there is little doubt that Boone County's strategic mid-Missouri locale played an important part in its selection as the home of Missouri's largest single institution of higher learning, the University of Missouri-Columbia. This action changed the course of Boone County's history. Both the health and insurance industries, the two other key pillars of the existing local economy, also have found Boone County an excellent place for business given its central location.

Scenic beauty has also proven to have been one of Boone County's major assets. The Missouri River to the southwest, Cedar Creek along the eastern border, the Mark Twain National Forest, the rolling hills of southern Boone County, and the pastoral fields of northern Boone County, all contribute a variety of natural settings enjoyed by local residents. For good reasons, the Boone County segment of the KATY Trail State Park has become a popular recreation facility. It draws bicyclists and hikers to its natural beauty from throughout mid-America and significantly boosts the tourist economy.



*Photo 1 - Interstate Highway 70 spans the Missouri River downstream from Rocheport.*

## **1.3 History of Boone County**

Boone County's early Euro-American settlers included two sons of the legendary frontiersman Daniel Boone, Nathan and Daniel Boone. They came to the area in 1807 to mine salt. The area was organized as Boone County on November 16, 1820. It was probably named in honor of the elder Daniel Boone who died on September 26, 1820. In January of 1821, Columbia was designated the county seat. On August 10, 1821, Missouri became the 24th state to be admitted to the Union.

In 1839, Columbia was chosen as the site for the new University of Missouri campus. This decision has dramatically influenced the growth of Columbia and its environs ever since. "Old Mizzou" continues to attract new residents to Boone County. By itself, it serves as a major source of employment. Moreover, it generates additional economic activity through all the commercial enterprises required to support the University of Missouri-Columbia community.

During 1848-1849, the Missouri Legislature retained a firm to build a plank road from Columbia to a town called Providence on the Missouri River. Completed in 1854, this ten-mile road afforded Columbia access to river-based trade. It was a major factor in Boone County's early development. As economics changed, however, river commerce became less important. Through time, Providence declined and eventually ceased to exist. Rail transportation was also important to Boone County, leading to the eventual incorporation of Rocheport as a commercial center.

Boone County was the site of several battles during the Civil War. The massacre of Union soldiers during a guerrilla fight near Centralia was one of the most important of many Missouri battles<sup>1</sup>. Centralia was incorporated after the Civil War as a railroad town. Today, it is the focal point of railroad shipping in Boone County.

For the next century, Boone County experienced slow but steady growth as its local economy expanded and diversified while agriculture diminished in relative importance. More and more, the University of Missouri-Columbia became a larger economic and physical presence. Its post-World War II expansions, coupled with the 1960s completion of Missouri's segment of Interstate Highway 70, helped to recast Boone County as the rapidly growing and urbanizing locale that it is today.

<sup>1</sup> The details of this battle and much of Boone County's colorful history are documented at the Boone County Historical Museum. One of the best early history sources is a volume written by William Switzler in 1882, History of Boone County, Missouri, published by the St. Louis Western Historical Company.

## 1.4 Planning and Zoning in Boone County

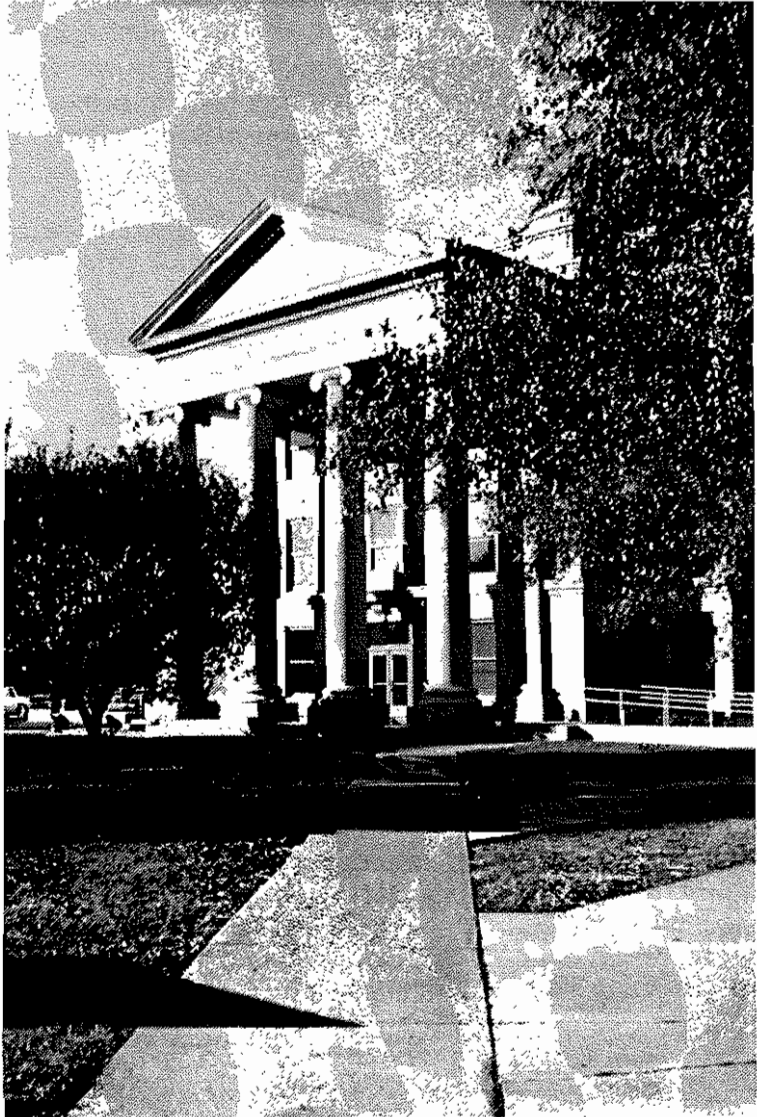
The origins of planning and zoning in Boone County date to the early 1970s. Local residents petitioned to seek planning and zoning in accordance with Missouri statutes. The success of the ballot issue prompted the County Court (since replaced by the County Commission) to hire a nationally-known planning consultant to prepare a comprehensive plan, zoning regulations, and subdivision regulations. The consultant worked with a citizens' committee appointed by the County Court.

Boone County's Comprehensive Plan and initial zoning and subdivision regulations were adopted in December of 1973. The unincorporated areas of Boone County were divided into zoning districts that reflected future land use in accordance with the Comprehensive Plan.

Following the adoption of these regulations, there were electoral challenges to Boone County's zoning. On two occasions, petitions were submitted that called for Boone County to suspend zoning regulations. Each of these ballot issues failed. However, the ongoing controversy prompted the County Court to conduct a review of the regulations, concentrating on the concerns raised by the petitioners.

In March of 1976, the County Court adopted revised zoning and subdivision regulations that served Boone County for the next nine years. In 1981, the Planning and Zoning Commission, working in conjunction with a planning consultant, began another extensive revision of the zoning regulations. A revised set of regulations was adopted in 1985. In September of 1991, another revision was adopted that brought the zoning ordinance into its current form. The subdivision regulations were revised in 1991 and, subsequently, in 1995.

Today, the Boone County Planning and Zoning Commission comprises eight members. One member is appointed from each of the seven townships in Boone County. The County Highway Engineer also serves as a member.



*Photo 2 - The Boone County Courthouse in Columbia.*

## 1.5 Master Plan Purpose

Boone County has experienced significant growth for several decades. With growth comes change, giving rise to numerous controversies over how land should be used as well as how other resources might be allocated. The Boone County Master Plan is one of the tools that Boone County's elected officials, staff, and the community need to provide guidance and direction for daily decision-making relative to the ongoing process of development.

The functions of the Boone County Master Plan include:

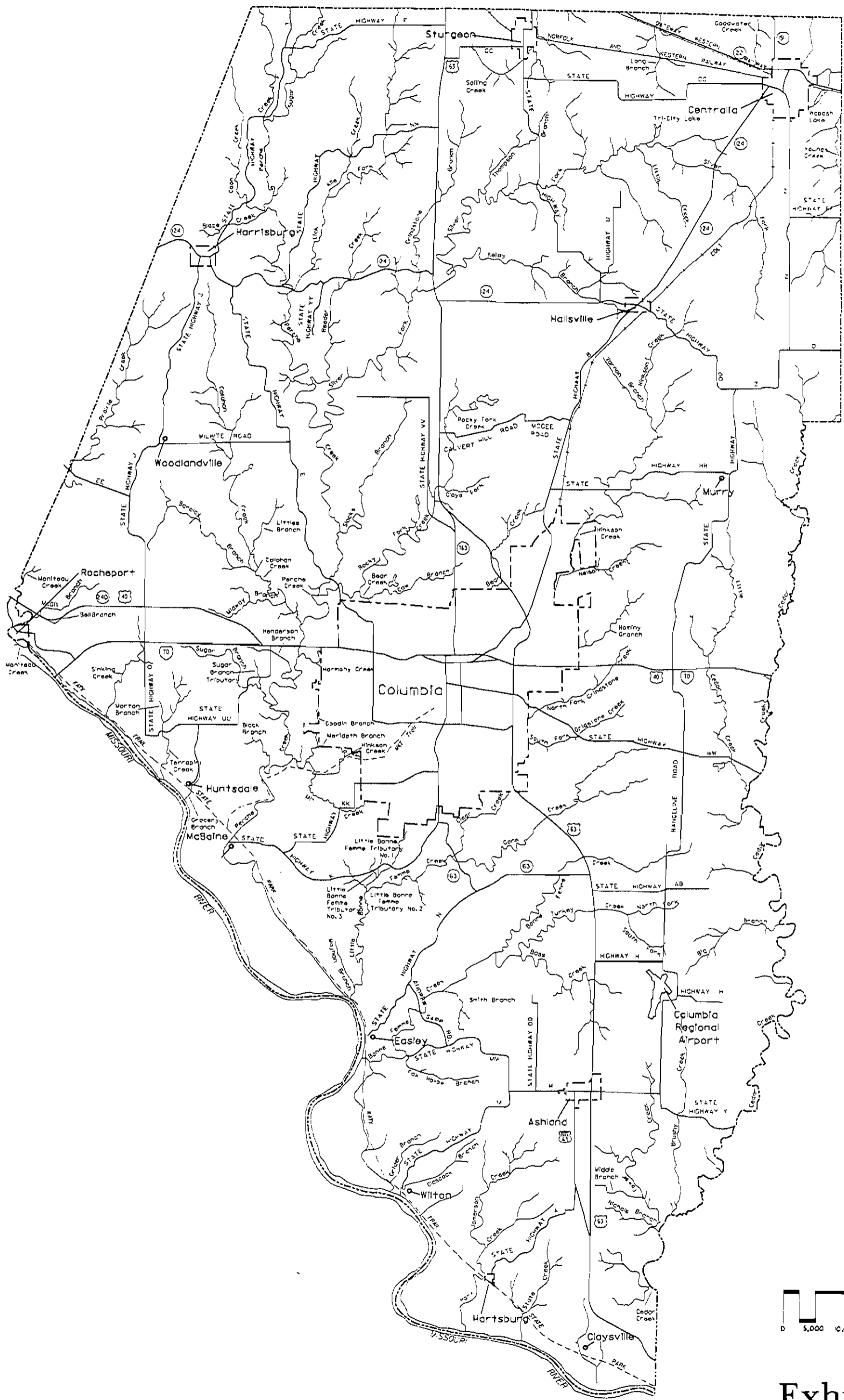
- Guiding decision-making
- Establishing policies for the physical development of Boone County
- Providing background information about Boone County
- Creating the necessary legal documentation for zoning decisions

Creating this document has prompted citizens from diverse backgrounds and interests to work together and consider pertinent planning issues. This process of gathering information, seeking citizen input, and developing plan concepts represents the heart of this effort. The planning process encourages a community to openly explore various aspects of controversial issues. Moreover, it requires community values and preferences to surface and be clarified in the light of future expectations.

The Boone County Master Plan is an expression of those community values and shared expectations for Boone County's future.

Exhibit I, the Base Map, is the basis for all subsequent mapping in the Boone County Master Plan.

**BCMP**



**BOONE COUNTY**  
**Master Plan**

**Exhibit I**  
**Base Map**



BOONE COUNTY MASTER PLAN

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## **2.0 Demographic and Economic Characteristics**

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## **2.0 Demographic and Economic Characteristics**

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### **2.1 Introduction**

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Boone County is now, and forever will be, a “work in progress.” Its demographic and local economic characteristics change in keeping with an evolving developmental calculus that is dependent upon local, state, national, and technological variables. What it is today has been shaped, in large part, by past circumstances and trends tempered by future hopes and expectations. A variety of available data quantifies important aspects of Boone County life.

### **2.2 Population Growth**

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In 1900, Boone County’s population was 28,642 and its economic life revolved around agriculture and the University of Missouri. By 1990, its population had grown to 112,379, a gain of 83,737 or 292.4 percent over nine decades. The annual compounded growth rate was about 1.53 percent during this nine decade period.

Boone County was Missouri’s eighth largest county in 1990. The City of Columbia was the state’s sixth largest community. Neighboring Cole County, by comparison, had 65,579 people, over 3,500 fewer than Columbia.

For the purposes of this document, Boone County’s 1996 population is estimated to total 123,975 people. This figure represents a gain of 11,596 or 10.3 percent in six years. It amounts to an approximate 1.65 percent annual compounded growth rate for the 1990s.

As this century ends, the University of Missouri-Columbia has long since become the cornerstone of a larger and more diverse Boone County economy than could have been imagined in 1900. Health services, for example, have expanded to become the single largest local industry in terms of total employment<sup>2</sup>. Agriculture remains important but, economically, plays a lesser role. Fewer people are needed to produce more food as agricultural knowledge, equipment, and techniques have advanced.

Historically, Boone County's population growth has been uneven in geographical distribution. It has been disproportionately concentrated in and around Columbia, a long-term trend that will continue. Table 1 charts 1960-1990 population changes in municipalities as well as the unincorporated portion of Boone County<sup>3</sup>. Annexation can be a significant component of municipal population growth. For example, between 1960 and 1970 Columbia annexed areas comprising 15,246 people (1960 population) as reported by Boone County's 1973 Comprehensive Plan (p. 41). It is noteworthy that the County Government's overall responsibilities are reduced as unincorporated land is annexed by existing municipalities or new municipalities incorporate.

<sup>2</sup> See Section 2.4.4, Table 7, subsequently.

<sup>3</sup> The Village of McBaine, on Perche Creek at the terminus of State Highway K, is Boone County's smallest incorporated community. It was not a functioning municipality in 1990 and was not enumerated in the 1990 U. S. Census.

**Table 1**

Boone County Municipal/Unincorporated Population Trends (1960-1990)

Municipality	1960	1970	1980	1990	1960-1990 Change	1960-1990 Change%
City of Ashland	495	769	1,021	1,252	+757	+152.9%
City of Centralia	3,200	3,623	3,537	3,414	+214	+6.7%
City of Columbia	36,650	58,812	62,061	69,101	+32,451	+88.5%
City of Hallsville	363	790	849	917	+554	+152.6
Village of Harrisburg	124	150	283	169	+45	+36.3
Village of Hartsburg	158	120	118	131	-27	-17.1%
City of Rocheport	375	307	272	255	-120	-32.0%
City of Sturgeon	619	787	901	838	+219	+35.4%
<b>Total Municipal</b>	<b>41,984</b>	<b>65,358</b>	<b>69,042</b>	<b>76,077</b>	<b>+34,093</b>	<b>+81.2%</b>
<b>Total Unincorporated</b>	<b>13,218</b>	<b>15,577</b>	<b>31,334</b>	<b>36,302</b>	<b>+23,084</b>	<b>+174.6%</b>
<b>Total Boone County</b>	<b>55,202</b>	<b>80,935</b>	<b>100,376</b>	<b>112,379</b>	<b>+57,177</b>	<b>+103.6%</b>

Note: No 1960-1990 data is available for the Village of McBaine.

Source: U. S. Census An analysis of Table 1 yields the following points:

- Boone County, as a whole, experienced impressive growth between 1960 and 1990, more than doubling its population. (By way of comparison, during the same period Missouri's population only grew by 19.8 percent.)
- Columbia is the population center of Boone County. In 1960, its municipal limits contained 66.4 percent of Boone County's population. This percentage grew, peaking at 72.7 percent in 1970. By 1980 and 1990, it had declined to 61.8 percent and 61.5 percent, respectively, as Columbia fell short of Boone County's overall growth rate (88.5 percent vs. 103.6 percent) for the thirty-year period.

- The results in the other, much smaller municipalities were mixed. Between 1960 and 1990, only Ashland and Hallsville exceeded Boone County's overall growth rate. However, Hartsburg and Rocheport lost 17.1 percent and 32.0 percent, respectively, of their populations during the same period. Boone County's second population center, Centralia, declined in its relative share of county-wide population. Its 5.8 percent share of Boone County's 1960 population declined to 3.0 percent by 1990. Excluding Columbia, the remaining seven incorporated municipalities in 1990 posted a collective gain of 1,642 persons, or 30.8 percent, during this period.
- The largest thirty-year population growth rate in Boone County, 174.6 percent, occurred in its unincorporated areas between 1960 and 1990. Most, but not all, of this growth was directly or indirectly related to economic opportunities and/or "development spillover" in and around Columbia. Providing sufficient services for this burgeoning unincorporated population has been an ongoing public concern. It has grown in both absolute and relative terms, amounting to 23.9 percent of Boone County's population in 1960, then dropping to 19.2 percent in 1970, before soaring to 31.2 percent and 32.3 percent in 1980 and 1990, respectively.

The basic implications of Boone County's rapid growth are two-fold: there are many more people to serve as well as many more people to serve outside of a municipal governmental jurisdiction. Although much of Boone County's population growth is attributable to "natural increase" (i.e., births less deaths), much more of it has been due to a high net level of migration (i.e., migrations-in less migrations-out). Many of these people arrive in the area as adults with high expectations for community infrastructure, public facilities and local public services.

## 2.3 Future Population Growth

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It is a virtual certainty that Boone County's population will continue to experience strong growth during the foreseeable future. The attractive employment opportunities, local amenities, proximity to Kansas City and St. Louis along Interstate Highway 70, and presence of a major university, among other factors, are powerful inducements for people to remain and relocate throughout the area. However, even if future growth seems assured, its magnitude, timing and direction are less predictable. Moreover, although local governmental entities cannot effectively control the demand for population growth, they can modulate its potential through land use policies, zoning, transportation as well as other infrastructure improvements, and environmental controls.



*Photo 3 - New homes will be needed for Boone County's growing population.*

The greatest pressures for new development to house, employ and service population growth demands probably will be along major roads within and radiating from Columbia. Centralia's stable industrial base will continue to anchor the economy of Boone County's second largest city. Among smaller communities, Ashland and Hallsville are likely to grow. Sturgeon should also enjoy new development.

County-wide, future population forecasts vary according to sources, methodologies, time periods, and underlying assumptions. In 1992, NPA Data Services, Inc. of Washington, D.C. projected Boone County's future growth in its Key Indicators of County Growth, 1970-2010. Starting with the 1990 base population of 112,379, it produced annual forecasts, including predictions of 120,584 in 1995, 125,907 in 2000, and 128,110 in 2003, utilizing projected compounded variable declining annual growth rates ranging from about 1.4 percent to less than .6 percent.

The CATS 2015 Transportation Plan (1995), prepared by the Columbia Area Transportation Study Organization (CATSO), reports Boone County population projections from five sources. For 2010, forecasts range from a low of 122,934 to a high of 145,146. The 2015 projections are similarly diverse, spanning a minimum figure of 125,454 and a maximum of 143,862. For the purposes of transportation planning, a projection of 140,000 people in 2015 was chosen.

Woods & Poole Economics, a consulting firm, performed an analysis prior to the 1990 U.S. Census that yielded projections similar to those published by NPA Data Services. Conversely, the State of Missouri's Office of Administration recently estimated and projected numbers that suggest much higher growth rates for Boone County.

Table 2 summarizes all of these population estimates and projections. For the purposes of this document, an estimated 1996 Boone County population of 123,975 is expected to grow to 146,150 by 2015. During these nineteen years, this anticipated gain of 22,175 would represent an increase of almost 17.0 percent or about 0.87 percent compounded annually. In any case, significant population growth is a reasonable expectation.

**Table 2**  
**Boone County Population Projections Comparison**  
**(1990-2015)**

Year	NPA	CATS 2015	Woods & Poole	State of Missouri
1990			112,810 *	
1995	120,584		120,240	122,352
2000	125,584		125,940	131,778
2003	128,110		129,220	
2005			131,390	140,668
2010		122,934 - 145,146	136,950	149,388
2015		125,454 - 143,862**	142,760	158,048

\* Note: 1990 U.S. Census figure was 112,379.

\*\* Note: 140,000 is used for CATSO planning purposes.

Sources: As indicated above.



## 2.4 Population Characteristics

People vary by race, age, gender, work, income, and education, among other factors. This section profiles basic population characteristics for Boone County, Missouri. Where appropriate, comparisons are made to other Missouri political jurisdictions.

### 2.4.1 Racial Composition

Boone County is much more racially diverse than typical mid-Missouri locales. In large part, this circumstance is directly and indirectly attributable to the presence of the University of Missouri-Columbia. It, Stephens College and Columbia College, attract students, faculty, and staff from across America and around the world. The 1990 U.S. Census identified the racial/ethnic groupings reported in Table 3.

**Table 3**

**Boone County Racial/Ethnic Composition (1990)**

Racial/Ethnic Group	Population	Percentage
White	100,178	89.1%
African-American	8,320	7.4%
American Indian	320	0.3%
Asian	3,120	2.8%
Pacific Islander	33	<0.1%
Other	408	0.4%
Totals	112,379	100.0%

Source: U.S. Census

Hispanic persons, who may be of any racial group, numbered 1,230 or 1.1 percent. The Chinese community, by itself, comprised 1.0 percent of Boone County's population and represented the single largest Asian population group. In general, minority population groups of all kinds tend to be clustered in and around Columbia.

It is projected that these percentages will shift somewhat by 2015. The white population is expected to decrease to 86.5 percent of the total while the African-American population is anticipated to increase to 10.3 percent of the total. The balance, 3.2 percent, would comprise other racial and ethnic groups.

## 2.4.2 Age Distributions

The 1990 U.S. Census determined the age composition of Boone County's population. The overall age distribution is skewed, as compared to other Missouri counties, by the presence of the University of Missouri-Columbia which serves and employs large numbers of young and relatively young people. Columbia College and Stephens College also contribute to this effect.

Boone County's median age was determined to be only 24.8 years in 1990. By comparison, it was 34.6 years for St. Louis County. The median age is not an "average." Rather, it is that point which divides reported ages of a total population into equal groups of older and younger people.

Table 4 reports the 1990 age distributions for Boone County as well as Columbia and the combined balance of incorporated and unincorporated areas outside Columbia.

**Table 4**  
**Age Distributions (1990)**

Age Groups by Years	Boone County	City of Columbia	Balance of Boone County
<1 - 4	7,923 (7.1%)	4,214 (6.1%)	3,709 (8.6%)
5 - 17	17,441 (15.5%)	8,556 (12.4%)	8,885 (20.5%)
18 - 24	24,798 (22.1%)	20,933 (30.3%)	3,865 (8.9%)
25 - 44	37,211 (33.1%)	21,074 (30.5%)	16,137 (37.3%)
45 - 64	15,563 (13.8%)	8,342 (12.1%)	7,221 (16.7%)
65 or more	9,443 (8.4%)	5,982 (8.7%)	3,461 (8.0%)
Totals	112,379 (100.0%)	69,101 (100.1%)	43,278 (100.0%)

Note: Due to rounding, percentages may not total 100.0 percent.  
Source: U.S. Census

Age distributions have a variety of implications relative to the adult labor pool, schools, medical care, housing, and elderly services. Within Boone County, there is a clear difference between the age distributions in Columbia as compared to elsewhere. This circumstance will not change given the location of the largest University of Missouri campus in Columbia.

### 2.4.3 Gender Ratio

Slightly more than 50 percent of all live human births produce males. However, the mortality rates for males are greater at all ages from birth onward. Consequently, there are growing differences in the relative numbers of males and females, particularly in later life. For example, the 1990 U.S. Census determined that nationally there were only 67.2 males for every 100 females in the 65 years or older age group. This amounted to a 40.2 percent male/59.8 percent female gender ratio.

The male/female gender ratio is closer to "50/50" when all ages are included over a large geographical area. Nationally, there was a 48.7 percent male/51.3 percent female gender ratio in 1990 for all ages. This represented 95.1 males for every 100 females.

Boone County had 54,654 males and 57,725 females in 1990 for all ages. There were 94.7 males for every 100 females. The gender ratio of males to females was 48.6 percent/51.4 percent, virtually the same as the national ratio.

### 2.4.4 Workforce and Occupational Analysis

About half of Boone County residents were employed in 1990. They worked in a variety of capacities locally and elsewhere. The 1990 U.S. Census determined that Boone County's resident workforce comprised 56,860 individuals 16 years of age or older or 50.6 percent of the total population of 112,379. In comparison, Cole County's resident workforce represented 48.0 percent of its total population age 16 or older. The 1990 St. Louis County workforce figure was 50.4 percent for this age group.

Boone County's 1990 resident workforce found employment in three different geographic areas: in Columbia, elsewhere in Boone County, and outside of Boone County. Table 5 reports the 1990 data.

**Table 5**

**Boone County Resident Workforce Employment by Locations (1990)**

Location	Number/ Percentage
In Columbia	44,543 (78.3%)
Remainder of Boone County	7,777 (13.7%)
Outside of Boone County	4,540 (8.0%)
Total	56,860 (100.0%)

Source: U.S. Census

Columbia is the center of Boone County resident workforce employment. Many of those Boone County residents not employed locally work in or around Jefferson City, Missouri, often for the State of Missouri. Similarly, sizable numbers of non-Boone County residents work in Boone County.

The overall high level of educational attainment among Boone County's workforce is remarkable. It is examined in Section 2.4.6. This circumstance is one of the key elements of Boone County's post-World War II and future growth and both reflects and helps determine its economic life.

The 1990 U.S. Census collected data to describe the occupations, industries, and employers of those people who actually worked in Boone County as opposed to the resident workforce. There were 58,017 such positions, a number well in excess of the resident workforce of 56,860 and an indicator of Boone County's regional economic importance. Theoretically, its entire resident workforce could have worked in Boone County and not filled all available positions.

Boone County jobs were classified by occupation as reported by Table 6. No distinctions are made among 1990 full-time, part-time, or limited-term positions.

**Table 6**

**Boone County Employment by Occupation (1990)**

Occupation	Jobs	Percentage
Executive, Administrative and Managerial	6,813	11.7%
Professional Specialty	12,214	21.1%
Technicians and Related Support	3,200	5.5%
Sales	6,496	11.2%
Administrative Support	9,720	16.8%
Private Household Service	220	0.4%
Protective Service	740	1.3%
Other Service Occupations	7,387	12.7%
Farming, Forestry, Fishing	1,057	1.8%
Precision Production, Craft, Repair	4,512	7.8%
Machine Operators, Assemblers and Inspectors	2,360	4.1%
Transportation and Materials Moving	1,623	2.8%
Handlers, Equipment Cleaners, Helpers and Laborers	1,675	2.9%
<b>Totals</b>	<b>58,017</b>	<b>100.1%</b>

Note: Due to rounding, percentages do not total 100.0 percent.  
 Source: U.S. Census

Another way of classifying jobs is by industry. Table 7 reports 1990 Boone County employment by industry.

**Table 7**  
**Boone County Employment by Industry (1990)**

Industry	Jobs	Percentage
Agriculture, Forestry and Fishing	1,349	2.3%
Mining	44	0.1%
Construction	2,753	4.7%
Manufacturing Nondurable Goods	1,736	3.0%
Manufacturing Durable Goods	3,030	5.2%
Transportation	1,469	2.5%
Communications/Public Utilities	1,435	2.5%
Wholesale Trade	1,482	2.6%
Retail Trade	9,679	16.7%
Finance, Insurance and Real Estate	4,413	7.6%
Business and Repair Services	1,861	3.2%
Personal Services	1,524	2.6%
Entertainment and Recreation	730	1.3%
Health Services	10,247	17.7%
Educational Services	9,887	17.0%
Other Professional and Related Services	3,779	6.5%
Public Administration	2,599	4.5%
<b>Totals</b>	<b>58,017</b>	<b>100.0%</b>

Source: U.S. Census

Table 8 classifies 1990 Boone County jobs by various employer types.

**Table 8**

**Boone County Employment by Employer Type (1990)**

Employer Type	Jobs	Percentage
Private for Profit	32,694	56.4%
Private Non-Profit	5,627	9.7%
Local Government	3,054	5.3%
State Government	10,954	18.9%
Federal Government	2,184	3.8%
Self-Employed	3,326	5.7%
Unpaid Family	173	0.3%
Totals	58,017	100.1%

Note: Due to rounding, percentages do not total 100.0 percent.

Source: U.S. Census

Tables 6, 7 and 8 yield the following conclusions:

- Compared to other jurisdictions, Boone County's employment opportunities are much more "white collar" and less "blue collar" or "pink collar" than national or Missouri norms. This suggests higher educational levels and larger incomes for established households.
- Over a quarter of local jobs, 27.9 percent, are governmental, a high figure. Most of these jobs are associated with the University of Missouri-Columbia.
- Educational services, predictably, as well as health services and retail trade, are the dominant industries. Collectively, they account for slightly more than half of all jobs. The health services industry employs more people than any other employer classification.
- Agriculture, including forestry and any commercial fishing, is a comparatively insignificant employer, notwithstanding the large dollar value of local crops, the major capital investments required to farm, the large expanses of land needed, and secondary employment generated by agriculture-related suppliers and services.



### 2.4.5 Income Distribution

The 1990 U.S. Census collected and reported 1989 income data. The 1989 median household income for Boone County was \$25,647. This means that, statistically, half of Boone County's households reported incomes greater than \$25,647 in 1989 and half less. By way of comparison, the corresponding figures for Cole County and all of Missouri were \$30,362 and \$26,362, respectively.

A household comprises one or more related or unrelated individuals sharing a dwelling unit (i.e., a single family home, apartment, mobile home or condominium). Persons living in group quarters (i.e., nursing homes, college dormitories, fraternity or sorority houses, jails or a military barracks) are not parts of households. Consequently, Boone County's large student population had less of an impact upon its reported household income figures than other indices but, nevertheless, skewed overall household income figures downward.

Table 9 reports Boone County's 1989 household incomes by dollar amount.

**Table 9**

**Boone County Household Incomes (1989)**

Dollar Amount	Households	Percentage
Less than \$5,000	3,556	0.4%
\$5,000 to \$9,999	4,293	10.2%
\$10,000 to \$12,499	2,387	5.7%
\$12,500 to \$14,999	2,147	5.1%
\$15,000 to \$17,499	2,134	5.1%
\$17,500 to \$19,999	2,036	4.8%
\$20,000 to \$22,499	2,065	5.4%
\$22,500 to \$24,999	1,727	4.1%
\$25,000 to \$27,499	1,931	4.6%
\$27,500 to \$29,999	1,521	3.6%
\$30,000 to \$32,499	1,773	4.2%
\$32,500 to \$34,999	1,589	3.8%
\$35,000 to \$37,499	1,460	3.5%
\$37,500 to \$39,999	1,108	2.6%
\$40,000 to \$42,499	1,230	2.9%
\$42,500 to \$44,999	1,065	2.5%
\$45,000 to \$47,499	1,044	2.5%
\$47,500 to \$49,999	753	1.8%
\$50,000 to \$54,999	1,702	4.0%
\$55,000 to \$59,999	1,231	2.9%
\$60,000 to \$74,999	2,588	6.1%
\$75,000 to \$99,999	1,440	3.4%
\$100,000 to \$124,999	489	1.2%
\$125,000 to \$149,999	191	0.5%
\$150,000 or More	429	1.0%
Totals	42,809	99.9%

Note: Due to rounding, percentages do not total 100.0%

Source: U.S. Census

The "student factor" substantially contributed to the 18.6 percent of Boone County households below \$10,000 in income in 1989. By way of comparison, Cole County only had 12.5 percent such households while the national figure was about 16.0 percent. Similarly, notwithstanding its high levels of adult educational achievement, Boone County had proportionately fewer households at the other end of the household income spectrum.

Approximately 30 percent of all American households had incomes of \$50,000 or more in 1989. The Boone County figure was 19.1 percent. Nevertheless, Boone County was more affluent than other mid-Missouri counties with the exception of Cole County. If student households were factored-out, Boone County probably would have approached Cole County's level of household prosperity. On a per capita basis, 1989 Boone County income was \$12,707.

The Federal Government determined that 16.6 percent of Boone County's population fell below the 1989 "poverty level." Again, these statistics were distorted by the large student population. In any case, there are significant numbers of non-student poor persons in Columbia and other municipalities as well as elsewhere throughout Boone County. Household poverty level incomes for 1989 were calculated to be \$6,310 (1 person), \$8,076 (2 persons), \$9,885 (3 persons), and \$12,674 (4 persons). Higher figures were set for larger households.

### 2.4.6 Educational Attainment

Boone County's high level of adult educational attainment is a critical characteristic. It relates directly to the affluence of a high proportion of its population. The presence of large numbers of highly educated people also helps shape community priorities, political life, employment opportunities in the local economy, and future development. Table 10 reports the 1990 U.S. Census educational profile of 62,424 Boone County adults 25 years old and older.

**Table 10**

**Boone County Educational Attainment (1990)**

Educational Level of Individuals Age 25 or More	Number	Percentage
Less than 9th Grade	3,688	5.9%
9th - 12th Grade (No Diploma)	5,776	9.3%
High School Graduate	15,810	25.3%
Some College (No Degree)	11,043	17.7%
Associate Degree	3,318	5.3%
Bachelor Degree	12,664	20.3%
Graduate or Professional Degree	10,125	16.2%
Totals	62,424	100.0%

Source: U.S. Census

Limiting the data to individuals 25 years or older substantially reduces the impact of large numbers of undergraduate college students. In any case, Boone County is home to a large, well-educated pool of people. In fact, no other Missouri county has so great a proportion of college graduates as Boone County. In the 25 years or older age group, the 1990 figure was 36.5 percent.

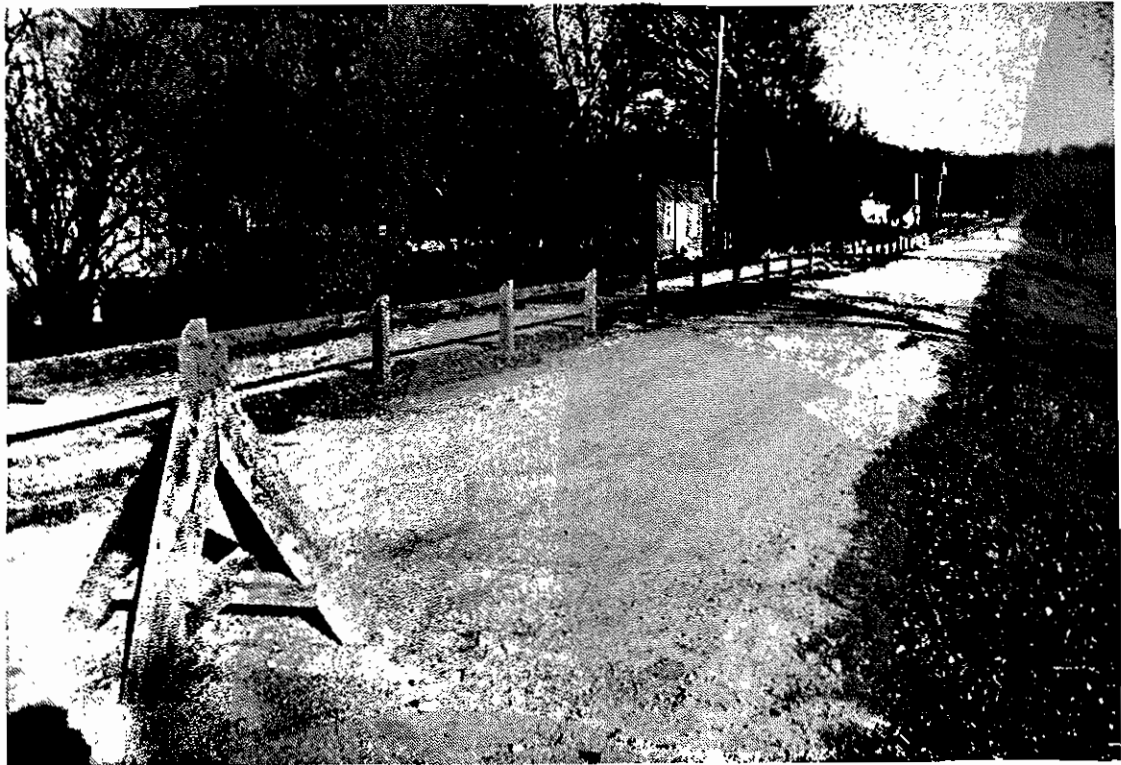
## 2.5 Travel and Tourism

Travel and tourism are emerging as an increasingly important part of Boone County's economy. The "hospitality industry" includes businesses as diverse as motels, hotels, automobile rental agencies, "bed and breakfasts," dry cleaners, caterers, restaurants, and convenience stores. People visiting Boone County, or individuals simply stopping along Interstate Highway 70 to buy gasoline, spend money. That money translates into Boone County jobs and tax revenues.

The University of Missouri-Columbia, including related facilities, constitutes the largest visitor destination in Boone County. University events ranging from athletic contests to academic conferences collectively attract multitudes of people from outside Boone County each year. University affiliated medical facilities are routinely utilized by non-Boone County residents throughout the heart of Missouri. Patients and their families often make frequent and/or extended visits to the area. Friends and relatives travel to Boone County to see students. All of this activity fills hotel and motel rooms as well as restaurants.

Boone County is fortunate to hold a strategic position midway between St. Louis and Kansas City. It is also close to Jefferson City and only a relatively short drive from the Lake of the Ozarks. Additional travel and tourism business accrues to Boone County as a consequence of its proximity to these population and activity centers. By itself, I-70 is a mainstay for local hospitality providers. Many cross-country travelers welcome the opportunity to dine and sleep in a less congested and expensive locale than either metropolitan Kansas City or St. Louis.

Most travel and tourism activity is centered in and around Columbia. However, there are other points of significant interest. Centralia is a railroad community with a long history. To the south and west, local Missouri River businesses have benefited from hikers and bicyclists enjoying Boone County's 31.2 miles of the Missouri Department of Conservation's KATY Trail State Park. This facility, as well as the Finger Lakes and Rock Bridge Memorial State Parks, draw many visitors from areas far beyond Boone County.



*Photo 4 - A segment of the KATY Trail State Park in Boone County.*

## 2.6 Property Tax Base

The Boone County property tax base has evidenced steady growth for many years. Much of this expansion is attributable to inflation. An "average" home costs more in 1996 than in 1986 or 1966. Farmland prices are more volatile than residential real estate and sometimes crash. Nevertheless, the long-term trend has been up.

As urbanization advances, favorably situated agricultural or otherwise developable properties increase in value. Residential, commercial and industrial land uses have intensified in keeping with Boone County's long-term population growth. Given the relatively large portion of Boone County that is tax-exempt (i.e., the University of Missouri-Columbia and related facilities, Stephens and Columbia Colleges, state parks and other governmental holdings, and churches), an expanding tax base is particularly important for local property taxing governmental entities, especially school districts.

The Boone County Assessor's Office has provided valuation data assessed by five classifications for the years 1991 through 1995. It also supplied 1996 estimates. These figures are reported in Table 11. They reflect new development, changing property values, and inflation as well as reassessment practices and timing throughout Boone County.

Table 11 is another indicator of the fundamental strength of Boone County's economic life. The demands for more homes for a growing population and an expanding commercial real estate base are the driving forces behind generally increased housing, retail, office, wholesale, warehouse, and industrial property values. The marked rise in the assessed value of residentially classified real estate demonstrates the strength of the housing market in Boone County. Clearly, residential property is the driving force behind the increasing real estate values in Boone County.

**Table 11**

**Boone County Assessed Valuations (1991-1996 Est.)**

Description	1991	1992	1993	1994	1995	1991-1995 % Change	June 1996 Est.
Residential Real Estate	\$348,492,713	\$366,163,969	\$409,320,009	\$430,789,642	\$471,562,508	+35.31%	\$495,319,543
Commercial Real Estate	\$212,055,628	\$228,497,904	\$235,028,714	\$238,655,613	\$229,435,970	+7.58%	\$242,795,945
Agricultural Real Estate	\$15,664,868	\$15,465,255	\$15,446,225	\$15,391,908	\$15,623,883	-0.03%	\$16,138,528
Real Estate Subtotals	\$576,203,209	\$610,127,475	\$659,794,978	\$684,837,163	\$716,622,361	+24.37%	\$754,254,016
Personal Property	\$135,636,307	\$145,019,061	\$160,959,629	\$180,349,991	\$202,967,083	+49.64%	\$228,614,199
State Assessed	\$20,819,401	\$19,797,850	\$21,037,657	\$23,039,434	\$26,512,225	+27.34%	\$27,804,943
Non-Real Estate Subtotals	\$156,455,709	\$164,816,911	\$181,997,286	\$203,389,425	\$229,479,308	+46.67%	\$256,419,192
Assessed Valuation Totals	\$732,658,917	\$774,944,386	\$841,792,264	\$888,226,588	\$946,101,669	+29.13%	\$1,010,673,208

Source: Boone County Assessor's Office

The slight 1991-1995 decline in agricultural real estate valuations is attributable to two factors. Farmland prices waver more than virtually any other property due to fluctuating national and international product markets, changing governmental policies, and in many instances, the potential for conversion to other uses. Indeed, agricultural real estate in Boone County is regularly transformed into new tract housing and commercial uses among other things. Through time, there is less and less Boone County agricultural real estate. This trend will continue. For the time being, preliminary 1996 data suggests stronger demand, and higher prices, for the agricultural acreage that remains.



## **2.7 Economic Development Trends, Opportunities and Limitations**

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Boone County has enjoyed significant economic growth for many years. However, the future seldom follows the “straight lines” that can be projected from the past. Boone County, by itself, is a large economic entity. However, it is subject to strong regional, national and, increasingly, international influences. More and more, its fortunes are enmeshed with those of Missouri, America, and the balance of the developed world.

In this context, Boone County has considerable strengths that promise continued economic vitality. They include:

- A large, diverse, well-educated and growing workforce
- A strategic mid-state and mid-continent location on Interstate Highway 70
- Sizable amounts of developable land, much of which is now used for agriculture
- The relative absence of many older, “big-city” problems such as large-scale blight
- An array of successful existing businesses and institutions that provide economic stability as well as the potential for expansion

It is likely that much of Boone County's future economic growth will occur in areas in which it already has a major or dominant position, in particular insurance and medical care. The University of Missouri-Columbia also will continue to be a reliable "mainspring" for the local economy. Moreover, for the near term, demographic factors, i.e., the "baby boom echo," will push its admissions applications upward although financial and physical constraints will restrict its ability to quickly accommodate a significantly larger enrollment.

In any case, there are limits to how much Boone County can grow along established lines. For sustained economic growth, its institutions and businesses will have to increasingly tap into larger markets and/or find and satisfy new needs. The imaginations, risk-taking thresholds, and financing capacities of local entrepreneurs will be tested. Moreover, Boone County and its municipal governments will have to actively pursue outside investment if they wish to maximize their shares of opportunities that will emerge from beyond mid-Missouri.

Boone County has advantages in the competition for economic development but it also has shortcomings. For example, the pace, nature, quality and location of certain actions will be dependent upon the availability of key infrastructure. The lack of access to good roads can limit or preclude the developmental potential of otherwise suitable property. State and local road-building and/or maintaining entities are hard-pressed to meet immediate needs, let alone "get ahead of the curve" and use road improvements to conscientiously help direct new development to selected locales. This is a key reason why, to date, Boone County's growth has tended to radiate along major routes from Columbia rather than be more scattered.

Water and sewer service also are critical infrastructure issues. A well and/or sewage lagoon may suffice for an isolated homestead but utility lines must be extended or whole systems developed to support intense new development. At this time, mass sewer service is unavailable throughout most of Boone County. Given that poor soil permeability limits the ongoing use of ground-disposal waste systems, the expansion and/or creation of trunk sewer service seems inevitable. Such work is expensive and, when implemented in existing developed areas, especially disruptive.

Another realm that impacts Boone County's potential economic growth are the individual policies and capabilities of Boone County and its municipal governments as well as school and special districts. Developers of all kinds need to meaningfully interact with multiple governmental entities in order to design and complete projects. Zoning and subdivision regulations compliance are basic issues where applicable requirements are in place. School districts need to know possible impacts upon their enrollments and operations that might result from new housing. Public water districts, whose original mission was to provide drinking water and not water service for fire protection, must be consulted for project purposes. Fire protection is often the responsibility of another set of service providers. All of these entities will continue to influence how Boone County grows and develops.

**BCMP**

BOONE COUNTY MASTER PLAN

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**3.0 Natural Features,  
Land Use and Historical Sites**

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## **3.0 Natural Features, Land Use and Historical Sites**

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### **3.1 Introduction**

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Boone County is a large and physically diverse place. Its localized environments range between the virtually pristine to highly urbanized settings. New construction occurs within the dual contexts of its natural endowment of soils, topography, floodplains and wetlands as well as an existing manmade overlay that comprises roads, farms, homes and office buildings, among other things. Boone County is not now, and never was, a “blank state” in which “anything” could happen. Yet, many “futures” were and are possible for its 687 square miles. In any case, Boone County’s ongoing evolution will continue to be conditioned by basic characteristics in place millennia ago that have been increasingly altered by two centuries of unfolding manmade development, some of which can be considered historic.

## 3.2 Natural Features

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Relative to future growth, there are two basic sets of natural physical features that facilitate or constrain development to large degrees: the local topography including geology and soils, and floodplains including wetlands. Each are discussed below. Collectively, they constitute most of the natural “starting point” for everything that humans change and create later.

### 3.2.1 Topography

Boone County’s mid-Missouri topography is the product of ceaseless geological forces. At least once in prehistory, virtually all of it was covered by a large glacier. Glacial till comprising yellowish clay mixed with sand and pebbles is present almost everywhere. Depths vary from a few inches to 100 feet or more but it tends to be thickest immediately north and east of the Missouri River. Most parts of Boone County are covered by loess. It is thickest on the Missouri River bluffs but thins out with greater distances from the bluffs. In places, wind and water have eroded the loess so that the glacial till often is exposed.

Limestone is present as bedrock throughout most of Boone County. It is notably high-grade beneath the southwestern Missouri River valley hills. Sinkholes associated with Karst topography are present throughout the area and can complicate potential development. Limestone quarries have been active for many years. Coal deposits have been mined from time to time as well.

Boone County tends to be hilly except for its northeastern corner, a more or less level plain around Sturgeon and Centralia, and the elongated Missouri River floodplain. Elevations range from about 919 feet National Geodetic Vertical Datum (NGVD) on high points approximately 6.8 and 10.6 miles south-southwest of Centralia to 558 feet NGVD and less on the Missouri River floodplain at Boone County’s southeastern tip. This 361 (+/-) foot difference is the equivalent of a 30-story building. Slopes vary consider-

ably, ranging upward to as much as 30 percent for the most part but, in isolated circumstances, equalling 50 percent. All but the northeastern portion of Boone County drains into the Missouri River through numerous streams that dissect the area.

Most of Boone County lacks the large upland plains that are most efficiently developed, such as the "Golden Triangle" in St. Charles County, Missouri. Its topography can be a limiting factor. Except for its northeastern corner, most of the "easiest" land topographically has already been utilized. In the future, for example, new development around Columbia may require more grading and filling as well as present more drainage and stormwater issues. Generally, however, there should not be insurmountable problems beyond additional design and construction costs.

### 3.2.2 Soils

Exhibit II is a general soils map for Boone County, adapted from materials prepared by the U.S. Department of Agriculture's Natural Resources Conservation Service (formerly the Soil Conservation Service). It identifies eight general soil "associations." At least 57 individual soil types comprise these eight associations. Each soil type has individual characteristics relative to permeability, slope, flooding potential and depth to rock. These and other qualities help determine its suitability for uses such as agriculture, construction, and sanitary purposes, notwithstanding other pertinent factors.

Sinkholes can convey surface pollutants far underground. Boone County sinkhole locales associated with Karst topography, as determined by the Missouri Department of Natural Resources, are identified by Exhibit III, Natural Features. Significant potential for contaminating ground water exists where agriculture or development impinges upon sinkhole sites.

Boone County is fortunate that almost all of its soils, absent sinkholes, can be productively used for agriculture. In general, soil associations 1, 2, 5, 7 and 8 represent good croplands. Soil associations 3, 4 and 6 are better suited for hay and pasture, or forestry, due to steeper slopes although less sloping portions may be cultivated.

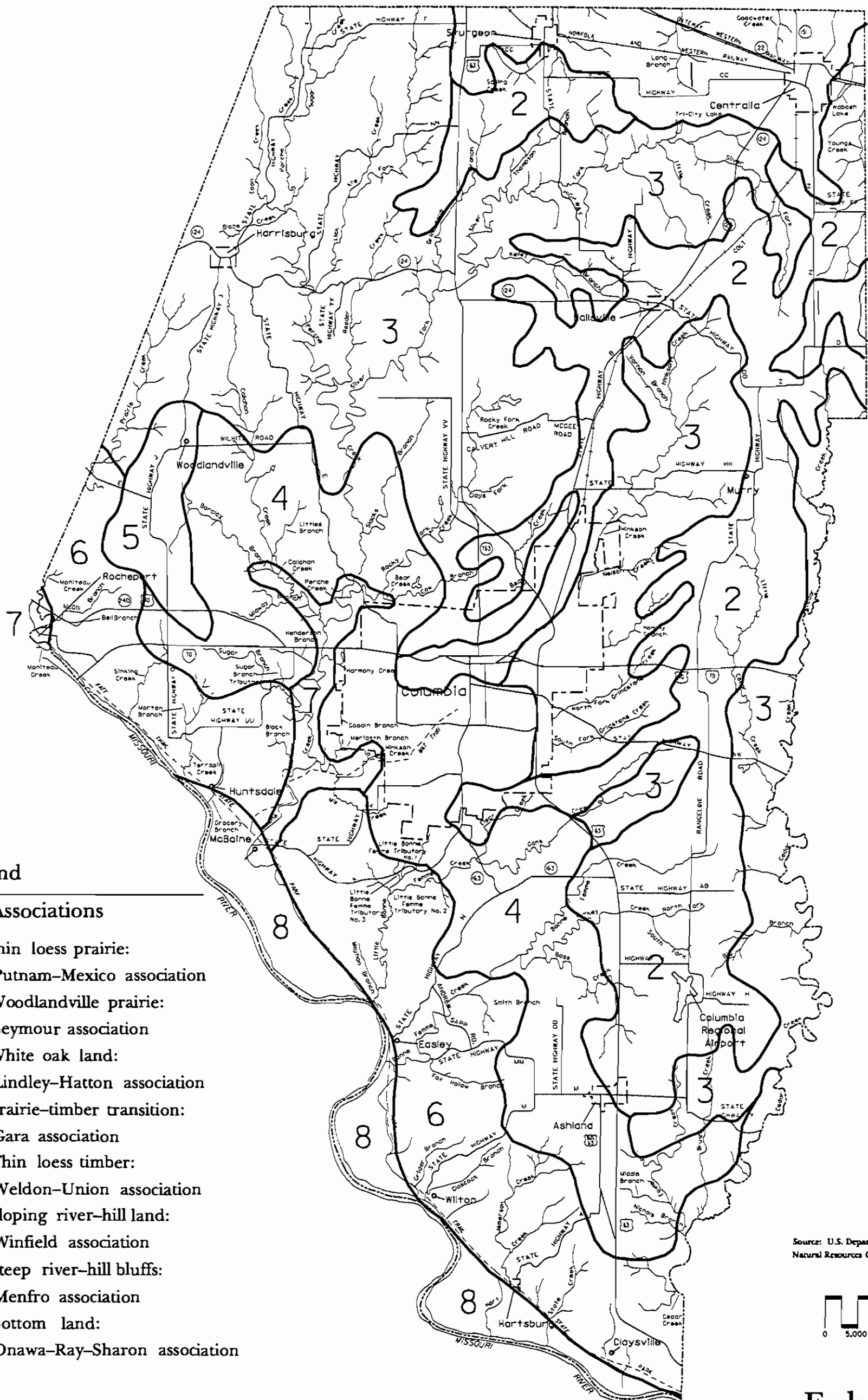
Excessive slopes and potential Karst topography are not Boone County's only source of construction difficulties. In general, local soils are not particularly well-suited for denser development. Problems run the gamut from erosional characteristics to high shrink-swell potentials to frequent flooding.

In one regard, Boone County soils pose particularly acute developmental concerns. At least 24 different soils, including at least one soil in each of the eight soil associations, present "severe" problems relative to constructing and operating septic tank absorption fields and sewage lagoons as well as sanitary landfills. Large tracts of Boone County are too flood-prone, too hilly, too naturally wet, too close to rock, or percolate water too slowly and/or are too clayey, for these purposes. Many existing homeowners, for example, are painfully aware of the problems resulting from septic tank systems that probably should not have been installed in the first place because certain local soils are inappropriate at particular sites.

Soil conditions can vary widely over short distances. Good soils for a specific purpose may be across a road, for example, from unsuitable soils. Developers, planners, investors and purchasers need to be certain that a specific Boone County site has appropriate soils for any projected new uses or risk unpleasant consequences.

It is worth noting that the Natural Resources Conservation Services is currently remapping Boone County's soils. Fieldwork is scheduled to be completed in late 1996. Ultimately, local soil survey data will be digitized for easier access and use.



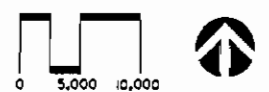


**Legend**

**Soil Associations**

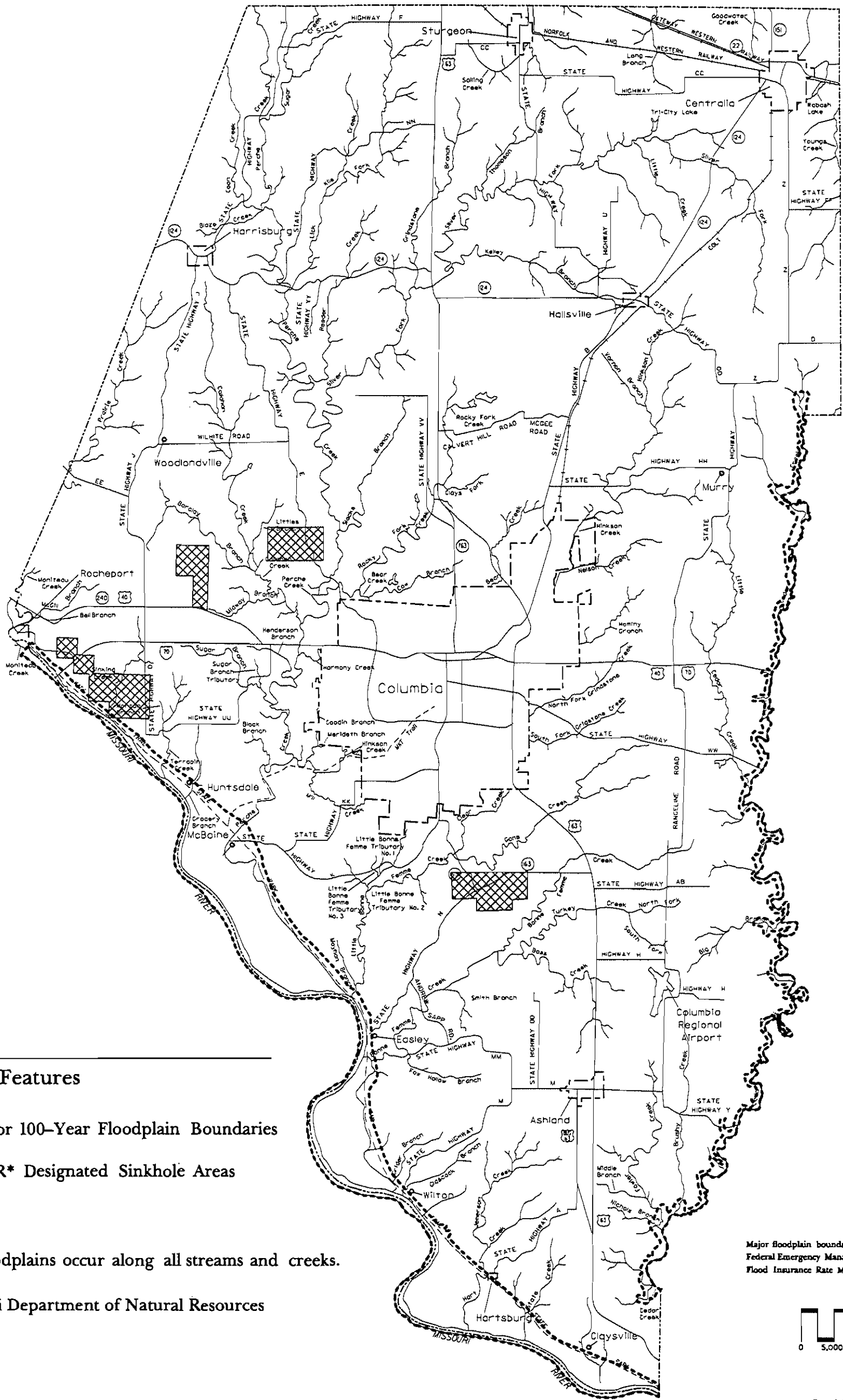
- 1 - Thin loess prairie:  
Putnam-Mexico association
- 2 - Woodlandville prairie:  
Seymour association
- 3 - White oak land:  
Lindley-Hatton association
- 4 - Prairie-timber transition:  
Gara association
- 5 - Thin loess timber:  
Weldon-Union association
- 6 - Sloping river-hill land:  
Winfield association
- 7 - Steep river-hill bluffs:  
Menfro association
- 8 - Bottom land:  
Onawa-Ray-Sharon association

Source: U.S. Department of Agriculture  
Natural Resources Conservation Service



**BOONE COUNTY**  
**Master Plan**

**Exhibit II**  
**Soils**



**Legend**

**Natural Features**

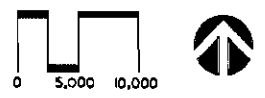
----- Major 100-Year Floodplain Boundaries

▣ DNR\* Designated Sinkhole Areas

Note: Floodplains occur along all streams and creeks.

\* Missouri Department of Natural Resources

Major floodplain boundaries are adapted from Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps.



### 3.2.3 Floodplains and Wetlands

The 1993 and, to a lesser extent, 1995 floods highlighted a basic fact of developmental life. All floodplains will, sooner or later, fulfill their natural functions of allowing rivers and streams to overflow normal banks during periods of high water. Manmade flood control measures such as levees and pumps may modulate this process and, typically, eliminate nuisance occurrences. However, there will always be flood events beyond human control.

The nature and amount of present and future development on floodplains are issues without "good" answers. There are compelling historical reasons why substantial investments have been made in these locales. Nevertheless, significant flooding that will jeopardize these investments is inevitable.

Recently, governmental policies and public thinking have gravitated toward the view that often the risks are too great to warrant repeated destruction and rebuilding cycles. Outright floodplain developmental prohibitions are more frequent. Moreover, other mechanisms such as restricting flood insurance availability and benefits, enhanced flood design requirements, and buyouts can have the same effect over time.

Approximately 37.6 miles of the Missouri River forms the southwestern border of Boone County. Its immediate floodplain varies greatly in width but basically extends north and east to the old Missouri-Kansas-Texas (KATY) Railroad tracks, more recently the KATY Trail State Park, at the foot of bluffs and hills scoured by the river eons ago. This massive limestone formation is punctuated by numerous local Missouri River tributaries. A complex fanlike network of floodplains related to these tributaries permeates most of Boone County.

Exhibit III depicts only those floodplains associated with the Missouri River and Cedar Creek. This representation's scale is such that lesser floodplains cannot be accurately reproduced. However, it should be sufficient to know that virtually every stream or creek in Boone County, or anywhere else, of any size and constant flow has a natural floodplain.



*Photo 5 - November morning along Silver Fork Creek.*

The practical developmental effect of floodplains is some degree of risk for flooding as well as under current law, in most instances, the legal necessity of governmental regulatory reviews and permitting. Such controls may impede, modify or effectively prevent certain public and private proposed actions.

Wetlands are usually interspersed among floodplains. They also are present around lakes and ponds and in ditches, among other places. Whether natural or manmade, wetlands are ecologically important features. In recent years, they have benefitted from enhanced regulatory protections. Developmentally, the basic national policy in 1996 is:

1. Avoid wetlands (if possible),
2. Minimize harm to wetlands (as possible), and
3. Mitigate any losses (create replacement wetland acreage, as required, in excess of the loss).

Federal and/or state laws may change. In any case, Boone County has many floodplain and/or wetland environments. Their status relative to local growth will remain an ongoing concern for more than legal or regulatory reasons.

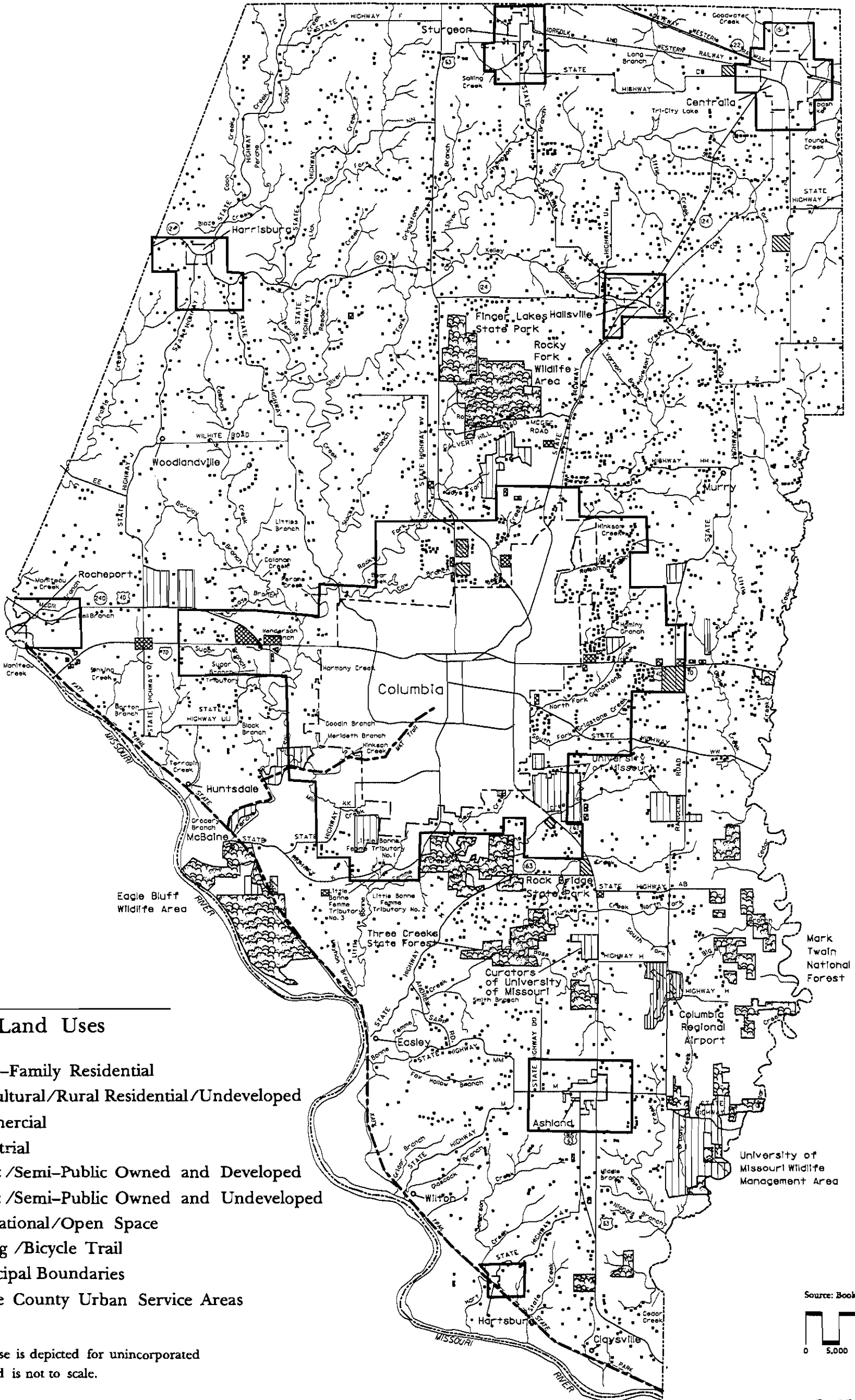
### **3.3 Existing Land Use**

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Land use analysis is one of the basic tools of master planning. Any developed area's existing land use reflects generalized historical patterns of human interaction with the natural environment. These patterns represent the starting point from which future development will flow. Boone County's existing land use was determined by utilizing a combination of field work and aerial photography. Exhibit IV illustrates these results.

Boone County's existing land use is most complex in and around Columbia. Land use is not depicted by Exhibit IV within Columbia or other Boone County municipalities. Columbia and its surroundings constitute the dominant urbanized population and economic center for this portion of mid-Missouri. Boone County's other incorporated municipalities, i.e., Ashland, Centralia, Hallsville, Harrisburg, Hartsburg, McBaine, Rocheport, and Sturgeon, are of varying but lesser developmental magnitudes.

Under its existing subdivision regulations, Boone County has designated official "urban service areas," as also indicated by Exhibit IV. These are areas in which urban-type development is considered most appropriate. Section 7.2 of this document discusses urban service areas.



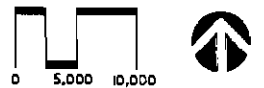
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**Existing Land Uses**

- Single-Family Residential
- Agricultural/Rural Residential/Undeveloped
- Commercial
- Industrial
- Public/Semi-Public Owned and Developed
- Public/Semi-Public Owned and Undeveloped
- Recreational/Open Space
- Hiking/Bicycle Trail
- Municipal Boundaries
- Boone County Urban Service Areas

Note: Land use is depicted for unincorporated areas only and is not to scale.

Source: Booker Associates, Inc.



A corridor along east-west Interstate Highway 70, that balloons around Columbia, is the primary developmental spine in Boone County. Most of non-urbanized Boone County is agricultural or otherwise undeveloped except for scattered pockets of diverse uses. Isolated residential land use occurs throughout the area.



*Photo 6 - Agriculture is a major Boone County land use.*



Residential subdivisions of varying scales, including mobile home parks, also are present, particularly in the unincorporated areas around Columbia and east-west off of I-70. Similar developments are evident in the vicinities of other incorporated communities. Such locales collectively house most of Boone County's unincorporated area population.

Commercial uses are also concentrated around Columbia and east-west along and off of Interstate Highway 70. Scattered commercial land uses exist elsewhere but, by and large, commercial needs are satisfied in incorporated areas or along the I-70 corridor.

Industrial facilities are relatively rare in Boone County, especially in unincorporated areas. The most noteworthy unincorporated industrial sites are northeast of Columbia and east along I-70. Some industrial uses are served by the railroad linking Centralia and Columbia. Other industrial development is along the tracks emanating from Centralia to points outside of Boone County.

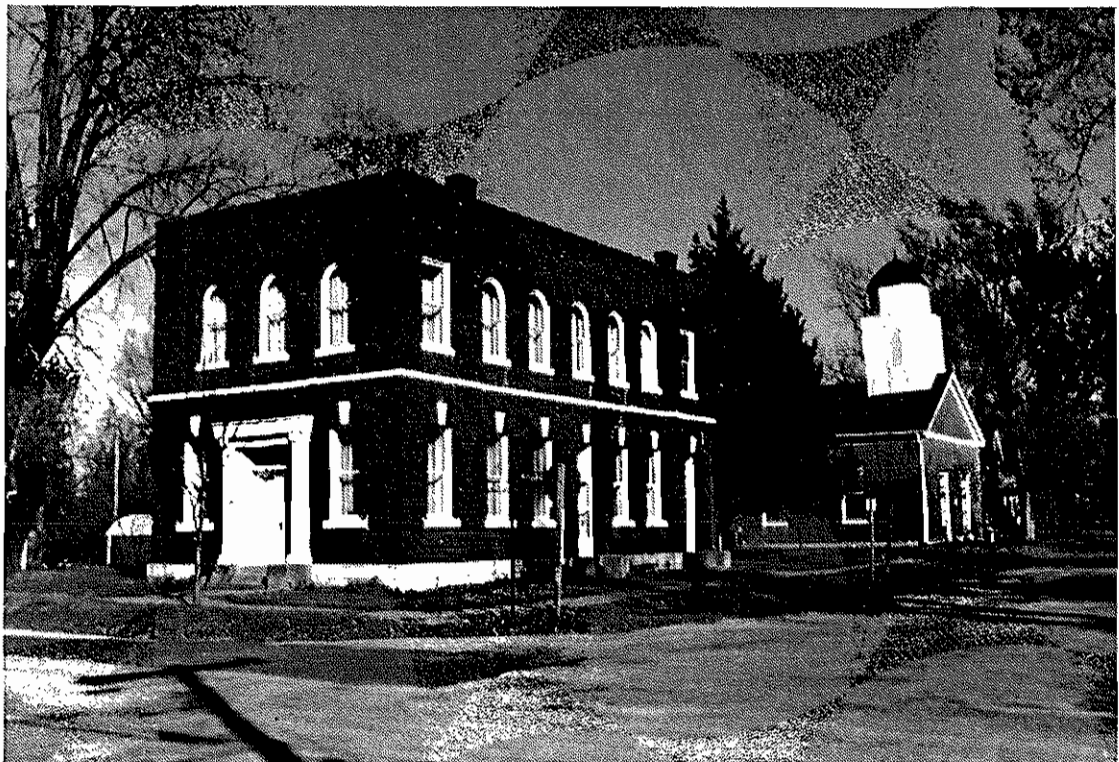
Public, institutional and/or recreational land uses are located throughout unincorporated Boone County. They range from the Columbia Regional Airport, northeast of Ashland, to various University of Missouri facilities, to the Mark Twain National Forest and several state parks including the KATY Trail. It is noteworthy that the City of Columbia owns significant amounts of land outside its municipal boundaries, including the airport.

### 3.4 Historical Sites

Boone County has a long and distinguished history. To date, 37 locations have received county, state or national listing as historic sites. They range from Civil War battlefields to the remains of the Boone's Lick Trail to individual homes and churches. Additional sites will be recognized in the future.

Acknowledging Boone County's past is an important part of its planning. Local history is one of the elements that distinguishes Boone County from other mid-Missouri locales. Insofar as possible, the physical heritage of Boone County needs to be respected and preserved for the future.

**BCMP**



*Photo 7 - Historic Rocheport is one of Boone County's oldest communities.*

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BOONE COUNTY MASTER PLAN

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## 4.0 Transportation

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## **4.0 Transportation**

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### **4.1 Introduction**

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The state and county road systems are the primary means of transportation throughout the urbanized and non-urbanized portions of Boone County. In turn, municipal streets typically branch off from state and county roads within incorporated communities. One of the major transportation issues Boone County will continue to face is the efficiency of the local road system, both in terms of improvements to existing roads as well as the construction of new roads. Maintenance of the local road system is another priority Boone County and other transportation facility providers must address. County roads are one of the primary benefits that the County Government provides its taxpayers.

### **4.2 Existing Conditions**

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Although Boone County's transportation needs are primarily satisfied by its roadway network, other facilities are important as well. Existing conditions are subsequently described for roadways as well as public transportation, bicycle and pedestrian routes, railroads, the Columbia Regional Airport, and waterborne commerce along the Missouri River. Some recommendations are included relative to specific transportation issues and circumstances.

#### 4.2.1 Major Roadways and Traffic Volumes

Interstate Highway 70 (I-70) is the major east-west roadway through Boone County. The major north-south route is U.S. Highway 63. Lesser state and county roadways extend throughout Boone County. The interchanges for I-70 occur at Highway Z, Lake of the Woods Road, U.S. 63, I-70 Business Loop (2), Highway 763, Highway 163 (Providence Road), Highway 740 (Stadium Boulevard), U.S. Highway 40 (240) and Highway UU, Highways J and O, and Highway BB.

Traffic volumes vary markedly among streets, roads and highways due to numerous factors including individual designs and the areas served. The highest traffic volumes along I-70 in Boone County occur near U.S. 63 where the 1993 average daily traffic (ADT) volume was over 51,000 vehicles. The traffic volumes drop to just under 50,000 ADT near the western City of Columbia limits and to around 36,000 ADT at Columbia's eastern limits. The volume along I-70 at the western Boone County limits is near 24,000 vehicles per day. It is around 26,000 vehicles per day at the eastern limits.

U.S. 63 carries over 26,000 ADT just south of I-70 and over 31,000 ADT near Highway 740 in Columbia. South of Ashland, U.S. 63's ADT is almost 14,000 vehicles. In the northern part of Boone County, U.S. 63's volumes range from over 8,000 vehicles per day near the county line to almost 13,000 vehicles per day south of Highway 124.

The remaining roadways within Boone County and outside Columbia each carry less than 10,000 vehicles per day, as shown on Exhibit V, Existing Roadways and Traffic Volumes.

#### 4.2.2 Roadway Providers

The majority of local traffic travels on interstate, national, and numbered or lettered routes, all of which are maintained by the Missouri Department of Transportation (MoDOT - formerly the Missouri Highway and Transportation Department).



*Photo 8 - MoDOT maintains Highway NN northeast of Harrisburg.*

Boone County's Public Works Department presently maintains 850 miles of roadway. Only 250 miles of these 850 miles are currently paved, with most of the paved roads being located within subdivisions. The remaining 600 miles are gravel roads which require timely and costly maintenance.

Boone County currently has a capital improvements program to pave specific gravel roads. This program, which is funded by a sales tax ending in 1998, will upgrade 51.9 miles of roadway. These county roadways, generally carrying over 250 vehicles per day, will be paved with three inches of asphalt on a six-inch rolled base over a prepared subgrade. These improvements will be made along either new or existing county rights-of-way.

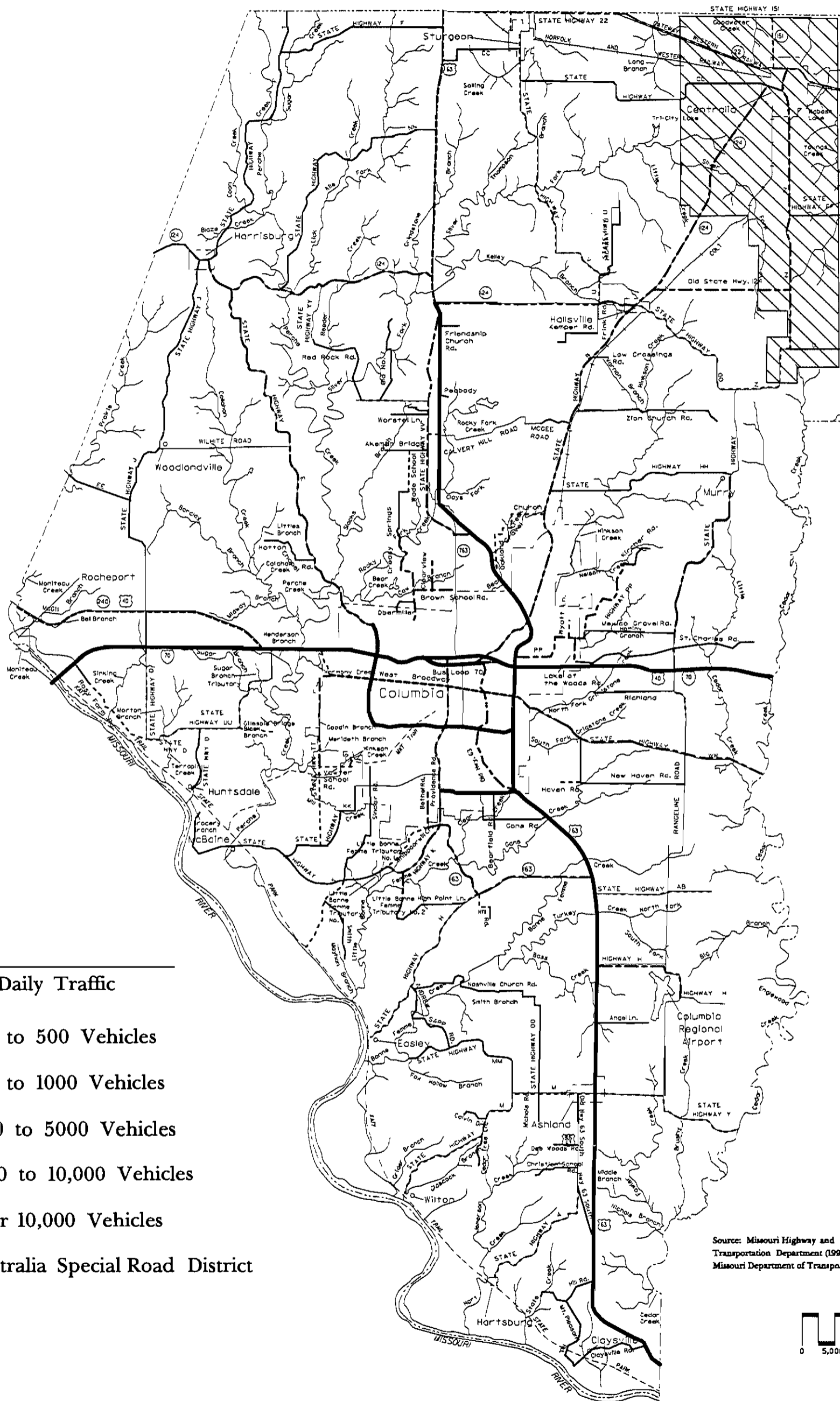
The Centralia Special Road District has been active in northeastern Boone County since 1911. It and two other special road districts, both now defunct, were organized at a time when Boone County, like many of Missouri's rural counties, was not building enough roads to satisfy local residents. Today, the Centralia Special Road District basically takes the place of the Boone County Public Works Department by providing and maintaining non-state and non-municipal roads within its service area.

Exhibit V shows the portion of Boone County served by the Centralia Special Road District. It maintains approximately 52 miles of roads. An estimated maximum of 12 percent of these facilities are paved. The rest are gravel. Gravel roads are paved as demand dictates and funding allows. In recent years, local traffic has steadily increased as people have migrated to the area in and around Centralia.

Currently, the Centralia Special Road District is focusing upon the maintenance and improvement of its existing roadways rather than new construction. No specific projects are planned. Most of its revenues are derived from personal property and real estate taxes within its district boundaries. However, it is sharing in the revenues from the special Boone County capital improvements sales tax which, as noted above, ends in 1998.

Municipal authorities maintain local road and street systems within their jurisdictions. Columbia has the largest and most complex local street network. Maintenance levels vary among Boone County's incorporated communities in response to local resources and priorities.





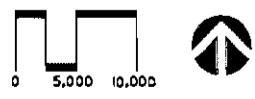
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**Average Daily Traffic**

- 250 to 500 Vehicles
- 500 to 1000 Vehicles
- 1000 to 5000 Vehicles
- 5000 to 10,000 Vehicles
- Over 10,000 Vehicles

▨ Centralia Special Road District

Source: Missouri Highway and Transportation Department (1993), now the Missouri Department of Transportation (MoDOT).



**BOONE COUNTY**  
Master Plan

**Exhibit V**  
Existing Roadways  
and Traffic Volumes

### **4.2.3 Bridges**

In general, Boone County's bridges are in acceptable condition. Most are sufficient to carry the load limits required. However, bridges, as well as related channels, need to be maintained to ensure the integrity of Boone County's transportation system. The failure to maintain creek and stream channels leads to bridge degradation, eventually requiring costly repairs to bridge structures.

### **4.2.4 Snow Removal Policy**

Boone County has guidelines in place for snow removal. These guidelines include the use of contracted operators assigned specific districts and priorities. A snow removal team consists of a motor grader operator and a truck with a plow and cinder capability. Boone County is currently using cinders. However, this approach may need to be reevaluated. The general effectiveness of cinders has recently decreased due to new coal processing methods which yield smaller cinders.

### 4.2.5 Scenic Roads

Boone County established a Scenic Roads Committee in 1995. It was charged with developing a draft set of guidelines and regulations intended to preserve roadway segments in Boone County with special scenic or historical significance. This committee's draft work has been reviewed by Boone County's Road and Bridge Advisory Committee and its Planning and Zoning Commission as well as the County Commission. Presently, the County Government staff is modifying the committee's draft work. Legal concerns, as well as various practical considerations, are major factors when establishing a process and procedures for designating and maintaining scenic roads.

### 4.2.6 Signage

Highway signage within Boone County appears to conform with the Manual on Uniform Traffic Control Devices issued by the Federal Highway Administration. These guidelines are continually updated. Boone County needs to maintain appropriate standards for its facilities.

An updated inventory of signs would help determine compliance with evolving standards. Such an inventory would also assist local authorities in replacing older signs lacking reflectorization that could present safety hazards. Signs lose reflectivity as they age. Old signs should systematically be replaced to assure visibility.

### 4.2.7 Striping

County paved roads usually are not striped. Consideration should be given to developing a striping program for all paved roads. It should conform with the Manual on Uniform Traffic Control Devices.



*Photo 9 - This Boone County bridge is in acceptable condition but lacks pavement striping.*

### 4.2.8 Maintenance Building

The existing Boone County Public Works Department road and bridge maintenance building is located south of Columbia on U.S. 63. This is in the central part of Boone County, providing reasonable access to the entire area. County staff have made great efforts to maximize the utilization of the space available. However, there is a need for more room to enable the Public Works Department to function more effectively.

#### **4.2.9 Regional and Local Bus Service**

Greyhound Bus Lines offers the only regularly scheduled regional bus service to and from Boone County. Several buses a day travel between St. Louis and Kansas City with stops in Columbia. Connections for most other points are made in St. Louis and Kansas City.

The only local bus service in Boone County is provided by Columbia Transit, owned, operated, and heavily subsidized by the City of Columbia. At present, Columbia Transit runs four full-service fixed routes and one commuter route. It also offers complementary paratransit service for disabled individuals within Columbia. Without significantly increased public subsidies, it is unlikely to expand service within or beyond Columbia. Low population densities throughout Boone County militate against new local public transportation systems elsewhere.

#### **4.2.10 Bicycle and Pedestrian Routes**

For 31.2 miles the KATY Trail State Park runs along the Missouri River bluffs in the southwestern part of Boone County. It is used by local and visiting bicyclists as well as hikers in Boone County. The entire facility extends from Sedalia, Missouri to eastern St. Charles County, Missouri, a distance of approximately 200 miles. Exhibit V illustrates the local segment.

The City of Columbia has developed and adopted a bicycle master plan. This plan defines three classifications of routes including a Class I route to be used exclusively by bicyclists and pedestrians. This plan has been partially implemented.

Recently, Boone County developed a biking/hiking trail, the MKT Trail, that links Columbia's growing bikeway system to the KATY Trail State Park. Clearly, interest in such facilities is great. A county-wide trail system probably will be created segment by segment, over time, by a variety of private and/or governmental entities.

Current Columbia subdivision regulations require sidewalk construction on both sides of new streets. New sidewalk requirements in other municipalities vary. Sidewalks are required in unincorporated portions of Boone County for lots of 1/2 acre or less.

#### 4.2.11 Railroads

Boone County does not have passenger rail service. The nearest AMTRAK station is in Jefferson City.

Local freight service is provided by the Columbia Terminal Railroad (COLT). This line, owned and operated by the City of Columbia, runs between Columbia and Centralia. It is indicated on Exhibit V.

Railroad freight service to and from Boone County is along tracks operated by the Norfolk Southern Corporation (Norfolk and Western Railway) and the Gateway Western Railway. This service is through Centralia. Both lines are depicted on Exhibit V.



*Photo 10 - Railroad tracks and related industrial development in Centralia.*

#### 4.2.12 Columbia Regional Airport

Columbia Regional Airport is the only airport for general or commercial aviation in Boone County. It occupies a large site northeast of the City of Ashland to the east of U.S. 63. The City of Columbia owns and operates the facility.

For various reasons, this airport has experienced difficulty in attracting and keeping adequate amounts of regularly scheduled service during the post-deregulation era. The relative proximity of two major airports, Kansas City International Airport and Lambert-St. Louis International Airport, is a major factor. It is sometimes more convenient, and often less expensive, for mid-Missourians to use them as flight origin or destination points rather than to start or end trips at Columbia Regional Airport. The presence of another nearby airport, Jefferson City Memorial Airport, similarly dilutes mid-Missouri general aviation business.

° Airports of significant size usually generate related development. This process has been slow at Columbia Regional Airport. A general lack of local infrastructure, in particular sanitary sewers, has so far blunted this area's ancillary development potential.



*Photo 11 - The Columbia Regional Airport competes with three other facilities.*



### 4.2.13 Waterborne Transportation

The Missouri River is a significant element of the national inland waterway system. However, it lacks many of the natural and manmade attributes that make the Mississippi and Ohio Rivers, by comparison, waterborne commerce "superhighways." Its 732 commercially navigable miles extend from Sioux City, Iowa downstream to its confluence with the Mississippi River. Boone County's riverfront represents about 37.6 miles of that distance. The typical navigational season is only about eight months long, from early April to early December, due to winter low water conditions and ice.

Boone County has a history of riverfront sand, gravel and rock operations that utilize barges to ship these building materials upstream and downstream. Other commercial waterway transportation applications have been negligible for many years. At a minimum, significant on-shore infrastructure investment would be required for Boone County to maximize its potential for waterborne commerce and related economic development. However, there are presently no municipal or county port authorities to facilitate such efforts.

There is some commercial fishing along the Missouri River in Boone County as well as commercialized recreation. To date, Boone County, unlike other mid-Missouri political jurisdictions, has shown little interest in riverboat gaming.

## 4.3 Planned Improvements

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All Boone County transportation facility providers plan. Some are general, i.e., "pave more roads" while others are quite detailed, encompassing specific projects in a particular time frame. Current projects are grouped and listed subsequently for Boone County's two county-wide transportation providers: the Boone County Department of Public Works and the Missouri Highway and Transportation Department. The role of the Columbia Area Transportation Study Organization (CATSO) and its 1995 Major Thoroughfare Plan are also discussed.

### 4.3.1 Boone County Public Works Department

As previously noted, Boone County's gravel road paving intends to complete 51.9 miles of gravel roads by 1998. Tables 12-A and 12-B indicate the roadways and locations included in this program. Before paving particular segments, Boone County's Public Works Department is completing property research. In an effort to maximize available public funding, individual property owners are sometimes asked to donate small amounts of land for these purposes.



*Photo 12 - The County Government is paving 51.9 miles of gravel roads like this one.*

**Table 12-A**

**Boone County Gravel Road Paving Program  
(North of I-70 by 1998)**

<b>NORTH OF I-70</b>	<b>MILES</b>
Akeman Bridge Road	1.5
Alfalfa Drive	0.8
Benedict Road	1.5
Blackfoot Road	0.4
Boone Road	0.3
Creasy Springs Road	1.1
Dozier Station Road - I-70 Access Road to LaVista	0.7
Dripping Springs Road	1.2
Friendship Church Road	0.5
Frink Road - Highway 124 to Route B	1.0
Hatton Chappel Road - Highway E to North Corner	1.0
Kircher Road - Highway PP to Mount Hope Road	0.8
Locust Grove Church Road - Midway to Westlake Road	0.8
Mauler Road	0.5
Mexico Gravel Road	2.0
Mt. Zion Church Road	4.1
Old No. 7 - Dripping Springs North	0.3
Red Rock Road	1.3
Roemer Road	0.5
Rollingwood Road	0.3
Roy Barnes Road	0.5
St. Charles Road - Golf Course to Route Z	2.1
<b>Total</b>	<b>23.2</b>

Source: Boone County Public Works Department

**Table 12-B**  
**Boone County Gravel Road Paving Program**  
**(South of I-70 by 1998)**

SOUTH OF I-70	MILES
Andrew Sapp Road - Sapp to Route M	2.6
Bearfield Road - City Limits to End	1.5
Cedar Tree Lane	0.8
Christian School Road	2.0
Englewood Road - Englewood to Johnson Cemetery Road	1.3
Gans Road - Rock Quarry Road to Ponderosa	2.0
High Point Lane	1.7
New Haven Road - Pavement to Rangeline	3.5
Old Plank Road	1.4
Olivet Road - Highway WW to New Haven	1.0
Palis Nichols Road	0.8
Rangeline Road - Carter to New Haven	2.5
Richland Road - City Limits to Sunrise Estates	3.0
Rock Quarry Road - City Limits to Gans Road	0.5
Scott's Boulevard - Vawter School Road to Bridge - Bridge to Highway KK	1.9
Smith Hatchery Road - Old Plank Road to West Dothage Road	1.5
Tomlin Hill Road	0.7
<b>Total</b>	<b>28.7</b>

Source: Boone County Public Works Department

In addition, the Boone County Public Works Department currently has three major reconstruction projects planned:

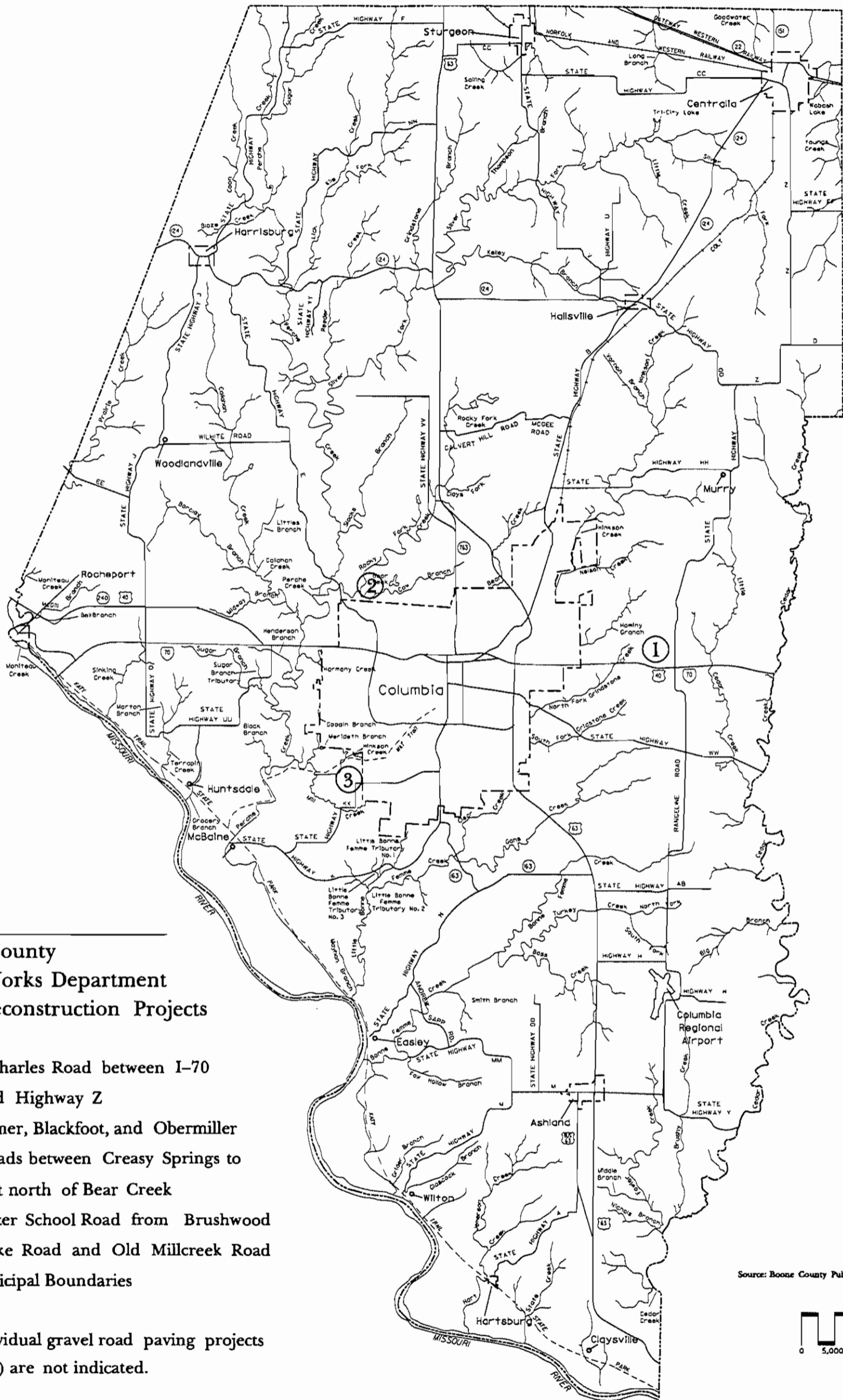
1. St. Charles Road between I-70 and Highway Z
2. Roemer, Blackfoot, and Obermiller Roads between Creasy Springs to just north of Bear Creek
3. Vawter School Road from Brushwood Lake Road and Old Millcreek Road

Exhibit VI (A) depicts these three projects. Exhibits VI (A), (B) and (C) collectively constitute Boone County's Transportation Plan.

Boone County is also developing a cost accounting system for the transportation facilities it maintains. This system will be an inventory for existing facilities and a tool for defining and estimating future projects.

As suggested in Section 4.2.10 of this document, bicycle and pedestrian routes are becoming important facets of Boone County life. The KATY Trail State Park has proven to be a popular amenity and the City of Columbia is developing its own network of designated bicyclist and pedestrian routes. Boone County recently constructed a biking/hiking trail, the MKT Trail, that links the KATY Trail State Park and the Columbia system.

The creation of a large-scale biking/hiking trail network would be a major asset for Boone County. It can be developed segment by segment by various private and/or governmental entities as funding and other circumstances allow. Road building and maintenance agencies will need to provide sufficient shoulders along appropriate roadways to facilitate this network concept.



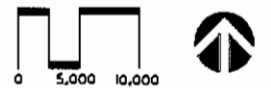
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**Boone County  
Public Works Department  
Road Reconstruction Projects**

- ① St. Charles Road between I-70 and Highway Z
- ② Roemer, Blackfoot, and Obermiller Roads between Creasy Springs to just north of Bear Creek
- ③ Vawter School Road from Brushwood Lake Road and Old Millcreek Road
- Municipal Boundaries

Note: Individual gravel road paving projects (51.9 miles) are not indicated.

Source: Boone County Public Works Department



### 4.3.2 Centralia Special Road District

As previously noted, the Centralia Special Road District has no specific projects planned at this time beyond the ongoing maintenance and improvement of its existing roadways.

### 4.3.3 Columbia Area Transportation Study Organization (CATSO)

The Columbia Area Transportation Study Organization (CATSO) neither builds nor maintains roads, bridges or other transportation facilities. Nonetheless, it plays a major, ongoing role in Boone County transportation planning. Federal law requires that "Metropolitan Planning Organizations" (MPOs) help prioritize and coordinate transportation projects in metropolitan areas. CATSO is the MPO for the "Columbia Metropolitan Planning Area" which includes the City of Columbia as well as its current and prospective urbanized surroundings.

CATSO was formed in 1964 and has served as the local MPO since 1974. Its staff comprises employees of the City of Columbia's Planning and Development Department. CATSO's CATS 2015 Transportation Plan was issued in 1994. Its 1995 Major Thoroughfare Plan delineated the functions of larger roadways in and around Columbia as well as identified prospective improvements throughout the overall system. The Boone County Commission, the Boone County Planning and Zoning Commission, and the Columbia City Council have adopted this plan. It should be considered a part of this Boone County Master Plan's Transportation Plan as well.

For the foreseeable future, CATSO will be intimately involved in federally-funded transportation initiatives in and around Columbia. This will include most MoDOT or City of Columbia projects in this portion of Boone County.

#### 4.3.4 Missouri Department of Transportation (MoDOT)

Unanticipated financial constraints recently forced MoDOT to limit its transportation work across Missouri. Fifteen-year planning and programming cycles had been standard for many years. Now, three-year "Short-Term Action Plans" (STAPS) are formulated annually statewide that include projects anticipated to go under contract, if not be completed, within three years. The projects so listed are considered "firm." Corridor studies for prospective projects are sometimes included in this group as well.

A second group of projects are annually determined to be "beyond STAP." Overall, these projects are less certain. No time period for their implementation is indicated.

MoDOT cautions that a number of factors have to be in place before any year's STAP or beyond STAP work can proceed. They include:

- Obtaining state and federal funding at expected levels
- Securing any additional funds that may be needed for particular projects
- Meeting environmental requirements
- Resolving legal matters on a timely basis, especially right-of-way acquisitions and utility relocations
- Receiving Metropolitan Planning Organization concurrence for projects in Columbia, Joplin, Kansas City, Springfield, St. Joseph and St. Louis



Statewide, Short-Term Action Plans, as well as the "beyond STAP" group, will annually evolve. Each will experience deletions and additions as projects are completed, dropped, delayed, or conceptualized. It is noteworthy that the controversial Highway 750 project, a previously proposed "superloop" around the southwestern quadrant of Columbia and its environs with a terminus at Interstate Highway 70 to the west and U.S. 63 to the south, is not listed among any of MoDOT's current STAP or beyond STAP projects for Boone County.

Table 13 lists and briefly describes these road and bridge projects that MoDOT expects to begin and/or complete in Boone County during the 1997-1999 period. These projects are shown on Exhibit VI (B).

**Table 13**  
**Boone County MoDOT STAP Projects (1997-1999)**

#	ROUTE	DESCRIPTION
1.	Highway AC (Nifong Blvd.)	Buy land and widen part of Highway AC. Relocate part of Highway AC to increase traffic flow and safety.
2.	Highway B (Paris Road)	Buy land, widen to five lanes and widen bridge over I-70 to five lanes from U.S. 63 to north of Business Loop I-70. Also install new traffic signals.
3.	Highway B (Paris Road)	Buy land, widen to five lanes from Columbia north urban limits to U.S. 63.
4.	Highway PP (Clark Lane)	Earthwork and widening to five lanes from U.S. 63 east 0.5 mile.
5.	U.S. 63	Repair the Silver Fork Creek Bridge south of the Highway 124 north junction by widening and improving approaches.
6.	U.S. 63	Resurface 5.4 miles of U.S. 63 from 0.1 mile north of Highway 124 north junction to Hinton Road to provide a smoother pavement and safer shoulders.
7.	Highway 163 (Providence Road)	Replace bridge at Clear Creek 1.5 miles north of Highway N with a wider bridge and improved approaches.
8.	Highway 740 (Stadium Blvd.)	Location study for Highway 740 from U.S. 63 to I-70 and Major Investment Study (MIS) to include other major corridors in the Columbia area.

Source: MoDOT



In addition to the above, MoDOT expects to undertake a major corridor study for improvements to U.S. 63 from Columbia north to Kirksville, Missouri in Adair County between 1996 and 1998. As part of this work, U.S. 63 would ultimately be upgraded to four-lanes throughout all of northern Boone County.

MoDOT Boone County projects for the period after 1999 are listed and described by Table 14. Exhibit VI (C) illustrates these projects.

**Table 14**

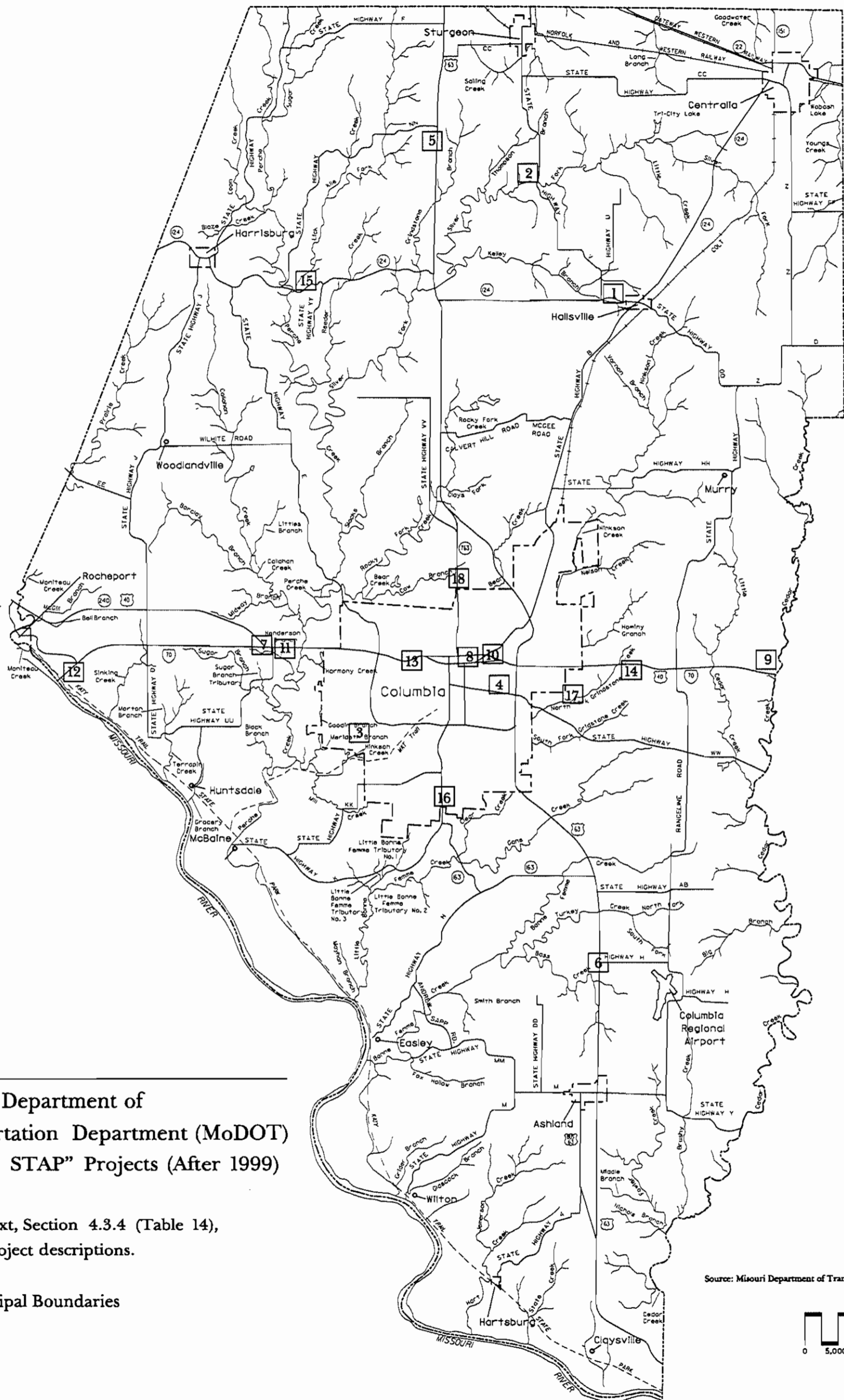
**Boone County MoDOT "Beyond STAP" Projects  
(After 1999)**

#	ROUTE	DESCRIPTION
1.	Highway B	Build a new two-lane highway west of Hallsville to decrease congestion through Hallsville.
2.	Highway V	Buy land, do earthwork, pave two lanes, and build a new two-lane bridge 3.1 miles south of Highway CC at Silver Fork Creek.
3.	Highway TT (Scott Blvd.)	Prepare ground and pave to widen to four and five lanes from south of Smith Drive to end of Highway TT.
4.	Highway WW (Fulton Gravel Rd.)	Earthwork and widening to four lanes with left turn lanes from Business Route 63 to U.S. 63.
5.	U.S. 63	Prepare ground and build bridges in first stage of widening to four lanes from the Randolph County line to the Highway 124 north junction. Second stage, including paving, to be completed later.
6.	U.S. 63	Construct a full diamond interchange at U.S. 63 and Highway H intersection.
7.	I-70	Provide 16-foot minimum clearance under bridges at U.S. 40 (240) and Highway ZZ interchanges.
8.	I-70	Build new bridge at westbound lane off ramp over eastbound lanes 0.4 mile east of Highway B and build new bridge at COLT Railroad over I-70 in Columbia.

**Table 14 (continued)**

#	ROUTE	DESCRIPTION
9.	I-70	Build a new bridge over Cedar Creek on the I-70 north outer road on the Boone and Callaway Counties line.
10.	I-70	Build a new bridge at Business Loop 70 in Columbia.
11.	I-70	Widen bridge over Perche Creek located 1.0 mile east of U.S. 40 to three lanes.
12.	I-70	Prepare ground and build bridges for addition of median lanes from the Cooper County line to Highway 740 to improve traffic flow.
13.	I-70	Prepare ground and construct bridges to widen I-70 to eight lanes from Highway 740 to U.S. 63 in Columbia to improve traffic flow.
14.	I-70	Prepare ground and build bridges to add median lanes from U.S. 63 to Callaway County line to improve traffic flow.
15.	Highway 124	Buy land and prepare ground for paving and replace bridge east of Highway NN to 0.9 mile west of Highway YY with a wider bridge and improved approaches.
16.	Highway 163 (Providence Rd.)	Prepare ground and add lanes to widen pavement and improve traffic flow from South Hampton Street to Highway K in Columbia.
17.	Highway 740 (Stadium Blvd.)	Buy land, earthwork, build bridges and pave four lanes on new location from U.S. 63 to I-70 in Columbia.
18.	Highway 763 (Rangeline St.)	Prepare ground and pave to widen to five lanes from U.S. 63 relocation to Big Bear Boulevard.

Source: MoDOT



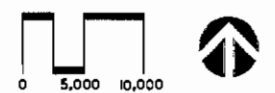
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Missouri Department of Transportation Department (MoDOT)  
 "Beyond STAP" Projects (After 1999)

1 See text, Section 4.3.4 (Table 14), for project descriptions.

-- Municipal Boundaries

Source: Missouri Department of Transportation (MoDOT)



Items 7 through 14 in Table 14 collectively presage a thorough overhaul of Interstate Highway 70 in Boone County. Most of Boone County's segment of I-70 dates to the 1960s and, by the time this work is implemented, will have been in service for three to four decades. High-volume roadways literally wear out and, ultimately, need replacement.

Two projects, No. 8 from Table 13 and No. 17 from Table 14, signal MoDOT's intent to proceed with the extension of Highway 740 (Stadium Boulevard) from U.S. 63 east-northeast to I-70. As Section 4.3.5 of this document makes clear, this project will be subject to a Major Investment Study (MIS). It is generally assumed that this project will occur in a corridor beginning at the existing Highway 740/U.S. 63 interchange and ending at a somewhat modified Interstate Highway 70 interchange at Lake of the Woods Road. However, pending the results of the forthcoming MIS, it cannot be assured that this project will move forward. Moreover, if it does proceed, its precise alignment has not yet been determined.

Table 14's Interstate Highway 70 projects (Nos.7-14) probably will be collectively subjected to another MIS. The timing of it would be dependent, in part, upon the Highway 740 MIS results.

### 4.3.5 Major Investment Study (MIS) for Highway 740 (Stadium Boulevard)

MoDOT and CATSO have a Major Investment Study (MIS) transportation analysis<sup>4</sup> in Boone County scheduled to begin in 1997. This study, which will define and determine alternatives for the possible east-northeast extension of Highway 740 (Stadium Boulevard), may take up to two years to complete. Its results will have a major impact upon central Boone County's transportation planning and operations for many years.

The preparation of a Major Investment Study, under current law, is customary procedure for very large transportation projects, in particular along new alignments, with significant anticipated Federal Government funding. Any MIS is undertaken in accord with the National Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and relevant U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA) rules and regulations (23 CFR Part 450). There is some latitude in the MIS process that is reflected in both the format and content of its end-products. At a minimum, however, any MIS can be expected to include a rigorous engineering evaluation of the costs and benefits of various alternatives; "environmental studies" that may lead to or entail the preparation of a full-scale Environmental Assessment (EA) and/or Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA); the meaningful participation of all local governmental entities likely to be impacted; and ample opportunities for public knowledge and involvement.

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<sup>4</sup> A Major Investment Study (MIS) is also sometimes called a Major Transportation Investment Analysis (MTIA). This terminology is more commonly used in and around St. Louis. Each of these names and acronyms refer to the same process and products.



## 5.0 Infrastructure

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## 5.0 Infrastructure

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### 5.1 Introduction

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Modern life would be impossible without the essential public or semi-public services generally known as utilities. Some of these services, such as running tap water and sewer systems, began in antiquity. Others have more recent origins. Utilities that have key impacts upon development in Boone County are subsequently reviewed. They are:

- Water
- Wastewater and Stormwater
- Electricity
- Natural Gas

Collectively, utilities and other facilities as varied as roads, school buildings, levees, sidewalks, airports, railroads, and port facilities are often termed “infrastructure.” Large investments are required to create infrastructure. However, supplying some utility services is relatively “easy” compared to others. For example, telephone and electrical service are universally available in Boone County to everyone that wants and can afford them although it took decades to serve the entire area. Sanitary sewers are much more problematic and expensive to provide. Nevertheless, many residents and businesses would gladly pay for this service if it were available.

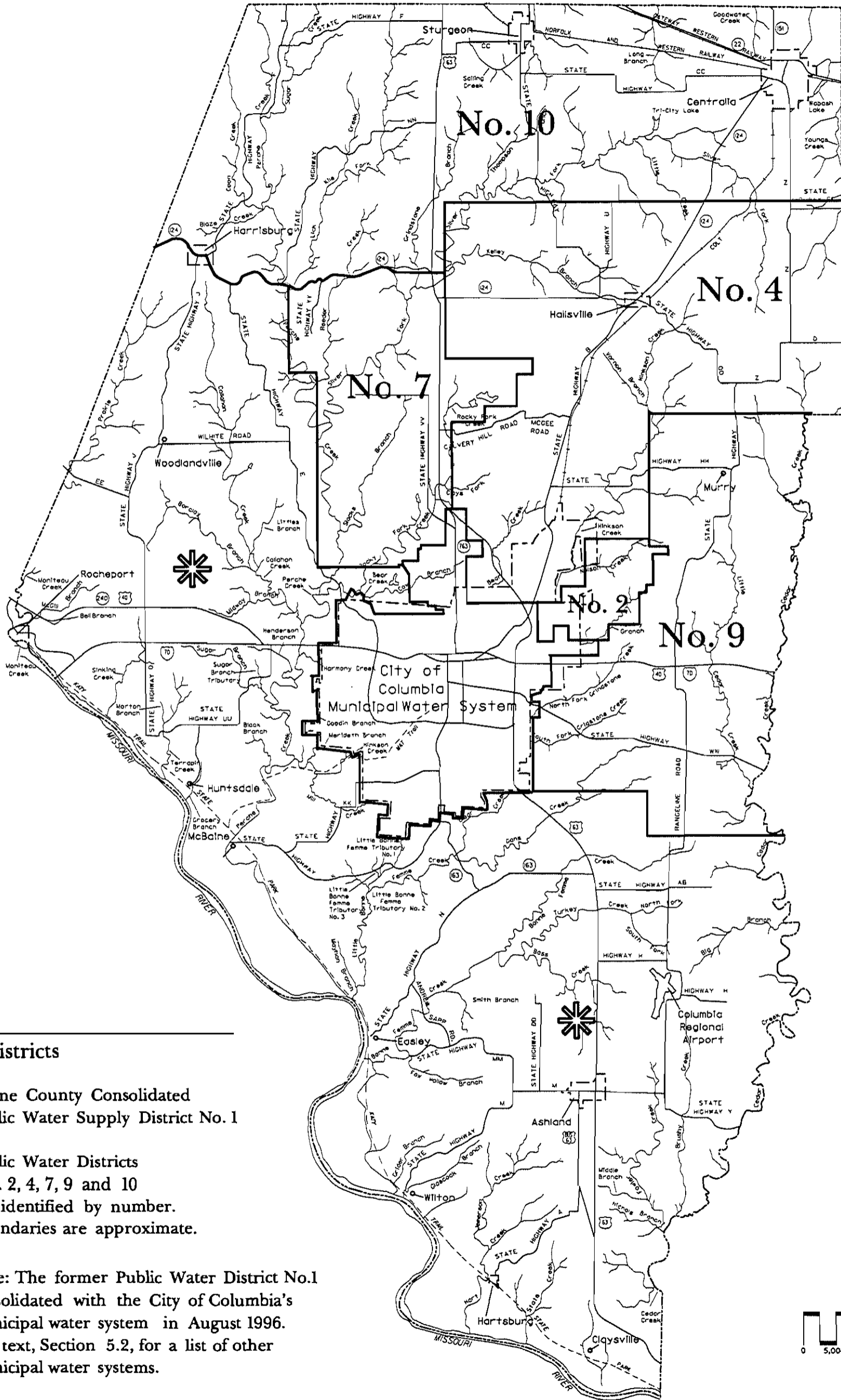
The existing transportation infrastructure was previously discussed in Chapter 4.0, Transportation, of the Boone County Master Plan.

## 5.2 Water

A large array of public water districts as well as municipal systems supply potable water to most Boone County residents and businesses. Some private systems, including wells for individual farms, commercial sites and residences serve other local needs. The City of Columbia's water plant and lines constitute the largest single Boone County system and serves more customers than all other water systems combined. Many of its customers are outside of Columbia's present municipal boundaries. All told, Boone County's public water providers include thirteen different entities:


- City of Ashland (Municipal System)
- Boone County Consolidated Water Supply District 1
- City of Centralia (Municipal System)
- City of Columbia (Municipal System)
- City of Hallsville (Municipal System)
- City of Harrisburg (purchases water from Boone County Consolidated Water Supply District 1)
- Public Water District No. 2
- Public Water District No. 4
- Public Water District No. 7
- Public Water District No. 9
- Public Water District No. 10
- City of Rocheport (Municipal System)
- City of Sturgeon (purchases water from Public Water District No. 10)

Exhibit VII shows the areas served by Boone County seven independent water districts. The boundaries indicated are approximate. Formal and informal arrangements exist among water providers to cross boundaries and serve "outside" customers for good engineering and/or financial reasons. To facilitate coordination, several water districts formed the Boone County Water District Association. However, some districts do not participate.



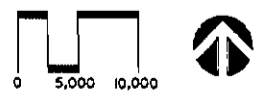
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**Water Districts**

 Boone County Consolidated Public Water Supply District No. 1

Public Water Districts Nos. 2, 4, 7, 9 and 10 are identified by number. Boundaries are approximate.

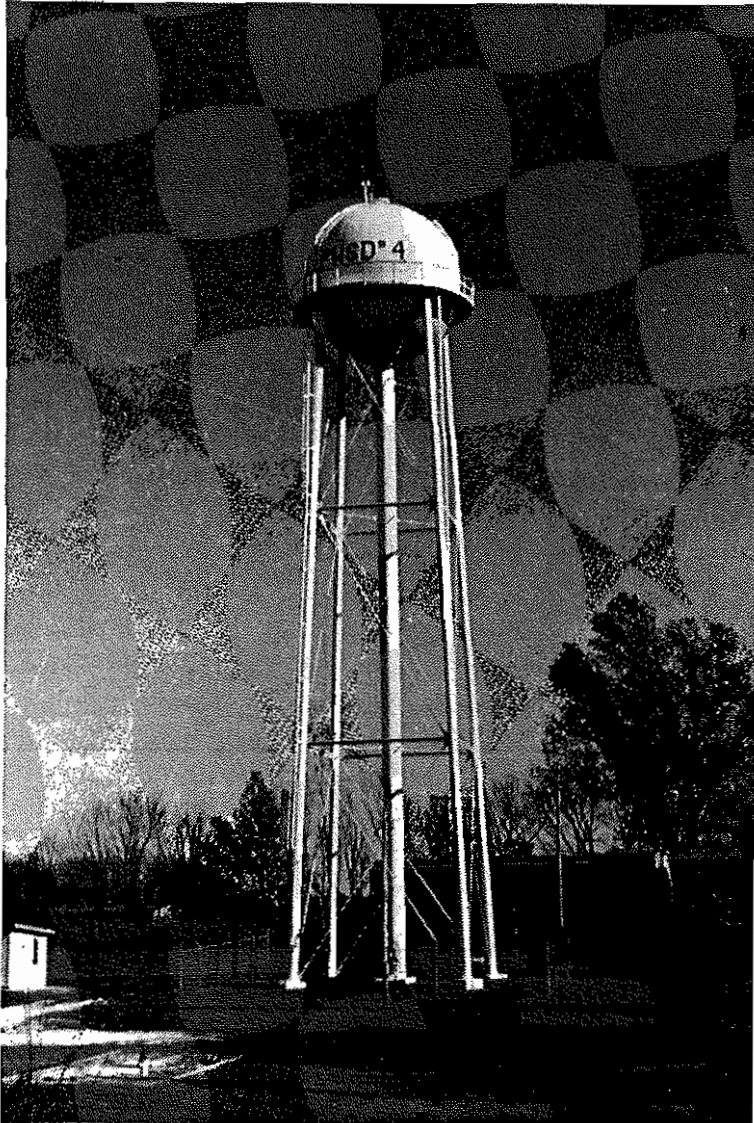
Note: The former Public Water District No.1 consolidated with the City of Columbia's municipal water system in August 1996. See text, Section 5.2, for a list of other municipal water systems.



A large portion of Boone County's water supply comes from deep wells. Two large aquifers are below the southern two-thirds of Boone County: the Roubidoux and the Gunter Member. The Missouri River floodplain alluvium also yields substantial amounts of water. The City of Columbia utilizes this resource. Most local water supplies are relatively high quality. Treatment levels vary from none for individual wells to whatever is needed to meet mass human consumption standards/expectations such as chlorine, fluoride, and softening agents.

Water pressure, transmission and/or storage capacity are problems in certain locales. This is not only an inconvenience. It also impacts fire protection. Water service is a critical element in determining the costs and availability of property insurance. Moreover, the lack of it can limit the development potential of otherwise suitable properties for commercial, industrial, and large-scale residential purposes.

The economics, logistics, and realities of public water supplies vary throughout Boone County. Some systems have ample supplies as well as storage and transmission or distribution capabilities that are adequate for now and the foreseeable future. Others have problems ranging from insufficient pressure to few or no fire hydrants. Some locales lack service and, for practical economic reasons, likely will never be connected to a public water supply system.



*Photo 13 - This water tower on Highway B (Paris Road) is a vital element of Public Water District No. 4's system.*

Contacts with water districts and municipal system authorities relative to preparing the Boone County Master Plan yielded a series of general observations that follow below. Of course, some of the individuals contacted would not support certain of these statements in principle or as worded. Nevertheless, these points reflect a high degree of shared beliefs relative to the state of Boone County's public water systems. In no particular order, they are:

- Boone County is fortunate to have large supplies of high quality ground water that represent a relatively cheap resource. Reliance on surface sources, i.e., directly processing water from a river or lake, is more difficult and expensive. Opinions vary as to the long-term availability of high quality ground water.
- Boone County's rural water districts have common mid-1960s origins and were intended then to serve only agricultural and lower-density population needs. These water districts were created under Missouri statutes and are independent public entities. Each district is governed by a five member board. Some districts have adjusted better than others to the demands of new development by virtue of better resources, planning, foresight and leadership. However, most suffer from expensive to repair/upgrade/replace too old and/or too small lines. Some have too few lines in the "right" places. In certain locales, these shortcomings mean poor or interrupted service.
- County-wide, the availability of water for fire protection is related to the presence and distribution of fire hydrants as well as adequate available flows. Large portions of Boone County have too few hydrants. Others have none. In some circumstances, existing hydrants might not deliver enough water to effectively fight a fire.

- The City of Columbia's growth is causing problems for adjoining public water districts. Sometimes, it annexes denser development that represents an adjoining water district's most profitable customers. Various districts may ultimately consolidate with Columbia for water service purposes. In April 1996, voters in the former Public Water District No. 1 approved such an arrangement which took effect in August 1996. Others have sought or may seek territorial agreements to protect their customer bases. Some smaller municipalities may present similar future problems for adjoining public water districts. As Columbia annexes vacant land undergoing development, it requires that the new development be served by its municipal water system and meet its fire flow requirements.
- Almost all local water districts are sound financially. However, this is true for different reasons. Some plan and manage well while others do only the minimum necessary to meet immediate needs.
- Many water districts and/or municipal systems are interconnected. This allows a margin of safety in case of an emergency or natural disaster. More and/or better interconnects are both appropriate and probable.
- The engineering issues relative to supplying Boone County with water are widely understood by individuals in the water business. They can be effectively addressed provided that adequate financing is available and political, personal, and territorial complications are minimized.
- Boone County Consolidated Public Water Supply District 1 is an amalgam of the former Public Water District Nos. 5, 6 and 8 and also includes much of the territory of the former Public Water District No. 3. More such consolidations are likely in Boone County, including municipal providers and/or non-Boone County districts. In fact, some "Boone County" public water districts already serve non-Boone County territories.



- Boone County needs more effective planning relative to new development and water systems. Too often, there is a mismatch between the existing service levels, or the future potentials for particular sites, and new projects.
- Public water service is most consistently dependable in those areas or communities served by municipal systems.
- Many households, businesses and developers expect urban levels of water service but do not want to pay what it costs to create or maintain them.
- The capacity of local water supplies to accommodate new growth varies widely across Boone County. Most systems have the capacity to serve some new customers but not necessarily to the scale or timetable that new development sometimes requires. Given sufficient financing, however, high general standards of service could be provided, from an engineering perspective, notwithstanding other complicating factors.

## 5.3 Wastewater and Stormwater

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Overall, Boone County's wastewater and stormwater systems are much less advanced than its public water systems. Historically, sanitary sewer and stormwater systems are associated with urbanization. In Boone County, Ashland, Centralia, Columbia, Hallsville, Harrisburg, Hartsburg, Rocheport, and Sturgeon have municipal sanitary sewer systems with various treatment capacities. In addition, the Boone County Regional Sewer District serves much of the urban service area around Columbia. Stormwater sewer systems are present in Centralia and Columbia. All sewer systems are relatively expensive to build and maintain.

Throughout most of Boone County, and in some instances within the jurisdictions indicated above, there is a patchwork of individual and subdivision wastewater systems, many of which predate modern regulations. Some are operating near, at, or above capacity. Wastewater management is a longstanding and growing problem in Boone County. Local soil conditions, in general, are not conducive to the proper functioning of septic systems which can work well in other Missouri locations.

The Boone County Regional Sewer District, among other governmental entities, recognizes the urgent need to build trunk line sanitary sewers to serve existing and future growth. However, funding for engineering and construction does not exist at this time. Whenever this work is ultimately accomplished, it will be expensive with significant developmental implications. A combination of rising public expectations and stringent Missouri and/or Federal Government requirements could compel comprehensive future action.

In addition to the need for a large sewage collection system, questions regarding the capacity to provide adequate treatment must also be addressed. Today, the Boone County Regional Sewer District contracts with the City of Columbia for limited sewage treatment, where practical, at the municipal facility. The capacity of this facility may need to be expanded to provide service to growing numbers of municipal and non-municipal customers.

Stormwater management in Boone County is even more variable, being largely dependent upon the degrees of problem awareness and the implementation of effective strategies and techniques. It is important to note that good stormwater management does not presuppose a comprehensive system of stormwater sewers. Stormwater sewer systems, where they are in place, are intended to operate independently of sanitary sewer systems most, if not all, of the time. Stormwater sewers handle large amounts of precipitation runoff that drains from hillsides, roofs, streets, parking lots, and sidewalks in urbanized settings. Manmade elements reduce the land area available for natural absorption and can contribute to localized flooding. Detention and retention areas, swales, and porous pavements are often used to effectively address localized stormwater and drainage concerns in the absence of stormwater sewers.

The County Government does not build or operate wastewater and stormwater systems. Yet, its developmental policies in unincorporated but urbanizing areas often play a major role in determining the ultimate requirements for these services. Boone County needs to be an active, responsible partner with its municipalities, as well as the Boone County Regional Sewer District, in advancing workable solutions to wastewater and stormwater problems.

## 5.4 Electricity

Electrical service is offered by five different providers throughout Boone County. Geographically, the Boone Electric Co-op serves most of it. The Union Electric Company and the Howard Electric Co-Op serve some outlying areas.

The City of Columbia provides municipally-owned electrical service through its Water and Light Department. It and the Boone Electric Co-op have an agreement whereby as Columbia annexes land the electric service provider does not change. The City of Centralia also operates a municipal electric system. Service is limited to the corporate boundaries of Centralia.

There are no service capacity or delivery issues associated with electric service from any of the five providers that would significantly impact Boone County's future development.

## 5.5 Natural Gas

The Natural Gas Division of the Union Electric Company supplies natural gas to numerous Boone County residences, businesses and institutions. Service includes communities such as Ashland, Centralia, Columbia, Hallsville, Hartsburg, Rocheport, and Sturgeon as well as other points. Natural gas lines are being extended in keeping with growth, economic and regulatory considerations. This process is incremental, however. It is likely that various locales throughout Boone County will remain unserved during the foreseeable future. In the absence of natural gas, electricity, truck-delivered fuel oil, and truck-delivered liquid propane will continue to serve as the primary energy sources for many households as well as institutional, commercial, and industrial applications.

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BOONE COUNTY MASTER PLAN

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## **6.0 Intergovernmental Coordination**

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## 6.0 Intergovernmental Coordination

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### 6.1 Introduction

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More than thirty-five local governmental and/or quasi-governmental entities are currently active in Boone County. Some of these bodies have very narrow purposes. Others, in turn, have multiple roles and functions. For example, the County Government, by itself, has individual responsibilities as diverse as its Recorder of Deeds, Public Works Department, and the Sheriff's Department. (The Federal and State Governments are similarly compartmentalized relative to their services and operations in Boone County.) In addition to the County Government, other primary local governmental bodies currently serving Boone County include its nine incorporated municipalities: Ashland, Centralia, Columbia, Hallsville, Harrisburg, Hartsburg, McBaine, Rocheport, and Sturgeon.

The County Government's powers are circumscribed within incorporated municipalities. Moreover, all of these municipal entities, unlike Boone County, have the legal potential to grow geographically. In recent years, for example, Columbia has grown incrementally through parcel by parcel voluntary annexations. On prior occasions, until 1988, it periodically annexed sizable amounts of land through electoral means. Both annexation options are available to Columbia as well as the eight other Boone County incorporated communities.

Every time any Boone County municipality annexes land, the County Government's responsibilities are effectively reduced. In any case, municipal annexations will continue to occur. For this and other reasons, the complex financial mosaic of local government financing through taxes, grants and fees will continue to change as well.

## 6.2 Other Governmental and Quasi-Governmental Entities

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Public school districts constitute another important realm of local governmental units. Growth sometimes generates the need for additional educational capacity in the forms of buildings, staff, and transportation before sufficient revenues are available to satisfy these needs. All school districts want to be able to anticipate changing service demands. Eight public school districts serve different portions of Boone County. They are:

- Centralia R-VI School District
- Columbia Public Schools (Columbia 93 School District)
- Hallsville R-IV School District
- Harrisburg R-VIII School District
- New Franklin R-I School District
- North Callaway R-I School District
- Southern Boone County R-I School District
- Sturgeon R-V School District

It is noteworthy that several of these districts have responsibilities partly or largely beyond Boone County. For example, the Centralia R-VI School District serves students from neighboring Audrain and Randolph Counties.

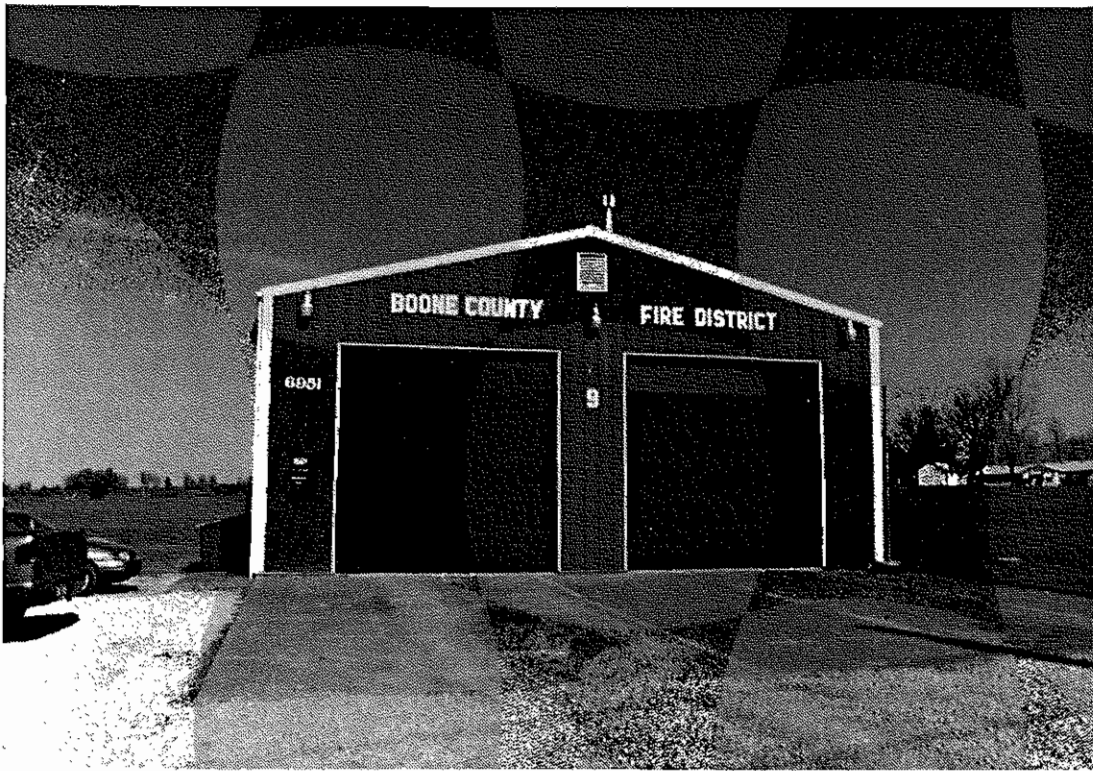
Similarly, Boone County's water providers may extend their service outside Boone County. Thirteen public water providers are noted in Section 5.2 of the Boone County Master Plan. The six water districts function as independent entities while municipal systems are arms of their respective municipal governments. There have been territorial conflicts among water providers in Boone County although some territorial agreements are in place and more will be sought. One of the basic problems is that some of these systems/districts are better able to accommodate growth than others. Future water district consolidations are likely.

Sanitary sewer and stormwater systems are associated with urbanized areas. Ashland, Centralia, Columbia, Hallsville, Harrisburg, Hartsburg, Rocheport and Sturgeon have municipal sanitary sewer systems while Centralia and Columbia have stormwater systems as well. Much of the existing urban service area around Columbia is served by the Boone County Regional Sewer District. The presence, or absence, of sewer service will continue to influence future growth throughout Boone County. Presently, the potential for territorial conflicts among sewer service providers is minimal, as compared to water providers, given the distances that separate most existing sewer systems.

The responsibilities of the Centralia Special Road District are discussed in Section 4.2.2 of this document. The role of the Columbia Area Transportation Study Organization is addressed in Section 4.3.3.



The Boone County Fire Protection District was formed in 1970. Its facilities and boundaries have grown so that its 12 fire stations now serve 532 of Boone County's 687 square miles (more than 77 percent). Most of this expanse is unincorporated but it does include the municipalities of Hallsville, Harrisburg, McBaine, Rocheport and Sturgeon. Basically, the Boone County Fire Protection District covers central and northern Boone County with the exception of the cities of Columbia and Centralia. In addition to fire protection, it also provides emergency medical services to a larger area that includes Centralia. The Southern Boone County Fire Protection District was organized to serve much of the rest of Boone County. It became a taxing entity in 1981.



*Photo 14 - The Boone County Fire Protection District's Fire Station No. 9 on Henderson Road.*

Drainage and flood control are major concerns throughout much of Boone County. The Callahan Creek Drainage District, Hartsburg Levee District, and Moniteau Creek Drainage District were recently joined by the McBaine Levee District in flood control and drainage activities.

Local agriculture is the focus of the Boone County Soil and Water Conservation District. Sound soil management is its principal concern. It provides technical assistance as well as facilitates participation in Federal and State Government programs in this regard.

The Columbia Special Business District works to bolster downtown Columbia. Public and other subsidized housing is the responsibility of the Housing Authority for the City of Columbia. The Columbia Library District provides library services to Boone County residents within and beyond Columbia.

Some Boone County local governmental and quasi-governmental entities obviously have more influence relative to shaping new development than others. However, all of them are themselves impacted by new development as their revenue bases change and their respective missions evolve.

## 6.3 Land Use and Urban Service Areas

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The existing Boone County land use patterns are largely the products of natural circumstances interacting with historical or economic forces as well as, more recently, planning on the municipal and/or county levels. Zoning was first adopted by Boone County in 1973. Five Boone County municipalities have zoning today: Ashland, Centralia, Columbia, Hallsville, and Rocheport. Zoning has been the basic means of land use control throughout the United States for most of this century.

In Boone County, the County Government and the five municipalities noted above have committed to an administrative process of land use control that is fundamentally local in concept, orientation and execution. Understandably, communities zone land, draft subdivision regulations, make public improvements, and undertake related actions in ways that they deem to be in their self interests. However, it is sometimes true that what represents good land use policy in one jurisdiction can constitute bad land use "next door" in another. A cattle feed lot, for example, may be a valuable economic resource on one side of a road and an unconscionable nuisance to the subdivision across from it at the same time.

Land use and zoning disputes between adjoining political jurisdictions occur from time to time. Much more frequent are intergovernmental conflicts rooted in obligated services versus the revenues to pay for them. All other things being equal, for example, a local school district stands to do better financially if 175 acres of choice ground in its jurisdiction are zoned and developed for commercial use rather than a residential subdivision. The immediate effect would be a sizable jump in tax revenues rather than a dramatic increase in enrollments with comparatively little additional revenues.

The desirability of trying to take a larger view of land use and related developmental issues has been widely recognized across America. In Boone County, the 1981 revised subdivision regulations made some progress in this regard by creating and designating urban service areas around each of eight municipalities<sup>5</sup>. The basic premise was that particular attention needed to be accorded those areas that were most likely to experience new growth, i.e., the urbanizing peripheries of established communities with sufficient existing or potential infrastructure available. Exhibit IV, Existing Land Use, in Section 3.3 of the Boone County Master Plan illustrates these urban service areas which, not incidentally, can change through time.

A fairly straightforward points system was devised to determine the general appropriateness of development within the unincorporated portions of Boone County. Those geographic areas that accumulated 50 or more points by virtue of available centralized off-site sewage treatment, proximity to main roads, adequate school capacity, available fire protection, sufficient water supply, floodplain and environmentally sensitive areas, and soil capabilities were mapped. The urban service areas, by these criteria, were determined to be those places most appropriate and conducive to growth.

This concept, however, has had little discernible effect on subsequent development in unincorporated Boone County. The 1991 zoning ordinance as well as the 1991 and 1995 subdivision regulations failed to contain appropriate language that could direct growth toward urban service areas as opposed to more problematic locales. Consequently, there has been no real test of an idea that has proven rational and workable elsewhere.

<sup>5</sup> McBaine was not a functioning municipality at that time and no urban service area was designated for it.

## 6.4 Transportation

Transportation systems both drive, and are driven by, development. Multiple layers of government, as well as diverse private interests, are responsible for creating and maintaining transportation systems in Boone County. Local airport, bus service, and railroads notwithstanding, most movements of people and commerce to and through Boone County are primarily dependent upon the local network of highways, roads and streets.

The Federal Government operates no transportation facilities in Boone County. Nevertheless, it has been a major source of funding for transportation improvements, almost always channeled through other governmental entities. Heretofore, such funding has ebbed and flowed through budgetary and political cycles. Nevertheless, it has proven to be an indispensable prerequisite for many projects. Moreover, this work has had to satisfy demanding and evolving national requirements relative to labor, equal opportunity, and the environment among other things. However, the Federal Government's role in transportation is evolving. It may change significantly.

Within Boone County, local roads are built and/or maintained by the State of Missouri (the Missouri Department of Transportation or MoDOT), Boone County's Public Works Department, the Centralia Special Road District, municipalities, and private interests. There is already a significant amount of both informal and more structured coordination among these entities, particularly where new projects impact existing transportation facilities administered by different agencies or private concerns. However, longer-range planning tends to be somewhat more compartmentalized, depending upon what entity is undertaking the work for any particular portion of Boone County. The special role of the Columbia Area Transportation Study Organization (CATSO) is described in Section 4.3.3 of this document.

Large-scale transportation projects requiring Federal Government funding can be subject, under current laws and regulations, to a rigorous process called a Major Investment Study (MIS), as described in Section 4.3.5. This process is intended to produce comprehensive, cost-effective and environmentally sound solutions to significant transportation problems. At this time, a Major Investment Study is scheduled for MoDOT's prospective extension of Highway 740 (Stadium Boulevard) in 1997. Subsequently, another MIS is likely relative to the rebuilding of Interstate Highway 70 in Boone County.

The City of Columbia operates Columbia Transit, the only local bus service available in Boone County. Its operations are dependent upon local as well as Federal Government subsidies. This is true of almost all mass transit anywhere in the United States.

## **6.5 Utilities**

Utilities may or may not be provided by a governmental entity. Chapter 5.0 describes different public and private providers of potable water, wastewater and/or stormwater systems, electricity and natural gas. Additional utilities such as telephone, cable television, and pipelines represent other important services. All utility providers, whether governmental or private, have direct stakes in the flow, direction and pace of new development.

## **6.6 The Need for Enhanced Intergovernmental Coordination**

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It is evident that there is a real need in Boone County for enhanced intergovernmental coordination relative to developmental matters. Non-governmental utility providers should be included in such coordination as well. Substantive benefits can accrue from comparatively small investments of time and effort.

Often, the basic problem is a lack of information flow. One governmental entity takes or approves actions that have immediate or long-range implications for another governmental or utility service provider without its knowledge. There may be legitimate concerns that need to be voiced and considered. At a minimum, all responsible managers want to be aware of the evolving "big picture" beyond their immediate concerns.

Sharing information does not equate to sharing authority. In unincorporated Boone County, the County Government in the personages of Boone County Planning and Building Inspections Department staff, the Planning and Zoning Commission members, the Boone County Board of Zoning Adjustment members, and the elected Boone County Commission, are the primary reviewers and arbiters of local development. They need to be able to make the best informed decisions possible.

A mixture of face to face contact and modern technology can enhance developmental coordination. For example, local utility representatives have been meeting regularly as "The Boone County Service Providers" to exchange information and reduce potential conflicts. The Boone County Commission has quarterly meetings with the mayors of Boone County's municipalities. These contacts could be expanded and/or new opportunities could be created.

The Boone County Planning and Zoning Commission, for example, might convene joint meetings with municipal planning and zoning officials. Representatives from public school districts, in turn, should have frequent exchanges with development officials and decision makers.

At a minimum, there needs to be an increased awareness of the immediate and longer range impacts of development. There is probably no better mechanism than one individual talking with another to accomplish this. However, the ongoing revolution in information systems and networking technologies has created the opportunity to launch imaginative counterparts such as an electronic "Boone County Development Bulletin Board" that could provide up to the nanosecond news and data.

For example, a database could be set up on the Columbia Information Network (COIN). Each developmental entity wired into the system could post and update its site. In one instance, the County Government might digitize its building permit applications. This public information would be instantaneously available to any school district, utility, drainage district, or interested individual with compatible on-line capabilities. At this stage, and by these means, pertinent issues might routinely be raised that would not otherwise be identified via traditional means of notification.

Geographic Information System (GIS) mapping is another new technology that can advance intergovernmental and developmental coordination in Boone County. At present, most local governmental entities as well as local utilities use different mapping systems so that engineering and development work is unduly complicated. For example, the same natural feature, road, or property line can appear to be in somewhat different places on maps that were produced for dissimilar purposes at diverse times. Adoption of a common Boone County GIS standard could remedy these problems.



The County Government is already working to make a local GIS system a reality. The database is being developed and necessary hardware is being acquired. Across Boone County, investments of time, training and capital will be necessary to start new information systems as well as operate them. In the future, as successor technologies continue to reshape life, work and communications, other opportunities will emerge for sharing information and furthering local developmental coordination in Boone County.

**BCMP**



*Photo 15 - Boone County's Government Center opened in April 1995.*

## 7.0 Goals and Objectives

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## 7.0 Goals and Objectives

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### 7.1 Introduction

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The basic function of a master plan is to provide policy direction for a community. It is impossible to foresee all of the issues that Boone County will be facing over the next several years. The role of this Boone County Master Plan is to help to put future decisions into the context of an overall direction, moving toward a set of goals which define the community's desired future.

Boone County has a multiplicity of possible futures. Generally speaking, policy decisions do not revolve around "right" and "wrong" answers but, rather, a series of choices spanning differing sets of advantages and disadvantages. The choices made should reflect a community's values and sense of what constitutes a reasonable quality of life. A master plan helps to bring these values, and subsequently issues, into focus as well as helps to define a community direction. The goals and objectives for this document are a reflection of Boone County's values.

The process for developing these statements began with a series of three public meetings which took place at the beginning of the planning process. These meetings, held in Ashland, Columbia and Centralia on September 12-14, 1994, respectively, were intended to describe the planning process to the public and to take early public comments and questions.

The primary work of establishing plan goals and objectives was centered around three public workshops. The participants reflected a broad array of community interests. Participation averaged about 60 people per workshop. Evening sessions were held at the Boone County Fairgrounds on October 12, November 2, and November 15, 1994, respectively.

At the first two workshops, participants worked in groups to begin to identify priorities as well as their views on related issues. Each table, comprising five to eight individuals, was asked to consider the questions and reach a group consensus. The results were then reported by each table to all the participants. Results summaries for each of these events are found in the Appendix, Citizen Participation.

Using this input, a draft set of goals and objectives were developed. This material was reviewed and revised by the participants of the third workshop. Each group's comments on this initial draft were recorded. A summary of results for Workshop No. 3 is also contained in the Appendix.

All comments were subsequently reviewed by the Plan Working Group, the Long-Range Steering Committee, the Planning and Zoning Commission, and the County Commission. Additional changes were made toward perfecting the goals and objectives.

It is noteworthy that the County Government commissioned a telephone survey with the purpose, in part, of validating the goals and objectives developed for the Boone County Master Plan. It was conducted by the University of Missouri-Columbia's Business School Research Center between April and May 1995. In general, the survey results upheld the concepts stated in the goals and objectives. Specifically, the directors of the survey found that Boone County residents (age 18 or more) are willing:

- To consider allowing their County Government to impose higher taxes for specified purposes
- To support many measures which would regulate and restrict land usage
- To support both higher taxes and planning for environmental preservation and outdoor recreational facilities
- To support the idea of an impact fee on development of subdivisions

They went on to state that:

"Effectively, we can conclude that the opinions support a strong governmental role in the process of growth and/or change in land usage in Boone County."

## **7.2 Guiding Principle, Goals and Objectives**

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The Boone County Master Plan goals and objectives development process began in September of 1994 and largely concluded in February of 1995. Section 7.2 comprises the final statement of goals and objectives. It begins with a guiding principle.

### **Guiding Principle**

1. Boone County should include both urban areas and rural areas. Public services should be appropriate to the level and nature of development. Land use decisions should be guided by the availability of existing services; the cost to the taxpayer of providing additional services; and environmental impacts.

## General Planning

2. Goal: Adopt and implement a Master Plan which provides policy guidelines for growth management, particularly regarding land use and supporting infrastructure, and which furthers protection of the environment and the community's quality of life.
3. Objective: Formal adoption of the Master Plan by the Boone County Commission.
4. Objective: Bi-annually review actions undertaken to implement the Master Plan. Assess the need for changes in the implementation process and/or Master Plan revisions. Allocate budget and/or manpower to accomplish any necessary revisions and updating every four years.
5. Objective: Inform the public as to the purpose and content of the Master Plan through document dissemination, the use of various media, and information from Boone County's government.
6. Objective: Evaluate and revise land use control mechanisms as necessary to reflect policies in the Master Plan.
7. Objective: Encourage and facilitate participation in training programs dealing with planning, zoning and related issues for the Planning and Zoning Commission, Zoning Board of Adjustment, and the County Commissioners.
8. Objective: Use task forces to develop problem-solving recommendations. On an as-needed basis, Boone County will assign these task forces a specific mission statement to address selected issues. The task force work should be of limited duration.
9. Objective: Provide staff support necessary to administer Boone County's Master Plan, including the regulating of land use mechanisms and their enforcement.

## Growth Management and Land Use Planning

10. Goal: Growth and development in Boone County shall be managed so that the community is able to enjoy the benefits of growth, including increased revenues for services, employment opportunities, entrepreneurship, and other business opportunities, while controlling and alleviating the difficult impacts that are often associated with new development and change.
11. Objective: Provide opportunities for a mix of lifestyles and living environments and provide for a mix of uses for the Boone County community. This includes agriculture and rural uses, a range of housing densities, a variety of commercial land uses, and industrial park development.
12. Objective: Develop land use around a pattern of existing urban service areas. Land use of such density and intensity which generally exhibits urban characteristics and requires urban service levels shall be close to or within these urban service areas.
13. Objective: Encourage developer investment in those areas already exhibiting urban/suburban characteristics.
14. Objective: Assess both the positive and negative impacts that specific development projects will have on roads, sewage disposal, water service, police, fire, schools, etc.
15. Objective: Address the means to bring facilities and services to adequate capacities prior to project approval.
16. Objective: Consider the carrying capacity of the area's natural resources and the cumulative impacts of development (environmental, socio-economic, and public health) when evaluating land use and development plans.



17. Objective: Facilitate growth by means other than subsidizing private developers. Development should be promoted through the use of market forces, offering location, land availability and community quality of life as incentives.
18. Objective: Recognize that the responsibility for financing new and improved infrastructure to support private development projects is primarily a private obligation. This includes on-site infrastructure improvements, as well as the trunks, mains and roadways, etc. serving the site. Programs such as the use of impact fees and development exactions which focus on financial contributions by the private sector to offset project impacts should be evaluated to determine their applicability in Boone County.
19. Objective: Facilitate the growth and development of the Columbia Regional Airport as an economic asset for the region. Work with the City of Columbia to assure proper land use management around the airport facility.
20. Objective: Encourage the development of vocational/technical continuing education for all Boone County workers to support business investment, expand job opportunities, and enhance the local wage base.
21. Objective: Support the preservation of the agricultural industry in Boone County.

## Transportation

22. Goal: Provide for an efficient, cost-effective and safe transportation and circulation system. Recognize that Boone County is, and in the foreseeable future will remain, primarily served by an automobile-based transportation network. However, opportunities exist for multi-modal transportation systems that will supplement automobile travel.
23. Objective: Make the improvement of existing roadways in both urban and rural areas the highest transportation priority. Unsafe conditions should be addressed as quickly as possible.
24. Objective: Planning for new roads in all urban service areas and in the Columbia Area Transportation Study Organization(CATSO) Metropolitan Planning Organization (MPO) area should be accomplished through municipal/Boone County cooperation.
25. Objective: The right-of-way for new roads should be acquired by dedication as negotiated whenever possible. If this is not possible, then rights-of-way for new roads should be purchased as necessary.
26. Objective: Encourage the development of bicycle pathway systems in urban areas. Planning for new roads and road improvement projects should incorporate bikeways, wherever feasible, in order to develop a linked system.
27. Objective: Encourage the Missouri Department of Transportation (MoDOT - formerly the Missouri Highway and Transportation Department) to develop bikeways along state secondary highways in rural areas.

## Intergovernmental Coordination

28. Goal: Enhance intergovernmental cooperation as a means to coordinate service delivery. As growth continues to occur in the unincorporated areas of Boone County, the demand for services will continue to increase, placing greater emphasis upon the need for coordination among the various service providers in Boone County.
29. Objective: Continue to improve intergovernmental communication between various service providers such as municipalities, water districts, the sewer district, utility providers, school districts, fire districts, and the Columbia Area Transportation Study Organization.
30. Objective: Continue to encourage formal intergovernmental agreements dealing with service delivery issues.

## Environment

31. Goal: Provide a balance between development and the natural environment, protecting and improving existing conditions, wherever possible.
32. Objective: Protect sensitive environmental features and systems such as groundwater, sinkholes, floodplains, and wetlands.
33. Objective: Formulate and adopt a scenic road policy.
34. Objective: Encourage the development of environmentally clean industries.

### **Parks/Recreation/Open Space**

- 35. Goal: Examine how best to meet the needs for parks, recreation and open space.
- 36. Objective: Appoint a Boone County park board.
- 37. Objective: Study Boone County park, recreation and facility needs, focusing on cooperative efforts with the municipalities and school districts. State and federal grants, user fees, land donations, and sales taxes and property taxes should be evaluated as funding sources.

### **Community Heritage**

- 38. Goal: Perpetuate pride and the recognition of Boone County's history and cultural diversity.
- 39. Objective: Support community-based programs and other efforts intended to provide education and increase appreciation of the Boone County community.

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# 8.0 Implementation

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## 8.0 Implementation

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### 8.1 Introduction

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Implementation of the Boone County Master Plan will require the concurrence, goodwill and concerted actions of Boone County governmental officials as well as other governmental entities and individuals. This document is primarily directed toward those portions of Boone County that are not presently incorporated. This represents both the geographic area and the population where the County Government has its greatest responsibilities. Nevertheless, the Boone County Master Plan does have some important implications for incorporated municipalities as well.

Recommendations are basically confined to three chapters as well as the Executive Summary in this Boone County Master Plan. By themselves, the goals and objectives listed in Section 7.2 constitute the largest grouping of expressed and implied recommendations. The process by which these statements were developed is chronicled in Section 7.1 as well as the Appendix. The successful realization of this document's goals and objectives and its other recommendations will represent the critical test of the worth of this entire effort.

Chapter 4.0, Transportation, includes transportation related recommendations as well as Exhibit VI, in three parts, the Transportation Plan. This chapter is important as well. Section 8.2's recommended conceptual changes to Boone County's regulations and subdivision ordinance are intended to strengthen the County Government's planning and development powers. The Land Use Plan described in Section 8.3, illustrated by Exhibit VIII, represents the large-scale physical vision for the future of Boone County.

## 8.2 Recommended Changes to Zoning Ordinance and Subdivision Regulations

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As discussed in Section 2.3 of this document, the predicted future population growth of Boone County is significant for the period ending in 2015. Assuming a 1996 estimated population of 123,975 increases to a projected figure of 146,150 by 2015, the gain of 22,175 people would represent a rate of growth approaching 17.0 percent for the period. This is an annualized and compounded rate of about .87 percent, which is well below past historical rates. Even then, a net gain of almost 100 "new" people can be expected in Boone County every month for nineteen years. Where will these people live, work and shop?

If history is any guide, they will disproportionately want to locate in and around the City of Columbia. The problem with this is that, for the most part, the easiest to develop land already has been taken. Moreover, public resources to improve and expand necessary infrastructure are limited and likely to remain so for many years.

As far back as 1981, Boone County took a tentative step toward directing its unincorporated area growth by advancing the concept of the "urban service area" in its then newly revised subdivision regulations. However, the necessary legal language that would have implemented this idea in full was not enacted. To this day, Boone County's zoning ordinance as well as its subdivision regulations, subsequently revised in 1995, make extensive references to urban service areas although the concept has no real role in day to day developmental administration.

Although the urban service area concept of directed growth apparently cannot be implemented, the problems of sprawl, inadequate infrastructure, the decline of local agriculture, and limited local government resources, among others, still remain. If it is impossible to take a large-scale approach to these problems, it may prove productive to employ a case by case "sufficiency of resources" test for proposed development instead.

It is a fact that diverse kinds and scales of land use or development impose and generate different demands and impacts upon the local environment and infrastructure. One hundred acres of single-family homes are environmentally more intrusive and, from an infrastructure perspective, more expensive to maintain than a 500-acre expanse of this year's corn. Similar differences exist among shopping centers, golf courses, industrial parks, schools, office complexes, and nature preserves, among other things, of all sizes. Accordingly, it arguably represents sound public policy to

- Assess the likely impacts and demands of proposed new development, and
- Require the mitigation of adverse environmental impacts as well as the financing of needed public infrastructure and services, and
- In particular instances prohibit specific development projects in certain locales.

In conjunction with an appropriately revised zoning ordinance and amended subdivision regulations, Boone County should devise a system whereby each plat and/or building permit applicant within certain zoning classifications and, in excess of a specified size and/or dollar value, would need to demonstrate a sufficiency of resources appropriate to the proposed action in three domains:

1. Federal and State Government requirements (if any), and
2. The natural environment, and
3. Infrastructure.



Satisfying Federal and/or State Government developmental requirements are real, but comparatively infrequent, problems. Nevertheless, under current laws, they cover a wide array of concerns varying from the heights of structures near airports, to increased flood potentials, to water quality issues, to the production and storage of hazardous materials. In some instances, Boone County may have or adopt more demanding standards than the Federal and/or State Governments. In any case, it makes no sense for Boone County to sanction any development that otherwise would be prohibited by the Federal or State Governments.

The natural environment shapes development and, in turn, is itself almost always reshaped by development. For economic reasons, if not others, some sites are simply better for some developmental purposes than others. In fact, some are not, as a practical matter, good for any construction whatsoever. A given tract of land can be too wet, too steep, too porous, and too rocky, among other things, to construct a house or anything else.

These thresholds may be significantly lower for fifty homes by comparison. It might be foolish to build a single home on the steeper side of a hill but there is little or no public interest question. It would be bad public policy, however, for Boone County to approve a condominium complex on the same site without the developer demonstrating the stability of the hillside and/or the adequacy of the design, a satisfactory drainage plan, the mitigations of possible noise and lighting nuisance impacts, and an appropriate construction erosion plan. In evaluating the impacts of proposed development on the natural environment, both the kind and the scale of the project matters.

The same thing is true relative to the demands a new development project may make upon existing and prospective infrastructure. A shopping center generates different traffic loads than a new church. An industrial park has a large array of sewage disposal requirements while a new golf course may generate comparatively little new sewage demand but require much more water. A new subdivision may trigger the need for an additional school while a new office complex could help generate more revenues to pay for it.

At a time when the public, at large, is increasingly reluctant through its tax revenues and fees to, in effect, subsidize new development by expanding or upgrading public infrastructure such as roadways, schools, water systems, and sewers, it is not unreasonable to expect new development to pay more of its way "upfront" to the extent that it represents additional demands upon public infrastructure and service systems. This could be accomplished by the direct financing of a needed improvement, such as an access road or an extended water line, and/or by assessing an "impact fee."

In other political jurisdictions, impact fees, sometimes known as facility fees or project fees, are collected when building permits are issued. The calculation and assessment of such fees is subject to various formulas as is their ultimate distribution to local public infrastructure and service providers. Although, the State of Missouri has not yet authorized all of its political jurisdictions such as Boone County to impose impact fees, this concept needs to be explored and enabling legislation sought. In Boone County, it is probable that certain projects could not bear the costs of directly financing necessary improvements and/or appropriate impact fees. In such instances, unless exceptions were made, some projects would need to be modified, delayed or terminated.

Whether or not Boone County moves toward a system of sufficiency of resources developmental review and impact fees, its zoning ordinance is due for an overall review. Public expectations, the legal context, and the economics and direction of development change through time in response to evolving issues, beliefs and technologies. At five-year intervals, the Boone County Planning and Building Inspections Department should evaluate the performance and results of both the zoning ordinance and the subdivision regulations and make a public report of its findings and recommendations. Five years have elapsed since the 1991 revisions to the zoning ordinance. Although the subdivision regulations were revised in 1995, further revisions would be appropriate to implement the concepts discussed above.

## 8.3 Future Land Use

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Exhibit VIII, Generalized Future Land Use, is Boone County's Land Use Plan. It illustrates the generalized recommended future land use for Boone County. It is based upon these assumptions:

- Boone County will continue to experience significant population growth.
- This growth will necessitate the conversion of large amounts of what is now agricultural or otherwise undeveloped privately-owned land.
- New growth will tend to disproportionately cluster in and around Columbia.
- The most extensive infrastructure (roads, public water, sanitary and storm sewers, natural gas, etc.) and concentrations of public and private services are and will be in Columbia and its environs.
- Lesser growth will occur in and around other Boone County incorporated communities conditioned by market forces as well as the availability of appropriate infrastructure.
- There will be more very low density housing development, i.e., single homesteads on large parcels of land, scattered throughout Boone County.
- Boone County's economic life will continue to be oriented toward health services, education, and government with limited industrial growth and a reduced agricultural component.

The City of Columbia and its environs will be the focal point for future Boone County development for reasons that extend well beyond Boone County's borders. Through time, Columbia has transcended its historic role as the home of Missouri's largest single institution of higher learning to become the preeminent mid-Missouri medical, administrative, commercial, cultural, and economic center as well. Columbia is much more than the county seat of Boone County. It represents the dominant economic and population concentration serving a broad spectrum of needs for a huge swath of central Missouri. In most regards, its principal competition is not Jefferson City and/or Cole County. Rather, it is the Kansas City and St. Louis metropolitan areas.

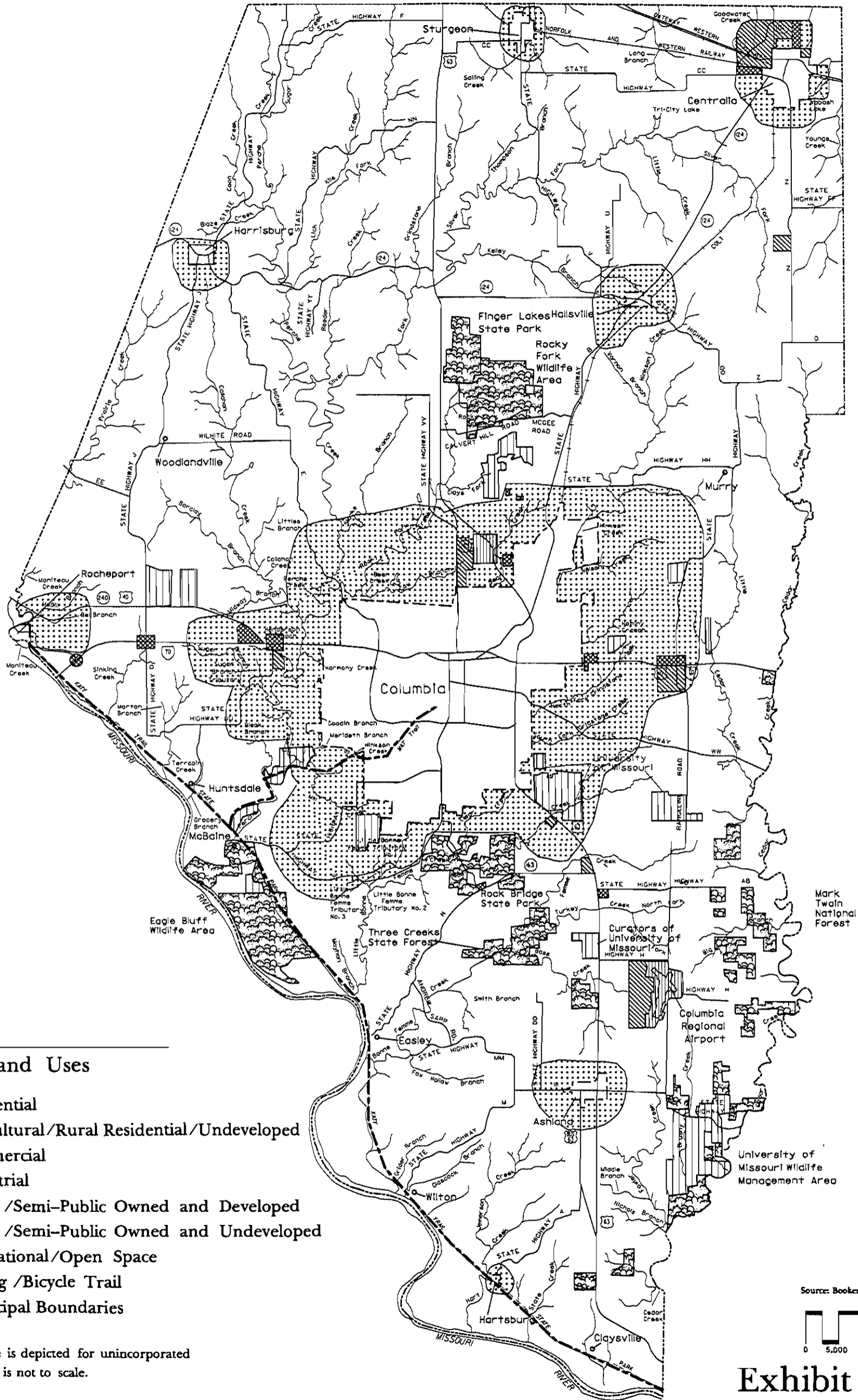
There will be critical infrastructure issues to resolve to serve new Boone County growth. Transportation, water, sewage and natural gas service systems will need to be expanded and/or upgraded. The failure to address these concerns in timely and effective manners predictably will complicate and ultimately blunt new development. In fact, most of these realms are beyond the County Government's control. However, it should be ready to act in any reasonable way to help facilitate the resolution of infrastructure issues. Moreover, as recommended in Section 8.2, it needs to make certain that a sufficiency of resources, including appropriate infrastructure, exists before new development moves forward in unincorporated areas.

In recent years, two dominant local growth vectors have emerged. Utilizing I-70 and U.S. 63 to divide Boone County into four rough quarters, building data indicates that the southwestern and, to a lesser extent, northeastern quadrants are experiencing the most new growth. The southeastern and northwestern portions of Boone County also grow but at notably lower rates.

For these and other reasons, the unincorporated areas of Boone County, as well as its municipalities, will share new growth to different degrees. As suggested above, more new homes on large tracts of land will dot the countryside. Subdivisions and mobile home parks will be developed in accord with zoning constraints and available infrastructure. Relative to commercial and industrial development, the degrees to which individual communities can and do proactively seek such development varies. However, more will occur, mostly in an urbanized context.

Not everyone who lives or will live in Boone County wants or expects to live in or near Columbia. Many people appreciate the resources available in Columbia but want a small town or rural life style. The Centralia area, for example, has experienced some "outflow" development in the forms of people who work in Columbia but reside in northeastern Boone County. In effect, most Boone County municipalities can function as readymade "suburbs" of Columbia.

Are there alternatives to growth clustering around Columbia and other established communities? It has been suggested that Boone County could be a site for Missouri's first planned "new town" development. Seaside, Florida is perhaps the most prominent national example of a community conceptualized, designed and built "from the ground up" in harmony with its environment to high aesthetic standards. Sufficient acreage exists at several locales in unincorporated Boone County for a visionary effort of this nature although Exhibit VIII does not specify a particular site for such a development. If and when responsible interests advance such a proposal, with the requisite financial resources, it should be welcomed by the County Government and other authorities who, nevertheless, will need to make certain that a broad range of public interests are satisfied.



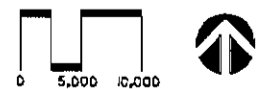
**Legend**

**Future Land Uses**

- Residential
- Agricultural/Rural Residential/Undeveloped
- Commercial
- Industrial
- Public/Semi-Public Owned and Developed
- Public/Semi-Public Owned and Undeveloped
- Recreational/Open Space
- Hiking/Bicycle Trail
- Municipal Boundaries

Note: Land use is depicted for unincorporated areas only and is not to scale.

Source: Booker Associates, Inc.



**BOONE COUNTY**  
**Master Plan**

**Exhibit VIII**  
**Generalized**  
**Future Land Use**

## 8.4 Beyond the Boone County Master Plan

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The County Government will continue to play an integral role in Boone County's future development. The preparation and adoption of this Boone County Master Plan is an important milestone in local planning. However, much more needs to be done. Section 8.2 notes that an evaluation of the zoning ordinance by the Boone County Planning and Building Inspections Department is now appropriate. Moreover, the related subdivision regulations could require revision in light of some of the recommendations made by this document.

Soon, Boone County should also undertake the preparation of its first Capital Improvements Program (CIP). The County Government needs to take an ongoing, long-range, multiyear look at its public facility requirements. This can be accomplished by annually preparing a CIP that addresses County Government responsibilities such as roads, recreational amenities, and public buildings. Specific projects should be described, as well as reasonable cost estimates developed and resources identified, for a five-year period. Each year's CIP will evolve as projects are completed, deleted and added over time. CIP implementation will be critical. Capital improvements budgeting, in step with the CIP, needs to be a standard element of Boone County's annual operating budget.

Bricks, mortar, grass and asphalt are important but Boone County also needs to think in terms of the "big picture." County Government capital improvements are but a small part of the overall capital investments from the private sector and all governmental entities that spur Boone County's development. The Boone County Master Plan will be regularly reviewed and updated during its anticipated useful lifespan of ten to twelve years. Separate and apart from this, it is suggested that Boone County launch a long-term "visioning" process to develop a larger sense of what Boone County is and where it should be going. This "Boone County 2020" effort can be organized and underway in 1997.

If history and present circumstances are any guides, Boone County's future beckons with the promises of growth and new opportunities. More people and commerce will continue to fuel a rural to urban transformation that has been underway throughout Boone County for many years. Accommodating this growth in a sensible manner will be an ongoing challenge shared by a broad array of governmental agencies, local utilities, major institutions, businesses, developers, and public-spirited individuals.

**BCMP**



*Table 7:* In planning use, land should be set aside for parks and recreation development and require developers to set aside open land. Promote black culture, perhaps highlighted in Boone County Historical Society. Support local colleges and universities with their cultural activities.

*Table 8:* No response.

*Table 9:* No response.

*Table 10:* No response.

BOONE COUNTY MASTER PLAN

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# Appendix: Citizen Participation

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## Appendix: Citizen Participation

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### Introduction

The following materials are adapted from individual summary reports prepared for the three Boone County Master Plan workshops. These events were held on the following dates:

- October 12, 1994
- November 2, 1994
- November 15, 1994

Each of them took place at the Horse Arena at the Boone County Fairgrounds. Between 40 and 60 people participated at each event. Individuals were randomly assigned to working groups (tables) and asked to reach consensus as a group. Collectively, the three workshops were intended to result in a set of goals and objectives for the Boone County Master Plan that reflected the general beliefs of a cross-section of Boone County residents.



*Photo 16 - One of seven tables at Workshop No. 1 on October 12, 1994.*



*Photo 17 - A Workshop No. 2 spokesperson summarizes his table's results on November 2, 1994.*



*Photo 18 - Workshop No. 3 participants working toward consensus on November 15, 1994.*

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BOONE COUNTY MASTER PLAN

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**Workshop No. 1**

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**Master Plan  
Boone County**

**Workshop No. 1  
Issues and Values**

**October 12, 1994  
RESULTS SUMMARY**

*"We are faced not with one vision of the unknowable future,  
but with a multitude of possible futures." (Natalie Halprin)*

The following questions relate to individual and group perceptions of values, priorities and issues for Boone County. They are deliberately open-ended and, as such, have no "right" answers. We want to know what you think. We are looking for a consensus (general agreement) from each table. Please work as a group in responding to the following questions.

**NOTE:** There were seven participating groups at seven tables. Not every table reached a consensus on each statement. Consequently, fewer than seven responses are reported for some statements.

1. Each of the items listed below can, in some way, affect the future of the community. Rank these areas of concern in order of their importance. For each of these areas, identify a specific issue that needs to be addressed.

_____	Recreational Facilities	_____
_____	Housing	_____
_____	Economic Development	_____
_____	Transportation/Circulation	_____
_____	Utilities	_____
_____	Land Use	_____
_____	Public Services	_____
_____	Community Image	_____
_____	Environmental	_____
_____	Other	_____

Ranking of the areas of concern resulted in what can be classified as three tiers of priorities with land use identified as the top concern.

1st Tier  
Land Use  
Transportation/Circulation  
Utilities

3rd Tier  
Recreation Facilities  
Community Image

2nd Tier  
Economic Development  
Housing  
Public Services  
Environment



Other areas of concern identified included:

- Cultural
- Education
- Agriculture
- Town Planning

Issues that were identified for areas of concern are listed below:

Recreation Facilities

Parks and Sports Facilities  
Additional Sports Fields  
Parks Commission

Housing

Mobile Homes  
Holding Down Costs of Lots and Houses  
Individual Responsibility  
Low Income

Economic Development

Home-Based Business  
Clean Industrial Growth  
Approached on County-Wide Basis and Diverse  
Managed Growth  
Keep Money In

Transportation/Circulation

750-Outer Loop  
Improved Roads  
Build to Better Standards  
Balanced Transportation Master Plan

Utilities

Sewers  
How to Finance Sewers  
Electric/Water/Sewer  
Sewer/Water

Land Use

Better Definition of Uses  
Subdivision Regulations  
Don't Rezone County with Master Plan  
Agricultural/Woods/Industrial Development  
Enforcement - Determine what is Appropriate

Public Services

Availability/Equity  
Adequate Water Supply for Fire Protection  
Coordinate Development Impact

Community Image

School Quality  
Better Cooperation between County and City Governments

Environmental

Sinkhole Protection  
Ground Water Protection  
Not at all Costs  
Hog Farms, Air/Water Pollution

Other

Cultural, Education, Agriculture  
Town Planning

2. How to provide adequate infrastructure (water, sewage disposal, roads, etc.) is a critical aspect of planning for a growing community. As in most communities, infrastructure often lags behind the need in Boone County. This includes servicing both existing development and new growth. With which of the principles in the following statements do you generally agree?

It is the responsibility of Boone County government to finance new infrastructure to facilitate growth and development.

  3   Agree        4   Disagree

It is the responsibility of the existing property owners to pay for the provision of adequate infrastructure. This includes existing subdivisions where failing or the lack of adequate sanitary sewer disposal facilities is contaminating the groundwater.

6 Agree      1 Disagree

It is the responsibility of developers to pay for or heavily contribute to the provision of infrastructure to their developments. This includes responsibility for the major trunk lines and mains leading to the development site. We agree with this statement even if it results in higher home prices, fewer jobs, and slows down the overall growth and development of the County.

6 Agree      1 Disagree

Investment in new infrastructure should be concentrated in urban service areas and as a result, new development should be concentrated in existing urban service areas. Land outside of urban service areas should be used for agriculture, open space, and generally rural-related uses.

3 Agree      2 Disagree

No Consensus: 11

3. If the only means available to provide certain improvements for roads, streets, sanitary sewers, parks, bikeways, open space, etc., would be to raise taxes, do you think taxes should be increased or do you think that these improvements should just not be made if this is the only way? (NOTE: This question is purposely general.)

Yes    4  
No     1

4. You own 200 acres in outlying Boone County. A developer offers you a fortune for your land, enough so that you could retire with ease. His offer is contingent on his ability to obtain approvals for rezoning and for his subdivision plat. This is a realistic scenario for many people in Boone County. What action should the County take?

Deny the petition because the site is too far from other urban services and the cost of getting infrastructure to the site too great.

  5   Agree        2   Disagree

Deny the petition because the County needs to preserve its agricultural and open space land.

  1   Agree        6   Disagree

Approve the petition because the County should not turn down a subdivision proposal just because it is in an outlying area because you, the property owner, have a right to make money from your investment.

  2   Agree        5   Disagree

5. What is the one most important action the County should take over the next five years?
- Actively promote good development through the use of the professional planning staff for educational sessions and training workshops.
  - Improve water and sewer systems.
  - Work on priorities listed in Question #1 based on funding available.
  - Long-range plan to manage growth:
    - Water/Sewers
    - Home Rule
    - Improve Cooperation between Columbia and Boone County
    - Utilities
    - Fire Protection
    - Roads
  - Need program with teeth:
    1. Plan
    2. Enforce
    3. Work for Home Rule in Boone County
    4. Coordinated Planning
  - Decide what position to take long-range with regard to scenic areas and sustainable communities:
    - Land Use
    - Subdivision
    - Comprehensive Land Use Plan based on Topographical Structure of Land Itself
  - Subdivision Regulations
    - Impact Fees

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BOONE COUNTY MASTER PLAN

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**Workshop No. 2**

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Master Plan  
Boone County

Workshop No. 2  
More Issues

November 2, 1994  
RESULTS SUMMARY

*"There ain't no such thing as a free lunch."*

*(Crane's Law from Murphy's Law by Arthur Bloch)*

The following questions relate to individual and group perceptions of values, priorities and issues for Boone County. They are deliberately open-ended and, as such, have no "right" answers. We want to know what you think. We are looking for a consensus (general agreement) from each table. Please work as a group in responding to the following questions.

NOTE: There were ten participating groups at ten tables.

1. Rank the following types of transportation in order of priority for Boone County, regardless of who is paying for these projects.

<u>3</u>	New Roadways
<u>1</u>	Improve Existing Roadways
<u>2</u>	Hard-Surface Existing Gravel Roads
<u>4</u>	Develop Bikeways
<u>5</u>	Develop a County Bus Service System
<u>6</u>	Develop a Rapid Mass Transit System

2. At the first workshop, several tables identified a need for recreation and open space facilities.

- a. Is it an appropriate role for Boone County government to institute a County-wide parks and open space system? This process could begin with the establishment of a County Park Board which would study recreation needs and identify land for acquisition.

9 Agree                      1 Disagree

- b. Because there are no outside sources of funds to viably support parks and recreation, Boone County would need to generate its own funding. Is this a high enough priority that Boone County should raise property taxes to support such as system?

  3   Agree                        7   Disagree

3. Improved relations between Columbia and the County also were identified as a needed action. What suggestions do you have as to how this might realistically occur?

*Table 1:* Appointed official from County and City to keep lines of communication open. They should be less possessive of turf.

*Table 2:* Stronger, better organized County government. Yes, it will cost more. Home rule - vote yes on Amendment 1. Political leadership (city, state, county). Publish a history of county/city relationships. Community services advisory commission.

*Table 3:* Home rule.

*Table 4:* Education beginning in school. Merging and sharing utilities and services. Better out-county representation. We can't improve relations until we understand each other.

*Table 5:* Define issues - communication to all communities and larger county. Combine planning and zoning commission. Collect (elect or hire) people with goals. A steering committee to be made up of representatives from all areas of the county to disseminate information on issues to city and county organizations. Citizens demand more communication from their leaders.

*Table 6:* Cooperate on programs. Centralized recycling, reduce duplication, solid waste. Abandon the "those dumb farmers" attitude. City should approach ladies and gentlemen with respect as business people. Effort to cooperate. Master planning, county constitution, home rule charter to provide versatility in developing avenues for cooperation.



*Table 7:* Avoid duplication of services. Regular joint meetings to address common problems. Passage of home rule.

*Table 8:* Instead of changing structures, hold joint informational meetings. Retain existing powers. Hold joint meetings of planning and zoning, roads, fire, water and sewer, etc. Allow common discussion. Everybody will hear the same thing. Tax bases to be protected, respect tax base, avoid duplication. Work to get county charter, work toward uniformity and provide some flexibility, allow longer term perspectives.

*Table 9:* City and county officials need to "grow up". Both should be less territorial. Combine service departments such as planning department and planning and zoning commission, building inspection departments, share and coordinate sewers and water utilities, standardize regulations. Scheduled workshops between county and city.

*Table 10:* County and city utility cooperation and communication. Regular meetings at departmental level between City and County.

4. There is a general feeling that there is a great deal of conflict surrounding growth and development issues in Boone County. What are the conflicting issues? What is the substance of these issues and what are the arguments on both sides? Who are the proponents of each side of the issue? Be as specific and clear as you can. No individual names, please!

*Table 1:* Eliminating farm land, open space, land planning, inadequate infrastructure. Spillover in development. Sun Valley - 40 acres developed. Rights of property owners, real estate brokers, farmers who want to sell off small tracts, developers/farmers part-time, rural home owners - who pays the freight?

*Table 2:* Misinformation or misunderstanding or inertia. Lack of political leadership. Different "scenarios for the future" e.g. extension of present trends, new towns, not suburbs. Zoning/planning - design guidelines - mixed use zoning. Roads/noxious weeds/utility cooperation, a metro form of government. Green space. The long-range plan needs a legal component.

*Table 3:* More African-American representation in decision-making. Agriculture exempt from all P&Z regulations until changes land use. Industrial parks a solution? Jobs vs. nature - fear that plan will be put on a shelf and forgotten. Long range plan that is adhered to is important. Developers vs. neighborhoods.

*Table 4:* Rate type and placement of growth. Economics vs. aesthetics. Proponent: mixed = economic interests, property owners, real estate, development/environmentalists (NIMBY). Urban service areas exist around all county cities.

*Table 5:*

<u>Regulations</u>	<u>Personal Property Rights</u>
Chamber of Commerce REDI Columbia City Council County Commission	Land Owners
<u>Economic Growth</u>	vs.
REDI Citizens for a Better Community	<u>Quality of Life</u> Sierra Club Greenbelt Coalition Neighborhood Associations

*Table 6:* Expansion: growth as beneficial; growth as detrimental; growth as freedom of the marketplace; growth as a detriment to the future quality of life.

*Table 7:* Growth vs. status quo. Proponents: builders/developers, businesses, Chamber of Commerce, REDI. Opponents: Established residents, environmentalists, decay, new residents looking for a small town atmosphere.

*Table 8:* Basic conflict is growth vs. no growth. Fear that we have to grow to survive. Old vs. new. Private property rights vs. sprawl, excess public cost, public subsidization of new development, impact on rehab, allocation of scarce resources. More in favor of market mechanism than direct regulation. Address equity issues - old vs. new, owner vs. neighborhood. Comprehensive planning (also known as communication), strong standards, cheap oil economy, affordable housing, equity in allocation of scarce public resources, provide for maintenance over long term - not just construction.

*Table 9:* Growth should not be confined to urban service area. Neighborhoods should be allowed to develop out in the country. An impact fee system like the City has is needed to help finance development of infrastructure to support our anticipated rate of growth. Subdivision regulations - should not be used to control zoning.

*Table 10:* There are not just two sides, but multiple sides. Value conflict.

Optional:

At the first workshop, some of the tables identified cultural issues as an area of concern. What cultural issues do you think Boone County faces and how can they be addressed in the context of a land use plan for Boone County?

*Table 1:* Agronomics vs. urbanites moving to the country.

*Table 2:* Culture is important.

*Table 3:* Dialogue with and input from African-Americans in the planning stages. Thought this process has worked so far. With plan, government gets power. Issues of property rights - government telling people what they can do with land changes. Land values - plan could make some people rich, hurt other people.

*Table 4:* Heritage. Archaeological sites. Beautification (cultural sites - natural history museum? open air theater?). Possibly under direction of county parks entity.

*Table 5:* Where did this question come from? Affordable housing. A misunderstanding of what the cultural issues in Boone County are. We need to be informed - more meetings like this for a larger issue such as music, art, literature - including various other contributions representative of Boone County.

*Table 6:* Value of rural lifestyles. Interest of business community money-makers. Bike crowd, natural environment, aesthetics, Boone County lifestyle.

*Table 7:* In planning use, land should be set aside for parks and recreation development and require developers to set aside open land. Promote black culture, perhaps highlighted in Boone County Historical Society. Support local colleges and universities with their cultural activities.

*Table 8:* No response.

*Table 9:* No response.

*Table 10:* No response.

BOONE COUNTY MASTER PLAN

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**Workshop No. 3**

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**Master Plan  
Boone County**

**Workshop No. 3  
Draft Goals and Objectives**

**November 15, 1994  
RESULTS SUMMARY**

Goals statements are policy statements. They reflect the direction, focus, and emphasis of the Master Plan and they define perceived community needs and desires. Review the following goals and objectives and determine if the people at your table agree or disagree with each statement. Please edit the statements if you disagree with the wording. Mark "agree" if you concur with the basic principle of the statement, even if you have done some editing. If you disagree, tell us why and give us a revised statement or delete it. Please feel free to add goals and/or objectives statements.

Topic areas include:

- Guiding Principle
- General Planning
- Growth Management and Land Use Planning
- Transportation
- Intergovernmental Coordination
- Environment
- Parks/Recreation/Open Space
- Community Heritage

**NOTE:** There were nine participating groups at nine tables (numbered 1-10 without a Table 9). Not every table reached a consensus on each statement. Consequently, fewer than nine responses are reported for some statements.

Guiding Principle

Boone County should include urban service areas and rural service areas. Urban type services will be provided only within a designated urban service area. Within rural service areas, rural service standards will be achieved. Persons and businesses choosing a rural lifestyle and environment should not expect to receive urban type services.

The availability of urban services and the natural characteristics of the land should guide land use decisions. Urban development impacts on the environment should be minimized and sensitive environmental conditions should be protected.

7 Agree 1 Disagree

*Table 1* Can't agree on answer.

General Comments:

1. Don't create any more Boards or Committees.
2. Work financial plan with construction plans.

*Table 2* Services should be appropriate for areas served, i.e. business parks, denser populated areas. Also, sensitive environmental areas should be protected by County members and not solely at expense of proper owner.

*Table 5* Urban services being roads, sewer. It is so general a statement, it is hard to not agree.

*Table 7* How much?

*Table 8* General Comment: We believe this group should be reconvened to review the final report before sending to the Commissioners. We should come back to review after implemented, as the review task force. County Constitution was considered important. Policy should be clear and well-defined.

*Table 10* Believe land owner who agrees to furnish services in compliance with all federal and state regulations should not be limited as to land use.

GENERAL PLANNING

Goal: Adopt and implement a Master Plan which provides policy guidelines for growth management, particularly regarding land use and supporting infrastructure, which furthers protection of the environment and the community's quality of life.

Objective: Formal adoption of the Master Plan by the County Commission

7 Agree 0 Disagree

*Table 6* With respect and consideration for land owner's property rights.

Objective: Annually review actions undertaken to implement the Plan. Assess the need for changes in the implementation process and/or Plan revisions. Allocate budget and/or manpower to accomplish any necessary updating.

7 Agree 1 Disagree

*Table 4* Form a working committee.

*Table 8* Within a budgeted amount approved by taxpayers.

Objective: Update the Plan every five years.

8 Agree 0 Disagree

*Table 1* Change "five" to "three"

*Table 4* Change to "at least every five years" or as needed

*Table 6* Change "five" to "three"

*Table 8* Too long perhaps - sooner if needed

Objective: Inform the public as to the purpose and content of the Plan through document dissemination, use of various media, and information from County government.

8 Agree 0 Disagree

*Table 1* Add "including computer media"

*Table 4* Presented in laymen's terms, larger print, etc.

*Table 6* And public meetings - workshops



Objective: Evaluate and revise land use control mechanisms as necessary to reflect policies in the new Master Plan.

8 Agree 0 Disagree

Table 2 "Land use control mechanisms" leads to a lack of building consensus.

Objective: Encourage and facilitate participation in training programs dealing with planning, zoning and related issues for the Planning and Zoning commission, Zoning Board of Adjustment, and the County Commissioners.

7 Agree Disagree

Table 4 Not clear as to what training is about. For appointees - not for public - all for

Table 6 Trained by whom? What kind of training?

Table 8 Training by whom, for what, how much money?

Table 10 And interested members of the public

Objective: Use task forces to develop problem-solving recommendations. On an as-needed basis, the County would assign these task forces a specific mission statement to address selected issues. The task force work should be of limited duration.

7 Agree Disagree

Table 4 Some for, some against (Commission should do its job). (Very suspicious of the process as is used currently.)

Table 6 Question is poorly written and not complete. Can't agree.

Table 8 Add "...of limited duration with regular participation, as a standing committee." We want to come back for final document review for clarity before being presented to Commissioners.

Objective: Provide staff support necessary to administer the County's Master Plan, including the regulating of land use mechanisms and their enforcement.

9 Agree Disagree

Table 1 Add "Objective: We want to live within our means." Requires financial plan to go with master plan.

Table 4 Enforcement mechanism

GROWTH MANAGEMENT AND LAND USE PLANNING

Goal: Growth and development in Boone County shall be managed so that the community of Boone County is able to enjoy the benefits of growth, including increased revenues for services, employment opportunities, entrepreneurship, and other business opportunities, while controlling and alleviating the difficult impacts that are so often associated with new development and change.

*Table 10* Can't have growth without difficult impacts

Objective: Provide opportunities for a mix of lifestyles and living environments by retaining the County's combination of urban/rural lifestyles.

8 Agree Disagree

*Table 8* With a well-defined policy statement protecting both rural and urban rights.

Objective: Provide for a mix of uses for the Boone County community. This includes agriculture and rural uses, a range of housing densities, a variety of commercial land uses, and industrial park development.

8 Agree Disagree

*Table 1* Add "... for a planned mix..."

Objective: Develop land use around a pattern of urban centers. Land use of such density and intensity which generally exhibits urban characteristics and requires urban service levels shall be concentrated within these urban centers. Development outside the urban centers shall be low density and shall be of such low intensity as to not require the support of urban type services.

5 Agree 4 Disagree

- Table 1* Change "develop" to "encourage"
- Table 2* Not a black and white issue concerning services vs. density
- Table 4* Can't have cake and eat it too
- Table 5* Unless developer/county can provide necessary infrastructure and services
- Table 7* Change to "...land use will develop around..."
- Table 10* If developer provides urban services, then land use should not be limited.

Objective: Encourage developer investment in those areas already exhibiting urban/suburban characteristics and preserve the rural character of the outlying areas.

5 Agree 1 Disagree

- Table 1* Change "Encourage" to "Require"
- Table 2* Delete "and preserve the rural character of the outlying areas."
- Table 3* "...preserve the rural character..." Is this practical?
- Table 4* Because there is inadequate encouragement
- Table 5* Change to read "Encourage developer investment in all areas and preserve the rural character of the outlying areas (through incentives)." Encouraged, not mandated.
- Table 6* How?
- Table 8* We don't think this can be done. Can't agree. Delete objective.
- Table 10* Owner of rural land should not be stuck with furnishing "rural character" forever.

Objective: Assess both the positive and negative impacts that specific development projects will have on roads, sewage disposal, water service, police, fire, schools, etc.

9 Agree Disagree

- Table 4* Hallsville School District an example. School Board didn't even know about the project.

Objective: Address the means to bring facilities and services to adequate capacity prior to project approval.

9 Agree Disagree

Objective: Consider the cumulative impact(s) of development when evaluating land use and development plans.

8 Agree Disagree

- Table 1* Add "consider as a major factor the cumulative ..."
- Table 5* Strongly agree.

Objective: Facilitate growth, but not by subsidizing private developers. Development should be promoted through the use of market forces, offering location, land availability and community quality of life as incentives.

7 Agree Disagree

*Table 1* Change entire objective to only: "Facilitate growth, but not by subsidizing private developers."

*Table 2* Developers should not be allowed to build below standards if that's what is meant by subsidizing. They should provide to current standard levels.

*Table 8* Making sure opportunities for all are addressed.

Objective: Responsibility for financing new and improved infrastructure to support private development projects is primarily a private obligation. This includes on-site infrastructure improvements, as well as the trunks, mains and roadways, etc. serving the site. Programs such as the use of impact fees and development exactions which focus on financial contributions by the private sector to offset project impacts should be evaluated to determine their applicability in Boone County.

9 Agree Disagree

*Table 2* Impact fee costs should be proportionately charged. Change "primarily" to "partly"

Objective: Support Regional Economic Development, Inc. (REDI) as the lead marketing organization for economic development.

4 Agree 3 Disagree

*Table 2* No strong opinions either way

*Table 3* If answerable to County administration

*Table 4* We are overmarketed. Only if REDI becomes regional.

*Table 8* Questionable to support a private company

Objective: Identify and facilitate development of industrial parks suitable for light industry. Joint county/municipal projects should be considered.

9 Agree Disagree

*Table 1* Change to "...suitable for industry."

Objective: Facilitate the growth and development of the Columbia Regional Airport as an economic asset for the region. Work with the City of Columbia to assure proper land use management around the airport facility.

7 Agree 1 Disagree

Table 2 Change "Facilitate" to "Encourage"  
Table 4 Mixed feeling

Objective: Facilitate the development of vocational/technical continuing education for all Boone County workers to support business investment, job opportunities and enhance the local wage base.

8 Agree 1 Disagree

Table 10 Who pays?

Objective: Support the preservation of the agricultural industry in Boone County.

8 Agree    Disagree

### TRANSPORTATION

Goal: Provide for an efficient, cost-effective and safe transportation and circulation system. Recognize that Boone County is and in the foreseeable future will remain as primarily an automobile-based transportation network, but that opportunities for multi-modal transportation systems that will supplement automobile travel.

Objective: Make improvement of existing roadways in both urban and rural areas the highest transportation priority. Unsafe conditions should be addressed as quickly as possible.

8 Agree Disagree

Table 4 But must define unsafe

Objective: Planning for new roads in all urban service areas and in the Columbia Area Transportation Study Group (CATS) (MPO) area should be accomplished through City/County cooperation.

8 Agree Disagree

Objective: Purchase right-of-way for new roads whenever possible. If this is not possible, the right-of-way should be acquired by dedication as negotiated.

6 Agree 3 Disagree

*Table 4* Objection to purchase becomes a "slippery slope" (if start buying land for roads, would have to buy all).

*Table 6* Change entire objective to: Obtain right-of-way by dedication as negotiated.

Objective: Develop bicycle pathway systems in the urban areas. Planning for new roads and road improvement projects should incorporate bikeways wherever possible to develop a linked system.

9 Agree Disagree

*Table 3* If of moderate financial impact proportionate to its use.

Objective: In cooperation with the Missouri Highway and Transportation Department, develop bikeways along state secondary highways in the rural areas.

7 Agree 1 Disagree

*Table 3* If of moderate financial impact proportionate to its use.

*Table 4* But educate bikers to use these bike routes.

*Table 6* Who is to pay for them?

Objective: Expansion of the Columbia Transit bus system to service commuters from the outlying urban areas to Columbia should be aggressively explored. Service between Centralia, Ashland, Columbia, and Jefferson City should also be evaluated.

7 Agree 1 Disagree

*Table 3* Need confirmation of need

*Table 5* Specifically OATS

*Table 6* Who is to pay for this?

INTERGOVERNMENTAL COORDINATION

Goal: Enhance intergovernmental cooperation as a means to coordinate service delivery as a high priority goal. As growth continues to occur in the unincorporated areas of the County, the demand for services will continue to increase, placing greater emphasis on the need for coordination among the various service providers in Boone County.

Objective: Improve intergovernmental communication between various service providers such as municipalities, water districts, the sewer district, utility providers, school districts, fire district, Columbia Area Transportation Study Organization, etc.

9 Agree Disagree

Objective: Negotiate and adopt formal intergovernmental agreements dealing with service delivery issues.

9 Agree Disagree

Table 1 Change to: "...service delivery issues and other areas of inter-governmental cooperation"

Table 4 Makes good sense - Fire, Water District 9

Objective: Explore the potential and advisability of establishing a new Council of Governments to further intergovernmental cooperation.

5 Agree 1 Disagree

Table 4 Some for, some against. Increased opportunities for consensus. Worried about another level bureaucracy.

Table 6 How much would cost be?

ENVIRONMENT

Goal: Provide a balance between the human and natural environment, protecting and improving existing conditions, wherever possible.

Objective: Protect sensitive environmental features and systems such as groundwater, sinkholes, floodplains, and wetlands.

9 Agree Disagree

Table 2 If willing to purchase

Table 6 How? At whose expense?

Objective: Adopt a scenic road program to conserve particularly visually aesthetic corridors.

7 Agree Disagree

Table 2 No consensus

Objective: Adopt and implement a well head protection program to help protect potable well water.

7 Agree Disagree

Table 4 No consensus. Mostly agree. Prohibit infrastructure development and use of chemicals. Worried about excessive regulation.

Table 10 State of Missouri is doing this now.

Objective: Protect groundwater by limiting the use of on-site sewage disposal methods which are not suitable for Boone County soil conditions.

8 Agree Disagree

Table 4 Thought we already had this.

Objective: Encourage development of light (environmentally clean) industry. New heavy industry is to be discouraged.

5 Agree 2 Disagree

Table 1 Change to: Encourage development of environmentally clean industry.

Table 2 Change to: Encourage development of environmentally clean industry.

Table 3 Change to: Encourage development of environmentally clean industry.

Table 4 Heavy industry is OK if environmentally clean.

Table 5 Change to: Encourage development of environmentally clean industry.

Table 6 Cannot agree.

Table 10 Can some heavy industry be located anywhere in Boone County.



Objective: Stringently follow federal floodplain protection programs, respecting the natural role of the floodplain and floodway to drain surface water.

8 Agree 1 Disagree

Table 2 Change to "Follow realistic floodplain protection programs..."

Objective: Develop a County wetlands protection program compatible with existing federal wetlands requirements.

7 Agree 1 Disagree

Table 2 Delete this question - waste of time.

*PARKS/RECREATION/OPEN SPACE*

Goal: Assume a new service delivery role to provide parks, recreation and open space planning and implementation.

Objective: Appoint a County park board.

7 Agree 1 Disagree

Table 2 County Commission (not a Park Board) should address this.

Table 4 Volunteer only

Table 6 Cannot agree

Objective: Study County park, recreation and facility needs, focusing on cooperative efforts with the municipalities and the school district. Funding sources such as state and federal grants; user fees; land donations; and sales taxes should be evaluated as funding sources. Property taxes should not be used.

8 Agree Disagree

Table 5 Add "...with the municipalities and the School District as well as state and federal."

Table 10 Do not rule out property taxes.



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# Boone County Master Plan

*Prepared for*  
Boone County, Missouri



*Prepared by*  
Booker Associates, Inc.  
St. Louis, Missouri

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