Growth Management and Land Use Plan

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ADDENDUM

Growth Management and Land Use Plan Element

1. Add under AVariety@ on page 18-61:

   Diverse housing types can be more easily planned and designed in developing (new) neighborhoods. Inclusion of diverse housing types in existing neighborhoods should relate to areas in transition and should adopt appropriate design and buffering considerations for the particular neighborhood.

2. Add under AUtilize Historic Resources@ page 18-54:

   Promote the use of various economic incentives such as loans, grants, and tax credit programs as tools for the protection and rehabilitation of these historic sites.

3. Add under ACompatible Institutional Growth@ page 18-55:

   Encourage institutions to develop master plans, indicating future boundaries, through a process that involves participation and input from neighborhood property owners and residents. These master plans should ultimately be approved by both the institution and the City.

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Growth Management and Land Use Plan

Planning Framework

Preface

The Springfield-Greene County Growth Management and Land Use Plan is based on the following policies and actions together with the Land Use Plan Map and accompanying sketches.

This plan establishes broad guidance for private and public physical development of the region. The Community Physical Image and Character Element presents more detailed policies for physical design. Thus, the elements of these two plans should be used in coordination with one another as well as with other Elements of *Vision 20/20*, such as Parks, Open Space and Greenways, or Transportation.

These guiding precepts of *Vision 20/20* represent the synthesized, collective opinion of hundreds of citizens who have participated in a lengthy process of study and debate. The products of the twelve *Vision 20/20* Focus Groups have been woven into this element and other elements of the plan.

Population, Housing and Land Needs

Population Growth

Projected Greene County population for the year 2020 is estimated between 285,000 and 300,000, an increase of 75,000 to 90,000 persons (or 36 to 42 percent) from the 1990 Census figures. This equates to an annual growth rate of 1.2 to 1.4 percent. This growth rate is consistent with the growth rate for the past several decades and is consistent with other State and local projections. Eighty-five to ninety percent of the future Greene County population (245,000 to 270,000 people) are expected to live in the Springfield urbanized area of the County.

Housing Demand

Approximately 40,000 to 45,000 additional housing units will be needed to accommodate the future Greene County population, with 33,000 to 35,000 of them needed in the Springfield urbanized area.

Land Needs

Land needed to accommodate future *housing* in Greene County is estimated at approximately 11,200 acres; 9,500 acres will be needed in the Springfield urbanized area.

Total land requirements to accommodate all future development in the Springfield urbanized area are estimated at approximately 17,000 acres, or more than 26 square miles. To provide perspective, the total land area contained within the city boundaries of Springfield is approximately 70 square miles. The developed land within the Springfield urbanized area of Greene County, including the City of Springfield, is approximately 90 square miles. Total land needed in the urbanized area by 2020 represents approximately a 30% increase over currently developed land.

Alternative Development Patterns Studied

Three conceptual, alternative growth patterns illustrated by Figure 18-1 were studied for the Springfield-Greene County area**:**

- **Current Trends:** A continuation of recent emphasis on growth mainly to the south

- **Compact:** Reduced fringe growth, more infill development and somewhat higher densities overall

- **Balanced:** A greater balance of growth to the north, east and west relative to the south.

These options have been conceived as "pure" or abstract forms of potential courses of action. Consequently, none of them was expected to be chosen without alteration to guide the completion of the *Springfield-Greene County Comprehensive Plan.* Rather, positive aspects of each were identified and brought together to create the Preferred Development Pattern.

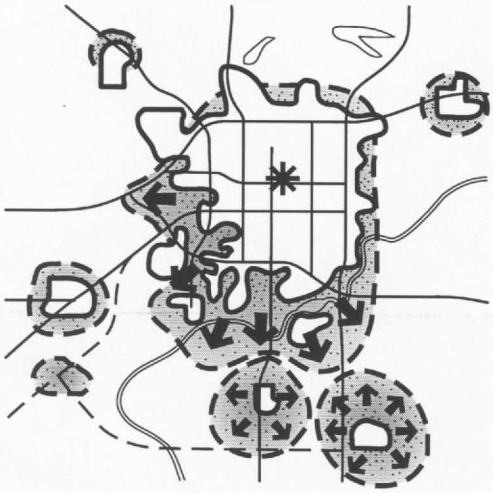
Current Trends Alternative

This development alternative assumes that current trends would continue to favor low-density fringe housing.

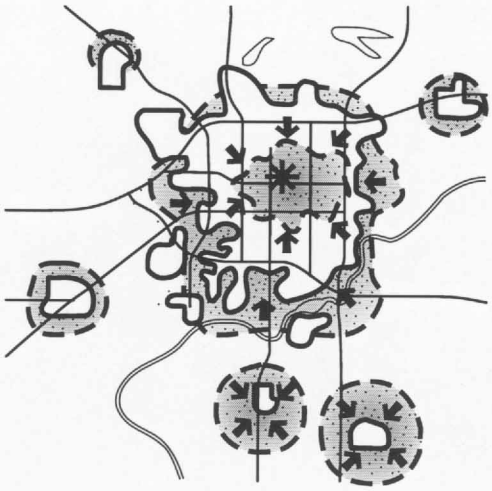
Over the next 25 years, the new housing and jobs would be located in all sectors of the Springfield fringe, following historic patterns and market demand. New development would occur all around the currently urbanized area but mainly to the south, including large parts of northern Christian County. There would be relatively minor amounts of infill and redevelopment activity.

In the Current Trends Alternative, decisions that provide necessary infrastructure would be largely based on a continuation of current city, county and regional development policies. Trunk sewers would be extended to new basins and several arterial roads would be widened, lengthened or newly built. One result would be that fringe development would not always be contiguous to prior investments but would occasionally involve extending

Current Trends



Compact



Balanced

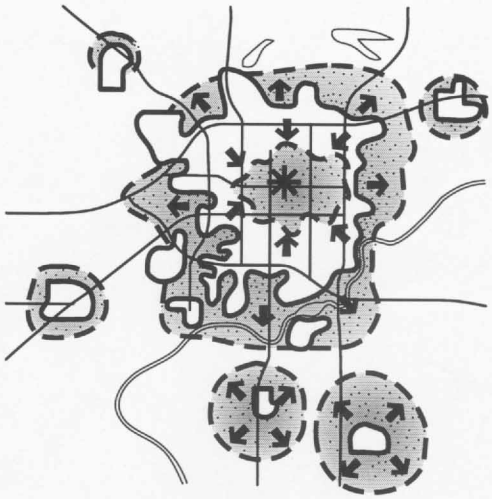


Figure 18-1
Alternative Development Patterns

utilities and roads past open land. Growth in this alternative would also occur in and around the outlying cities in Greene and Christian Counties, especially Republic, Nixa and Ozark. Nixa and Ozark would become the focus of southern growth, which would have spread northerly to merge with development spreading south from Springfield.

Compact Development Alternative

The Compact Development alternative would direct most new development to areas currently serviced with utilities and roads and provide additional infrastructure only when available serviced land in the region has been nearly fully used. No new highways would be built around Springfield before 2020. This would be a conscious public strategy to use existing infrastructure more efficiently and increase demand for infill and redevelopment. Overall residential densities would increase.

Public incentives and regulations would be used to direct development to several Activity Centers, which are locations that presently have a significant number of jobs and/or which have the potential for major employment growth.

The Compact Development Alternative assumes that competition for available land would intensify and land prices would rise. Existing structures would become more valuable and undergo rehabilitation and improved maintenance. Some development would be lost to surrounding communities where land prices would be lower.

The imposition of stronger land use controls in the rural area would result in less development and increased preservation of the rural landscape.

Balanced Development Alternative

Under the Balanced Development alternative, a greater portion of growth would be directed to the north, east and west areas relative to the south. As a result, most of the new Springfield urbanized area growth would occur in Greene County (as opposed to spilling over into Christian County).

Public investments in roads, parks and utilities would be made in advance to guide development to underdeveloped portions of the region.

This alternative would make more efficient use of roads, sewers and schools than would Current Trends but less efficient use than Compact Development. Most major new road investments would be on the north or east sides of the area or within existing developed areas.

Activity Centers, particularly Greater Downtown, would be promoted by this scenario through incentives and regulations but not to the same extent as they would under Compact Development. A band of mostly open land would be preserved between Springfield and its nearby cities during the planning period.

Finally, rural areas would continue to experience large-lot subdivisions and “estate” development, and the loss of rural land would continue at present rates.

Growth Management Plan

This section describes a coordinated and comprehensive method for guiding growth around Springfield and across Greene County and for coordinating public investments and private land development. The following major section, Land Use Plan, indicates more specifically the desired pattern of development in and around Springfield.

Summary of Objectives

The objectives for the Growth Management Plan are summarized below. The objectives for the Land Use Plan are stated in that section.

Objective 1 -- Preferred Future Development Pattern: The City of Springfield and Greene County should work together to create a future development pattern that is more geographically balanced and compact than past trends.

Objective 2 -- Sustainable Growth: Springfield and Greene County should seek sustainable growth by investing in established areas, carefully planning new neighborhoods, providing attractive public amenities, and protecting environmental resources.

Objective 3 -- Urban and Rural Areas: Springfield, Greene County and the other municipalities of the county should designate the *Urban Service Area* plus the *Urban Reserve* as the limit for municipal sewer service between now and 2040.

- Land within the *Urban Service Area* is eligible to receive municipal sanitary sewer service between now and the year 2020.

- Land within the *Urban Reserve* but outside the Urban Service Area is expected to eventually be developed for urban use and should be regulated accordingly.

- Land outside the Urban Reserve, termed the *Rural Area,* is expected to remain permanently rural and should be regulated as such.

Objective 4 -- The Urban Service Area: Urban Service Area boundaries should continue to be used by Springfield, Greene County and the other cities of the county to indicate the areas in which municipal sewer service will be available (within certain limitations) to all users who request the service and where urban transportation improvements will be focused. This concept should be adopted by other cities in Greene County.

Objective 5 -- The Urban Reserve: Springfield, Greene County and the other municipalities of the county should work together to create urban “holding zones” beyond the year 2020 Urban Service Area boundaries of each city but within the Urban Area of each city. This band of land should be known as the Urban Reserve.

Objective 6 -- The Rural Area: Greene County, in cooperation with the several cities, should seek to preserve and accentuate the difference between the highly serviced urban areas (Springfield Urban Area, the Surrounding Small Cities and the Outlying Towns) and the less serviced Rural Area. The cities should be compact, efficient and walkable while the rural areas should be open and agricultural. The intent is to reduce sprawl, preserve desirable rural qualities and promote appropriate rural economic activity by keeping average housing densities low and limiting inappropriate land uses.

Objective 7 -- Surrounding Cities: A portion of the Greene County residential, commercial and industrial growth should be guided to the cities of Willard, Strafford, Republic and Battlefield.

Objective 8 -- Outlying Towns: A portion of county growth should be accommodated in the outlying towns such as Ash Grove, Fair Grove and Walnut Grove, in order to take some growth pressure off the Rural Area.

Objective 9 -- Activity Centers: Springfield and Greene County should target several locations as *Activity Centers*. In those locations, plans, regulations and public investments should promote additional or new employment, intensified retail business, higher density housing and convenient transit service. Design should emphasize mixed- and multiple-use development, attractive public spaces, and high-quality site planning and architecture. Activity Centers should be linked to the bicycle and linear open space networks.

Objective 10 -- Annexation: Springfield should work to maintain a well-planned and fiscally sound community by including all appropriate land areas within its boundaries.

Objective 11 -- The Planning and Regulatory Process: Springfield and Greene County should build regional processes and relationships that help accomplish *Vision 20/20*.

Objective 12 -- Local and Regional Investments: Springfield and Greene County should invest in public facilities so as to maximize their impact, minimize duplication and advance the other Objectives of *Vision 20/20*.

Future Development Pattern

Introduction

This section is the most fundamental and important of the entire Growth Management and Land Use Plan. This section establishes general means of accomplishing the central objective of the Plan -- compact and contiguous growth -- by introducing several key concepts such as**:**

- The directional allocation of growth areas
- Coordination among the cities and the county
- A strengthened Urban Service Area
- The Urban Reserve
- The Rural Area
- The Activity Centers
- The greenway system
- Proactive annexation.

Each of these concepts is described in detail in subsequent sections along with Objectives and Actions for each. A specific pattern of future land use plus other Objectives and Actions is presented in the third of three major sections of this element, entitled Land Use Plan. (The first two major sections were Planning Framework and Growth Management Plan.)

Objective 1: The City of Springfield and Greene County should work together to create a future development pattern that is more geographically balanced and compact than past trends.

Objective 2: Springfield and Greene County will seek sustainable growth by investing in established areas, carefully planning new neighborhoods, providing attractive public amenities, and protecting environmental resources.

Actions:

1. **Compact and Contiguous Growth:** Urban growth in Springfield and Greene County should be guided to locations either contiguous to or within presently urbanized areas. Development should be either urban, compact and efficient, or rural and very low density. This would serve to**:**

   - Promote efficient use of serviced land
   - Promote continued investment in older areas
   - Limit public and private expenses
   - Protect sensitive environmental resources
   - Preserve rural character
   - Conserve nearby fringe areas for future urbanization when public sewer and water service become available
   - Reduce driving
   - Enable increased use of transit and bicycling
   - Preserve the distinction between urban and rural areas
   - Create a stronger sense of neighborhood and community.

2. **Balanced Fringe Growth:** Direct an increased amount of urban growth to the northeast, north, and west of the existing developed area, while recognizing that a majority of the future development would continue south, southwest, and southeast. Consequently, more of the Springfield area growth would occur in Greene County as opposed to spilling over into Christian County.

   This Action emphasizes the desire for a more balanced distribution of future development. Generally, the growth is expected to be distributed as follows**:**

   - Infill**:** 15 - 20 %
   - North**:** 20 %
   - East**:** 10 - 15 %
   - South 35 - 45 %
   - West 15 - 20 %

   This would make better use of existing capital infrastructure investments and provide market potential for better distribution of services and jobs.

   The Growth Management Plan for the Springfield Vicinity, illustrated by Figure 18-3, contains elements of all three development alternatives but is probably most closely related to concepts embodied in the Balanced and Compact Alternatives. The recommended Growth Management Plan was based on recommendations from *Vision 20/20* citizens' Focus Groups.

3. **Metropolitan Planning:** Utilize land resources according to a plan that recognizes Springfield, Greene County and northern Christian County as a single metropolitan region with several independent cities or towns and intervening open space.

4. **Urban and Rural Areas:** Continue and expand the current Urban Service Area policy to reflect this desire for more investment in the north, east and west. The Urban Area consists of land within the ***Urban Service Area*** and land within the ***Urban Reserve,*** as diagrammatically illustrated by Figure 18-2. These growth management concepts are explained in the subsequent section, Urban Growth Management.

   Growth should be compact and contiguous in and around Springfield and in the Surrounding Cities (Republic, Strafford, Willard, Battlefield, Nixa and Ozark), while the rural area should remain very sparsely settled. Springfield's Center City and the existing neighborhoods should be strengthened, and infill development should be promoted. Future urban densities should be based on market demand, but higher densities should be accommodated in Center City, the Activity Centers and the growing fringe of Springfield.

5. **Surrounding Cities and Outlying Towns:** In addition to the Springfield Urban Area, guide growth to the Surrounding Cities, consisting of Republic, Willard, Strafford and Battlefield in Greene County and Nixa and Ozark in Christian County, and to the Outlying Towns of Ash Grove, Fair Grove, Walnut Grove and Rogersville. These locations have the public facilities and services needed to accommodate more intense residential, commercial and industrial developments.

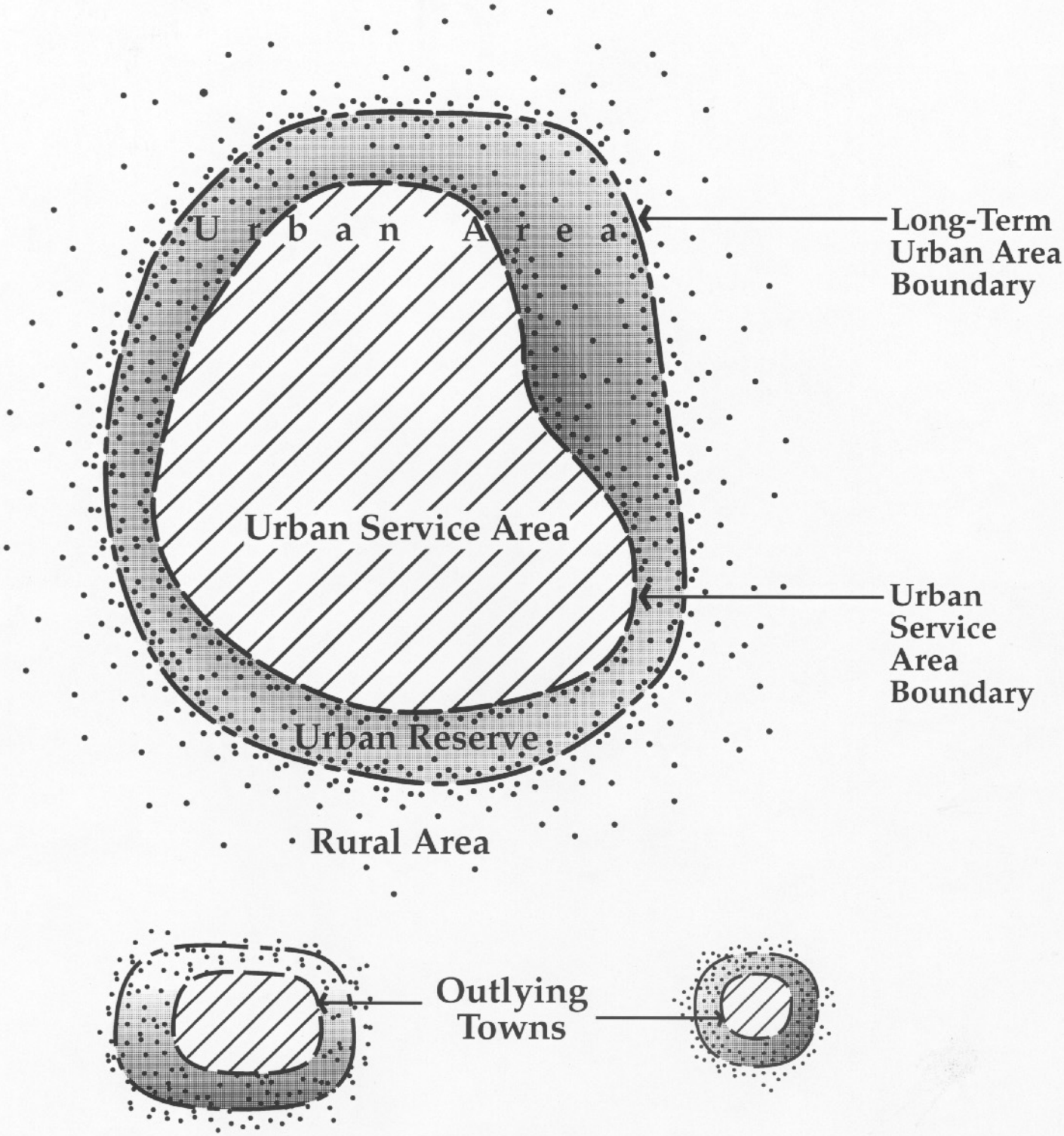
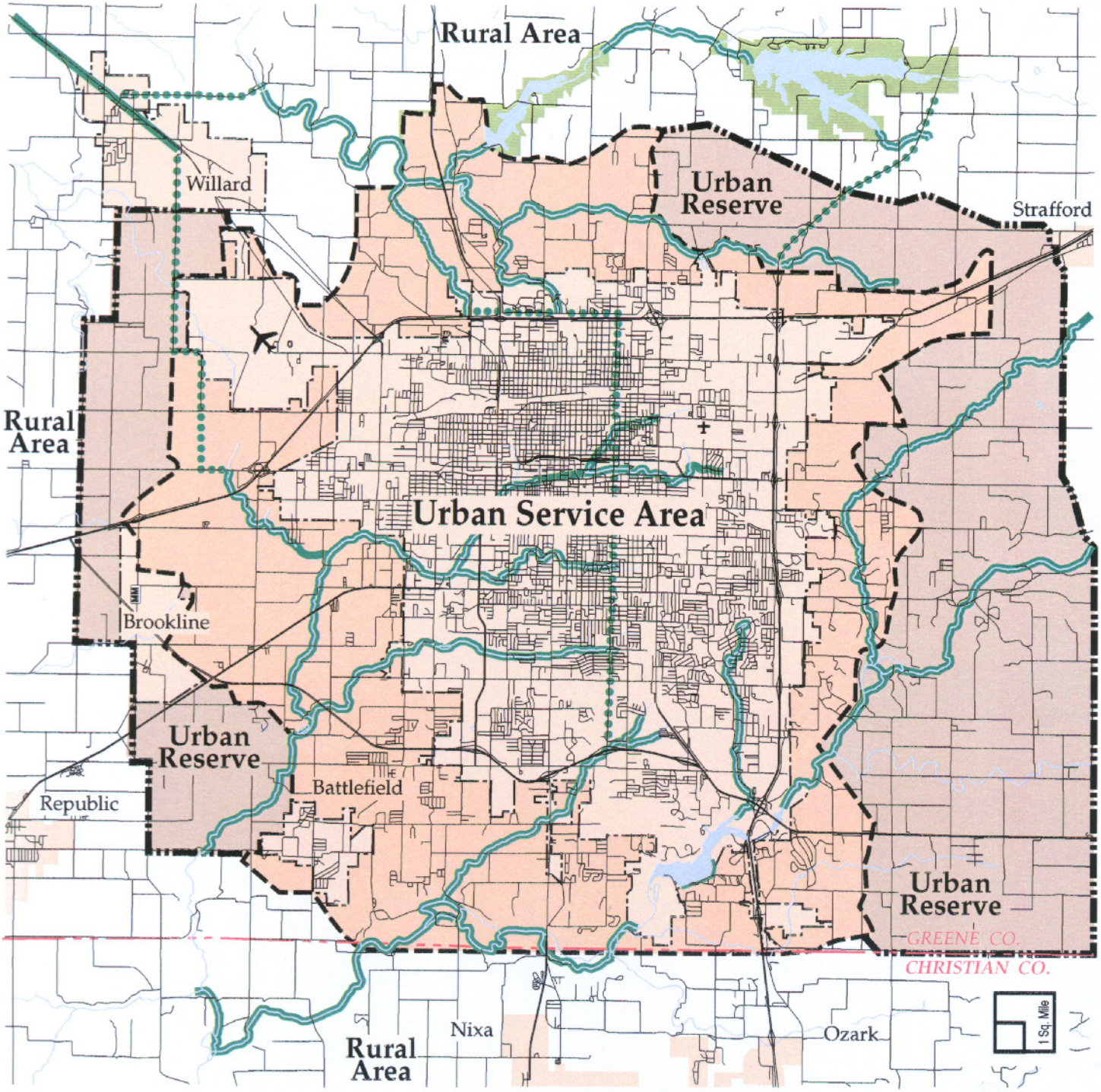


Figure 18-2
Urban and Rural Areas Concept



Municipal Area

Greenways

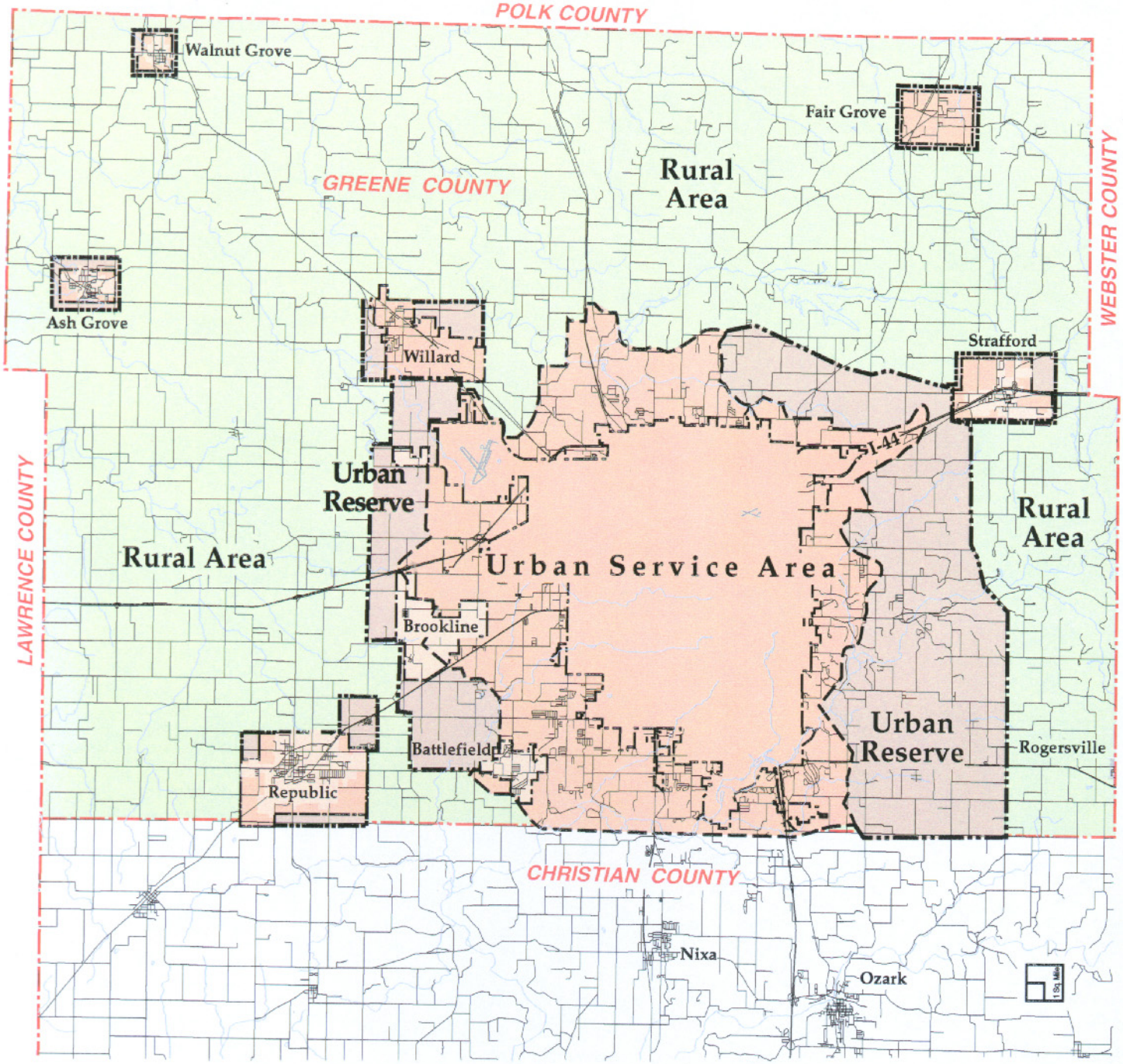
Greenway Connections

Year 2020 Urban Service Area Boundary

Year 2040 Urban Reserve Boundary

Figure 18-3

Growth Management Plan - Springfield Vicinity



Year 2020 Urban Service Area Boundary

Year 2040 Urban Reserve Boundary

Municipal Boundary

Note: Urban Service and Urban Reserve Boundaries should be negotiated and adjusted by surrounding Cities and Greene County.

Figure 18-4
Growth Management Plan - Greene County

6. **Activity Centers:** Encourage in the Activity Centers higher density development, particularly employment, shopping and multi-family housing, served by transit, major roads and bicycle routes. Activity Centers, a key concept in the preferred development pattern for the Springfield area, are intended as a means of encouraging infill growth, of using infrastructure efficiently, of reducing auto trips and creating diverse, exciting urban locations. The primary Activity Center should be the Greater Downtown, which should benefit from public and private actions to become more interesting, diverse, highly developed and oriented to the pedestrian.

7. **Established (Older) Urban Areas:** Keep existing urban areas attractive and economically viable so as to protect those private and public investments and assets.
8. **New Neighborhoods:** Design new housing and businesses to create compact, diverse and pedestrian-friendly neighborhoods and districts.

9. **Parks, Open Space and Greenways:** Use parks and linear public open space to improve quality of life, provide recreation and exercise opportunities, protect sensitive environmental resources, guide and enhance development, and give form to the community.

   The City and County should jointly invest in a major system of linear parks and trails called Greenways. This public land should usually follow creeks and rivers to link community parks, neighborhoods and Activity Centers while helping to protect the waterways. In several instances, these public investments could be used to attract and guide private development. Greenways on the northern and eastern sides of the community are intended as public investments to attract private neighborhood development investment and promote long-term neighborhood stability.

10. **Rural Areas and Towns:** Maintain low densities in rural areas. Direct growth outside the major cities to the Outlying Towns, each of which should have a center and an edge, and each of which should provide jobs as well as housing.

11. **Environmental Resources:** Protect and preserve sensitive environmental resources to the extent feasible as urban development occurs. Use environmental resources as valuable assets, and incentives to high quality development and a means of reducing some development costs.

Urban Growth Management

Introduction

An effective plan for guiding and regulating urban fringe growth can pay dividends for Springfield and the region through fiscal, economic, environmental and social savings.

The City, the County, several smaller cities and the State provide a variety of roads, utilities, parks and various other public services to support private investment at the urban fringe. There is a tremendous public cost associated with these investments, and they compete for limited dollars with other needs, including the demands of previously-developed areas. It is essential that such public investments be made efficiently because the costs are passed on to all taxpayers, they influence the economic climate for business,

and the trend is for fewer state or federal dollars being available to assist local communities.

In addition to the financial cost of fringe growth, other costs should be considered, such as the loss of rural scenery and farmland, and increased driving. Several issues to consider include**:**

- How to properly size, stage and coordinate the provision of **public facilities?**
- How to **coordinate the actions of several governmental units?**
- How to ensure there is an **adequate amount of serviced or serviceable land** in the Urban Area for 40-plus years of new housing and businesses, and how to increase future densities to help ensure that the Urban Area is adequately sized?
- How to ensure that **land is used wisely,** particularly land where investments have already been made in public services?
- How to safeguard the region's **environmental features** that contribute to quality of life such as its lakes, streams and water quality?
- How to protect the **rural lifestyle** and the farm economy?
- How to protect and enhance the qualities of the freestanding **small towns** in Greene County?
- How to keep **taxes and fees** within reasonable limits?

Objective 3 -- Urban and Rural Areas: Springfield, Greene County and the other municipalities of the county should designate the *Urban Service Area* plus the *Urban Reserve* as the limit for municipal sewer service between now and 2040.

- **Land within the *Urban Service Area* is eligible to receive municipal sanitary sewer service between now and the year 2020.**
- **Land within the *Urban Reserve* but outside the Urban Service Area is expected to eventually be developed for urban use and should be regulated accordingly.**
- **Land outside the Urban Reserve, termed the *Rural Area,* is expected to remain permanently rural and should be regulated as such.**

Actions:

1. **Official Documents:** Adopt this joint City-County land use plan and amend the County zoning ordinance and map to preserve the land in the Urban Reserve for future urban development.

2. **Maximum Housing Density:** Amend the County zoning ordinance to limit rural housing development to **4 housing units per 40 acres in both the Urban Reserve and the Rural Area,** where it is still feasible.

   Refer to the following sections entitled The Urban Reserve and The Rural Area for further details.

3. **County Minimum Lot Sizes:** Set the minimum lot size in Greene County's Agriculture District at 3 acres, just as it is in the Agricultural-Rural District. (This minimum lot size is not inconsistent with the preceding policy of 4 housing units per 40 acres.)

4. **Coordination:** Involve all affected governmental units in planning and implementing this growth management plan.

   - Consult with the Cities of Willard, Strafford, Battlefield, Brookline, Republic, Ash Grove, Walnut Grove and Fair Grove to gain their cooperation and support on concepts related to the Urban Reserve, the Rural Area, the Surrounding Small Cities, and major sewer and roadway improvements. Each City should be asked to adopt its own Urban Service Area boundary.

   - Involve Christian County and the Cities of Nixa and Ozark in issues and plans relating to growth management, transportation and sanitary sewage treatment and interceptors. Enlarge the Transportation Planning Area and the Metropolitan Planning Organization to reflect the changing size of the Springfield urbanizing area. Use this enlarged organization as a forum for discussing cross-county issues.

   - Involve the Missouri Department of Transportation to ensure that their investments are consistent with the objectives of this plan.

The Urban Service Area

Summary

The Springfield Urban Service Area concept has been used successfully by Springfield and Greene County for many years to promote cost-effective growth. The concept remains workable and has been retained for this plan with minor changes to the boundary of the Urban Service Area and to the text of the City's adopted Urban Service Area Policy.

Boundary Changes

Changes to the boundary of the Urban Service Area include land where public investments have been made or are programmed for sanitary sewer service or urban transportation facilities. The boundary would expand in the southwest to accommodate anticipated growth, and to the west to be consistent with the *Vision 20/20* future growth area. It would expand in the southeast to include a portion of the Farmer's Branch basin. In addition, the boundary change would include a portion of the Pierson Creek basin where services are currently programmed or planned. It would also delete a portion of the

South Dry Sac basin to reflect the existing and programmed sanitary sewer system in that area.

The new boundary is illustrated on Figure 18-4, Growth Management Plan, and Figure 18-7, Springfield Area Land Use Plan. Generally, the new boundary is composed of a combination of ridge lines and drainage basins. In a few locations , the boundary was adjusted to include an Activity Center, an existing subdivision in need of sewer service or the portion of a basin intended to be served by sewer by 2020.

Urban Service Area Policy Text Changes

The proposed text changes would require both the City and the County to adopt the amended Urban Service Area Policy. The amendment would focus on sanitary sewer and urban-level transportation as the primary infrastructure needed for urban development. Thus, City Utilities would no longer be a partner in the Urban Service Area concept. The City and the County would be the primary participants and would be required to approve any future changes to the policy. This change would promote the coordination of urban services between the City and the County and would establish a foundation and procedure for programming urban services.

Inclusion in the Urban Service Area does not imply a timetable for provision of services. Within the Urban Service Area, sewer services will be provided as available resources permit. Streets and highways will be planned to handle urban populations. Plans and programs will be designed to promote urban development within the boundary of the Urban Service Area Policy.

Introduction to the Urban Service Area Policy

The provision of services is a fundamental responsibility of government and its operating agencies. The availability and capacity of such services strongly influence the intensity, distribution and timing of urban development and, in a broader context, the growth potential and pattern of the community as a whole. In consideration of the enormous public investment these services represent and the limited fiscal resources available to maintain and expand these services, a clear articulation of the extension of major urban services is fundamental to sound fiscal management and a vital economy.

The City of Springfield and Greene County are committed to a “guided growth” concept -- one that accommodates future growth but does so in a manner that is sensitive to environmental, community and fiscal resources. This plan identifies future growth patterns, land use and transportation policies and provides the framework for the Urban Service Area Policy.

History of the Springfield Urban Service Area Policy

Springfield’s Urban Service Area Policy was established in April 1984 as an agreement between the City of Springfield and the Board of Public Utilities. Its purpose was to set geographic boundaries for the provision of urban services. It set forth a philosophy for providing urban services that allows for continued growth and development by maximizing the use of existing resources while minimizing the cost to the citizens. Within the geographic boundary set by the policy, the intent was to provide water and sewer services as available resources permitted. Streets and highway were to be planned to handle urban populations. The policy also provided a process for amendment and exceptions.

Since its adoption in 1984, the Urban Service Area Policy has functioned as a tool for guiding growth. Greene County has been instrumental in implementing the policy by using it as a guide for land development cases and by providing comment on exceptions and amendments.

Objective 4: The Urban Service Area concept should continue to be used by Springfield and Greene County to indicate the areas in which municipal sanitary sewer will be available (within certain limitations) to all users who request the services and where urban transportation improvements will be focused. This concept should be adopted by the other cities in Greene County.

Services offered within the Springfield Urban Service Area include**:**

- Sanitary sewer lines
- A higher level of road improvements.

Within the City, Springfield provides a host of other services and facilities such as police protection, fire protection, and parks and recreation programs. The other cities provide similar services.

Philosophy: The philosophy of the Urban Service Area concept is to allow for the continued growth and development of the Springfield urbanized area by maximizing the use of existing resources (land, water and sewer systems, roads and other major capital investments) while minimizing the cost to the citizens of the Springfield Metropolitan Area.

Policies and programs within the Urban Service Area are designed to promote urban development. The City of Springfield has made a commitment to extend sanitary sewer to the Urban Service Area under certain conditions. Outside the Urban Service Area, the desirability of sanitary sewer service extensions is questionable. No commitment is made to public investment outside the Urban Service Area, and participation by government in urban service extensions should not be anticipated.

In consideration of the enormous public investment these services represent and the limited fiscal resources available to maintain and expand them, a clear articulation of the extension of major urban services is fundamental to sound fiscal management and a vital economy. The City of Springfield and Greene County are committed to a “guided growth” concept**:** one that accommodates future growth but does so in a manner that is sensitive to environmental, community and fiscal resources.

Purpose: The purpose of the Urban Service Area is**:**

- To promote the coordination of urban services between the City of Springfield, Greene County and among other governmental bodies and agencies.

- To establish a foundation and procedure for the programmed provision of urban services to the developing portions of the Springfield-Greene County Metropolitan Area.

- To protect existing and programmed investments in sanitary sewage collection and treatment systems, and major streets and highways.

- To protect sensitive areas such as the public drinking water supply.

It is not the purpose of this concept to curtail service or to reverse prior service commitments but rather to provide guidelines for future decisions.

Benefits: The Urban Service Area is a conscious attempt on the part of the City and Greene County to concentrate the cost of their services, leverage their considerable capital investments and reduce the cost to the customers. Public utility and road costs would be minimized if the users were concentrated geographically. There would be fewer instances of installing facilities past undeveloped (or undevelopable) land to serve a new user.

The Urban Service Area should also result in a more compact pattern of urban development. This will preserve farmland by limiting speculative development pressures and help keep the farm community whole and intact. Non-farm residential development adjacent to active agricultural operations can lead to complaints from the newcomers about normal farming operations, which can force farmers out of business or raise their costs.

Finally, staging public improvements within the Urban Service Area will allow the City and private developers to plan in a comprehensive manner and make improvements and investments with confidence.

Actions:

1. **Springfield Urban Service Area Boundary:** Springfield and Greene County should both adopt the alignment of the Springfield Urban Service Area boundary as illustrated by Figure 18-3, Growth Management Plan - Springfield Vicinity, and Figure 18-7, Springfield Area Land Use Plan.

   The Urban Service Area represents land where public investment has been made or is programmed for sanitary sewer services or major transportation facilities. Generally, the boundaries are defined by a combination of ridge lines and drainage basins.

   Within the Springfield Urban Service Area, it is estimated that there is sufficient developable or redevelopable land to**:**

   - Meet regional demand for all types of housing and for commercial and industrial development for 20 years in each of the northern, eastern, southern and western sectors of the Springfield Urban Area
   - Equal approximately 150 percent of the forecast land demand within each of the four geographic sectors -- north, south, east and west
   - Minimize any artificial increase in land prices

- Discourage housing development from skipping beyond the Urban Service Area boundary.

The Springfield Urban Service Area boundary line has a "horizon date" of year 2020. The purpose of this date is to give assurances to landowners and developers what the policy and practice will be between now and that date. The horizon date should be reviewed and possibly adjusted every five years.

2. **Services to Be Provided in the Urban Service Area:** Within the Urban Service Area, properties will be eligible to receive from Springfield and/or Greene County sanitary sewer service and an urban level of road improvements. Design all plans and programs to promote urban development within the Urban Service Area.

   Sewer services will be provided as available resources permit, and streets and highways will be planned to handle urban populations. Including land in the Urban Service Area does not imply a timetable for providing that area with sanitary sewer service or urban-level transportation.

   Water, electricity and natural gas services are also available from the Board of Public Utilities without regard to whether a property is within the Urban Service Area.

   Transportation facilities are planned and coordinated by the City of Springfield, Greene County and the Missouri Department of Transportation through the Springfield Area Transportation Study Organization. Transportation decisions should be guided by the *Vision 20/20 Transportation Plan*.

3. **Monitoring:** Use the Springfield and Greene County geographic information system to monitor the supply of developable land within its Urban Service Area. Every five years (2000, 2005, etc.) review whether there is enough land within the Urban Service Area boundary to satisfy the above criteria. If necessary, adjust the boundary at that time.

4. **Forecasts:** Prepare and update forecasts of households and urban land consumption based upon the best available information. For Springfield, aggregate these forecasts by the total Transportation Planning Area and by sub-sector (e.g., southern, eastern, etc.). These forecasts should assume land use practices that support development of skipped-over parcels, redevelopment of obsolete land uses, greater use of underutilized sites, the creation of intensified "Activity Centers," and changes in demographics resulting in somewhat less demand for single-family detached housing and greater demand for attached housing.

5. **Surrounding Cities:** For the Surrounding Cities (Willard, Strafford, Battlefield and Republic), adjust the boundaries of the Urban Service Area according to sewer system conveyance and treatment capacities. The limits of the Urban Service Areas for Willard, Strafford and Battlefield may be subject to the terms of their sanitary sewer service contracts with Springfield.

6. **Density Targets:** Prepare City and County zoning regulations and urban design guidelines that should serve to achieve housing density and job concentration

targets. Such regulations should help avoid premature expansions of the Urban Service Area and help the Urban Reserve last until 2040.

- There should be a range of sewered housing types and residential lot sizes consistent with the plan objective of compact growth.

- Mixed-use and multi-use developments should be allowed and encouraged.

- Unsewered residential lots in the Urban Service Area or the Urban Reserve should be no more dense than 4 housing unit per 40 acres (except by conditional use permit); the minimum lot size should be 3 acres or sufficient size to meet septic system and well requirements.

The *Vision 20/20 Community Physical Image Element* provides further direction on this subject.

7. **Public Incentives:** Invest in parks, parkways, utilities, schools and similar amenities in a way that attracts private development to the northern, eastern and western side of the Springfield area more strongly than past trends.

8. **Sewer Staging:** Prepare plans for staging the extension of Springfield sewer service within the Urban Service Area**:**

   - Coordinate among Public Utilities, Springfield Planning and Development, Springfield Public Works, Greene County Planning and Zoning Department, the Metropolitan Planning Organization and the Outlying Cities receiving sewer service under contract (Strafford, Willard and Battlefield).

   - Prepare and update a map showing locations served by interceptor mains (e.g., Farmer's Branch) and local lines.

   - Indicate areas for the potential extension of interceptors and local lines by five-year period based upon forecasts of growth, land consumption and environmental protection.

   - Coordinate with road system improvements.

9. **Public Investments:** Target major City and County investments, services and initiatives within the Urban Service Area, including Center City and the Activity Centers, and within or near the highway ring of I-44, US 65 and James River Freeway.

   - Invest in needed transportation facilities, utilities or public-private financial partnerships that enable intensified concentrations of jobs and housing at the designated Activity Centers.

   - Give additional preference to assisting projects that make use of underutilized infrastructure and services.

- Target redevelopment assistance funds to locations and projects that provide living-wage jobs in or near concentrations of lower-income households and which demonstrate linkage to those groups.

- Target transportation improvements in areas consistent with planned and expected development intensities.

10. Annexation: The City of Springfield will continue to require annexation or irrevocable consent to annexation prior to providing sanitary sewer service outside its boundaries.

12. Public Open Space: Acquire land for parks, greenways, trails and other public open space purposes, according to a plan and in conjunction with the extension of public investments, through the joint efforts of Springfield and Greene County.

13. Amendments and Exception: Allow amendments and exceptions to the Urban Service Area Policy when it is of benefit to the community to go beyond the present service area.

Amendments would change the boundary of the Urban Service Area or modify the policy for providing services within or outside the Urban Service Area.

Exceptions would allow for the provision of sanitary sewer service or an urban-level of transportation**:**

- To land contiguous to the Urban Service Area when that land is transitioning from rural to urban levels of development, or

To land that is *not* contiguous when provision of services would alleviate environmental or health concerns.

Exceptions may or may not modify the Urban Service Area boundary depending on whether the area is contiguous to the current Urban Service Area.

Refer to Appendix B for a more detailed description of the criteria and process for granting Amendments or Exceptions to the Urban Service Area Policy.

Refer to Appendix C for a description of the considerations involved in possible Amendments or Exceptions to the Urban Service Area. This description is organized according to subareas and addresses concerns, problems, criteria for urban development and the potential for major urban service extensions.

The Urban Reserve

Introduction

It is essential for the long-term growth of Springfield that the Urban Service Area be expanded in a cost-effective and logical manner. Therefore, a broad ring of land is needed around the present Urban Service Area in which residential development densities are very low and in which future arterial road alignments are unobstructed. Although the residential development density prescribed for the Urban Reserve is the same as that of

the Rural Area, the Urban Reserve remains a vital element of the Growth Management Plan for its role in the planning of the road and sanitary sewer systems.

The limits of the Urban Reserve and, implicitly, the edges of the Urban Area, were established by five assumptions or decisions**:**

1. That the increase in the number of households will continue in a steady trend following the rate of growth forecast for the 1990-2020 time period.

2. That the rate of land consumption per household will be consistent with long-term historical trends.

3. That planned major investments in peripheral roads will be within the Urban Service Area and have developable land on both sides. (One exception**:** the extension of the James River Freeway to I-44.)

4. That major environmental features such as Wilson's Creek National Battlefield and Fellows Lake would be outside the Urban Reserve (and in the Rural Area).

5. That all of the Urban Service Area would be within the Urban Reserve.

Benefits: The benefits of the Urban Reserve are**:**

- Sewered urban development will not be made extraordinarily expensive by the existence of numerous 3- or 5-acre lots. (Parcels that small are very difficult to economically subdivide and redevelop; even if several can be consolidated, the location of existing houses often causes inefficiencies.)

- Land subdividers and developers will be able to locate and assemble suitably large tracts for sewered lots

- A moderate amount of rural residential development can occur in the Urban Reserve, satisfying, at least in part, the market demand for that type of housing.

Differences from the Rural Area: Although the allowable housing densities in the Urban Reserve and the Rural Area are the same, there are differences between the two areas**:**

- The Urban Reserve is considered to be temporarily rural and subject to eventual urban development

- Springfield, Greene County and other units of government should plan for the eventual development of urban facilities in the Urban Reserve such as roads, neighborhood parks, parkways, greenways and utilities. This planning may include studies, designs, reviewing and adjusting proposed land subdivisions, reserving rights-of-way, and acquiring land.

Objective 5: Springfield, Greene County and the other municipalities of the county should work together to create urban "holding zones" beyond the year 2020 Urban Service Area boundaries of each city but within the Urban Area of each city. This band of land should be known as the Urban Reserve.

Actions:

1. **Urban Reserve:** Regulate the part of the Urban Area beyond the Urban Service Area as temporarily rural. In that location, termed the Urban Reserve, observe these guidelines**:**

   - Until it becomes part of the Urban Service Area, public sewer and water service should not be extended to this area, and road improvements should be limited to the scale needed to handle pass-through and rural-level traffic.

   - Unsewered residential lots should be no more dense than **4 housing units per 40 acres.** Land uses and development patterns should be consistent with a rural lifestyle. The minimum lot size should be 3 acres or sufficient size to meet County septic system and well requirements. This is the same density approach recommended for the Rural Area.

     Any lot-of-record at the time the zoning ordinance is amended to implement this action should be allowed at least one housing unit. Please refer to the subsequent section entitled "Rural Area" and Appendix A for further descriptions of this approach.

   - A sketch plan should be required of any large-lot development that shows how the tract may be resubdivided in the future to City-sized lots. ("Large-lot" is defined here as one acre or greater.)

     The "base" housing density allowable in the Urban Reserve is 4 housing units per 40 gross acres. However, by **conditional use permit,** a density of up to **8 units per 40 acres** may be allowed if**:** (a) houses and driveways are located to accommodate possible future subdivision of the lot at such time as urban services become available, (b) lots, driveways and any new streets are located according to urban zoning requirements and plans for roads, utilities and drainage and (c) a plat is submitted to the County showing potential future resubdivision of the entire tract.

   - Unsewered housing units may be clustered according to the guidelines shown under the plan section entitled "Rural Area," in which case a density bonus should be granted.

2. **Staging of Development:** Prepare plans for the orderly, compact, contiguous and timely staging of streets, sewer, water and other facilities to service urban-scale housing and other private investment in the Urban Reserve.

3. **No Commitment to Provide Public Services:** Make no commitment to providing sanitary sewer service or an urban level of road service for land outside

the Urban Service Area. Springfield and Greene County will not participate in providing such facilities.

4. **Public Open Space:** Within the Urban Reserve, acquire land for parks, greenways, trails and other public open space purposes, in accordance with the *Parks, Open Space and Greenways Plan* element, and through the joint efforts of Springfield and Greene County.

5. **Boundary Amendments and Exceptions:** Allow amendments and exceptions to the Urban Reserve Policy when it is of benefit to the community to go beyond the present service area.

   Refer to Action 13 under Urban Growth Management -- Urban Service Area for the policy on extensions of sanitary sewer service or urban-level transportation improvements into the Urban Reserve.

The Rural Area

Introduction

The Rural Area is that part of Greene County outside the Urban Area (which consists of the Urban Service Area and the Urban Reserve). Therefore, most of the county is in the Rural Area.

Cattle raising and farming are the primary land uses in the Rural Area but there are also a variety of land activities that serve the Springfield urban area, such as non-farm housing, agriculture-related businesses, mining, businesses, industry, campgrounds, and public open space or parks. These land uses should be provided with adequate public facilities but should not be used to attract urban-scale growth to the Rural Area.

Within the Rural Area are several small towns that serve the nearby agricultural areas, provide local jobs and housing, and sometimes function as “bedroom” communities for Springfield. (Refer to the following section.)

Also geographically within the Rural Area but subject to a somewhat different philosophy are five Surrounding Cities -- Willard, Strafford and Republic along with Nixa and Ozark in Christian County. (Refer to the following section.)

Greene County regulates land use and development density outside the incorporated communities through its zoning ordinance and indirectly through its on-site sewer system and water well regulations. Springfield and other cities guide development within their borders. *Vision 20/20* is an integrated plan for the entire county, and plan implementation should be achieved through cooperation among all affected entities.

Objective 6: Greene County, in cooperation with the several cities, should seek to preserve and accentuate the difference between the highly serviced urban areas (the Springfield Urban Service Area, the Surrounding Small Cities and the Outlying Towns) and the less serviced Rural Area. The cities should be compact, efficient and walkable while the rural areas should be open and agricultural. The intent is to reduce sprawl, preserve desirable

rural qualities and promote appropriate rural economic activity by keeping average housing densities low and limiting inappropriate land uses.

Actions:

1. **Allowable Land Uses:** Devote land outside the cities mainly but not exclusively to agriculture and agricultural-support activities. Non-farm housing should be very limited, and arranged whenever possible in tight clusters on non-productive soils and on sites that minimize visual intrusion and environmental impact. Permitted development should protect rural character, meet all environmental quality standards, not require urban-level services, be of a scale to serve local market demands and preserve open space.

2. **Regulations:** Review rural land use regulations to focus on housing density rather than minimum lot size so as to allow lot-size averaging, which can be used to protect sensitive areas and minimize the loss of productive farmland.

   Greene County should amend its zoning ordinance to implement the method of regulating unsewered housing development in the Rural Area on the basis of density (as described below) rather than minimum lot size (its current method).

3. **Allowable Density:** Set the maximum overall gross housing density in the Rural Area at **4 houses per 40 acres,** and the minimum lot size at 3 acres or a sufficient size to meet County septic system and water well requirements. Use Rural Clustering as an optional method of providing rural non-farm housing while preserving open space and rural character.

   A density threshold of 4 housing units per 40 acres overall gross density is consistent with maintaining rural scenic character and is appropriate for the existing road system. This standard should not be construed as a recommendation of 10-acre lot sizes. In fact, lower densities and smaller lot sizes that mix farm and non-farm land uses would be even more in keeping with rural lifestyle and character. Once a community exceeds the 4 per 40 threshold, it begins to shift from a rural place to a more suburban place.

   State law indicates that land parcels 10 acres or greater in size may be created without review and approval by any unit of government. This should not be a hindrance to using the 4 per 40 density approach to land regulation in the Rural Area and the Urban Reserve.

   Appendix A provides further direction on calculating housing density. These procedures should also be used in the Urban Reserve.

4. **Rural Clustering:** Promote the clustering of rural housing so as to consolidate allowable development rights onto environmentally-appropriate locations while preserving fields and woods. This approach to regulating rural development is sometimes called “conservation subdivision” because the emphasis is on the identification and preservation of natural features and rural character.

   Shared septic systems and drain fields that extend into commonly owned open space could be permitted.

In the Rural Area, the open land in the clusters should be permanently protected as agriculture or open space.

Refer to the section of this Element entitled Open Space Housing Development for a further description of this technique.

5. **Public Improvements:** Consider whether it is appropriate to adjust the level of construction and maintenance of County roads and bridges in the Rural Area to be compatible with the low level of development recommended in *Vision 20/20* and the anticipated low traffic volumes.

6. **Development of Existing Lots:** Any buildable lot of record at the time the County Zoning Ordinance is amended to implement this plan shall be allowed to have at least one house if requirements for sewage treatment, water wells and access are met.

   As specified in Missouri law, any use of lands or structures, lawfully existing as of the day the County zoning ordinance is amended to implement this plan, may be continued at the same size and level of operation unless destroyed or discontinued. If a major structural improvement is made, the structure removed and rebuilt or the use of the property changes, requirements for substandard lots and sewage systems must be met.

Surrounding Cities

Introduction

Republic, Willard, Strafford and Battlefield -- the urban areas around the City of Springfield -- and Nixa and Ozark in Christian County are referred to as Surrounding Cities. These communities have a wide range of urban services, and thus, can accommodate a relatively large number of urban land uses. These six cities differ from the Outlying Towns (e.g., Fair Grove) in that they have more capacity to accommodate growth.

Republic, Willard, Strafford and Battlefield each have public sanitary sewer and other services such as water, schools and police protection that enable them to serve an urban population. Republic has its own sanitary sewer and water systems and may thus expand independent of Springfield. Willard, Strafford and Battlefield receive sanitary sewer service through an agreement with Springfield. Several of these cities also have employment bases large enough to provide work for some of the local population. They are more than just residential communities in both location and economy.

Objective 7: Guide a portion of the Greene County residential, commercial and industrial growth to the cities of Willard, Strafford, Republic and Battlefield.

Actions:

1. **Public Support:** Greene County should guide the growth of the Surrounding Cities so they prosper and grow to serve as alternatives to living and working in Springfield. Various types of housing, businesses and industries, and municipal

services and facilities should be provided to attract such investment. The housing stock should provide choices for people of all ages and levels of income and stages of the life cycle. New development should be served by public sanitary sewer service so as to protect water quality. Greene and Christian Counties and the Springfield Area Metropolitan Planning Organization should plan for public improvements that support municipal initiatives to direct and capture growth in the Surrounding Cities.

2. **Staged and Contiguous Growth:** Extend services in a staged and contiguous manner if more land is needed for growth, consistent with each individual community's ability to provide such services. Annexation through an orderly annexation agreement is the preferred course if the newly serviced land is in an unincorporated area.

3. **Republic:** Republic should update its land use and facilities plan to accommodate staged, contiguous and compact growth, including a variety of housing and employment opportunities.

4. **Battlefield:** The City of Battlefield receives its sanitary sewer service from the City of Springfield. As with Strafford and Willard, the service agreement limits the annual outflow from Battlefield to Springfield. Much new housing has been built in and around Battlefield during the 1990-1997 period.

   Housing adjacent to Wilson's Creek National Battlefield should have a minimum lot size of 5 acres and be designed to minimize visual impact on that historic site. The *Vision 20/20 Historic Preservation Plan* has as an objective to "preserve the historic integrity of Wilson's Creek National Battlefield by employing land use measures that minimize the effects of surrounding development." The City of Battlefield, Greene County and Wilson's Creek National Battlefield should work cooperatively toward this objective.

5. **Willard and Strafford:** These cities are encouraged to provide infrastructure and capture growth so as to relieve pressure from rural areas, consistent with the growth management plan for Greene County. The Transportation Planning Organization and the Transportation Study Area should be expanded to include these communities.

   It is in the interest of the region to ensure that urban growth is accommodated efficiently and compactly in the vicinity of Springfield, Willard and Strafford. Thus, Greene County zoning should alter recent trends and keep unsewered housing at a very low density (e.g., 4 houses per 40 acres) until public sewer and water can be provided. At the same time, Battlefield and Springfield should negotiate a mutually satisfactory boundary, annexation plan and long-term sewer service agreement.

6. **Nixa and Ozark:** These cities in Christian County are encouraged to maintain adequate sewer and water systems to capture a share of regional growth. Their growth plans should strive to maintain a band of very low density development between themselves and Springfield and attempt to use land in a way that maintains intervening open space. Nixa, Ozark, and northern Christian County should be included in an expanded Transportation Study Area.

7. **Brookline:** Conduct discussions among Brookline, Springfield and Republic regarding how to accommodate urban growth in the City of Brookline. That area has strong long-term potential for commercial, industrial and residential development, being located on the growing southwestern side of Springfield and near both the James River Freeway and I-44. Only a small portion of the municipality is presently developed, as there is no public sewer or water service.

   The Growth Management Plan locates Brookline in the Urban Reserve, so it would be preferable to keep the density of residential development very low (4 houses per 40 acres) until sewer and water services are available. A plan should be prepared that will result in a commercial and civic core, neighborhoods, parks, greenways and industrial areas. Also, development should be staged in the direction from which sewer service is extended (east or southwest). Annexation to Springfield should be considered if sewer service is extended from the east.

Outlying Towns

Introduction

Ash Grove, Fair Grove, Walnut Grove and Rogersville -- referred to in *Vision 20/20* as Outlying Towns -- have historically served as retail, service and transportation centers for their surrounding areas. However, changes in farming and roadways have reduced their links to the agricultural economy. Their levels of population and numbers of housing units remained nearly flat from 1970 to 1990.

Several services are important in adequately serving additional Outlying Town development, particularly sewage disposal. Each town has its own central sanitary sewer service, and some of these systems may need to be expanded to accommodate more growth in an environmentally responsible manner.

Objective 8: Accommodate a portion of county growth in the Outlying Towns such as Ash Grove, Fair Grove, Walnut Grove and Rogersville.

Actions:

1. **Role:** Greene County should encourage Outlying Towns to accommodate limited amounts of new housing and businesses to the extent that surface and groundwater can be protected, traffic accommodated without major improvements to the County road system, and municipal facilities and services locally financed and administered. Outlying Towns should seek a balance of jobs and housing to promote local self-sufficiency.

2. **Annexation:** If additional land is needed to accommodate growth, Outlying Towns should extend services in a staged, contiguous manner through joint planning and annexation agreements between the community and Greene County.

3. **Small Town Character:** The Outlying Towns should preserve and expand their traditional village pattern of interconnected streets, small lots, “Main Street” shops and historic character. This can be achieved through local zoning ordinances that encourage new development that is in character and scale with the existing settlement pattern.

4. **Boundaries for Urban Service Areas and Long-Term Urban Areas:** The boundary for the Urban Service Area and the Long-Term Urban Area for each Outlying Town should be refined and adopted by each municipality in coordination with Greene County.

Activity Centers

Introduction

Activity Centers, whether existing or potential, will be locations of significant business and high-density housing development. Examples would be Greater Downtown, the Battlefield-Glenstone retail area, Highway 65-Evans Road, and I-44 and Highway 65. The locations of these and other Activity Centers are shown on Figure 18-5.

It is intended that additional development be concentrated in and around the Activity Centers so as to optimize transportation investments, citizen convenience, investor confidence, a compact growth pattern, and a sense of urban excitement. Land in each Activity Center would be intensively and efficiently used.

Of course, the Activity Centers would not be the only locations in Springfield and Greene County for businesses or multiple-family housing. However, it should become the policy of the City and County to promote relatively dense and diverse concentrations of these and other land uses so as to create positive synergy among the Activity Centers.

This combination of access, density and diversity would allow the Activity Centers to grow into community focal points. In this manner, the Activity Centers could help hold Springfield together as a municipality and an integrated metropolitan area, although one with multiple centers.

Objective 9 -- Activity Centers: Springfield and Greene County should target several locations as *Activity Centers.* In those locations, plans, regulations and public investments should promote additional or new employment, intensified retail business, higher density housing and convenient transit service. Design should emphasize mixed- and multiple-use development, attractive public spaces and high-quality site planning and architecture. Activity Centers should be linked to the bicycle and linear open space networks.

Actions:

1. **Components:** The elements of an Activity Center will vary from one to another, but each should include, at a minimum, retail and office buildings and, ideally, multi-family housing, restaurants, and hotels, entertainment, and community facilities such as churches, public agencies, libraries, parks, etc.

   Activity Centers would play slightly different roles in the Springfield urban fabric and would share many characteristics but differ in their emphases. For example, Center City might focus on offices, entertainment, culture and education while Battlefield-Glenstone-James River Freeway (B-G-JRF) might concentrate on retail and service businesses, hospitality and multiple-family housing. Likewise, Center

City would have a stronger orientation toward transit, pedestrian movement and public space than the B-G-JRF area.

However, all Activity Centers would be important locations of development, investment, jobs and services. They would be diverse, would be served by all major and alternative transportation modes, and would be focal points of public investment.

2. **Design Features:** Activity Centers should epitomize many of the desirable design principles of a town or city, but accomplish them on a smaller scale. Therefore, these design principles should be observed when preparing or reviewing plans for an Activity Center**:**

- Each should have a diversity of uses and users
- Each should have attractive and useable public space toward which the private development is oriented.
- Each should accommodate the pedestrian, the bicyclist and the transit user
- Each should have a link, either direct or indirect, to the regional open space network
- Each should have a definable center and edge.

3. **Redevelopment and Evolution:** The City of Springfield and Greene County should provide guidance for the redevelopment and reinvestment necessary to create Activity Centers consistent with the intentions of *Vision 20/20.*

Because several of the Activity Centers have already experienced a wave of development, further growth in some cases would have to be accomplished through redevelopment, infill and intensified land use. This is the normal course of evolution for prime urban locations such as these, and provides opportunities to achieve the design goals described in this plan. Because redevelopment that increases densities and creates more complex and interrelated patterns tends to be more difficult, municipal leadership, incentives and regulations should play an important role.

It is recognized that the Activity Centers are at different stages of their desired evolution toward achieving the design goals described above. The City and County recognize that not every Activity Center will achieve these ideals in the near future, if ever, and that it may take several rounds of investment and reinvestment to reach a satisfactory state. Therefore, private and public investments should be made with an eye toward long-term, incremental improvements while keeping the design goals in mind.

Activity Centers have been classified as **Major**, **Community**, **Emerging** and **Potential Activity Centers**.

- **Major Activity Centers** are those that already have a "critical mass" of employment, business and housing that they serve the entire region, namely Center City and the B-G-JRF area.

- **Community Activity Centers** are those that have established business or residential bases but are of lesser size or importance than the two Major Centers.

- **Emerging Activity Centers** are, as the name implies, just beginning to show promise as commercial-residential-civic hubs.

- **Potential Activity Centers** are those that have not yet developed but, because of their location, have potential as a future activity center.

4. **Locations:** The City of Springfield and Greene County should work to achieve Activity Centers in the locations listed below and shown on Figure 18-5.

Activity Centers Listed and Described

Activity Centers have been classified as either Major, Community, Emerging or Potential, as indicated within parentheses below.

1. **Center City (Major)** - Currently the focus of varied and multiple activities, additional emphasis is needed to stabilize and revitalize the downtown. This is an important center for the community with respect to maintaining a "sense of place" and as a catalyst for conservation of older, stable neighborhoods. The 1997 *Center City Revitalization Framework* and the Center City Element of this comprehensive plan present recommendations for public and private improvement activities.

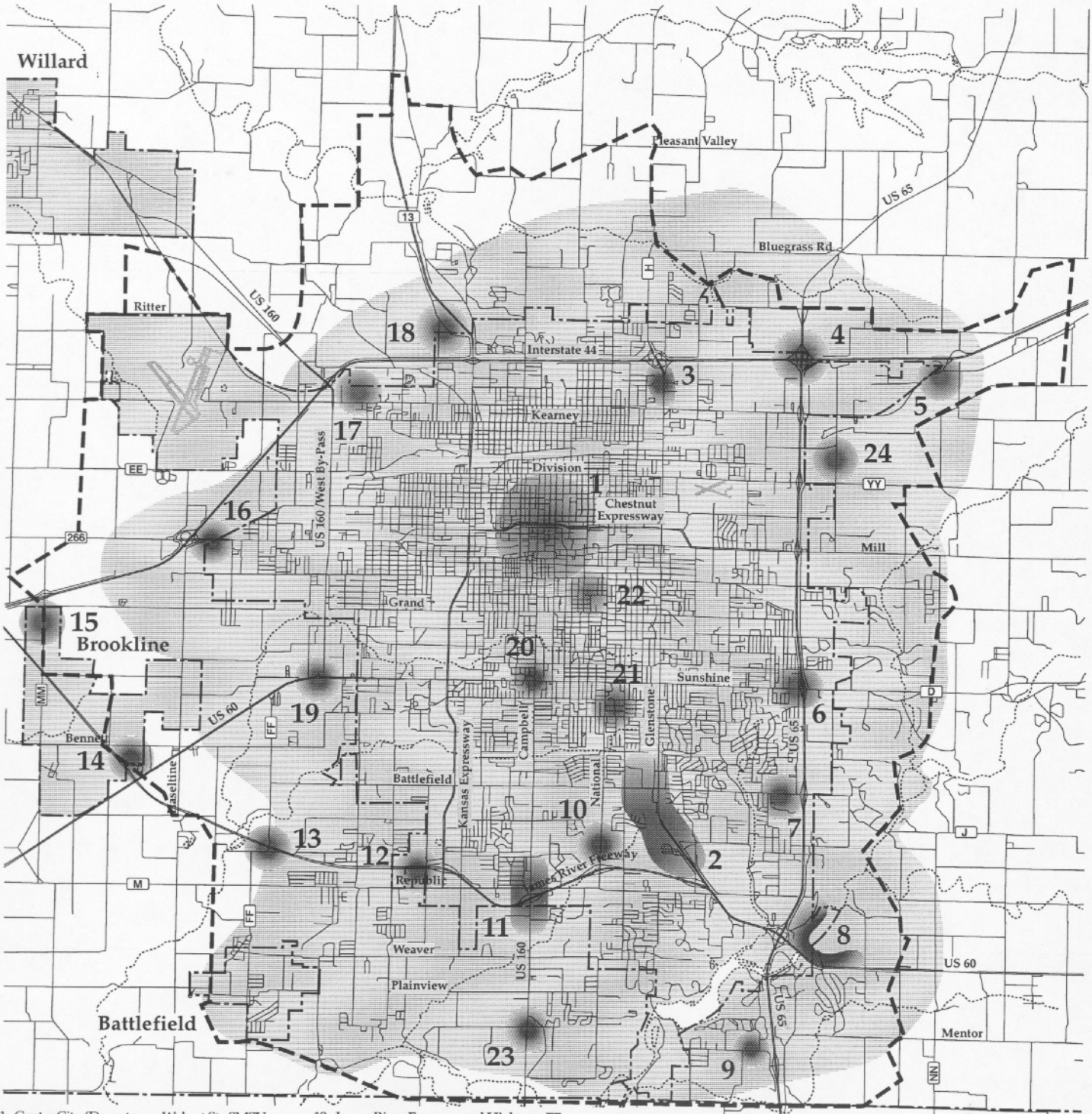
   Implementation of the Civic Park concept with the recreational ice complex, community open space and other planned facilities (e.g., exposition center, arena, baseball stadium) will increase the activity in Center City.

   The City should work cooperatively with Urban Districts Alliance and other private interests to bolster market interest here. Center City and especially the Civic Park area should be the location of major civic and institutional functions. Smaller concentrations of commercial, civic or institutional activity should be located so as to serve each neighborhood, not isolated in remote, single-use complexes.

2. **Battlefield - Glenstone - James River Freeway (Major)** - Battlefield Mall with the related commercial development along Battlefield, Primrose Marketplace, and James River Center, form the focal points of what is the most significant Activity Center today and probably should continue as such in the future.

3. **I-44 - Glenstone-Kearney (Community)** - Currently serves as a center for the northside and for hotels/motels and restaurants. Given the importance of I-44, this area will probably continue to intensify these land uses.

4. **I-44 - U.S. 65 (Emerging)** - Has potential to be a significant regional Activity Center. Existing business and manufacturing activity, including nearby Partnership Industrial Center, make this area currently a major employment center.



1. Center City (Downtown, Walnut St., SMSU, Government Plaza, Commercial Street, Drury and Evangel Colleges)
2. Battlefield-Glenstone-James River Freeway
3. I-44-Glenstone-Kearney
4. I-44/U.S. 65
5. I-44/Mulroy Road (Highway 744)
6. U.S. 65 and Sunshine Street
7. U.S. 65 and Battlefield Road
8. Highway 60 and Highway NN
9. U.S. 65 and Evans Road
10. James River Freeway and National Avenue
11. James River Freeway and Campbell Avenue
12. James River Freeway and Kansas Expressway
13. James River Freeway and Highway FF
14. James River Freeway and Highway 60 (Sunshine Street)
15. I-44 and Highway MM
16. I-44 and Chestnut Expressway
17. I-44 and Highway 160 (West Bypass)
18. I-44 and Kansas Expressway
19. West Bypass and Sunshine Street
20. Sunshine Street and Campbell Avenue
21. Sunshine Street and National Street
22. Southwest Missouri State University and Vicinity
23. South Campbell Avenue
24. U.S. 65 and Division Street

Figure 18-5
Activity Centers

Legend:

- Activity Center
- Future Growth Area
- City Boundary
- Urban Service Area Boundary, Year 2020

This could be a significant new Activity Center within the next 10 to 15 years. Additional residential development in the northern, northeastern, and eastern edges of Springfield would increase the development potential of this area. Future development of this area should be consistent with the Major Activity Center concept. Located within the Fulbright Springs watershed, development should be consistent with the recommendations set forth in the *Fulbright Spring Study*. Also, improvements to the I-44 / U.S. 65 interchange and the redesign of the Valley Water Mill interchange must be addressed for this center to fully develop.

5. **I-44 and Mulroy Road (Hwy. 744) (Emerging)** - Probably not as significant an Activity Center as I-44 and U.S. 65, but this interchange is immediately adjacent to Partnership Industrial Center. Development in this area could be related to the I-44 - Highway 65 Activity Center, the Partnership Industrial Center, or could contain characteristics related to both. Also located within the Fulbright Springs watershed; development should be consistent with the recommendations set forth in the *Fulbright Spring Study*.

6. **U.S. 65 and Sunshine Street (Community)** - This already serves as an Activity Center for the east side of Springfield. Improvement of the interchange should have a positive impact on accessibility of this center.

7. **U.S. 65 and Battlefield Road (Community)** - This is developing as a mixed use area, especially on the west side of U.S. 65. Additional retail businesses, office buildings and housing of various densities would be suitable for the east side of U.S. 65 if appropriate design techniques are incorporated to address relationships to existing development.

8. **U.S. 65 and Highway 60 (Potential)** - Currently undeveloped, land on the northeast quadrant of this interchange has potential as an Activity Center if access questions can be addressed. An additional interchange on U.S. 65 between the James River Freeway and Battlefield Road is required for this to develop as a mixed-use center. With such an access, non-residential land uses would be inappropriate adjacent to U.S. 65.

   Traffic from James River Freeway, U.S. 65, and Highway 60 passes this site. The problem is lack of access, especially to the property north of the James River. The Missouri Department of Transportation (MoDOT) has indicated that an additional interchange on Highway 65 may be possible if certain conditions can be met. This would provide direct access to land on the east and west sides of U.S. 65. If access is provided, mixed use development would be appropriate. MoDOT has significant concerns about a new interchange and its proximity to the 65-60 interchange. A major redesign of this interchange is needed and may preclude and additional interchange to the north.

   Care must be given to protecting the James River floodplain, the scenic views and the relatively pristine land adjacent to the river as well as the existing residential neighborhoods to the north and west of the possible interchange. Traffic circulation to the north and west must be addressed to avoid a negative impact on the existing street system and neighborhoods. Property fronting on Highway 60, east of the interchange, would be appropriate for some commercial and mixed use development if suitable access can be provided.

9. **U.S. 65 and Evans Road (Potential)** - This is the southernmost U.S. 65 interchange in Greene County. The area to the east is developing rapidly with housing. This interchange is also the eastern terminus of a proposed east-west arterial street that would link with Campbell Avenue and Kansas Expressway to the west.

   Property in the southeast quadrant has been zoned for mixed uses and there are large undeveloped tracts in the northwest and southwest quadrants. This could become an important Activity Center for southern Greene County, if the higher intensity land uses that are characteristic of a Major Activity Center are encouraged. Commercial and higher density residential development is appropriate. Serious consideration should be given to realigning Evans Road on the west side of 65. Development intensity/density should be diminished or "stepped down" to the west as it approaches existing residential neighborhoods.

10. **James River Freeway and National Avenue (Community)** - Medical, office, retail, and residential developments make this a true mixed use Activity Center that runs north and south along National Avenue. This center is closely linked to Activity Center #2 via Primrose and Independence Streets.

11. **James River Freeway and Campbell Avenue (Emerging)** - Most of the land north of James River Freeway is developing as retail businesses or offices. Some vacant land remains south of the freeway. The Library Center has recently located in the southwest quadrant.

12. **James River Freeway and Kansas Expressway (Community)** - This land is developing as mixed use in the northwest, southeast and southwest quadrants. The mixed land uses and pedestrian orientation of Chesterfield Village and the recent development of Chesterfield Park and Family Center make this an exemplary mixed-use activity center.

13. **James River Freeway and Highway FF (Potential) -** This interchange is well-located to serve as an Activity Center for nearby residential neighborhoods and for residential development southwest of Springfield, but the topography may make it difficult to develop at much density or intensity.

14. **James River Freeway and Highway 60 (Sunshine St.) (Emerging)** - While much of the adjacent land is developed, further extension of JRF to I-44 may spur redevelopment.

15. **I-44 and Highway MM (Potential) -** This interchange has significant future potential as a Major Activity Center when the State improves MM from James River Freeway to I-44 and if the airport terminal facility is relocated to the southwest side of the airport.

16. **I-44 and Chestnut Expressway (Emerging)** - Development in this area may increase as sanitary sewer becomes available. This could serve as an Activity Area for residents in West Springfield.

17. **I-44 and Highway 160 (West Bypass) (Potential)** - The proximity to the airport and available vacant land make this interchange a possible future Activity Center.

18. **I-44 and Kansas Expressway (Community)** - This interchange already functions as an activity center for north Springfield with the retail activities located south of I-44 and north of I-44. The proximity of Dickerson Park Zoo and the Fairgrounds provide unique regional attractions and activities.

19. **West Bypass and Sunshine Street (Potential)** - Planned improvements and extension of West Bypass to James River Freeway will create an opportunity for a significant Activity Center at Sunshine Street.

20. **Sunshine Street and Campbell Avenue (Major)** - Bass Pro Shop is already a major force in this vicinity and there are plans to construct the National Wildlife Museum. Other growth can be expected to follow.

21. **Sunshine Street and National Avenue (Community)** - St. John's Hospital and related clinics in the area form a foundation for long-term growth and change in the immediate vicinity.

22. **Southwest Missouri State University and Vicinity (Major)** - The SMSU campus is a significant location of employment, housing, business and entertainment with a daily "population" of 20,000 or more. It is becoming more closely intertwined with Greater Downtown.

23. **South Campbell Avenue (Emerging)** - There is significant potential at this location since the Transportation Plan identifies a possible east-west arterial road in southern Greene County that could intersect with Highway 160. Such an intersection would create the potential for an Activity Center. Development proposals in this area should be monitored closely. An activity center at this location would be enhanced if the planned arterial were developed in conjunction with the Parkway Concept as set forth in the *Parks, Open Space and Greenways Plan* element.

24. **U.S. 65 and Division Street (Emerging)**- There is a potential for mixed-use activity at the northeast portion of this intersection. Light manufacturing, retail and office development has been proposed and could emerge as a significant community activity center. Design of these land uses should take into account the proximity of the existing residential development south of Division Street.

Annexation Plan

Introduction

Consistent with the principles set forth in the Urban Service Area Concept, urban development should occur in areas served by utilities, appropriate streets and other public facilities. These and other facilities and services should be provided by the unit of government best equipped and staffed to do so, which is the municipality. The City of Springfield and other cities in Greene County should identify locations where public facilities can be extended to serve growth, prepare land use and other plans consistent with the intention to provide for and capture new investment, and work to achieve either consent or city-initiated annexations of land. Municipal annexations would produce several regional benefits**:**

1. Regional economic efficiency would be enhanced and spending reduced through less duplication of services and facilities.

2. Growth management would be improved and orderly development promoted.

3. Redevelopment and reinvestment would be promoted.

4. Governmental efficiency would be enhanced through rational and simplified city boundaries.

5. Potential for interjurisdictional conflict would be reduced.

6. Opportunities would be provided for fringe-area residents to have a voice in city decisions that affect them.

7. Social unity could be enhanced, and distinctions between residents of different jurisdictions could be reduced.

Objective 10: Springfield should work to maintain a well-planned and fiscally-sound community by including all appropriate land areas within its boundaries.

Actions:

1. Rationale for Annexation: The City of Springfield should consider annexing land within its Urban Service Area boundary because**:**

   - The Urban Service Area Policy calls for these properties to become urbanized.

   - Municipal services are required for sustainable urbanization and Springfield is most capable of providing those services.

   - A fiscally-sound central city is critical to the economic well-being and quality of life of the entire metropolitan community, and annexing new commercial real estate is key to achieving long-term fiscal health.

2. Consent Annexation Policy: When sanitary sewer is requested for properties outside of Springfield, the City should require immediate annexation for those properties that are adjacent to its city limits if city services can easily be provided. Properties that are not adjacent to the city limits will require agreements for future annexation.

If the property for which sanitary sewer service is requested is vacant and requires sanitary sewer for development, plans should first be submitted to the City to determine if sewer service should be provided and if annexation is required. Properties abutting the City should be annexed prior to development to avoid confusion in the permitting process unless the City determines that annexation is not in the interest of the City.

Springfield should provide sanitary sewer service to properties located outside its city limits provided the properties are located in the Urban Service Area and one of the following criteria are met**:**

1. In areas where annexation is not critical, the City may provide sanitary sewer service if**:**

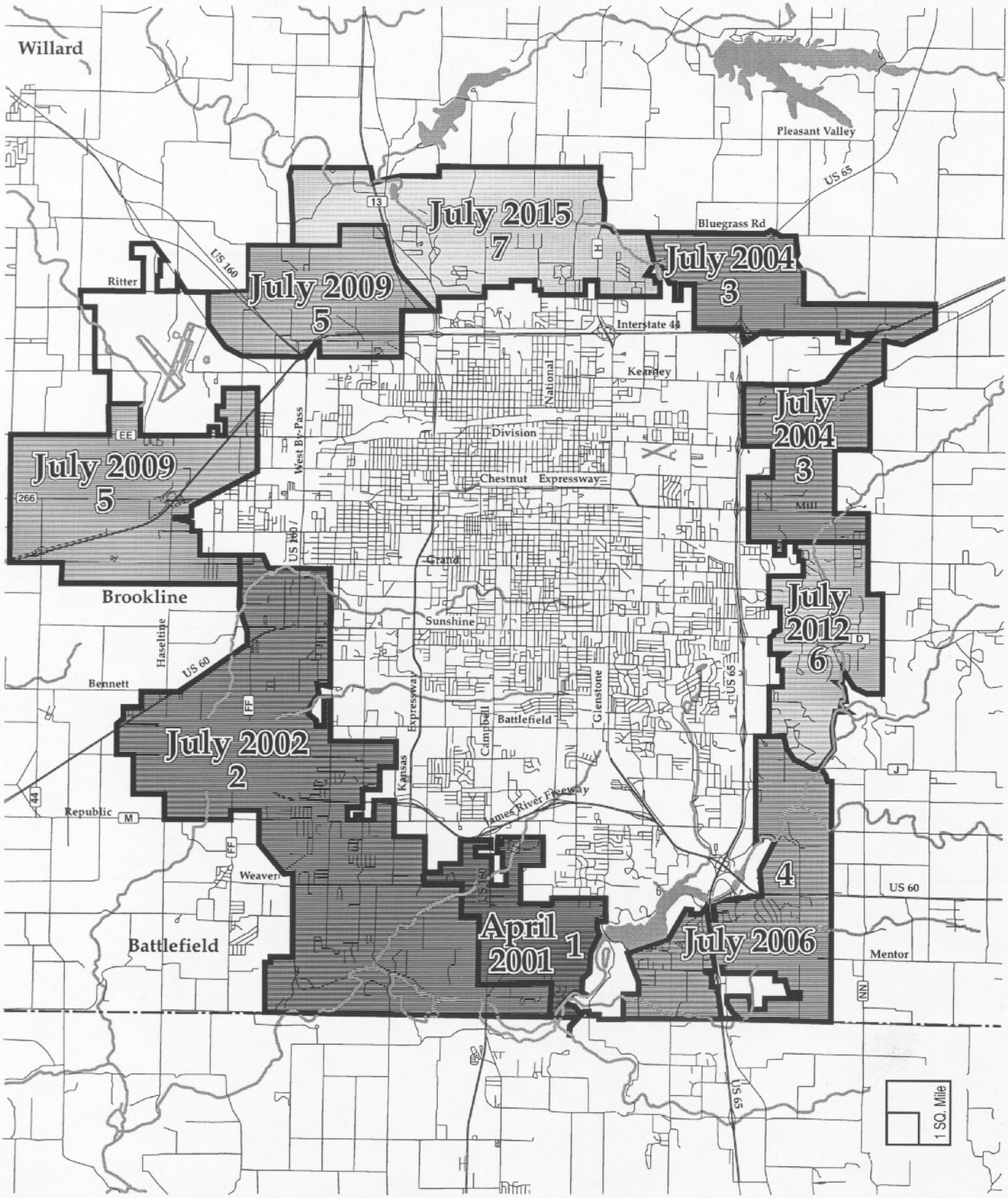
    1. The use of the property is residential;
    2. The property cannot reasonably be annexed within the time in which sewer service is needed; and
    3. The City has determined that it is in its interest to provide sewers prior to annexation of the property after reviewing a plan prepared by the property owner or City staff showing how and when the property can be annexed.

2. In the case of small commercial or industrial properties, sewer service may be provided if it is determined that it is in the City's interest and there is no reasonable way to annex the property to the City. Generally, the City should not provide sewer service to commercial or industrial properties outside the City limits.

Property owners that are provided with sewer service but not required to be annexed are required to sign annexation agreements that bind current and future owners to annexation at the City's option.

Currently, the City requires that consent annexation agreements be recorded in the land records at the County so that subsequent purchasers of property are informed about the existence of such agreements.

If annexation is deemed to be important to the City, Springfield should require annexation to proceed prior to providing sewers.



Sequence of Urban Development Staging

Note: Dates represent approximate times to complete studies upon which the Springfield City Council may base decisions regarding City Initiated Annexations.

Figure 18-6

Timing for City-Initiated Annexation Studies

3. Strategic Annexation Policy: The City of Springfield has identified several locations that are in its interest to annex from a strategic perspective. Essentially, this perspective reflects the need to protect the City's economic base and financial integrity; i.e., assuring that future retail development occurs within the City. Important locations for Springfield to annex include**:**

   - Key highway interchanges
   - The Southwest Power Plant and the Southwest Wastewater Treatment Plant site and property
   - The Campbell Avenue (Highway 160) corridor extending to the Greene-Christian County border
   - The Republic Street corridor between Golden Avenue and Kansas Expressway.

4. **City Initiated Annexation Policy:** It is the policy of the City of Springfield to vigorously protect its environment and economic base. To the extent that there are areas outside the City that could have substantial economic or environmental impact on the City and are urbanized or are urbanizing consistent with development within the City, Springfield should pursue city initiated annexation as directed by City Council upon review of a Plan of Intent to annex these areas.

   Figure 18-6, Timing for City-Initiated Annexation Studies, identifies those areas adjacent to the City of Springfield for which Plans of Intent should be prepared and submitted to City Council for review. The map also provides a schedule that identifies when the report should be submitted to City Council. Upon review by City Council and additional community discussion, a decision can be made whether to pursue city initiated annexations in these areas.

   The Plans of Intent must address all required elements as set forth by state law and should identify needed community facilities for annexation of these areas. The primary community facility will relate to fire protection and law enforcement service. Future fire station locations are addressed in the *Community Facilities Plan Element*.

5. **Public Agency Impact Mitigation:** The City of Springfield should work with the County Commissioners, fire districts, water districts and other service providers impacted by annexation of property in their service areas to develop policies and procedures to address the impacts of annexation on the service providers. The City has entered into an agreement with all surrounding Fire Districts to reduce fiscal impacts of annexation on the districts.

6. **Relationship with Greene County:** It is expected that all residential subdivisions within the Urban Area with average lot sizes of less than one acre should be served with City sewer and water lines and consequently should be annexed to the City before receiving such service.

   Primary responsibility for reviewing preliminary plats and site plans should rest with the City of Springfield as soon as an application for City services and annexation has been received.

The Planning and Regulatory Process

The best public policies are only as effective as the organizational structure established to exercise them. *Vision 20/20* has numerous strong ideas, some of which are being introduced locally for the first time, so it is essential that local and regional planning processes and relationships be comparably robust.

The City of Springfield has assumed a leading role in the preparation of *Vision 20/20* because it is the largest and most urban community in the region. However, plan implementation will be advanced if Greene County and the other cities can play an active part. Moreover, Christian County, Nixa and Ozark should be brought into the formal dialogue soon, and certain subjects may involve Webster County as well.

Daily and specific actions to carry out *Vision 20/20* will occur during reviews of applications for subdivision, rezonings and other permits. City and County staff, along with appointed and elected officials, must understand and embrace the details of the plan as it is built piece-by-piece.

Objective 11: Build regional processes and relationships that help accomplish *Vision 20/20.*

Actions:

1. **Development Review Process:** Make land use and development decisions in a reasonable, responsible, predictable manner based on approved plans and ordinances. Land should be designed in large tracts and whole neighborhoods rather than piecemeal.

   The process of reviewing applications for land development or rezoning in Springfield and Greene County should continue to be efficient and "customer-friendly." At the same time, staff should strive to work with applicants to ensure that the planning and design aims of *Vision 20/20* are implemented. This may involve interpreting objectives or guidelines that are not clear-cut and specific, and persuading developers to amend their designs to satisfy community aims not expressly stated in the Zoning Ordinance but contained in *Vision 20/20* or neighborhood plans. Staff from the City's Department of Planning and Development and the County's Planning and Zoning Department should lead this effort.

2. **Coordination and Cooperation:** Promote intergovernmental cooperation and coordination in land use and other planning. In particular, improve the communication among Springfield, Greene County and the Cities of Strafford, Willard, Brookline, Battlefield and Republic on matters of land planning, infrastructure planning and development reviews.

   Springfield should seek to improve communications with Willard, Republic, Strafford, Battlefield, Brookline, Rogersville, Nixa, and Ozark. Greene County should review its process for regular communications with all of the cities within its borders. Springfield and Greene County should establish a process to promote discussion of regional issues with Christian and Webster Counties as well as the City of Branson.

3. **Efficiency and Cost-Effectiveness:** Use planning to leverage private investments, improve private and public design, heighten development efficiency and cost-effectiveness, and coordinate efforts.

4. **Creating a New Vision:** Involve the City and County in community development to a somewhat higher level than they are at present and work to achieve a significant change in community attitudes, vision and values.

   Creating a more compact and livable pattern of urban development in and around Springfield will require a somewhat more activist and proactive role for the City and the County. Surveys and statements indicate that the population is generally ready to embrace more public involvement in development if tangible benefits can be shown. It should be the task of local leaders to express community goals and communicate steps taken in that direction.

5. **Role of the City of Springfield:** Springfield must continue to lead in planning the future of the urbanized area since it has the largest staff and has the greatest infrastructure investment of any of the involved units of government.

6. **Role of Greene County:** Greene County should focus on achieving the transition of land around Springfield and other communities to compact, urban, municipal use while continuing to provide facilities and services to rural, unincorporated areas.

   Cooperation is especially critical with respect to coordination of transportation facilities. Greene County should upgrade roads to urban standards (curb and gutter rather than drainage ditches) when development occurs within the Urban Service Area.

7. **Role of the Springfield Area Transportation Study Organization:** The Springfield Area Transportation Study Organization (the areawide Metropolitan Planning Organization or MPO) officially coordinates highway improvement planning among the State of Missouri, the Cities of Springfield, Strafford, Willard, Brookline, Battlefield and Republic, and Greene County.

   Members of the MPO should ensure that the organization's major roadway improvements support the philosophy expressed in *Vision 20/20*, particularly the objectives of compact fringe growth and support for private reinvestment in established areas.

   Membership in the Springfield Area Transportation Study Organization should be expanded to include Christian County.

   Members should consider expanding the role and changing the nature of the MPO. This organization may become a subregional planning organization for the communities in southern Greene and northern Christian County and serve as a forum for communications, planning and joint actions. Discussion of such an expanded role should include the Southwest Missouri Council of Governments (SMCOG) and other existing organizations.

8. Coordination with Christian County: The "Springfield Metropolitan Area" is growing to encompass land within both southern Greene and northern Christian Counties. There is a substantial amount of traffic between the counties as people live, work and play across jurisdictional boundaries to an ever-increasing extent. As the years pass, the boundaries are expected to become less distinct than they are today despite the efforts of this plan to balance the growth to the east, north and west.

Vision 20/20 expresses a philosophy that quality of life for the larger community would be enhanced by maintaining a band of agriculture or very low density semi-rural housing between Springfield and Nixa or Ozark. Thus, Christian County and its cities should be urged to join with Springfield and Greene County on (a) cooperative road system, watershed and other cross-jurisdictional planning and (b) guide development into compact patterns around existing cities while keeping rural development agricultural and very low density, consistent with Greene County's proposed pattern of 4 houses per 40 acres.

Therefore, Christian County and the Cities of Nixa and Ozark should be invited to participate actively in the next update of this comprehensive plan.

Local and Regional Investments

Introduction

Public spending is a powerful way to influence the pattern of land use and the actions of the private land development industry. Millions of dollars are spent annually on roads, utilities, parks and other facilities or services, all of which influence the value of land in one way or another. Thus, an excellent way to implement this plan would be to ensure that such spending is consistent with plan objectives. Ideally, *Vision 20/20* would be the central guiding document for all long-term capital improvements programming in Springfield and Greene County.

An important aspect of public capital spending is the relationship between transportation and land development. Highways and other major roads, while essential to our contemporary way of life and economy, may also distort land markets by facilitating development remote from presently urbanized locations or in particular corridors. By the same token, improvements in roads and transit can promote reinvestment in older neighborhoods or intensify development in selected locations. Because this plan emphasizes compact and contiguous growth, it will be essential to review all road and transit improvement plans in light of *Vision 20/20* for balanced fringe growth, agricultural preservation, and neighborhood preservation.

Objective 12 -- Local and Regional Investments: Invest in public facilities so as to maximize their impact, minimize duplication and advance the other Objectives of *Vision 20/20*.

Actions:

1. Priorities: High priority should be given to maintenance of and reinvestment in streets, parks, utilities and other City and County facilities so as to maximize the use of existing public or private investments. Secondarily, public expenditures should

be used to steer private investment to locations judged best for the interest of the region.

2. **The Role of the Public Sector:** The City, County and the State should provide infrastructure in an orderly and timely manner so as to promote, as the highest priority, intensive investment and redevelopment in Activity Centers and neighborhoods within or near the presently urbanized area. New investment on the urban fringe should receive secondary emphasis. Infrastructure investments should be used aggressively as an incentive to the private sector. Public buildings should be located and designed to foster community or neighborhood identity and raise the quality of nearby private development.

3. **Land Use and Transportation Relationships:** Land development should be planned and regulated to make relatively intensive use of sites served by highways and other roads.

   Building new roads or expanding existing ones should lag behind fringe land development in order to reduce the pace of outward urban growth and encourage the more intensive use of serviced areas. However, adequate future road rights-of-way should be planned and reserved in advance of development for the sake of economy and good design.

   The Parkway Concept (as set forth in the Parks, Open Space and Greenways Plan) is intended to provide access alternatives to the residents in the area. Traffic speed on those Parkways should be limited to 35 or 40 miles per hour. They should not be designed as a continuous ring route or bypass road. The land use plan should be designed and administered to focus mixed-use development (retail, office, varying residential densities) at key parkway intersections.

   High priority should be given to road and transit improvements serving Activity Centers. Road construction and maintenance in the Rural Area should be held to different standards than in the Urban Service Area.

   Road, transit, bicycle and pedestrian access to the Activity Centers should be improved. In those locations, the City and County should plan for higher density housing, concentrated employment, compact retail and service businesses, and mixed- and multi-use land development. This more intensive land use would take advantage of the transportation investments and reduce total trips. Likewise, major trip-generators such as apartment or office buildings should be located near major roads and transit lines.

   Finally, greenways, parks and parkways are other publicly-financed amenities that should be used to attract moderate- to high-density development.

4. **Fiscal Management:** Springfield and Greene County should consider all potential funding sources to arrive at creative means of effectively implementing plan recommendations and should adopt a method for determining the value of projects or services provided. The following guidelines should be used.

   A. Adopt and use **financial management policies** for the City and County that include long-range planning and performance management.

B. **Inform the community** and obtain community input when financing capital projects.

C. Include **cost-benefit analysis** as part of each project. Benefits need to be well-defined and the analysis should look at the project from both a "good times" and "bad times" perspective.

D. Use **benchmarking** as a tool to measure financial performance and financial condition compared to other communities or counties of comparable size. Benchmarking should take into account different tax policies in different states and should be sure to address both long- and short-term debt.

E. Establish a **direct relationship** between revenue sources or taxes and the service or value received.

F. **Link financing** of projects to adopted plans.

G. **Consolidate services** when possible to achieve economies of scale and efficiency.

H. Identify and use **several revenue sources** so as to avoid becoming too dependent on any one source.

I. Choose revenue sources that are consistent with the **ethical standards and integrity** of the community.

5. Capital Improvements Programming: Amend the current methods of annually updating the capital improvements programs of Springfield and Greene County by incorporating the intentions of *Vision 20/20*. A process for ranking all proposed projects should use the plan's Objectives as a starting point then consider mandates, prior commitments, project interrelationships and cost effectiveness.

A perfect convergence between the plan and the capital improvements programs is unlikely to emerge, but a higher degree of consistency should result than if *Vision 20/20* were not formally considered at all. In addition, this disciplined process will force a greater recognition of the importance of *Vision 20/20* in the minds of all staff and local public officials and also lead to regular, thoughtful plan amendments.

Land Use Plan

Summary of Land Use Plan Objectives

The objectives for the Land Use Plan are summarized below. Objectives for the Growth Management Plan were presented in the preceding major section.

Objective 13 -- Land Use Plan Map: The City of Springfield and Greene County should regulate land development consistently with the Springfield Area Land Use Plan map, Figure 18-7.

Objective 14 -- Reinvestment: The City of Springfield and Greene County should promote continuous public and private reinvestment to ensure that established neighborhoods remain attractive places to live.

Objective 15 -- Neighborhoods: The City and the County should work to create neighborhoods that are comprehensively planned, include all needed public facilities, provide for bicyclist and pedestrian movement, accommodate a variety of housing types and exhibit a sense of identity.

Objective 16 -- Environment: The Springfield-Greene County community should use environmental resources, particularly stream corridors, as means of improving urban quality of life, safeguarding health, promoting private investment and creating long-term economic strength.

Objective 17 -- Housing Choice: Springfield and Greene County should work to ensure a wide range of choice in living arrangements throughout the urbanized area through the promotion and protection of lands of suitable characteristics and environmental quality.

Objective 18 -- Commercial Development: Springfield and Greene County should work to provide sufficient and appropriate locations for well-designed, commercial development to ensure a wide range of goods and services for the urbanized areas of Greene County.

Objectives 19 -- Office Development: Springfield and Greene County should provide sufficient and convenient locations for well-designed, compatible office and institutional development consistent with other requirements of *Vision 20/20*.

Objective 20 -- Industrial Development: Springfield and Greene County should work to provide the community with industrial areas that facilitate economic development and job retention, that are well integrated into the fabric of the community, and that are responsive to environmental concerns.

Objective 21 -- Rural House Clustering: Greene County should allow houses to be clustered on smaller than average lots in exchange for careful siting and open space preservation.

Objective 22 -- Road Corridors: Plan for or re-create patterns of land use and road function that are mutually supportive, particularly along arterial roadways.

Planned Pattern of Land Use

Introduction

A proposed pattern of future land use for Springfield and its immediate area is illustrated by Figure 18-7 and is based on the preceding growth management policies and actions. This pattern is generalized and not exact. It should be used by City and County staff and officials to adjust zoning maps and to make recommendations and decisions about rezoning requests. The land use plan map should not be taken too literally but should be used in conjunction with the guidelines from previously-prepared neighborhood plans, the growth management and community physical character policies of this plan and good judgement.

Objective 13: The City of Springfield and Greene County should regulate land development consistent with the Springfield Area Land Use Plan, Figure 18-7.

Actions:

1. **Zoning Ordinance and Map:** The Springfield and Greene County zoning ordinances should be amended to include the additional districts of Business Park and Rural, which are described below. The Springfield and Greene County zoning maps should be amended for consistency with this plan, as needed.

2. **Subdivision, Site Plan and Rezoning Reviews:** Reviews of land development or rezoning applications should be conducted in light of this land use plan and other *Vision 20/20* Elements such as the *Community Physical Image Plan*, the *Neighborhoods Plan* and the *Parks, Open Space and Greenways System Plan*.

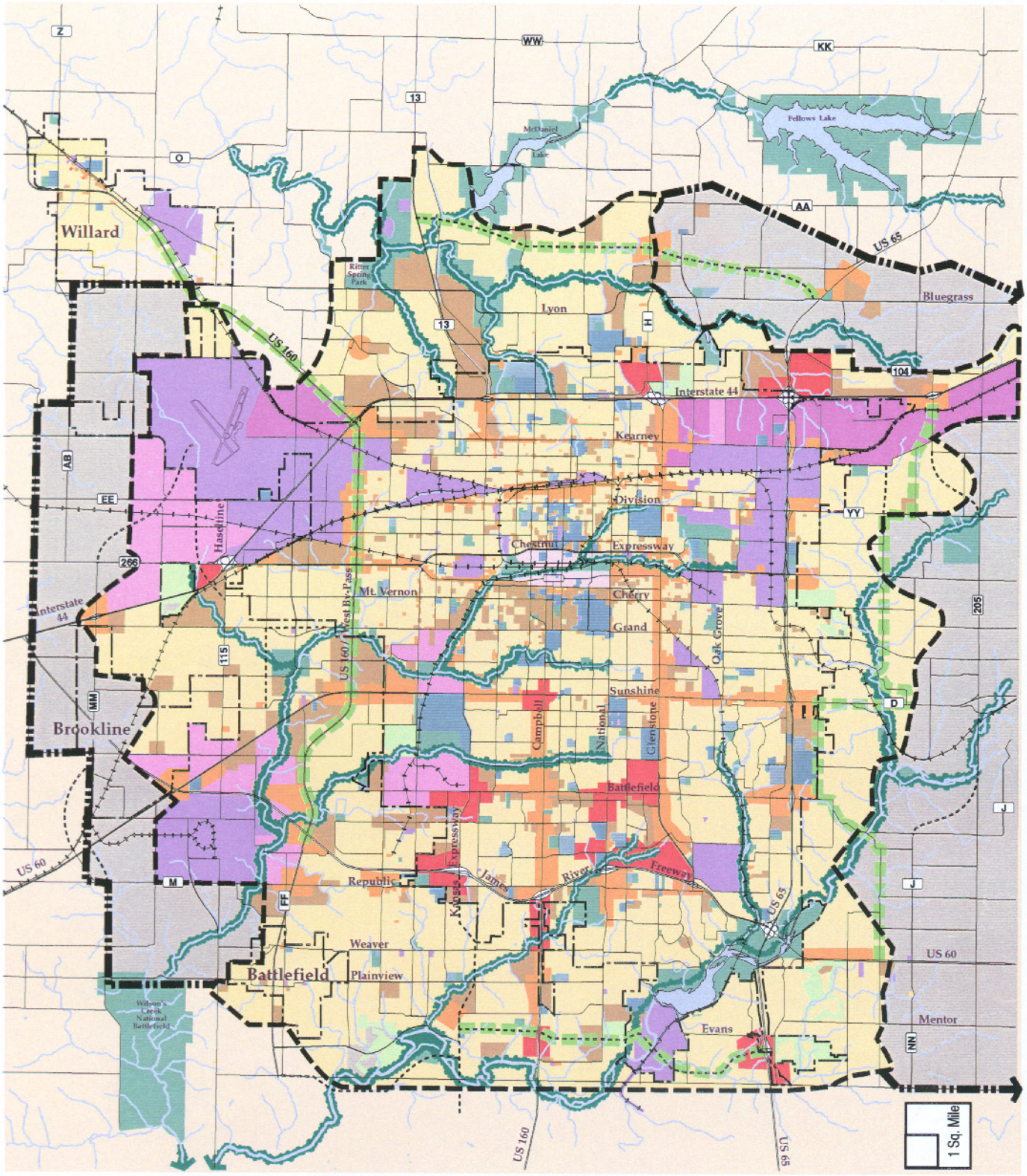
Land Use Plan Categories

The land use plan categories are**:**

Low-Density Housing: This category includes single-family housing at up to 6 housing units per net acre, home occupations specified in the zoning ordinance and, as an optional element, small neighborhood-oriented retail or service business carefully located and screened at certain intersections.

Lot sizes in the upper South Dry Sac watershed (east of County Road H and north of I-44) should be regulated to a larger minimum lot size than allowed in the R-SF District, which allows lots as small as 6,000 square feet. A more appropriate lot size for that area might be 12,000 to 20,000 square feet. Additionally, surface water Best Management Practices should be followed. (Please refer to the Environmental Resources section of this Element for a discussion of Best Management Practices and the water quality concerns in this location.)

Appropriate Springfield zoning districts for this land use plan category would be Single-Family Residential, and, for the Upper South Dry Sac watershed, either a new large-lot district or a new zoning overlay district. Appropriate Greene County zoning districts would be Suburban Residence District or the One- and Two- Family Residence District.



Low-Density Housing
Medium or High Density Housing
Medium Intensity Retail, Office or Housing
High Intensity Retail, Office or Housing
Greater Downtown
Business Park
Light Industrial, Office and Office-Warehouse
General Industry, Transportation and Utilities
Park
School
Golf
Community-Public
Urban Reserve Area
Rural Area
Greenway
Parkway
City Boundary
Urban Service Area Boundary, Year 2020
Urban Reserve Boundary, Year 2040
Proposed New Major Roads

January 29, 2001

Figure 18-7

Springfield Area Land Use Plan, Year 2020

VISION 20/20 Creating the Future

Springfield-Greene County

Comprehensive Plan

In the Low-, Medium- or High-Density Housing land use plan categories, two or more types of housing may be allowed in a single development through the use of the Planned Development zoning district. Rezoning to the PD classification (Plot Assignment District, PAD in Greene County) gives the City or County special powers to deny or regulate development in exchange for allowing the landowner to submit a more flexible or creative plan than would be permitted under the zoning ordinance.

Medium- or High-Density Housing: Townhouses and all various forms of apartment buildings are included in this category, which has been located where there is good traffic access, between Low-Density Housing and non-residential land uses, and at high-amenity locations such as the greenways or parkways. The density is expected to be greater than 6 housing units per net acre.

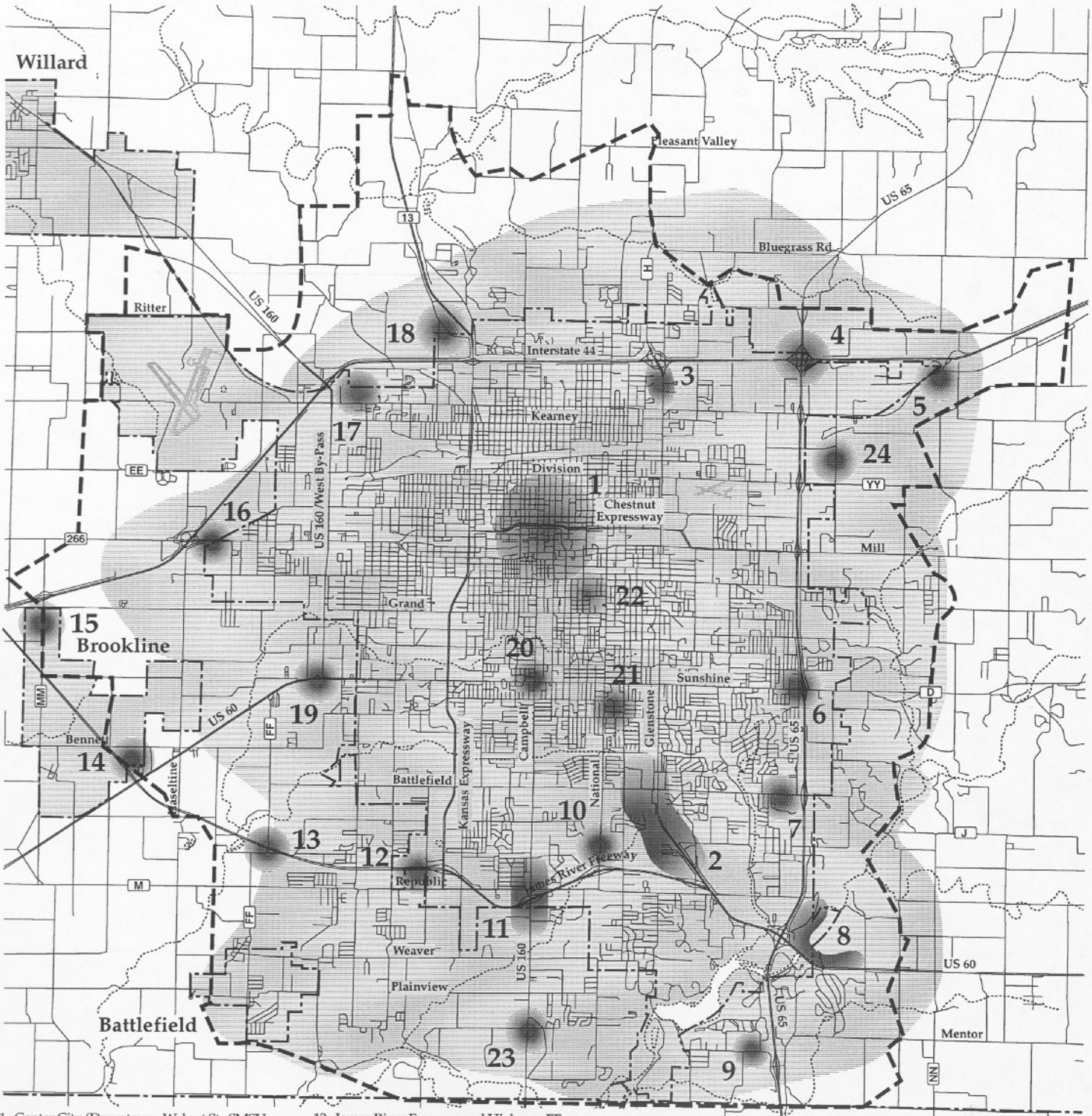
Appropriate Springfield zoning districts would be the Low-, Medium- and High-Density Multi-Family Residential Districts and the Manufactured Home Community District. Appropriate Greene County zoning districts would be R-3 and R-4 Multi-Family Residence Districts.

Medium-Intensity Retail, Office or Housing: This mixed category indicates that a variety of commercial and/or mid-or high-density housing may be appropriate at major intersections along certain road corridors. It is not possible in this plan to indicate exactly which land parcels should be designated for each of these land uses; that determination should be made as the zoning maps are refined and as development applications come forward. Since these land uses may have differing impacts on adjacent low-density housing and on traffic generation, the site planning guidelines of this plan and the regulations of the zoning ordinance must be observed during the site planning process. Consistent with the plan policy of generally increasing the compactness of urban development, housing may be combined in the same building or closely integrated on the same site with retail or office space.

Appropriate Springfield zoning districts would be Limited Business, General Retail, Highway Commercial, Office, Government and Institutional Use, University Combining, and the Low-, Medium- and High-Density Multi-Family Residential Districts. Appropriate Greene County zoning districts would be the General Commercial District, General Office District, or the Multi-Family Residence District.

High-Intensity Retail, Office or Housing: This category is sited on the map at locations identified as Activity Centers (see Figure 18-8) and is similar to the preceding except that the density and intensity of land development is expected to be greater. Policies call for mixed- and multiple-land uses on any given site in the Activity Centers, with major consideration given to creating attractive pedestrian spaces and streetscapes, shared or public open spaces, and links to the greenways.

Appropriate Springfield zoning districts would be General Retail or Highway Commercial, Office, Government and Institutional Use, University Combining, and the Medium- and High-Density Multi-Family Residential Districts. Several of the Greene County commercial or residential districts might be appropriate if they are revised to permit more intensive site development.



1. Center City (Downtown, Walnut St., SMSU, Government Plaza, Commercial Street, Drury and Evangel Colleges)
2. Battlefield-Glenstone-James River Freeway
3. I-44-Glenstone-Kearney
4. I-44/U.S. 65
5. I-44/Mulroy Road (Highway 744)
6. U.S. 65 and Sunshine Street
7. U.S. 65 and Battlefield Road
8. Highway 60 and Highway NN
9. U.S. 65 and Evans Road
10. James River Freeway and National Avenue
11. James River Freeway and Campbell Avenue
12. James River Freeway and Kansas Expressway
13. James River Freeway and Highway FF
14. James River Freeway and Highway 60 (Sunshine Street)
15. I-44 and Highway MM
16. I-44 and Chestnut Expressway
17. I-44 and Highway 160 (West Bypass)
18. I-44 and Kansas Expressway
19. West Bypass and Sunshine Street
20. Sunshine Street and Campbell Avenue
21. Sunshine Street and National Street
22. Southwest Missouri State University and Vicinity
23. South Campbell Avenue
24. U.S. 65 and Division Street

Figure 18-8
Activity Centers

Legend:

- Activity Center
- Future Growth Area
- City Boundary
- Urban Service Area Boundary, Year 2020

Greater Downtown: This land use category, which pertains to the downtown and University Plaza portions of Center City, allows and promotes high-intensity office, retail, housing, academic and public land uses, preferably in mixed-use buildings with a strong pedestrian orientation.

The most appropriate zoning district would be the Center City District.

Office and Industry: Pure office buildings, office-showroom, and light industrial buildings in landscaped "campus" settings with hidden truck docks and no outdoor storage are allowed in this category. It is intended to be a more attractive alternative to conventional light industrial areas. The emphasis is on the office instead of the industrial component. Locations include the proposed access corridor to the future airport terminal and several sites that have potential for coordinated master planning.

A new zoning district, titled Business Park, should be created for this category that combines elements from the Office and the Restricted Industrial District with additional requirements for landscaping and coordinated master planning. Both the City and the County should adopt this new zoning district.

Light Industry, Office and Office-Warehouse: Manufacturing, assembly, office and warehousing activities are included in this category. Appropriate City zoning districts include Restricted Industry, Light Industry, and General Manufacturing. An appropriate County zoning district would be the Light Manufacturing or Industry District.

General Industry: This category includes industry that involves railroad service, heavy truck traffic, extensive outdoor storage, noise or odors, and the handling of raw materials. It also includes railroad yards, power plants and the airports.

The most appropriate zoning district would be Heavy Manufacturing. An appropriate Greene County zoning district would be the General Manufacturing or Industry District.

Rural: Rural areas include land cultivation, pasture land and related agricultural activities as primary and predominant activities. However, housing may also be allowed at a density no greater than 4 houses per 40 acres or, if clustered appropriately, at a somewhat higher density.

A new zoning district would be needed in both Springfield and Greene County.

Park: Along with existing parks, approximate locations are shown for neighborhood, community and natural resource parks, consistent with the *Parks, Open Space and Greenways Plan* of *Vision 20/20*. These locations should be modified during field studies prior to land acquisition. Many neighborhood parks are expected to be located adjacent to schools. Golf courses are also included in this category.

Greenway: Greenways are intended to be linear public open spaces often containing pedestrian and/or bicyclist paths. They are usually to be located along the major creeks or rivers and connect parks.

Community and Public Land Uses: This category includes schools, colleges, public buildings and cemeteries. The Government and Institutional use zoning district should be applied in this land use plan category.

Parkways: Also illustrated on Figure 18-7 are approximate alignments of several Parkways. These are intended to be heavily landscaped linear parks that would usually include roadways with bicyclist and pedestrian facilities, widely spaced road intersections and few driveways. These Parkways serve multiple purposes including moving auto traffic, pleasure driving, recreational and purposeful bicycle trips, walking, neighborhood development and neighborhood revitalization. The number of roadway lanes within a Parkway is indicated in the Transportation Plan and could vary from segment to segment. Parkways may be classified and designed as either Collector or Arterial roads. (Refer to Tables 20-1 and 20-2 in the Transportation Plan for a description of these and others classifications of roads.)

Segments of the parkway system are proposed for the north, south, east and west sides of Springfield, but the segments are not intended to be linked into a ring around the community. Furthermore, the Parkway system is not intended to be a bypass around Springfield but rather several linear parks. The ultimate design of the parkway system should discourage its use for "by-passing" the city. Two existing major roadways, Chestnut and Kansas Expressways, should have their edge treatments upgraded to bring these benefits to central portions of the community. The bicycle lanes and/or paths that will included with each Parkway should be linked even if the roads for motor vehicles are not directly connected.

Activity Centers

The Activity Centers concept is reflected on the Land Use Plan map by the concentrations of these land use categories**:** High-Intensity Retail, Office or Housing, Medium-Density Housing, or High-Density Housing.

Established Neighborhoods

Introduction

The majority of urban development that will exist in the Springfield metropolitan area by the year 2020 is already in place. These private and public improvements represent a tremendous investment and are essential to the quality of life and financial security of many thousands of people. In addition, the historic fabric of the community provides a sense of place and a physical environment that is nearly irreplaceable. Enhancing and preserving Springfield through the coming decades will involve building on its urban character and heritage.

Objective 14: The City of Springfield and Greene County should promote continuous public and private reinvestment to ensure that established neighborhoods remain attractive places to live.

Actions:

1. **Neighborhood Planning.** Springfield and Greene County should follow these policies and those of the *Vision 20/20* Neighborhoods Plan.

2. **Neighborhood Protection:** The City of Springfield and Greene County should protect the best aspects of established areas from negative effects such as excessive

auto traffic or incompatible, unbuffered land uses. Conversely, blighted, deteriorating or obsolete activities should be phased out and those sites improved according to an established plan. Guided by the planning and community physical image principles of *Vision 20/20,* private and public investments should aim to enhance or strengthen a sense of neighborhood or district in all established areas.

3. **Public-Private Coordination:** Coordinate public sector actions and investments to promote private maintenance and renewal of established residential, commercial and industrial areas. Job growth should be promoted in mature areas to help reduce economic disparities. Blight and abandonment should not be regarded as unavoidable central area characteristics. Instead, the continual process of change should help keep those locations vital and desirable.

4. **Redevelopment:** Redevelopment and infill are keys to strengthening older areas and should follow the policies established in the *Neighborhoods Plan,* the *Historic Preservation Plan* and *Community Physical Image Plan* of *Vision 20/20.* Historic or architecturally significant buildings and areas should be preserved because they express the city's heritage and add beauty and charm to their surroundings.

5. **Planning and Design:** The City should prepare specific plans for a neighborhood or district in which a need for additional guidance beyond *Vision 20/20* is identified. When preparing plans or implementing public improvements, the neighborhood guidelines in the *Vision 20/20 Community Physical Image and Character Plan* and the *Neighborhoods Plan* should be observed. Greene County should consider initiating neighborhood planning consistent with the above guidelines.

Maintaining Traditional Urban Character

One of the strengths and beauties of older neighborhoods is the close-knit, compact mixture of different forms of housing, shops, offices, services and employment areas. It is this urban character that, if properly maintained and fostered, will help keep Springfield economically vital and an attractive place to live and work. New building technologies should be used and more accommodation made for the auto than in the past, but certain elements of the pre-auto era should be respected. It is these urban patterns that will help make Springfield and its older neighborhoods distinct, livable and competitive with other locations that are designed primarily for the auto. These and other recommendations are also described in the *Center City Plan Element.*

Actions:

1. **Mixed-Use Areas:** Support the development of mixed-use areas.

   - Identify and designate locations as mixed-use that are close to higher density residential neighborhoods, a mix of mutually supportive commercial and entertainment activities, pedestrian-friendly gathering places, transit service, and flexible parking requirements. Several of the proposed Activity Centers, particularly Greater Downtown, can and should flourish as mixed-use areas. Create plans and strategies that promote success for mixed-use areas.

- Focus less on separating different land uses and more on the size, design or position of buildings and their relationship to the street, to users and to neighbors. Base plans and zoning on performance standards that measure how various types of buildings interact. Allow a wide variety of activities within these buildings in mixed-use areas.

- Develop site design standards that attract pedestrians by bringing storefronts and windows to the sidewalk and orienting building faces to the street.

- Accommodate the automobile but locate parking so that it does not interfere with pedestrian movement and enjoyment. Rear or side parking is definitely preferred. Encourage patrons to travel to mixed-use areas by alternative means. Encourage parking and landscaping strategies that protect adjacent areas and mitigate negative spillover effects. Encourage shared parking. Landscape all parking areas, particularly those near the street. Build low walls of masonry or hedges that extend the visual effect of the building line along the street edge.

- Require storefront windows facing the street to ensure both natural surveillance and an inviting pedestrian experience.

2. Housing in Mixed-Use Areas: Support the development of housing of appropriate form and density in Center City and designated mixed-use areas.

- Promote the development of well-designed moderate-density housing adjacent to one or more of the following amenities**:** shopping, recreational or cultural facilities, and employment centers.

- Advance the understanding and acceptance of urban density and traditional urban patterns among businesses and designers; promote traditional urban patterns as a means of improving business, enhancing neighborhoods and reducing traffic congestion.

3. Appropriate Housing Forms: Continue to provide zoning districts that allow and encourage infill or replacement housing that is compatible with neighboring structures in height, setback, lot width, front door orientation, and general architecture, particularly in older neighborhoods.

4. Neighborhood Preservation: Maintain and strengthen the character of the various residential areas of the City and the County.

- Continue to encourage the rehabilitation of older and historic housing rather than demolishing such housing.

- Expand the scope and thoroughness of site plan review to include multi-family developments and to use the design considerations contained in the *Community Physical Image and Character Plan* in this review.

- Ensure that infill development standards reflect the setbacks, orientation, rhythm, height and scale of surrounding one- and two-family dwellings.

- Limit the amount and type of non-residential land uses permitted in low-density residential areas to religious institutions, specific public facilities such as schools, libraries, parks and other non-residential land uses that can be integrated with low-density housing through proper locating, site planning and facility design.

- Create traditional setbacks, orientation, rhythm, height and scale of housing in areas where no clear architectural pattern exists.

5. **Utilizing Historic Resources:** Continue to work with private groups to educate the public about the value of historic preservation as a tool for economic development and neighborhood stabilization. The City and County should follow the policies established in the *Vision 20/20 Historic Preservation Plan*.

Commercial Areas

"Neighborhood scale" shopping has a wide appeal but requires specific market criteria in order to remain viable. As retailing and transportation have evolved, small shopping areas oriented to the pedestrian have given way to much larger complexes with ample front-door parking and major roadway access. Springfield has followed this national trend. "Big-box" retailing requires very large sites and big store footprints, two features that do not fit well in older neighborhoods.

Actions:

1. **Traditional Commercial Design Standards:** Support urban design standards that emphasize a traditional urban character in those commercial areas that were designed with a pedestrian orientation.

   - Identify commercial districts in the city that reflect traditional urban form and develop appropriate standards and preservation objectives for these areas. The *Center City Plan Element* is a major step in this direction. Plans and zoning regulations for the Walnut Street and Commercial Street Historic Districts also apply.

   - Enhance unique characteristics of the city's designated traditional commercial districts by encouraging appropriate building forms and designs, historic preservation objectives, appropriate site plans, and by maintaining high quality public spaces and infrastructure.

   - Enhance pedestrian or transit-oriented commercial districts with street furniture, tree planting and improved transit amenities.

   - Orient new buildings to the street to foster safe and successful commercial districts, particularly in Center City.

   - Limit the construction and visual impact of billboards in neighborhood commercial districts.

- Expand the scope and thoroughness of site plan review to include most types of commercial development and to use the design considerations contained in the *Community Physical Image and Character Plan* in this review.

2. **Acceptable Locations:** Limit auto-oriented commercial districts to major arterial streets where the surrounding development pattern will not support high levels of pedestrian use or to streets where auto-oriented land uses can be compatibly concentrated.

3. **Pedestrian Features in Auto-Oriented Commercial Areas:** Accommodate transit service and provide convenient, safe pedestrian access in auto-oriented commercial districts.

Industrial Development

Action:

1. **Commercial-Industrial Development Quality:** Springfield and Greene County should work with private and other public sector partners to ensure that new development is attractive, functional and adds value to the physical environment. The following guidelines are offered in this regard**:**

   - Facilitate the location of new economic activity (office, research and development, and light industry) that takes advantage of environmental amenities and co-exists with neighbors in mixed-use environments. In new industrial developments, promote high quality design and buildings that are oriented toward the street and compatible with surrounding neighborhoods.

   - Provide setbacks, build-to lines and landscaping standards in commercial and industrial districts that are appropriate to the impacts on neighboring land uses.

   - Encourage site design that maximizes the potential for transit patronage in commercial, research and development, and light industrial developments.

Compatible Institutional Growth

As Springfield has grown, so have its major institutions such as colleges, hospitals and government offices. This institutional growth benefitted the community by providing jobs, tax base, visitor attractions, entertainment and cultural activities, and prestige. Continued institutional growth can be positive for the community, but it is also important that these institutions be compatible with their surroundings. Springfield has a good history of crafting plans and regulations that balance these sometimes competing interests, and the City should continue to pay attention to the needs of all stakeholders in this process.

Action:

1. Compatible Institutional Growth: Continue to work closely with institutional partners to ensure that the scale and form of expansion will occur in a manner compatible with surrounding areas.

- Colleges, medical complexes, governmental building areas and other large property interests should concentrate their greatest density and height in the interior of their "campuses."

- Work with institutions to create building forms on the edges of institutional properties that are most reflective of neighboring properties.

- Encourage institutions to make the amenities and green spaces of institutional properties visually and physically accessible to the public where practicable.

- Continue to work to build consistent and clear communications between institutions and affected neighborhoods.

- Encourage institutions to provide adequate buffers and green space to separate institutional land uses from residential land uses.

Growing Neighborhoods

Objective 15: The City of Springfield and Greene County should create neighborhoods that are comprehensively planned, include all needed public facilities, provide for bicyclist and pedestrian movement, accommodate a variety of housing types, minimize land use incompatibilities and exhibit a sense of identity.

Actions:

Neighborhood Planning

1. **Neighborhoods:** Undeveloped land should be planned and designed on the basis of creating identifiable neighborhoods.

   A "neighborhood" may be defined by major geographic boundaries such as arterial roads, major streams, railroads or major non-residential areas and may contain 3,000 to 6,000 residents.

   Each neighborhood should be structured by public open space, should contain a mixture of housing types (single-family detached and multi-family attached) and should be contained within a convenient walking radius of some retail stores.

   - Help neighborhoods to attract or retain necessary services and facilities (e.g., libraries, parks, grocery stores, pharmacies, etc.) through careful planning and use of zoning to allow mixed land uses.

   - Identify appropriate urban design elements which bring people together and build pride of place (for example, public space for meeting and talking, sidewalks in residential areas with good connections to shopping and recreational areas, ample green/open space in newly developed areas).

   - Provide variety within the larger community by encouraging developments with special features and a sense of uniqueness.

Relationship to Previously Established Neighborhoods

1. **Linkage:** New neighborhoods should be linked visually and functionally to the established portions of Springfield and Greene County via street connections, bicycle facilities and, where possible, the greenway system.

2. **Self-Sufficient:** To the extent feasible, new neighborhoods should be functionally self-sufficient in terms of neighborhood commercial services and proximity to park or greenway facilities.

Site Planning and Design

1. **Techniques:** Use a variety of development and redevelopment strategies such as the neighborhood unit concept, planned mixed-use developments, rural clustered housing or other innovative design concepts to build strong neighborhoods and a sense of community.

2. **Incentives:** Encourage innovative development and redevelopment through the use of incentives and appropriate regulations, to achieve desired residential and nonresidential development patterns that are also environmentally responsible. Provide incentives for developments which protect natural areas or environmentally sensitive areas through land trusts, open space zoning or other techniques such as density bonuses for open space development.

3. **Efficiency:** Encourage sites to share functional site design elements (such as shared access, shared parking, coordinated landscaping, linked open space, detention and retention areas, etc.) when such elements support a more efficient and attractive development pattern.

4. **Environmental Protection:** Require protection of natural features such as trees, slopes, streams, and lakes in new developments.

5. **Open Space:** Preserve open space in new developments by using open space subdivisions, planned unit developments, transfer of development rights between land owners, conservation easements, etc.

6. **Mixed- and Multiple-Use Development:** Encourage developments with innovative site plans that combine various residential densities, and where appropriate, a mix of uses including neighborhood-serving nonresidential uses.

   - Establish guidelines for mixed-use development.
   - Encourage carefully designed mixed use projects that combine office, retail, and/or residential land uses within the same development.
   - Ensure appropriate buffering between developments to reduce the impact of conflicting uses.
   - Encourage creative subdivision design with strong controls for the preservation of open space.

Street, Sidewalk and Boulevard Design

The street system is a fundamental element of the neighborhood design. The street pattern controls traffic flow, determines the ease of pedestrian and bicyclist movement, defines views and vistas, orients the user, unites the community, and creates a physical framework into which houses and other buildings are placed.

1. **Connections:** Require all new residential subdivisions to provide public street access in each cardinal direction unless impractical because of natural, environmental or similar conditions. Ensure there is proper coordination between Springfield and Greene County when reviewing plats near the municipal boundary.

2. **Local Streets:** Local streets should be designed to create an interconnected system to the extent possible and should be built to a relatively narrow width so as to encourage slow traffic speeds that enhance the safety and enjoyment of other users. Refer also to the *Neighborhoods*, the *Transportation* and the *Community Physical Image Plans* for further detail about Local Street design.

3. **Collector Streets:** Collector streets should be planned for each future neighborhood at the "sketch plan" phase and should link across neighborhoods to arterial roads and other collector roads. City and County planners should work with each land developer to plan the general alignment of collector streets beyond the limits of smaller subdivisions to ensure neighborhood-wide continuity.

4 **Arterial Streets:** Reserve a sufficiently wide public right-of-way for any additional arterial road by adopting an "official map" of the planned road system. Right-of-way width beyond what may normally be required through dedication at the time of a land subdivision should be acquired by purchase. The necessary width of the future arterial road right-of-way should be determined based upon the standards included in the *Vision 20/20 Transportation Plan*.

5. **Traffic Calming:** Traffic calming techniques may be used to discourage cut-through traffic, especially commercial traffic, and/or to slow traffic speeds. A list and description of these techniques is presented in the *Transportation Plan.* The most practical of these is the narrow street width but others may be used when conditions warrant, based on the review and advice of a traffic engineer. It should always be kept in mind, however, that when traffic is constrained along one route it tends to flow to another nearby route, possibly creating unintended effects. These techniques are particularly useful in older neighborhoods that have higher densities and a greater mixture of housing types and land uses. The Traffic Engineering Division of the Springfield Public Works Department or the traffic engineer for the Greene County Highway Department should be involved in any street design modifications. Alterations should be undertaken on a comprehensive, neighborhood-wide basis.

6. **Street Trees:** Trees should be planted in the public right-of-way along every street, including commercially-oriented arterial roads and local residential streets. Landscaping along the streets should be a joint public and private effort and could take advantage of both the public right-of-way and the private setback space.

7. **Sidewalks:** Sidewalks, ideally set six feet behind the curb, should be required along both sides of every public street. The minimum width should be four to five feet so that two adults may walk comfortably side-by-side.

Park System

1. **Function:** Parks, open space and natural features are a fundamental element of neighborhood design. They should be used to protect key natural features such as creeks, create visual focal points near the middle of each neighborhood, provide both recreation and beauty, act as neighborhood gathering points, and can also lend their names to their neighborhoods.

2. **Planning and Design:** Parks, open space, greenways, landscaping and major features should be coordinated with the street system to create interesting visual amenities. Parks should be edged with public streets to make them accessible, visible and inviting, and to spread the benefits of a park back into the neighborhood.

3. **Greenway Edges:** To the extent possible, local residential streets or parkways should abut Greenways rather than allowing the Greenway edges to be lined with private lots. Locating public streets along the Greenways would**:**

   - Provide increased public access to and views of the Greenways
   - Improve personal security in the Greenways
   - Spread the positive property value effects of those amenities back into the neighborhood rather than concentrating them on the adjacent properties.

   Local public streets that abut Greenways may be built narrower than normal to reflect the fact that they have houses on one side only.

Bicyclist and Pedestrian Systems

1. **Planning:** Every residential neighborhood should accommodate bicycling and walking and be connected to the rest of the city via bicycle lanes or paths and sidewalks. Pedestrian and bicyclist networks should be comprehensively planned for each neighborhood to ensure coordination and continuity among individual subdivisions, commercial sites, parks, schools and greenways.

2. **Bicycle System:** Every local residential street should accommodate bicycling by virtue of its traffic-calming characteristics and connections with many other roads. On-street lanes and off-streets paths should link neighborhoods to one another and overcome obstacles such as major roads, streams and railroad tracks. The greenway system should be used in conjunction with on-street lanes (both new and retrofitted) to provide a network that is continuous and relatively safe.

3. **Pedestrian System:** Every local residential street should also accommodate walking via sidewalks and connections with other roads. The sidewalk network should connect to the greenway trails and also link to commercial areas, parks and schools.

Housing Stock

1. **Variety Within Each Neighborhood:** Each neighborhood should contain a **range of housing types**, densities, and building configurations including single-family detached, townhouses, and apartments. Discourage large housing projects that consist of a single building type. Some portion of each type of housing should, ideally, be available for occupancy on either an ownership or lease basis.

   When combining housing types, it is preferable for the **transition between types to occur at the rear** rather than the front (i.e. across a courtyard or parking area rather than across the street).

2. **Front Setbacks:** Maintain the current setback requirements that allow houses to be built relatively close to the street. Continue to require that infill housing in existing neighborhoods reflect the setbacks of existing houses.

3. **Suburban, Traditional and Neo-Traditional Design:** Support the building community as it provides housing to meet the varied needs and demands of area homebuyers. Work cooperatively with the building community in meeting these varied needs and demands to ensure that regulations continue to encourage current housing design concepts as well as traditional and neo-traditional housing designs that emphasize streetscape and neighborhood interaction.

Attached Housing

Attached housing includes duplexes, townhouses, buildings with four or more units that have an exterior entrance for each unit, and apartment buildings that provide unit access via interior corridors

1. Compatibility with Single-Family Housing

- Attached housing should be created as an **attractive, compatible and acceptable alternative** to conventional detached housing.

- Attached housing should **emulate single-family housing** in its basic architectural elements -- pitched roofs, articulated facades, visible entrances, porches or balconies, and a maximum height of three to four stories. Attached housing should use the architectural “vocabulary” of single-family housing.

- Attached housing should be built in **small groupings** so that it fits into the overall residential context rather than being sequestered into large project sites.

- If a multifamily building or attached housing is developed near single-family detached housing, ensure that the **width of the building facade facing the street** is similar to that of a single-family house. Attached units should be grouped in rows of no more than four or six units to avoid a monolithic appearance.

- Attached housing should be located in **transitional spaces between commercial and single-family areas**, at high-amenity locations along the Parkway and the Greenway Systems, and overlooking parks.

- **Driveways and garages** should be located to the rear of the lot or interior of the block. When garages cannot be located to the rear or on the interior of the block, they should be set back similar to the requirements for single-family housing. Porches and front steps should face the local street.

- Encourage unity as well as diversity by specifying a **common design vocabulary throughout the buildings**, a clear pathway system and shared outdoor space that unifies and integrates the site.

- **Duplexes** should be designed for visual compatibility with single-family housing, should be scattered among the neighborhood rather than concentrated, and may be used as a transitional building type near larger buildings and street intersections.

2. Variety: Fined-grained diversity is a key to making attached housing compatible with single-family housing.

- Require **variety in the style and density** of attached housing within each neighborhood. Avoid the appearance of large multi-family "projects."

3. Appropriate Exterior Design for Attached Housing

- Ensure that buildings fit into the neighborhood through the use of **compatible scale, roof pitch, building massing and materials.**

- Design the **front and back facades** with appropriate levels of formality. The front, as the more public side of the house, should receive the more formal treatment, while trash/recycling storage, play equipment and outdoor storage should be located in the back. The main entry should face the street.

- Buildings should address the street with **varied and articulated facades, frequent entries and windows**. Porches and balconies should be encouraged, and facades consisting of long blank walls or series of garage doors should be prohibited.

4. Outdoor Spaces for Attached Housing

- Define all **outdoor spaces**, distinguishing between those reserved for residents and those open to the public. Provide visual indications of the **boundaries** between private space, public space and shared space. Enclose the shared outdoor space with buildings, low fences or hedges, and paths.

- Provide convenient **access to shared outdoor areas**, amenities such as play equipment, seating and tables to encourage their use, and vegetation for seasonal shade.

- Provide each housing unit with clearly defined private or semi-private outdoor space such as a **yard, patio, porch or balcony**, with direct access from inside the unit.

- To the extent possible, provide each unit with a **front entry** that faces the street and is visible and accessible from an adjacent public path. The "backs" of each unit should be reserved for private outdoor space and resident parking. Where individual entries are not possible, minimize the number of units that share a single entry.

- Use semi-private outdoor spaces such as **porches and patios** to increase the sense of privacy and security within the home. Provide opportunities for surveillance of shared outdoor areas such as streets, sidewalks and play areas from within the home.

- Provide a **clear path system** that connects each housing unit to destinations within the site and the surrounding neighborhood. Paths should be logical and predictable in their routes and should be linked to the public sidewalk system. Keep public paths at the edge of the site; distinguish between public paths and private outdoor space; and make paths visible from shared and private spaces.

- **Control access by nonresidents** via gateways, fences, plant materials or enclosed location. Locate outdoor spaces to allow for easy surveillance from inside homes.

5. Streets and Parking Areas

- On large sites, **extend the network of surrounding streets** through the site to improve circulation, visibility, security and integration into the surrounding neighborhood.

- Locate **resident parking** near each home, with a direct paved path to front or back door, while locating visitor parking near public spaces and public paths. Ensure that parking spaces are visible from within the resident's home and provide sufficient lighting.

- In most cases, **parking lots should be located to the rear of homes**. If they must be located on the street frontage, they should be screened by a low hedge, fence, gate or similar visual buffer.

- Use **vegetation in and around parking lots** to provide shade and visual relief.

Commercial Development

1. **Site Plan Review:** The City should review commercial site plans for conformance with the specifics of the zoning ordinance and with the guidelines of the Community Physical Image Element of *Vision 20/20*. The City should strive to ensure that there is bicycle and pedestrian access to each commercial site from adjacent residential areas.

Environmental Resources

Introduction

It is critically important for the Springfield-Greene County community to take extra precautions with its surface and ground waters because of the nature of the geology in the region. Throughout Greene County the bedrock is close to the surface and composed of fractured limestone. Surface water can easily travel into the bedrock from faults or sinkholes and thence to aquifers, rivers or creeks from which drinking water is drawn. Pollution from urban or rural activities may reach drinking water sources in a matter of hours. Topsoil is often not sufficiently thick to filter such pollutants.

Objective 16: The Springfield-Greene County community should treat environmental resources, particularly stream corridors, as a means of improving urban quality of life, safeguarding health, promoting private investment and creating long-term economic strength.

Actions:

Land Use Planning and Development

1. **Recognition:** Recognize environmentally sensitive areas when locating and designing land uses and provide appropriate criteria and standards for addressing those areas.

   The location of any land use must be sensitive to floodplains, sinkholes, water resources, steep slopes, faults, or endangered species. Residential densities may need to be limited where certain environmental conditions exist in order to prevent drainage problems, sewage disposal problems, flood damage, and associated water pollution problems.

Resource Mapping

1. **Mapping:** Continue and expand the process begun in 1995 of identifying and mapping sensitive natural resources around Springfield and throughout the county on the City and County geographic information systems so that they can be flagged during the planning and development process.

Urban Stormwater Runoff Quality

1. **Surface Water Management Plan:** The City of Springfield, Greene County, the Watershed Committee of the Ozarks and the Missouri Department of Natural Resources should jointly prepare a surface water management plan for the Springfield Urban Area. That plan should identify and rank in priority the watersheds to be studied in detail, and should include basin-specific stormwater management plans that utilize locally-prepared “best management practices” and other water quality ordinances and regulations. The Long-Range Recommendations of the Water Resources Task Force address this issue. Highest priority should be given to the Fulbright Spring and Pierson Creek Basins because they are important water sources for the Springfield metropolitan area. (“Best Management Practices” are locally-approved techniques and materials used in land alteration or

management. The 1995 *Fulbright Spring Comprehensive Watershed Protection Study* included an extensive description and evaluation of Best Management Practices.)

2. **Fulbright Spring Basin:** Water quality protection programs based on the approach recommended in the 1995 *Fulbright Spring Comprehensive Watershed Protection Study* should be implemented in the Pierson Creek, the South Dry Sac River and Fulbright Spring watersheds.

   The Fulbright Spring watershed is highly vulnerable to pollutants in runoff from urban or agricultural areas because of many geologic features that permit rapid entry of surface water into the shallow groundwater system. The natural buffering capacity of the watershed is reduced by faults, over 180 sinkholes and losing stream segments. The risk of degradation of Fulbright Spring water quality will increase as the recharge area develops unless there are carefully conceived land use controls and structural Best Management Practices.

   The *Fulbright Spring Protection Study* concluded that a combination of structural and non-structural stormwater control strategies will be needed to effectively protect the water quality of the spring. Those include**:**

   - Land use controls
   - Pollution prevention measures
   - Education of the public
   - Prioritization of Best Management Practices
   - Full utilization of the existing erosion and sediment control, sinkhole and other pertinent ordinances
   - Effective implementation of a comprehensive stormwater management program for the basin
   - Adequate maintenance, monitoring and enforcement
   - Adequate funding for all of the above.

   Specific actions or practices related to land use and growth management in the watershed should include**:**

   - Consider maximum impervious area goals for the most sensitive watersheds
   - Prepare a watershed-specific master water quality management plan for the South Dry Sac and the Pierson Creek watersheds. These watersheds are relatively undegraded. The South Dry Sac should have first priority because of its relation to Fulbright Spring. Pierson Creek, while still in good condition, contributes only a small percentage of the flow to the James River, on which there is a drinking water intake below its confluence with Pierson Creek.
   - Acquire buffer zones around important geologic features and along stream corridors
   - Prohibit development within the 100-year flood storage zone (defined specifically for each sinkhole)
   - Enact minimum setbacks from each sinkhole
   - Minimize the amount of land that can be cleared at any one time.
   - Require the use of water quality Best Management Practices for new development

The *Vision 20/20* Growth Management Plan calls for increased urbanization on the northern fringe of Springfield in order to balance the trend of southerly growth. Urbanization in the Spring Branch, Pea Ridge and South Dry Sac watersheds may lead to some degradation of the drinking water source. (A map of these and other watersheds is presented in the Sanitary Sewer System Analysis as Figure 8-1, Sanitary Sewer System.) To minimize that impact, the preceding recommendations should be pursued along with these specific actions**:**

- **Stage residential development** from the south to the north and the west to the east, beginning in the Pea Ridge basin, the area of Greene County's R-1 zoning. The Valley Water Mill subwatershed has a substantial amount of sewered land, and although it contributes flow to Fulbright Spring it is buffered by the Valley Water Mill Reservoir. A "go-slow" approach should be taken in the upper South Dry Sac watershed because it has direct flow to Fulbright Spring via one or more sinkholes just west of Highway H.

  North of the South Dry Sac River the alignment of the Urban Service Area was drawn to encompass a relatively small acreage so as to allow time to verify the efficacy of the Best Management Practices. Land to the north of that line may be the first area added to the Urban Service Area following the adoption of this plan. For that reason, the Land Use Plan indicates that part of the Urban Reserve as Low-Density Housing rather than Urban Reserve.

- **Limit the total impervious coverage** east of Highway H and north of the South Dry Sac Creek to no more than 15 percent of the gross area of a tract. Studies have shown that higher rates of cover lead to water degradation regardless of Best Management Practices.

- **Require the use of sound water quality controls ("Best Management Practices")** such as those described in the *Fullbright Spring Protection Study*. Examples of these include extended dry detention basins, wet detention basins, wetlands, filter strips, grassed swales, sand filters, infiltration trenches or basins, porous pavement, grit separators, and detention basins.

- **Limit the maximum density of unsewered housing** in the Urban Reserve to 4 houses per 40 acres, consistent with the *Vision 20/20* Growth Management Plan.

3. Other Affected Watersheds: Several other important watersheds in Greene County may be affected by the growth of Springfield's urban area. Several major creeks and numerous sinkholes already receive surface runoff from urban areas, and improper agricultural practices (either cultivation or animal feedlots) across the County contribute pollutants.

Within the Springfield Urban Area, *Vision 20/20* recommends the acquisition of land along several creeks for Greenways -- linear parks containing open space and trails. Riparian zone protection has proven to be a very effective watershed management tool.

High priority should be given to greenways along streams that contribute to the Springfield water supply, such as the South Dry Sac River, Little Sac River, Pierson

Creek and the James River. Other important streams include Pea Ridge River, Little Sac Creek (connecting Fellows and McDaniel Lakes), Pierson Creek (within an area planned for urbanization on the east of Highway 65), Spring Branch Creek.

Sinkholes

Sinkholes provide discrete points of discharge to shallow groundwater. In view of the potentially high cost of cleanup and remediation, it is critical that responsible steps be taken to control the quality of runoff entering sinkholes.

1. **Ordinance:** The City of Springfield should review its current sinkhole ordinance and consider requiring that water quality concerns be addressed when developing in sinkhole watersheds by using techniques such as vegetative buffer zones, minimum setbacks, extended detention storage and regulating the handling and storage of hazardous and toxic materials. Greene County should update and adopt its present sinkhole policy into its regulations.

Sediment and Erosion Control

Water quality protection efforts begin with an effective sediment and erosion control program, such as presently administered by Greene County. Such controls are administered directly by the Missouri Department of Natural Resources for areas over five acres and by the City of Springfield for areas between one and five acres.

1. **Protective Regulations:** Greene County and Springfield should improve their erosion and sediment control regulations and their enforcement capabilities. Requirements should include a contractor education and certification program. Springfield could contract with the County for inspection and enforcement for land parcels greater than five acres in size.

Septic Systems

There are still extensive areas within the Urban Service Area that are not served by sewers and in which septic system failures are common. All rural areas (outside cities) are also served by septic systems.

The County presently has a successful program for certification of septic installers. Pumping services are regulated only by the Missouri DNR through a recently-adopted permitting procedure. A local certification program would ensure that pumping service providers are aware of regulatory requirements and are following proper procedures. The County's program has been successful in ensuring that septic systems are properly designed and installed. These systems must be properly maintained if they are to be expected to function properly. This begins with homeowner education and awareness.

Because they are infrequently used, the City's regulations and procedures for the design of new septic systems and rehabilitation of old systems have become outdated. By adopting the County's standards, the City can update its regulations and also eliminate confusion resulting from different requirements in each jurisdiction.

1. **Sewer Hook-Ups:** Springfield and Greene County should create programs, including possible sources of financial assistance, for providing sanitary sewer service to subdivisions and other areas within the Urban Service Area that are still served by septic systems. This program should begin with a study to determine which businesses and residences have never connected to sewer in areas where sewers are available.

2. **Certification Program:** Greene County should develop and enact a certification program for septic pumping services similar to the present program for installers. The County should also continue to formulate a voluntary program to encourage and ensure proper homeowner maintenance of septic systems.

3. **On-Site Systems:** Springfield should adopt the regulations of Greene County for on-site wastewater systems and private wells, including contractor certification requirements.

Wellhead Protection

1. **Wellhead Protection:** Greene County should sponsor workshops to assist public water suppliers in creating wellhead protection plans for each of the public drinking water supply wells in Greene County. Once identified, these wellhead areas should be included in the City-County geographic information system and considered when land use decisions are made.

Rural Stream Corridors

A major concern in the rural areas of Greene County is the continuing loss of critical natural buffer areas along streams.

1. **Stream Assessments:** Greene County should begin initial assessments of the condition of stream corridors for use in developing management and protection programs. The County should seek cooperation and assistance from state, university and City departments and the Watershed Committee.

Urban Stream Corridors

Many reaches of urban streams have been altered by development but can support a variety of aquatic and urban wildlife in addition to their role as flood corridors.

Federal floodplain management regulations adopted by Springfield and Greene County originated in an era when flood control was the only concern. Though these regulations help preserve stream corridors by restricting development, this is not a stated objective or requirement. The community should broaden these regulations to consider protection and enhancement of valuable stream corridors.

1. **Floodplain Management:** Springfield and Greene County should amend their current floodplain management plans and practices to encourage enhancement and preservation of urban floodplains and to encourage the protection and development of these areas as community open space and greenways.

2. **Stream Bed Management:** Stream beds should be left in or returned to a natural state whenever possible rather than being paved.

Water Quality Data

1. **Interagency Work Group:** Springfield and Greene County should form an interagency work group including representatives from federal, state and local agencies having a responsibility for water quality protection. This group should review and compile existing water quality data, create monitoring strategies and programs for streams, springs and wells, and determine the personnel and funding needed to continue the monitoring programs on a permanent basis.

Public Education and Awareness

The success of water quality management efforts relies to a great degree on the understanding, acceptance and assistance of the public. A great deal of community effort has been invested and some success has been experienced in this area, but more effort is necessary.

1. **Public Education:** Springfield and Greene County should continue and expand their strong support of public education and awareness efforts, working in conjunction with public officials, civic groups, businesses, professional organizations, schools, churches and others. Possible activities include:

   - Support the state-wide stream team and citizen volunteer monitoring efforts in local watersheds
   - Utilize the Watershed Committee of the Ozarks to assist the City and the County in educating the public about water resources issues
   - Work with schools on support of environmental education funding
   - Work with Ozark Greenways on promoting the flood control and water quality benefits of protecting stream corridors as greenways
   - Promote environmentally-sensitive practices in yards and gardens.

Agricultural Water Quality Management

1. **County Efforts:** Greene County should work cooperatively with other agencies to identify present funding sources and means of encouraging practices that enhance water quality in agricultural areas.

Residential Land Use Guidelines

Objective 17: Springfield and Greene County should work to ensure a wide range of choice in living arrangements throughout the urbanized area through the promotion and protection of lands of suitable characteristics and environmental quality.

Actions:

Neighborhood Protection

Protection of our existing residential neighborhoods is a prime concern of *Vision 20/20.* It is important to ensure that new land uses are not detrimental to residential areas and to recognize the vulnerability of residential areas to certain adverse impacts. This objective does not mean that non-residential land uses are automatically inappropriate in residential areas; it means that design and location criteria must take into account the existing residential areas. Mixed land uses, as well as mixed residential densities, will need to be accommodated in the future. These must be accommodated with sensitivity to existing residential neighborhoods.

1. **Protection:** Springfield and Greene County should work to protect residential neighborhoods from adverse impacts of proposed development and inappropriate land use changes. New development should be compatible with existing development in terms of scale, materials, rooflines setbacks and open space. Landscaped transitions should be used between sharply differing types of land use. Excessive amounts of traffic, particularly commercial traffic, should not be allowed to pass through residential areas.

Variety in Housing Types

It is important to encourage the development of a variety of housing types that would enable developers to compete more effectively and to provide a greater choice for our residents. Appropriate design standards can assure compatibility of different housing types and densities with existing neighborhoods. Please refer to a previous section on Neighborhoods for appropriate design Actions.

Locations for Attached Housing

Higher residential densities should be located adjacent to streets with adequate capacity to handle traffic volumes generated. The appropriate street classification for high density development should exist at the time the development is proposed or is anticipated to be occupied. High density residential uses should be on or very near arterial or collector streets to prevent the disruption of significantly lower density or intensity areas from excessive through traffic. If access is not directly to an arterial or collector street, it may be on a lower street class as long as that access does not cross a lower density residential or lower land use intensity area and does not create traffic problems.

1. **Location Criteria:** Encourage the location of medium and high density residential uses along Collector and Arterial streets.

Commercial Land Use Guidelines

Introduction

There is a need for commercial areas of different intensity throughout the area. Commercial areas should be sited in areas that are well served by transportation facilities**:** major roads, bicycle and pedestrian facilities, and transit. The plan encourages mixed use. However, where commercial areas are concentrated they should be sited and designed to have a minimal effect on adjacent lower-intensity development, and the environment.

Objective 18: Springfield and Greene County should work to provide sufficient and appropriate locations for well-designed, commercial development to ensure a wide range of goods and services for the urbanized areas of Greene County.

Actions:

1. Locational Criteria: Design commercial areas to function effectively through common design features, shared vehicular access points and circulation patterns, shared utility access and service entrances, and common pedestrian circulation. Encourage the effective use of location, design and landscaping of office uses to screen and buffer neighborhoods from lights, signs, traffic noise and pollution, and other factors incompatible or conflicting with adjacent land uses. These practices will help ensure the integrity and function of the road system, reduce the length and frequency of auto trips, minimize impact on residential areas and contribute to the overall attractiveness of the community.

- **Regional-Scale Commercial Centers:** Encourage the future location of regional scale commercial uses (over 500,000 sq. ft.) on major arterials near a freeway or expressway.

  -- Site regional commercial centers to serve over 75,000 persons within a four-mile radius
  -- Require adequate utilities, storm water management, law enforcement and fire service, parking, landscaping and buffering, and design practices which minimize the effect on the environment.

- **Community-Scale Commercial Centers:** Encourage the future location of community level commercial areas (100,000 - 250,000 sq. ft.) on primary arterial streets near intersections of primary and secondary arterials, expressways, or freeways.

  -- Site community level shopping centers to serve 20,000 persons within a 2-mile radius
  -- Require adequate utilities, storm water management, law enforcement and fire service, parking, landscaping and buffering, and design practices which minimize the effect on the environment and on surrounding land uses.

- **Neighborhood-Scale Businesses:** Encourage the future location of neighborhood level shopping areas (30,000 - 100,000 sq. ft.) near intersections of arterials and collector streets.

  -- Site neighborhood level shopping centers to serve 3,000 persons within a ½ to 3/4 mile radius.
  -- Site smaller commercial areas where they serve only the adjacent neighborhood.
  -- Site smaller commercial areas where they have safe pedestrian access.
  -- Require adequate utilities, storm water management, law enforcement and fire service, parking, landscaping and buffering, and design practices which minimize the effect on the environment and surrounding land uses.

- **Free-Standing Commercial Locations:** Springfield and Greene County should discourage development outside planned commercial areas, and follow careful guidelines when such development is permitted. Secondary commercial and highway-oriented business should be allowed along arterial streets, preferably near intersections of arterials, only in the following circumstances**:**

  -- Where a conversion from an existing non-commercial building to a commercial use is compatible with adjacent buildings and uses
  -- When an existing commercial use proposes to expand and the expansion is compatible with adjacent uses
  -- When a proposed use is of an intensity and size to be comparable to a planned commercial center
  -- When a proposed use requires a unique or special location in or near a specific land use or activity center
  -- When land ownership patterns, existing land use conditions or other circumstances make single-lot commercial development the only possibility.

2. Access and Internal Circulation: Commercial areas should be served by major roads which have adequate capacity and should provide access at locations that do not contribute to congestion at major intersections. Shared parking and shared access among office uses should be encouraged. Sites should be designed to accommodate public transit and to encourage shared commutes.

- Require traffic impact studies for larger projects or where road system capacity has already been identified as a problem.
- Limit the number of access points to major streets.
- Separate access points from major intersections to prevent or minimize congestion.
- Consider shared access as a way to reduce traffic congestion.
- Build sidewalks and other pedestrian facilities as part of commercial development.

Internal circulation roads should be encouraged and access to roads managed according to the guidelines presented in the *Vision 20/20* Transportation Element in order to maintain the capacity and safety of the major street system

3. **Rural Areas:** Outside the urbanized area, commercial uses serving small areas or providing convenience goods may be located near the intersection of a County collector road and a highway, or two county collector roads, with appropriate site design.

   - Site smaller commercial areas where they serve only the adjacent neighborhood.
   - Site smaller commercial areas where they have safe pedestrian access.
   - Require adequate utilities, storm water management, law enforcement and fire service, parking, landscaping and buffering, and design practices which minimize the effect on the environment and surrounding land uses.

Office Land Use Guidelines

Introduction

The Springfield area is experiencing, and must plan for office development of several different types. Office development is not as easy to classify as residential and commercial shopping center development. Offices are often an ancillary use in shopping centers, medical buildings, and industrial uses. They can be developed in office park settings, as part of financial institutions, or separately, much the same as some isolated commercial uses. Some institutional uses, such as hospitals, clinics, and nursing homes, have location and impact characteristics similar to office development in terms of traffic generation, parking requirements and land area needed.

Objectives 19: Springfield and Greene County should provide sufficient and convenient locations for well-designed, compatible office development consistent with other requirements of *Vision 20/20.*

Actions:

1. **Access and Internal Circulation:** Access and internal circulation should be regulated according to the minimum guidelines presented under the previous subsection on Commercial Land Use.

2. **Location and Design:** Encourage the clustering of offices in common buildings, groups of buildings, or large sites rather than in strips along major roads. Encourage the effective use of location, design and landscaping of office uses to screen and buffer neighborhoods from lights, signs, traffic noise and pollution, and other factors incompatible or conflicting with adjacent land uses.

   Allow carefully planned, low volume office developments to be used as transitions and buffers between commercial and residential areas.

Industrial Land Use Guidelines

Introduction

Springfield expects to increase its industrial base, including light and heavy manufacturing, warehousing and distribution, and research and development. Regardless of the type of industrial businesses in the community, it is important that they be

developed with sensitivity to surrounding land uses, the environment, public facilities including transportation, and the community as a whole.

Objective 20: Springfield and Greene County should work to provide the community with industrial areas that facilitate economic development and job retention, that are well integrated into the fabric of the community, and that are responsive to environmental concerns.

Actions:

1. **Access:** Industrial areas should be directly accessible to one or more of the following regional transportation facilities**:** airports, railroads, arterial roads, freeways, expressways or the Interstate Highway System. Industrial areas should be served by major roads which have adequate capacity and are built to carry heavy freight traffic. Sites should be designed to accommodate public transit and to encourage shared commutes.

2. **Location and Design:** Industrial areas are generally incompatible with residential uses and should not be located adjacent to residential areas. A transition area or a step-down land use should be provided between industrial and residential uses. Industrial and related uses that have excessive visual clutter, noise, glare and/or odors should provide adequate screening and buffering.

3. **Industrial Variety:** The community should offer a variety of industrial areas that fit well within the overall development pattern and offer opportunity for industrial growth and expansion.

    - Designate a variety of industrial sites in several concentrated locations near collector and arterial highways where uses may be clustered.
    - Protect adjoining non-industrial areas by requiring industrial activities to meet strict standards and by ensuring their separation from residential areas.
    - Locate industrial activities where large land areas suitable for horizontal expansion are available and where on-site storage, parking, and landscaped areas can be included.
    - Locate and design industrial uses to have a minimal effect on adjoining land uses and on the environment.
    - Encourage sites which function as business parks or research parks.
    - Provide areas within the community where businesses with a strong office component and a strong industrial component can locate.
    - Encourage appropriate service or retail land uses with corresponding pedestrian connections for employees.

Open Space Housing Development

Introduction

Open space housing development or "cluster" development is *the concentration of allowable housing on one portion of a tract of land in order to preserve the remainder of the tract as open space.* "Allowable housing" means the amount of housing that is permitted on the tract based on maximum *density* -- the number of units per acre that is permitted within the applicable zoning district.

Open space housing development can be an effective way to allow some residential development in the Urban Reserve or the Rural Area while protecting resources and/or preserving future urban development options.

"Open space" in this definition means land that is protected -- in most cases permanently protected -- from future development. It may be retained as a natural area, used for recreation or farmed. The permitted uses will depend on the standards in the zoning ordinance and on the wishes of the homeowners, who generally own and mange the open space through an association.

Open space housing development can achieve these objectives**:**

- Protect significant resources
- Foster a sense of community
- Reduce infrastructure costs
- Create an interconnected network of protected open space
- Maximize the ecological health of the landscape

However, open space housing development has these limitations**:**

- It is not the best method for preserving large blocks of agricultural land
- It will not reduce the overall density or the number of housing units in the community
- It should not be used as a substitute for a comprehensive plan that designates areas for development and areas that should remain rural or agricultural. However, it can be an effective planning tool for retaining rural character and protecting key open space and natural resources.

For a more detailed discussion of this technique, see *Open Space Design Development***:** *A Guide for Local Governments,* Twin Cities Metropolitan Council (BRW, Inc.), 1997.

Objective 21: Greene County should allow houses to be clustered on smaller than average lots in exchange for careful siting and open space preservation.

Actions:

1. **Zoning Ordinance Amendment:** Greene County should amend its zoning ordinance to allow for clustered housing and open space preservation in locations zoned Agriculture or Agricultural-Residential.

Purpose: Clustering houses on small lots is a means of helping to achieve very low average housing densities in the Rural Area and the Urban Reserve. Another purpose of clustering houses is to provide an efficient use of the land while preserving good agricultural land, open space, scenic views, natural drainage systems and other desirable features of the rural environment. This technique should relieve development pressure or allow housing to take advantage of sites that have low agricultural potential and/or high natural housing appeal (such as wooded areas). It may also create small neighborhoods with distinct identities and sense of community. Figures 18-9 and 18-10 illustrate possible examples of clustering in comparison to standard platting.

Definition: "Open Space Housing Development" is defined as the grouping of three or more single-family houses on smaller lots than those allowed in the specific zoning district, leaving some land undivided for common use by all residents of the development, for lease to a farmer, or for conveyance to a public or an open space conservancy organization.

Open Space Housing Development is not the same as transfer of development rights, which would require a County or City ordinance and a change in State law.

Lot Sizes: Land owners and developers are encouraged to create small pockets of housing on parcels smaller than 3 acres if the houses are clustered following the provisions of the Open Space Housing Development ordinance. Lot sizes and road frontage may vary.

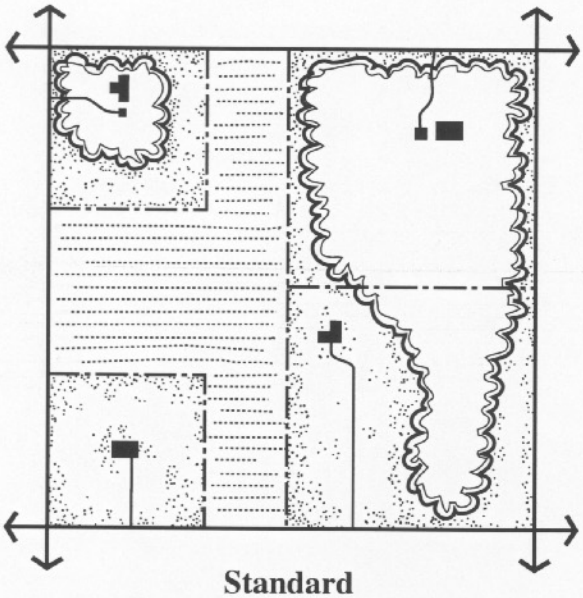
Sewage Systems: This policy assumes that all sewage system and water well location, design and installation requirements are satisfied, including space for replacement drainfield sites. Portions of the on-site sewage system, such as the drainfield, may be located on the commonly-owned land and not on the individually-owned lot. Shared or collector septic systems should be considered for small groupings of houses.

Open Land: Common open land shall be preserved as agricultural land, for open recreation space for the residents of the development, or for the preservation of natural or scenic resources. No other uses of the common land are permitted. The intent is to keep the land permanently undeveloped in the Rural Area and to retain it as temporary open space in the Urban Reserve.

A development agreement, deed restriction, covenant or conservation easement over the open space tract should be required. It should be recorded against the land to be owned in common and should specify the use and ownership of that property. The open space may be held in common by an individual, a non-profit organization or a public agency.

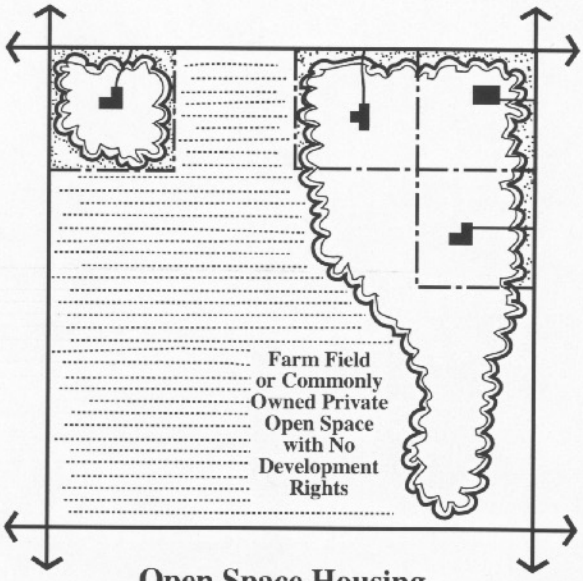
However, within the Urban Service Area the bulk of the open land may be resubdivided into urban-sized lots if or when public sewer and water services become available and the City replans and rezones the land to a higher density. Thus, for clusters in the Urban Reserve a development agreement should be signed by all property owners in the cluster that ensures they are aware that the open space may eventually be resubdivided.

The technique used to preserve the open space should be determined on a case-by-case basis. Preference would be to establish a homeowners' association that would hold the covenant on the land.



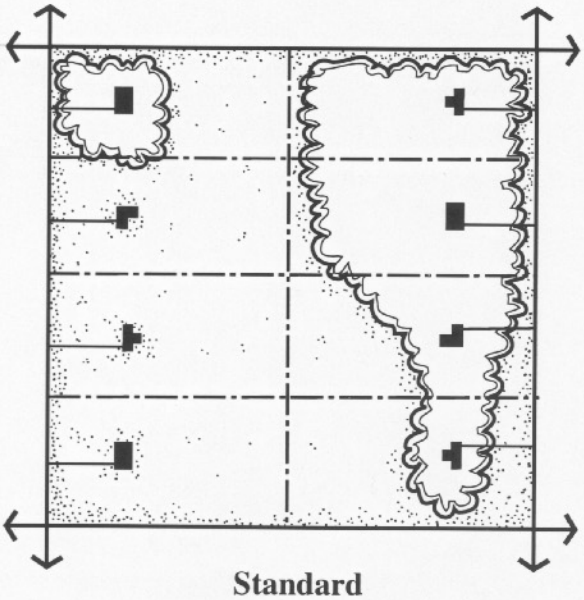
Standard

- 4 Houses Per 40 Acres
- 5- and 10- Acre Lots



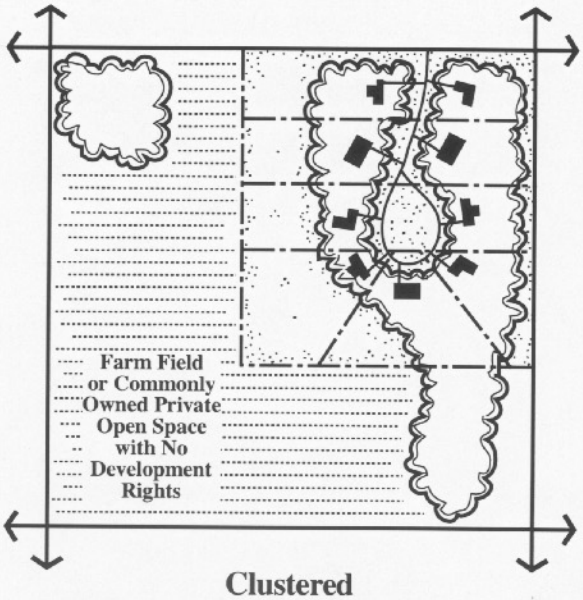
Open Space Housing

- 4 Houses Per 40 Acres
- 2- Acre Lots



Standard

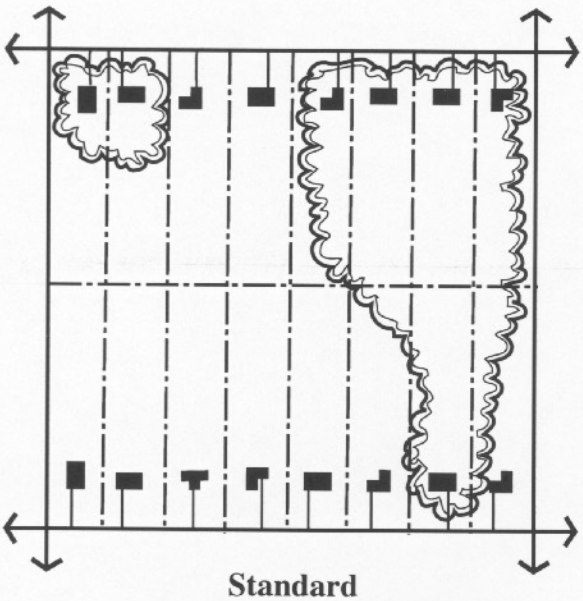
- 8 Houses Per 40 Acres
- 5- Acre Lots



Clustered

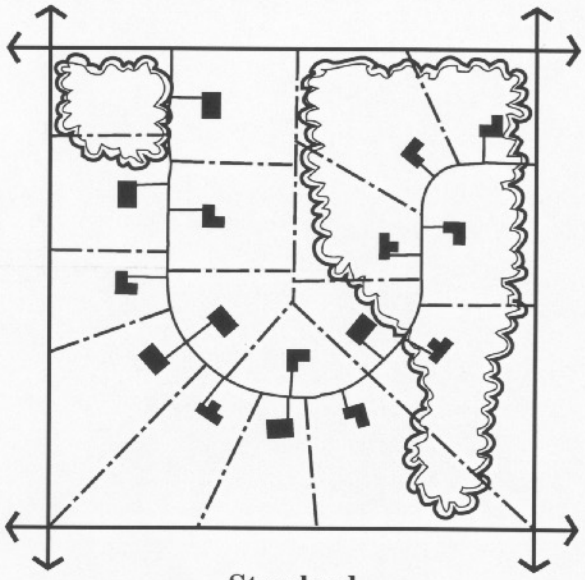
- 9 Houses Per 40 Acres
  (Density Bonus for Clustering)
- Variable Lot Size

Figure 18-9
Comparison of Typical Lots and Clustering at 4 or 8 Houses per 40 Acres



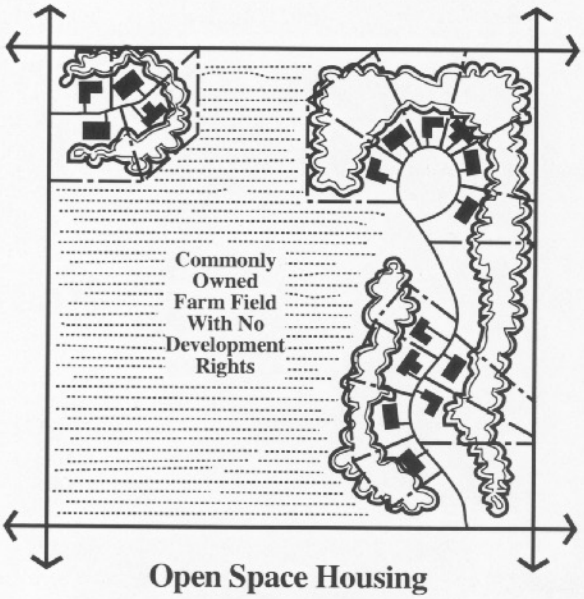
Standard

- 16 Houses Per 40 Acres
- 2 1/2 - Acre Lots



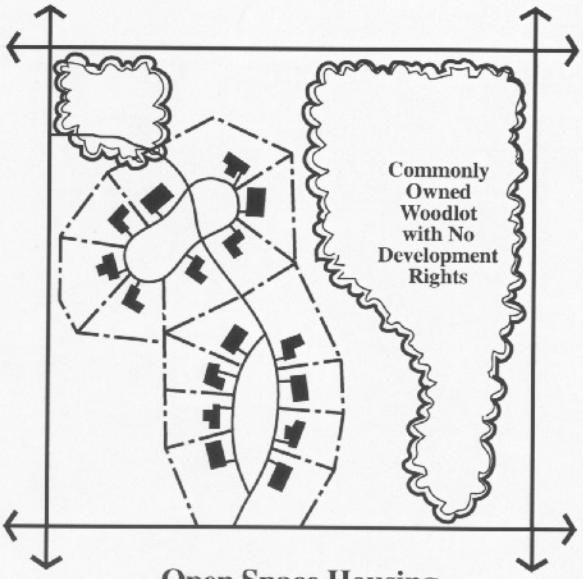
Standard

- 16 Houses Per 40 Acres
- 2- to 4- Acre Lots



Open Space Housing

- 16 Houses Per 40 Acres
- Agricultural Preservation



Open Space Housing

- 16 Houses Per 40 Acres
- Woodland Preservation

Figure 18-10

Comparison of Typical Lots or Clustering at 16 Houses per 40 Acres

Allowable Number of Lots: The allowable number of lots should be increased through a density bonus to encourage landowners and developers to pursue this more time-consuming and innovative form of development.

The number of lots allowed in a cluster development should be the base plus any bonus lots. The base is the number of lots allowed on the tract under the normal density regulations of this Plan. The number of bonus lots should be determined during the revision of the County Zoning Ordinance after this plan is adopted.

Generally, some density bonus should be "automatic" and some should be an incentive for incorporating such features as a central common open space, environmentally sensitive layout, pedestrian-friendly design (e.g., sidewalks, front porches, narrow streets), and a minimum number of new access points to public roads. The County should exercise design review of the plat. Parcel access shall be primarily from an internal local road.

Resource Inventory: A resource inventory should be conducted at the beginning of the design process to ensure that sensitive resources are properly utilized or protected. These resources may include woodlots, farm fields, streams, scenic views and cultural resources.

Yield Plan: A "yield plan" should be prepared to ensure that the Open Space Housing Development subdivision is "density-neutral" -- that is, the initial density is no higher than what would be permitted under conventional development. The density may then be increased according to a bonus formula.

Other Policies: To make Open Space Housing Development successful, the conventional standards for setbacks, lot widths, and other yard requirements must be modified.

Transitional Roadway Corridors

Introduction

As with most American cities, Springfield has many arterial roadway corridors that are an evolving mixture of housing and business. Numerous problems, described below, are generated by this relationship of land use and road function.

Prime locations of this classic phenomenon in Springfield are**:**

- Sunshine Street between Campbell and National Avenues
- National Avenue north of Chestnut Expressway
- Battlefield Road west of Campbell Avenue
- Grand Street between National and Scenic Avenues
- Republic Road

Origins of the Situation

These linear mixtures of housing and business were often created through the following general sequence**:**

1. Small lots were platted for single-family houses facing a low-volume two-lane road on the developing fringe of the community.
2. As the community grew outward, traffic increased on the road.
3. Businesses (each with its own driveway onto the road) were attracted and filled gaps among the houses.
4. The road was widened to accommodate increased traffic, often requiring the acquisition of part of the front yards of the abutting residential and commercial sites.
5. Increased turning movements at intersections and driveways reduced the traffic capacity of the road, and traffic safety problems grew.

The root problem is that the transportation and land use relationship had shifted from one in which there was low roadway traffic volume and low access demand to one of high volume and higher access demand. The road was being asked to perform the competing and mutually incompatible functions of land parcel access and traffic movement. Roads such as those listed above cannot handle average daily traffic volumes greater than 10,000 vehicles per day while providing frequent driveway access points.

Resulting Problems

There are several problems associated with roadway corridors such as those listed above:

Redevelopment Difficulties: Redeveloping the single-family houses along arterial corridors to commercial or multi-family housing sites is difficult because **:**

- The lots typically have insufficient depth for those activities.
- Individually the single-family housing lots are too narrow, requiring the assembly of several to make a viable site.
- The cost of acquiring and removing the housing is not yet warranted by the potential value of new development.
- Most of these roads abut existing residential neighborhoods, and the second tier of residents oppose the commercial land uses being proposed.

Housing Disinvestment: Housing quality often deteriorates in such locations because few people want to make a long-term ownership commitment in an environment degraded by high auto traffic volumes. There seems to be an undefined tipping point beyond which a corridor changes from residential to non-residential and beyond which there is no chance or desire to save its single-family character.

It is sometimes possible to sustain single-family housing along a busy arterial road; this will depend on the size and style of the housing, the natural features of the sites (such as mature trees along the road) and a location convenient to shopping, jobs and community amenities.

Pedestrian Environment: Finally, the pattern of streets, parking lots, driveways and buildings is often designed only for the automobile and is hostile to the pedestrian and bicyclist.

Objective 22: Plan for or re-create patterns of land use and road function that are mutually supportive, particularly along arterial roadways.

Actions:

1 **Road System Planning.** The City of Springfield and Greene County should work to establish the future function and design of roads in and around Springfield as far in advance as possible. This should be done by adopting and following the *Vision 20/20* Transportation Plan, which includes approximate future road alignments, a roadway functional classification plan, and road right-of-way dimensions.

The right-of-way width standards in the functional classification plan include sufficient land for the needs of the road, utilities, landscaping, lateral clearance and, in most instances, sidewalks. Space for bicycle paths or on-street lanes may increase right-of-way needs.

The City and the County should adopt an official map of road rights-of-way based on the Transportation Plan and more detailed alignment studies.

Based upon the adopted Transportation Plan and official map, sufficient land should be acquired in advance of or at the time of subdivision or development for the expected road needs. Acquisition should be accomplished through required dedication by the landowners and, in some cases, purchase by the City, County or State.

The City and County should adopt and follow the roadway access guidelines presented in the Transportation Plan. Those guidelines require greater spacing between access points, increased restrictions on turning movements and increased access control (e.g., signals versus stop signs) as the designated road function rises in the hierarchy.

2. **Road Corridor Land Use Planning.** The edges of arterial roads may be planned for any variety of land uses, ranging from single-family housing to shopping centers, as long as the roadway access guidelines are followed. Generally speaking, access efficiency and visibility should tend to guide more intensive land uses to the edge of major roads and land uses that generate less traffic to minor roads.

While there are reasons why housing developers may not want to locate next to an arterial road while businesses would, it is not necessary to line every stretch of arterial frontage with commercial or multiple-family development. In fact, allowing some low-density neighborhoods along arterial roads is both necessary and desirable. However, if housing is located along an arterial or collector road, its access must conform to the spacing guidelines of the Transportation Plan, meaning that intersections should be widely spaced and there should be no direct driveway access allowed.

3. **Redevelopment Activities:** There is a range of possible responses by the City or County to the problems created by inappropriate land use and access along arterial roads. The choice of methods should be made on a case-by-case basis.

   A. **"Live with It."** The least desirable option but one that many cities must adopt for a period of time is to live with the negative effects on the roadway and the

land development. However, there are costs associated with this option such as lost development opportunities, traffic accidents and congestion.

B. Planning and Zoning. The City or County could plan and zone the inappropriate locations for office, multi-family housing, a small shopping center or a similar use that might offer possibilities for improved access spacing and control. While this option has little direct cost to the City or County, it also depends on a willing and aggressive private sector for implementation. Small office buildings for professionals or corporations have often succeeded in these settings and can be a compatible neighbors with an adjacent residential neighborhood.

With the many locations of concern, this alternative is a necessary first step to change (which does not preclude Option D).

Figures 18-10 and 18-11 illustrate several design options for these situations.

C. Site Improvements. Site improvements may reduce somewhat the negative relationship between housing and a major road. For instance, housing may be protected from the deleterious effects of traffic, parking lots and commercial buildings by landscaping, setback, building orientation and size.

The road function may be protected by combining or closing access points and/or changing the access design.

D. Acquisition and Redevelopment Assistance. The City may assist private developers in acquiring property, relocating residents, and clearing buildings in order to stimulate new development under the powers granted by Missouri Statutes Chapters 99 and 353. Several financial tools are available such as Tax Increment Financing, a Neighborhood Improvement District, a Special Benefit District, federal Community Development Block Grant funds, general obligation bonds and others.

E. Right-of-Way Acquisition and Improvement. The City or County, perhaps in conjunction with the Missouri Department of Transportation, could acquire and clear inappropriate land development along one side of a roadway and add it to the public road right-of-way. The land could be devoted to landscaped open space, a sidewalk and a bicycle path to benefit the corridor travelers and the adjacent residents. If this option were selected, it would be less costly if the City did not prematurely zone the land for more intensive use.

Zoning and Subdivision Ordinance Amendments

Zoning Ordinance

Springfield, Greene County and the several independent municipalities in Greene County regulate land use and design through zoning ordinances, a power granted them by the State of Missouri. The zoning ordinance is one of the primary means of implementing this land use plan. Other means include capital improvements for roads, utilities, parks and other public facilities, and financial assistance for redevelopment.

Springfield:

Springfield wrote an entirely new zoning ordinance and amended its zoning map in 1993-1995. The City has a wide range of zoning districts which are applicable to this land use plan and which should be very usable in the course of implementing the plan. The new zoning ordinance has sufficiently small minimum lot sizes so that the density objectives of the plan can be achieved if the market responds. It also has districts that allow a range of increasing densities and/or mixtures of single-family and townhouse development. Requirements for landscaping (particularly of parking lots) and buffers between incompatible land uses were improved with the new zoning ordinance, and should now be adequate.

One of the new districts, Center City District, will be most useful in the older portions of the city and Greater Downtown. This zoning district allows a variety of residential, commercial and light industrial activities in close proximity, including housing over shops. This will help promote the diversity and complexity that characterize many portions of the community built before 1950 and that will help make them successful urban places in the future.

Finally, the zoning ordinance includes other districts that address particular needs that will be important in plan implementation. These include the University Combining District (uses near campuses), the Urban Conservation District (revitalization areas) and the Planned Development District (negotiated design).

The Planned Development District could be effectively used in the proposed Activity Centers, where mixed- and multiple-use projects are promoted and higher residential densities are desired. (Mixed-use implies housing or offices above retail or service businesses.) The Planned Development District is “wide open” in terms of what land uses it allows and how they are arranged.

Actions:

Two additional amendments would be useful for the Springfield zoning ordinance:

1. **Sinkholes:** Amend the sinkhole ordinance (and include it with the zoning ordinance) to require that water quality concerns be addressed when developing in sinkhole watersheds by providing vegetative buffer zones, setbacks, and extended-detention storage, and by regulating the handling and storage of hazardous and toxic materials.

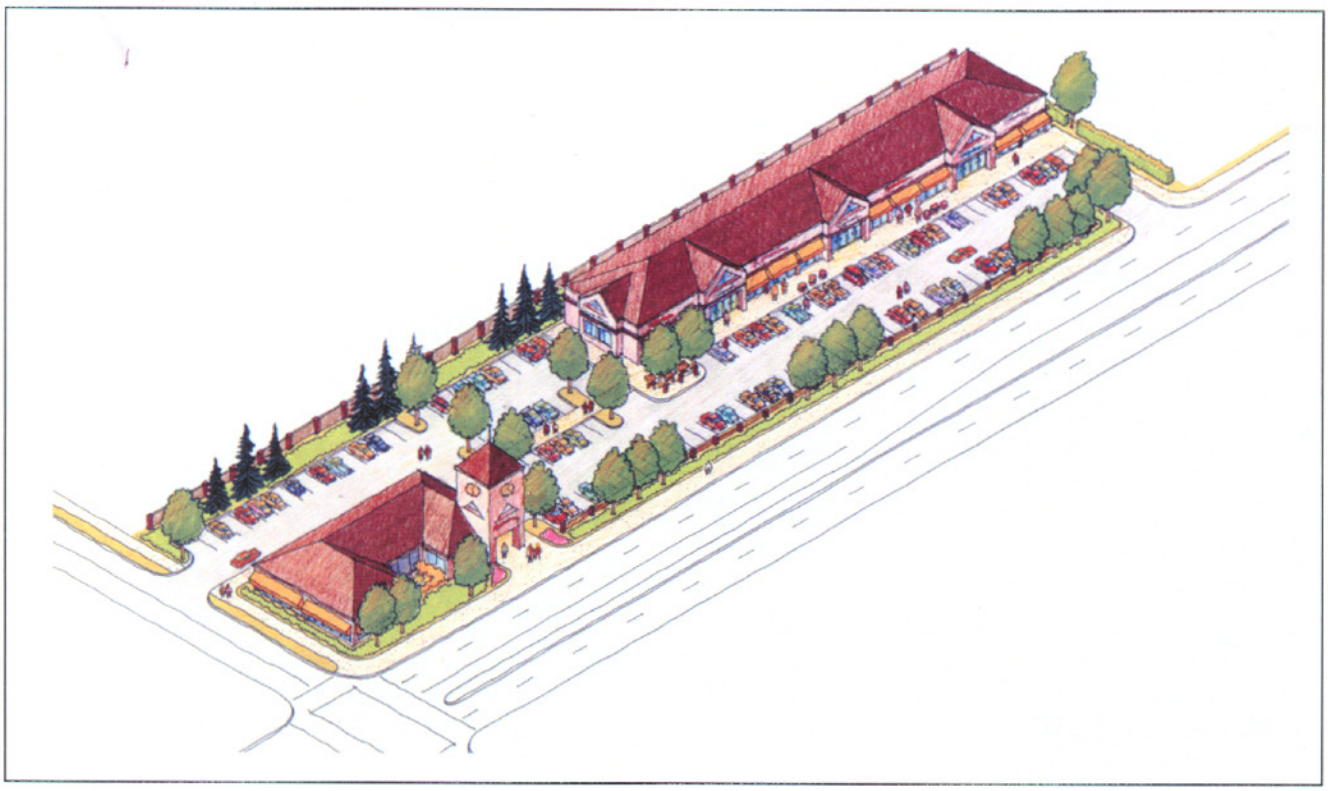


Figure 18-11: Small Site Development Option for a Transitional Corridor

Figure 18-12: Mixed-Use Development Option for a Transitional Corridor

2. **Erosion:** Greene County and Springfield should improve their erosion and sediment control regulations and include them with their zoning and subdivision ordinances.

Greene County:

Several fundamental amendments should be made to the Greene County zoning ordinance to successfully implement this land use plan**:**

1. **Maximum Density:** Greene County should shift away from using minimum lot size to regulate unsewered housing development in the Rural Area and instead regulate housing on the basis of maximum density, as described under the section of this plan entitled The Rural Area.

   This amendment will also effectively reduce the number of new housing units that can be built in the Rural Area because the most common zoning district in the unincorporated portions of Greene County is currently Agriculture District (A-1), which allows 5-acre lots.

2. **Open Space Housing Development:** Greene County should prepare and adopt a zoning provision allowing for "open space housing development" in the Rural Area and the Urban Reserve.

Subdivision Ordinance

Springfield:

The Springfield Subdivision Ordinance regulates how land is divided and also sets standards for public improvements such as streets, sidewalks and utilities. The design of local residential streets is a fundamental element of neighborhood development. The street and right-of-way standards of this ordinance are compatible with the design objectives of this land use plan, in that the regulations allow a relatively narrow street, generous use of sidewalks and installation of trees between the curb and sidewalk.

The standards for locating small utilities such as telephone, electricity and cable television cables should be amended so they are placed in a common trench behind the sidewalk, leaving the space between the curb and sidewalk for trees. This may require either increasing the width of the public street right-of-way or requiring an easement across the front of each lot.

The minimum sidewalk width stated in the subdivision ordinance should be amended to be five rather than four feet because two adults cannot walk comfortably side-by-side in a four-foot space.

Sidewalks should be required on both sides of all residential streets in sewered areas. Currently, they are required on both sides only when the density is greater than five units per acre, on one side when the density is three to five units per acre, and on neither side below that density.

***Greene County*:**

Similar to the City of Springfield ordinance, the Greene County Subdivision Ordinance allows relatively narrow streets and rights-of-way in residential neighborhoods. Besides aiding efficient use of land, this promotes compatibility with City neighborhoods, which is important in case of later annexation.

In the few portions of Greene County that may be built at urban densities but not annexed to a city, sidewalks should be installed consistent with the policies of the nearby city. In locations with rural densities, sidewalks are not appropriate.

As in Springfield, the minimum sidewalk width stated in the subdivision ordinance should be amended to be five rather than four feet because two adults cannot walk comfortably side-by-side in a four-foot space.

A good aspect of the ordinance is that any subdivision must provide right-of-way for arterial roads designated in the comprehensive plan. However, the County ordinance should be amended to prohibit private roads within the Urban Reserve, since these may conflict with eventual public road plans. Furthermore, owners of private roads often request public ownership when major reconstruction is needed.

Implementation Program for the Land Use and Growth Management Plan

This section describes the major actions involved in implementing the Growth Management and Land Use Plan and indicates the relative priority of each, the responsible agency and any required coordination. Numerous specific actions are described in the body of the plan while the items listed below are only the major short- and mid-term actions.

Priority	Action

1 **Staff Training:** Springfield and Greene County should review the plan in detail with all staff members who may be involved in its implementation including future new members.

Responsible Agency**:** City of Springfield and Greene County
Required Coordination**:** Departments within each jurisdiction.

1 **Plan Adoption:** Springfield and Greene County should formally adopt *Vision 20/20* as their guiding document for land development and related infrastructure planning. Use the plan to adjust zoning ordinances and capital improvements programs.

Responsible Agency**:** City of Springfield and Greene County elected officials.
Required Coordination**:** Other cities in Greene County; adjacent counties; state departments.

1 **Coordination:** Consult with the Cities of Willard, Strafford, Battlefield, Brookline, Republic, Ash Grove, Walnut Grove, Fair Grove and Rogersville to gain their cooperation and support on concepts related to the Urban Reserve, the Rural Area, the Surrounding Small Cities, and major sewer and roadway improvements. Each City should be asked to adopt its own Urban Service Area generally consistent with the limits shown by the Growth Management Plan on Figures 18-3 and 18-4. Otherwise, the Growth Management Plan should be amended to reflect the plans of other communities.

Improve the communication among Springfield, Greene County and the Cities of Willard, Strafford, Battlefield, Brookline and Republic on matters of land development, regional infrastructure and planning.

Involve Christian County and the Cities of Nixa and Ozark in issues and plans relating to growth management, transportation and sanitary sewage treatment and interceptors. Initiate discussions about expanding the Metropolitan Planning Organization and the Transportation Planning Area to include at least the northern

part of Christian County to reflect the changing size of the Springfield urbanizing area. Use this enlarged organization as a forum for discussing cross-county issues.

Involve the Missouri Department of Transportation to ensure that their investments are consistent with the objectives of this plan.

Responsible Agency**:** Springfield and Greene County Planning Departments
Required Coordination**:** Other Cities, Christian County, Springfield MPO, Missouri Department of Transportation

1 **County Zoning:** Amend the Greene County zoning ordinance to incorporate (1) the density approach, (2) the recommended housing densities, (3) the "open space housing development" provisions for the Rural Area and in the portions of the Urban Area outside the City of Springfield, and (4) the proposed Business Park district.

Responsible Agency**:** Greene County Planning Department
Required Coordination**:** None required.

1 **River Bluff Parkway:** Complete the alignment, urban design and preliminary feasibility study for River Bluff Parkway in order to advance that proposal as well as to establish guidelines for the northern and eastern parkways and adjacent land development.

Responsible Agency**:** Springfield Area Metropolitan Planning Organization
Required Coordination**:** Missouri DOT, Springfield, Greene County, Christian County, Battlefield.

1 **Strategic Annexation:** To the extent that there are areas outside the City that could have a substantial economic or environmental impact on the City, Springfield should pursue, at the direction of the City Council, non-consent annexation as a means to protect the City's environment and economic base.

Responsible Agency**:** City of Springfield Planning and Development Department
Required Coordination**:** City Departments, Greene County

1 **City-Initiated Annexations:** Propose annexations of strategically-located properties that are urbanized or urbanizing and where typical urban services can be provided.

Responsible Agency**:** Springfield Planning and Development Department
Required Coordination**:** Greene County

2 **Monitoring the Urban Land Supply:** Monitor the supply of developable land in the Springfield Urban Service Area and the Urban Service Area around other municipalities. Update the estimate of developable land within the Urban Service Area at least every five years. Adjust the USA according to criteria in Appendix B and any applicable Springfield sewer service contracts.

Responsible Agency**:** Springfield and Greene County Departments
Required Coordination**:** Republic, Willard, Strafford, Battlefield

2 **Sanitary Sewer Staging:** Prepare plans for staging the extension of Springfield sewer service within the Urban Service Area. Coordinate among Public Utilities, Springfield Planning and Community Development, Springfield Public Works, Greene County, the Metropolitan Planning Organization and the outlying cities receiving sewer service under contract (Strafford, Willard and Battlefield). Prepare and update a map showing locations served by interceptor mains (e.g., Farmer's Branch) and local lines. Indicate areas for the potential extension of interceptors and local lines by five-year period based upon forecasts of growth, land consumption and environmental protection. Coordinate with road system improvements.

Responsible Agency: Springfield Public Works and the Springfield Planning and Development Developments
Required Coordination: Greene County Planning and Zoning Department and other cities served by the sanitary sewer system

2 **Surface Water Management:** The City of Springfield, Greene County, the Watershed Committee of the Ozarks and the Missouri Department of Natural Resources should jointly prepare a surface water management plan for the Springfield Urban Area.

The City of Springfield should amend its current sinkhole ordinance to require that water quality concerns be addressed when developing in sinkhole watersheds by providing vegetative buffer zones, minimum setbacks, extended detention storage and regulating the handling and storage of hazardous and toxic materials. Greene County should update and adopt its present sinkhole policy into its regulations.

Springfield and Greene County should create programs, including possible sources of financial assistance, for providing sanitary sewer service to subdivisions and other areas within the Urban Service Area that are still served by septic systems.

Springfield should adopt the regulations of Greene County for on-site wastewater systems and private wells, including contractor certification requirements.

Springfield and Greene County should form an interagency work group including representatives from federal, state and local agencies having a responsibility for water quality protection.

Responsible Agency**:** City of Springfield, Greene County
Required Coordination**:** Greene County, Watershed Committee of the Ozarks and the Missouri Department of Natural Resources

2 **Public Open Space:** Acquire land for parks, greenways, trails and other public open space purposes, according to a plan, and through the joint efforts of Springfield and Greene County.

Responsible Agency: Springfield-Greene County Park Board
Required Coordination: Ozark Greenways; Springfield and Greene County Planning Departments

3 **Forecasting:** Update the forecast of population and households at least every five years.

Responsible Agency: Springfield Planning and Development Department
Required Coordination: Greene County and surrounding communities

3 **Northern and Eastern Parkways:** Conduct alignment and design studies for the proposed northern and eastern parkways.

Responsible Agency**:** Springfield Area Metropolitan Planning Organization
Required Coordination**:** City of Springfield, Missouri DOT, Greene County

3 **Activity Centers:** Review land development and public capital improvement proposals using the Major Activity Center guidelines. Provide public incentives and guidance to help move toward the design ideals for the Major Activity Centers.

Responsible Agency**:** City of Springfield and Greene County Planning Departments
Required Coordination**:** Landowners and nearby residents

3 **Development Review:** Springfield and Greene County should involve the staff of its Planning Departments in reviewing the larger multiple-family residential, commercial or industrial site plans, just as it does with land subdivision plat reviews. Planning staff should be involved in reviewing development proposals in the Major Activity Centers.

Responsible Agency**:** City of Springfield and Greene County
Required Coordination**:** City Departments

3 **Neighborhood Planning:** Springfield should continue (and Greene County should begin) its practice of preparing specific plans for each neighborhood or district in which a need for additional guidance beyond *Vision 20/20* is identified.

Responsible Agency**:** City of Springfield
Required Coordination**:** Residents and property owners; neighborhood organizations

3 **Springfield Zoning:** Amend the sinkhole ordinance and add erosion and sediment control regulations.

Responsible Agency**:** City of Springfield
Required Coordination**:** Watershed Committee of the Ozarks.

3 Springfield Subdivision Ordinance: Amend the ordinance to require five-foot sidewalks on both sides of all residential streets and to require trees to be planted by the developer between the curb and the sidewalk.

Responsible Agency**:** City of Springfield
Required Coordination**:** None

3 Resources Mapping: Continue and expand the process begun in 1995 of identifying and mapping sensitive natural resources around Springfield so that they can be flagged during the planning and development process.

Responsible Agency**:** Springfield Planning and Development Department, Springfield Public Works Department
Required Coordination**:** Greene County Planning and Zoning Department

Appendix A:
Calculating Allowable Housing Density in the Rural Area and the Urban Reserve

Average Housing Density: The allowable average housing density should be calculated over a quarter-quarter section (approximately 40 acres) and should be applied on an ownership basis. On tracts smaller than a quarter-quarter section the allowable housing density should be computed proportionately and rounded up according to the table below.

Calculating the Allowable Number of Residential Lots for Existing Unsewered Parcels Smaller than 40 Acres

Purpose. *Vision 20/20* proposes to regulate the number of new housing units in the Rural Area or the Urban Reserve based upon "density." The plan speaks in terms of "units per 40 acres." However, not all parcels are 40 acres, of course. Therefore, the table below shows how to calculate the number of housing units allowed on any size tract or parcel for each of the different land use categories.

"Existing Unsewered Parcels." This policy applies to lots that were recorded prior to the Zoning Ordinance being amended to implement *Vision 20/20.*

Rounding. If the site in question is at least 75 percent of the size of the next rounded "multiple,"" then you can "round up" to the next allowable number of lots. *For example,* in the 4 per 40 district, the first break point is actually at the 7.5 acre lot size but for illustrative purposes has been rounded to 8.0 acres.

At Least One Lot. Any "parcel of record" as of the date the Zoning Ordinance is amended is allowed at least one residential lot provided all standards for existing lots can be met.

Lots Created after the Zoning Ordinance Is Amended. Lots created after the Zoning Ordinance is amended to implement the Plan cannot be "rounded-up" if the lot size is not an even multiple of the average lot size in a given district.

Allowable Number of Lots

Parcel Size (Acres)	Rural Area (4 per 40)	Urban Reserve (4 per 40)
1	0	0
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11	1	1
12	1	1
13	1	1
14	1	1
15	1	1
16	1	1
17	1	1
18	2	2
19	2	2
20	2	2
21	2	2
22	2	2
23	2	2
24	2	2
25	2	2
26	2	2
27	2	2
28	3	3
29	3	3
30	3	3
31	3	3
32	3	3
33	3	3
34	3	3
35	3	3
36	3	3
37	3	3
38	4	4
39	4	4
40	4	4

Appendix B:
Criteria for Amendments or Exceptions to the Springfield Urban Service Area Boundary

The Urban Service Area Policy should remain flexible enough to allow service extensions when it is of benefit to the community to go beyond the present service area. Therefore, provisions are made for Amendments and Exceptions to the Policy.

Amendments would change the boundary of the Urban Service Area or modify the policy for providing services within or outside the Urban Service Area. Exceptions would allow for the provision of sanitary sewer service or an urban level of transportation**:**

- To land contiguous to the Urban Service Area when that land is transitioning from rural to urban levels of development, or
- To land that is *not* contiguous when provision of services would alleviate environmental or health concerns.

Exceptions may or may not modify the Urban Service Area boundary depending on whether the area is contiguous to the current Urban Service Area.

Amendments

An Amendment to the Urban Service Area Policy must be handled in the same manner as the establishment of the original policy for providing urban services, i.e., any amendment must be reviewed by the Springfield Planning and Zoning Commission, the Greene County Planning and Zoning Board and the Watershed Committee of the Ozarks, and must be approved by the Springfield City Council and the Greene County Commission.

The City Council or the County Commission may initiate a request for an amendment. Amendments must have the consent of the City and the County. An amendment would require a 2/3 majority vote of the City Council for approval.

The conditions under which an amendment is approved will vary within the eight subareas outside the Urban Service Area and should be based on the Criteria for Urban Development adopted for each subarea (refer to Appendix C). In addition, the amendment must be consistent with the Urban Development Pattern set forth in the *Vision 20/20 Comprehensive Plan.*

Exceptions

An Exception to the Urban Service Area Policy must be handled in the same manner as an Amendment except that a request for an Exception may be made by any owner of land located outside but contiguous to the Urban Service Area of the by the City of Springfield or Greene County.

The conditions under which an exception may be granted to an area contiguous to the Urban Service Area are**:**

1. There is adequate capacity in the water and sewer system to handle the projected population and development within the proposed transition area.

2. The provision of sanitary sewer or urban transportation service into the proposed transition area must be undertaken without any expenditure of public funds unless the expenditure is consistent with the City of Springfield's Capital Improvements Program, Greene County's Capital Improvements Program and the Comprehensive Plans for Springfield and Greene County.

3. Transportation service into the proposed transition area must be undertaken without any major alteration of the existing system unless approved by the service provider(s), and

4. The provision of sanitary sewer or urban transportation service into the proposed transition area must be consistent with the stated purpose of the Urban Service Area Policy and those standards and criteria set forth for the eight subareas surrounding the Urban Service Area.

Appendix C:
Considerations in Service Extensions Outside the Urban Service Area

Land outside the Springfield Urban Service Area is divided into subareas, each with its own concerns and problems, as described by the following text and maps. For each subarea, these subjects are addressed**:**

- Statement of concern,
- Identification of problems associated with urban development,
- Criteria for urban development,
- Potential for major urban service extensions, and
- Criteria for interim development.

No commitment is made to public investment in urban services for that land located outside the Urban Service Area, and participation by the City of Springfield and Greene County in providing urban services should not be anticipated. Urban densities are discouraged outside the Urban Service Area. Services would be provided only after careful consideration of the Criteria for Urban Development listed on the following pages.

Fellows and McDaniel Lakes Sub-Area

Statement of Concern – Protection of Springfield's water supply at Fellows and McDaniel Lakes and management of potential pollutant sources.

Identification of Problems – This area contains the entire Little Sac River Watershed, which drains into Fellows and McDaniel Lakes. It provides over half of the drinking water for the Springfield urban area and flows to Stockton Lake, part of the City's water supply.

- Wastewater gains access to the lakes by surface and subsurface means.
- Septic tank effluent can reach the lakes untreated (via Northview shale formation and surface streams).
- Improperly cased wells provide a conduit for contaminants to reach the lakes.
- Point source discharges (such as package plants) can introduce contaminants to the lakes.
- Surface water runoff introduces contaminants to the lakes.

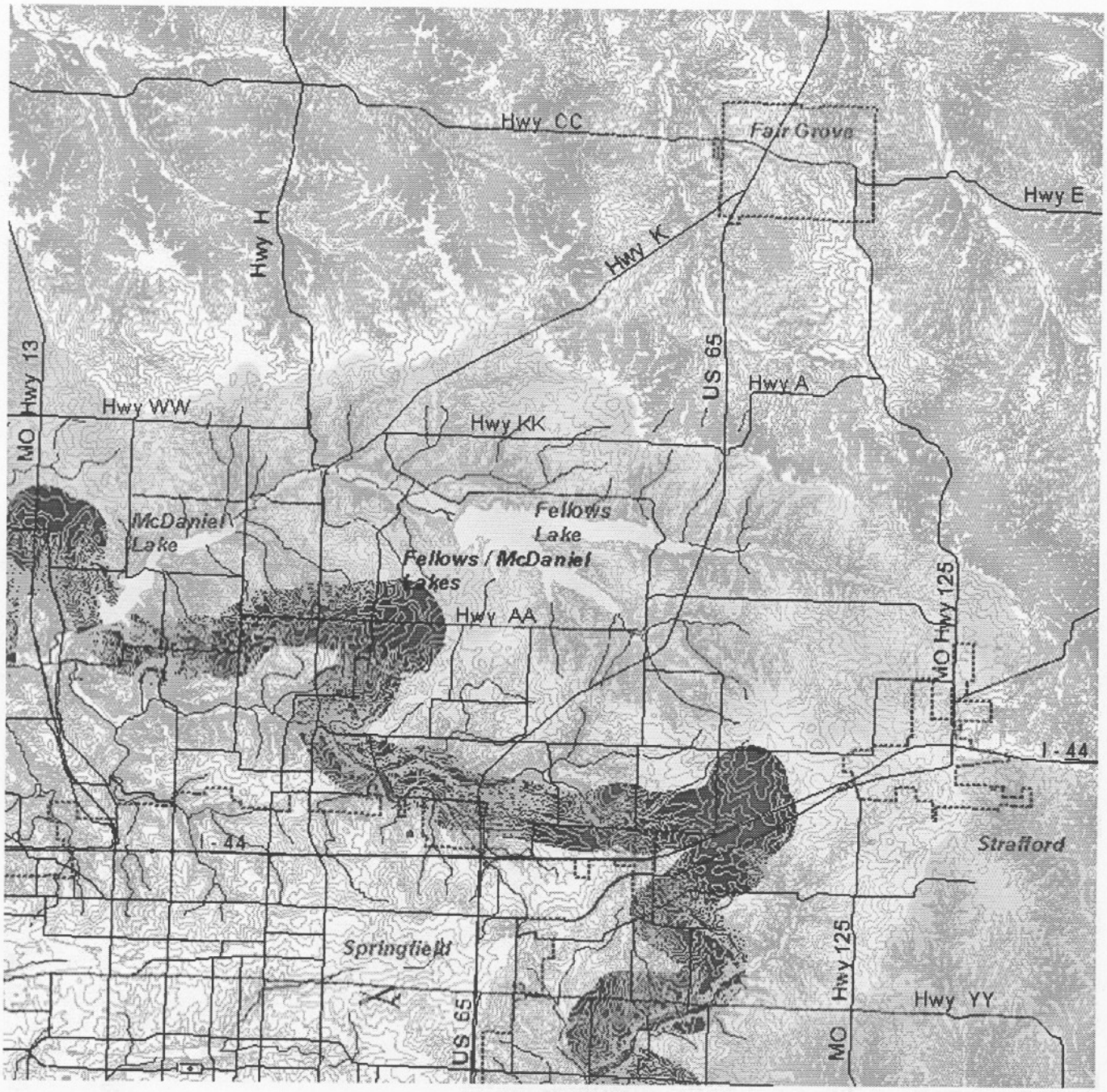
Criteria for Urban Development – Generally, urban density development should be discouraged due to potential impacts on the lakes, which are important to the City's drinking water supply. Consideration for development at urban intensities will require all of the following to be satisfied**:**

1. Proposed development must have connection to both public sanitary sewer and a public water supply;
2. Non-residential development generating wastewater requiring special treatment or pretreatment must be reviewed on a case-by-case basis and approval given if reasonable wastewater treatment standards are satisfied and connection to a public wastewater disposal system can be accomplished;
3. Development should be reviewed on a case-by-case basis and those capable of generating significant amounts of water-borne pollutants should be required to mitigate potential problems.

Potential for Major Urban Service Extension -- The inclusion of any land within this Subarea as part of the Urban Service Area is considered to be unlikely in the foreseeable future because there are no programmed or planned extensions of the sanitary sewer system into this area. In addition, there are no plans to improve the transportation system to meet urban design standards. The cost of providing these extensions and improvements will almost certainly be high and not economically justifiable at current and projected densities.

Criteria for Interim Development – Prior to including any of this subarea within the Urban Service Area, development will be required to meet the following**:**

1. Rural development could be tolerated without public sewer provided reasonable standards can be met for sewage disposal and water wells are properly cased.
2. Sewer systems, such as package treatment plants should be discouraged. Those systems that discharge outside this subarea may be tolerable following review and approval on a case by case basis. Discharges within this subarea, including land application, are not acceptable.



Urban service Area Boundary

Fellows/McDaniel Lake Basin

City Limits

Figure A-1
Fellows/McDaniel Lakes Sub-Area

South Dry Sac River Sub-Area

Statement of Concern – Protection of Springfield's water supply at Fulbright Spring and management of potential pollutant sources. The South Dry Sac also flows to Stockton Lake, a major part of the City's water supply.

Identification of Problems – Provides about 2/3 of daily flow to Fulbright Spring which in turn supplies about 15% of the community's annual drinking water needs.

- The South Dry Sac is a losing stream. Most or all of the flow normally enters the groundwater system directly.
- Runoff has negative impacts on Fulbright Spring and the drinking water supply.
- Potential groundwater contamination due to karst features.
- Threats of pollution to agricultural and recreational uses.

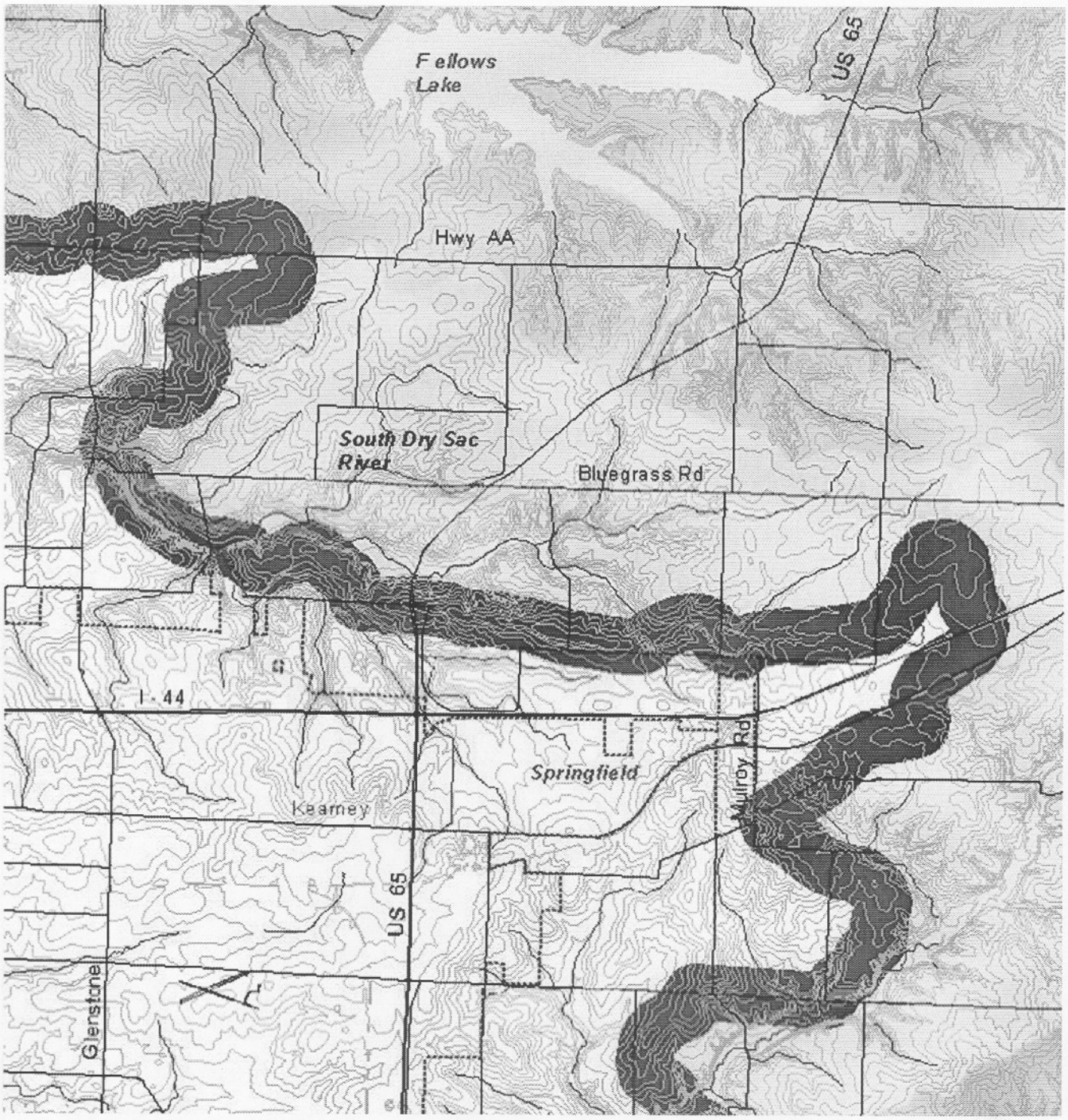
Criteria for Urban Development – Urban density development should be discouraged due to potential impacts on Fulbright Spring which is important to the City's drinking water supply. Consideration for development at urban intensities will require the following to be satisfied**:**

1. Urban density development in this area should only be considered after runoff water quality management programs have been developed.
2. Criteria for urban development should include the adoption of water quality management programs.
3. Sediment and erosion control programs must be developed.
4. Groundwater protection programs should be developed. Particular attention should be paid to sinkholes, fractures, and springs.

Potential for Major Urban Service Extension – Because of the sensitivity of this watershed there are no plans for sewer extension into the area shown. The Urban Service Area boundary has been drawn to encourage development to take place along the I-44 corridor.

Criteria for Interim Development – Prior to including any of this subarea within the Urban Service Area, development will be required to meet the following**:**

2. Development proposals must be considered on a case-by-case basis.
2. The use of best management practices should be explored.
3. Rural development can occur without public sewer provided reasonable standards can be met for sewage disposal and provided wells are properly cased.
4. Agricultural uses should integrate agricultural best management practices.



Urban service Area Boundary

South Dry Sac River Basin

City Limits

Figure A-2
South Dry Sac River Sub-Area

Pierson Creek Sub-Area

Statement of Concern – Protection of Springfield's water supply at Blackman Water Treatment Plant intake and the management of potential pollutant sources.

Identification of Problems – This area provides about 1/10 of the flow of the James River at the Blackman drinking water intake.

- Wastewater gains access to Pierson Creek/James River by surface and subsurface means.
- Septic tank effluent can reach Pierson Creek/James River virtually untreated via subsurface streams.
- Water wells, unless properly cased, can provide conduit for contaminants to reach Pierson Creek/James River via subsurface streams.
- Point discharges such as package plants, lagoons, etc. can introduce contaminants into Pierson Creek/James River via subsurface streams.

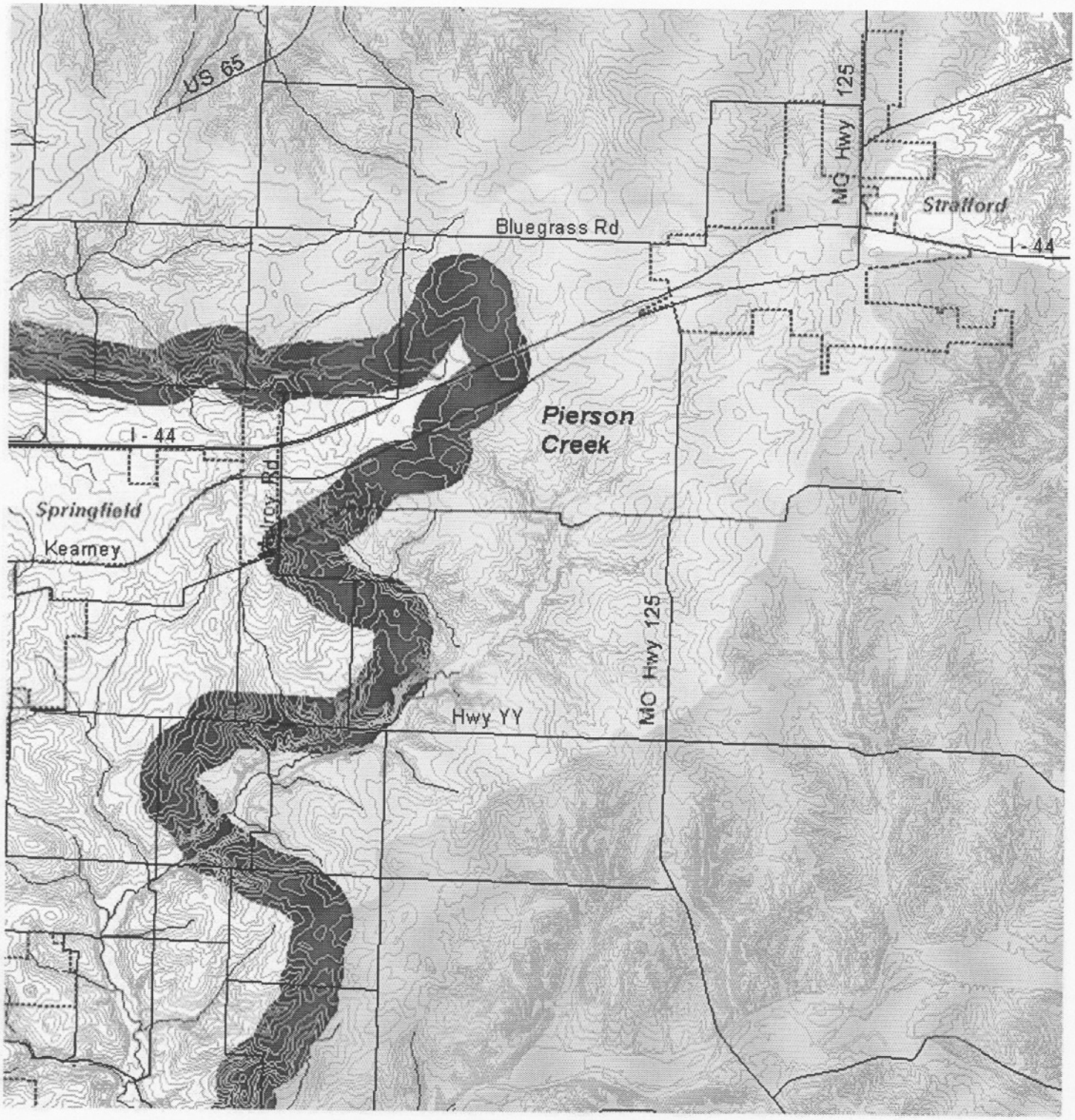
Criteria for Urban Development – There may be development pressure in this area due to proximity of urbanized area and market trends for desirable housing locations. Large lot development is currently occurring in the area. Consideration for development at urban intensities will require the following to be satisfied**:**

1. Connection to both public sanitary sewer and a public water supply should be in place.
2. Non-residential development generating wastewater requiring special treatment or pretreatment must be reviewed on a case-by-case basis and approval given if reasonable wastewater treatment standards are satisfied.
3. Development should be reviewed on a case-by-case basis and those capable of generating significant amounts of water-borne pollutants should be required to mitigate potential problems.
4. Groundwater protection programs should be developed. Particular attention should be paid to sinkholes, fractures, and springs.

Potential for Major Urban Service Extension – The designation of any additional area as part of the urban Service Area is considered unlikely from a public standpoint. More and more of this area is being divided into and developing on large lots. This is true between the proposed boundary line and the Pierson Creek valley.

Criteria for Interim Development – Prior to including any of this subarea within the Urban Service Area, development will be required to meet the following**:**

3. Rural development may be tolerated without public water and sewer provided reasonable standards can be met for sewage disposal and water wells are properly cased. Development on less than five acre parcels will be reviewed on a case-by-case basis for possible pollution of the city's water supply.
2. Sewer systems, such as package treatment plants, which discharge outside of this subareas may be tolerable following review and approval on a case-by-case basis. Discharges within this subarea, including land application, are not acceptable.
3. Connection to public water supply may be permitted if the above criteria for interim development are met.



Urban service Area Boundary

Pierson Creek Basin

City Limits

Figure A-3
Pierson Creek Sub-Area

Upper James River Sub-Area

Statement of Concern – Protection of Springfield's water supply at Blackman Water Treatment Plant intake and the management of potential pollutant sources.

Identification of Problems – This area provides 20 percent to 25 percent of the City's annual drinking water supply.

- Wastewater gains access to Pierson Creek / James River by surface and subsurface means.
- Septic tank effluent can reach Pierson Creek / James River virtually untreated via subsurface streams.
- Water wells, unless properly cased, can provide conduits for contaminants to reach Pierson Creek/James River via subsurface streams.
- Point discharges such as package plants, lagoons, etc. can introduce contaminants into Pierson Creek/James River via subsurface streams.

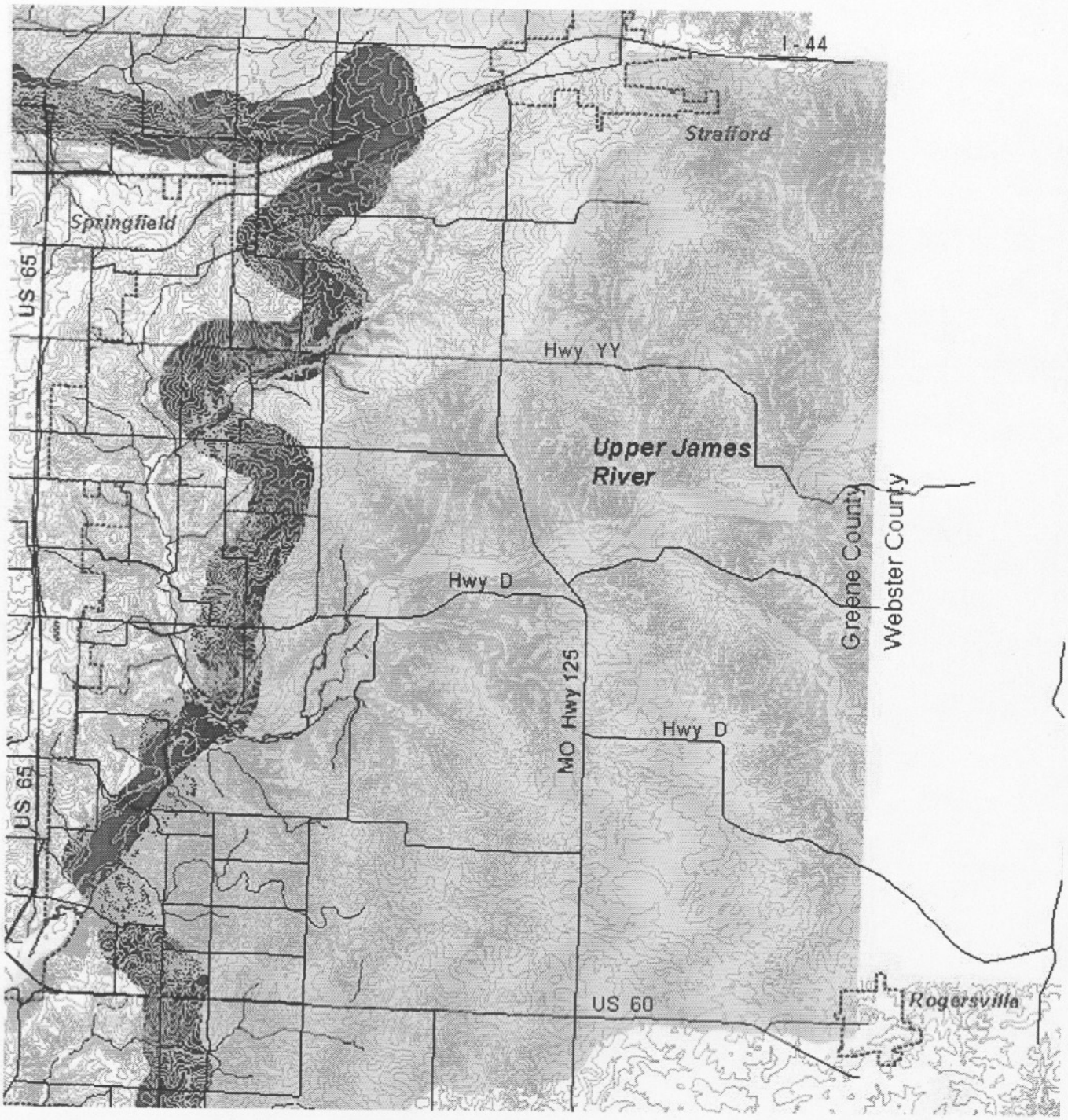
Criteria for Urban Development – Prospects for urban development are currently not great upstream of the Pierson Creek watershed due to distance from the City. Consideration for development at urban intensities will require the following to be satisfied**:**

1. Connection to both public sanitary sewer and a public water supply are needed.
2. Non-residential development generating wastewater requiring special treatment or pretreatment must be reviewed on a case-by-case basis and approval given if reasonable wastewater treatment standards are satisfied.
3. Development should be reviewed on a case-by-case basis and those capable of generating significant amounts of water-borne pollutants should be required to mitigate potential problems.

Potential for Major Urban Service Extension – The designation of any of this area as part of the Urban Service Area in the near future is considered unlikely. At a later date a trunk line could go up the river basin. Sewer extension in this area is not being planned at this time because there are other areas with service, existing or planned, that can be developed first.

Criteria for Interim Development – Prior to including any of this subarea within the Urban Service Area, development will be required to meet the following**:**

4. Rural development could be tolerated without public water and sewer provided reasonable standards can be met for sewage disposal and water wells are properly cased. Development on less than five acre parcels will be reviewed on a case-by-case basis for possible pollution of the city's water supply.
2. Sewer systems, such as package treatment plants, which discharge outside of this subarea may be tolerable following review and approval on a case-by-case basis. Discharges within this subarea, including land application, are not acceptable.



Urban service Area Boundary

Upper James River Basin

City Limits

Figure A-4
Upper James River Sub-Area

Kinser Branch and Farmers Branch Sub-Area

Statement of Concern – Maintain a cost-effective operation of the major urban services and management of potential pollutant sources.

Identification of Problems – This area contains dry karst valleys and numerous large sinkholes.

- Premature development at urban densities will necessitate expansion of urban services to development past already serviced vacant land.
- Pollution through groundwater movement is potentially high due to karst topography.
- Soils in the area are considered unsuitable for use in septic absorption fields.
- Much of the internally draining area contributes to the recharge of Camp Cora and Winoka Springs.

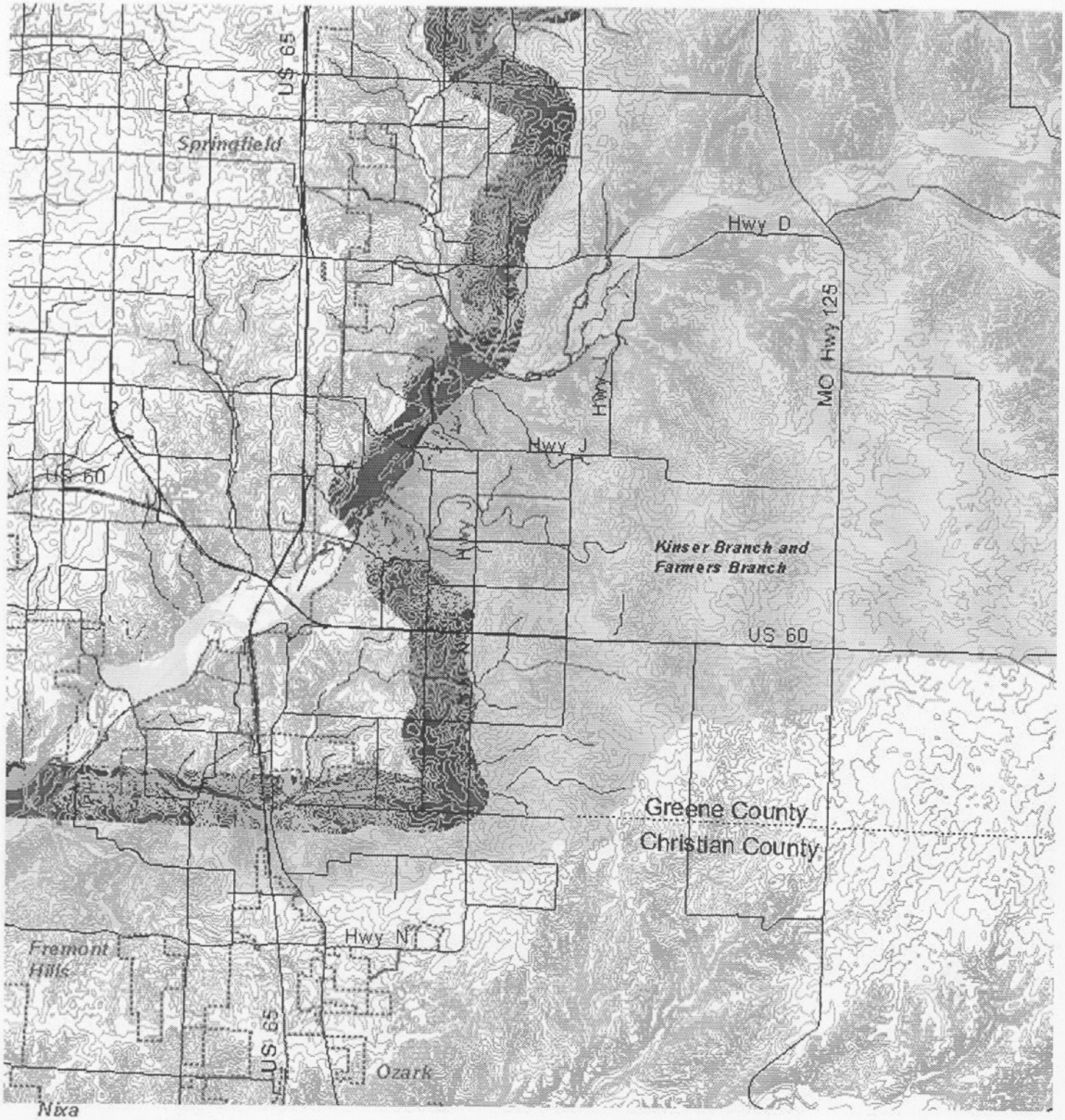
Criteria for Urban Development – Development at urban intensities in the upper reaches of this watershed will be discouraged. If development is considered appropriate after more detailed study, access to both public sanitary sewer and public water supply will be necessary. Consideration for development at urban intensities will require the following to be satisfied**:**

1. Urban development will be discouraged in the lower reaches. However, if it is considered appropriate after more detailed study indicating already serviced vacant land within the Urban Service Area has become developed and that urban services have adequate capacity for additional usage, development may be appropriate. In this case, access to both public sanitary sewer and pubic water supply will be necessary.
2. Non-residential development that generates wastewater requiring treatment beyond a septic tank will be discouraged.

Potential for Major Urban Service Extension – Extension of sewer service should not extend beyond the proposed urban reserve boundary for some time. However, at some time in the future, development will extend east of the proposed Urban Service Area boundary and sewer service should be provided at the appropriate time. No extension of sewer service into this area is currently planned.

Criteria for Interim Development – Prior to including any of this subarea within the Urban Service Area, development will be required to meet the following**:**

1. Rural development may be tolerated without public water and sewer provided reasonable standards can be met for sewage disposal and water wells are properly cased; and provided that any new septic tanks discharge into soils suitable for septic tank discharges; and provided the development is not within an internal drainage area for a sinkhole.
2. Sewer systems such as package treatment plants, that discharge outside of this subarea and outside an internal drainage area for a sinkhole, may be tolerable following review and approval on a case-by-case basis. Discharges within this subarea, including land application, are not acceptable.



Urban service Area Boundary

Kinser Branch and Farmers Branch Basin

City Limits

Figure A-5

Kinser Branch and Farmers Branch Sub-Area

McElhaney Creek – Wilson's Creek Sub-Area

Statement of Concern – Maintain a cost-effective operation of the major urban services, avoid a premature relocation of the Southwest Sewage Treatment Plant due to a scattered or sprawl development pattern, and manage potential pollutant sources.

Identification of Problems –

- Urban development of the area downstream of the Southwest Sewage Treatment plant in Wilson's Creek watershed and a portion of the James River watershed (west of Ward Branch watershed) would require pump stations or the movement of the Southwest Treatment Plant.
- Pollution through groundwater movement is potentially high.

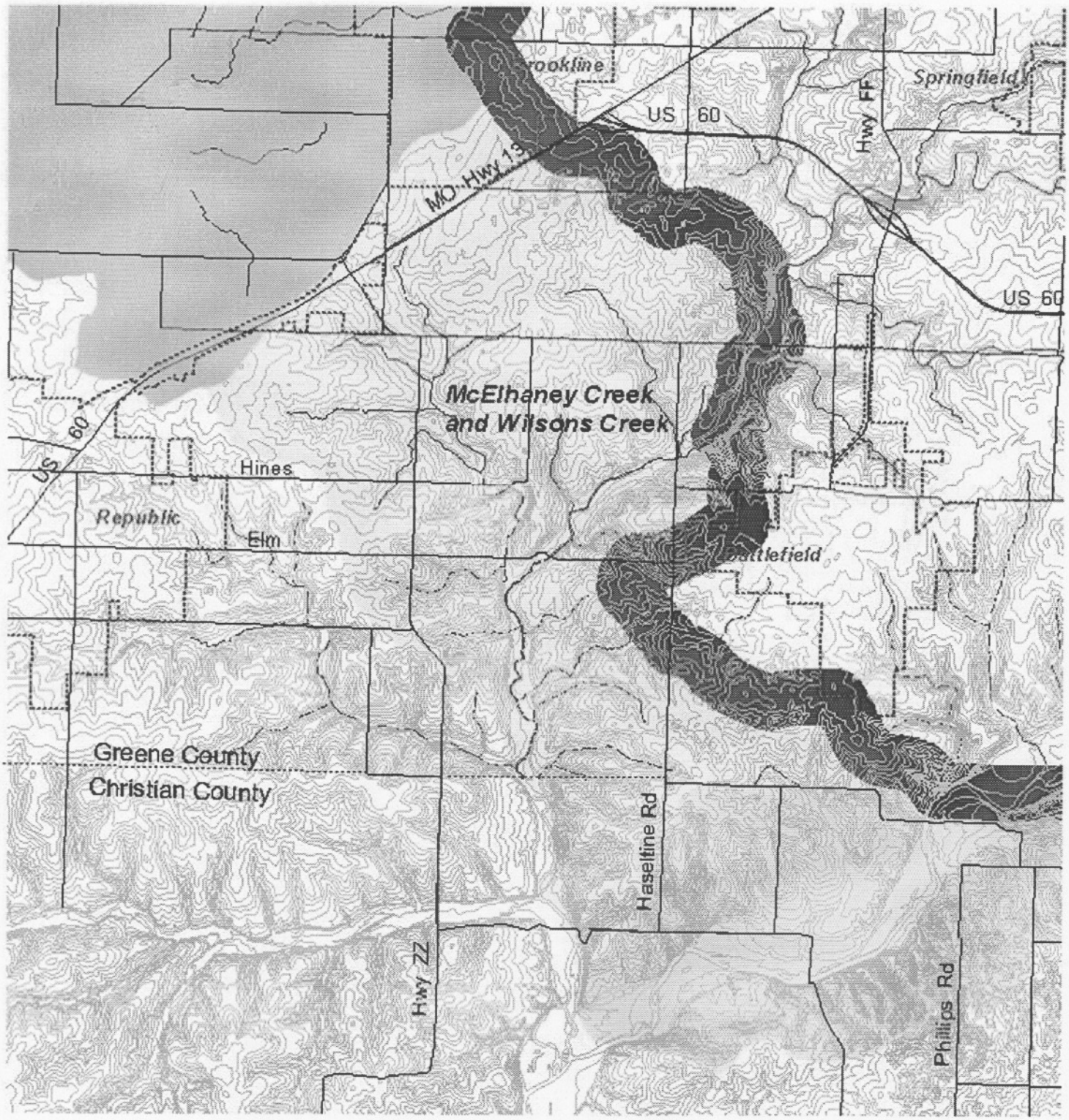
Criteria for Urban Development – Consideration for development at urban intensities will require the following to be satisfied**:**

1. Urban development may be tolerable with private water wells and septic tanks provided that wells are properly cased and that septic tanks discharge into soils suitable for septic tank discharges.
2. Non-residential development generating wastewater requiring special treatment or pretreatment must be reviewed on a case-by-case basis and approval given if reasonable wastewater treatment standards are satisfied.

Potential for Major Urban Service Extension – Wilson's Creek National Battlefield will be a barrier to sewer extension. Urban development of the area downstream of the Southwest Sewage Treatment Plant in Wilson's Creek watershed and a portion of James River Watershed would require pump stations or the movement of the Southwest Treatment Plant downstream.

Criteria for Interim Development – Prior to including any of this subarea within the Urban Service Area, development will be required to meet the following**:**

1. Rural development may be tolerated without public water and sewer provided reasonable standards can be met for sewage disposal and water wells are properly cased; and provided that the development uses septic tanks discharging into soils suitable for septic tank discharges; and provided the development is not within an internal drainage area for a sinkhole.
2. Sewer systems such as package treatment plants, that discharge outside of this subarea and outside an internal drainage area for a sinkhole, may be tolerable following review and approval on a case-by-case basis. Discharges within this subarea, including land application, are not acceptable.



Urban service Area Boundary

McElhaney Creek and Wilsons Creek Basin

City Limits

Figure A-6
McElhaney Creek-Wilsons Creek Sub-Area

Clear Creek and Rainer Branch Sub-Area

Statement of Concern -- Protection of the Springfield/Branson Airport from urbanization, plus protection of the municipal water sources for Springfield and Willard, and the management of potential pollutant sources.

Identification of Problems -- Wastewater has potential of gaining access to Clear Creek Spring, Brower Spring, Ritter Spring, Fantastic Caverns Spring, and Fulbright Spring, and Stockton Lake via underground conduits.

- Septic tank effluent can potentially reach the underlying aquifer in a virtually untreated state via sinkholes.
- Water wells, unless properly cased, provide a conduit for contaminants to reach groundwater supply sources.
- Point discharges such as package plants, lagoons, industry, etc. can introduce contaminants to water supply sources.
- Groundwater recharge from surface water runoff may introduce contaminants into Clear Creek, Brower and Fulbright Springs.
- Encroachment of incompatible urban uses may have negative impact on the airport.

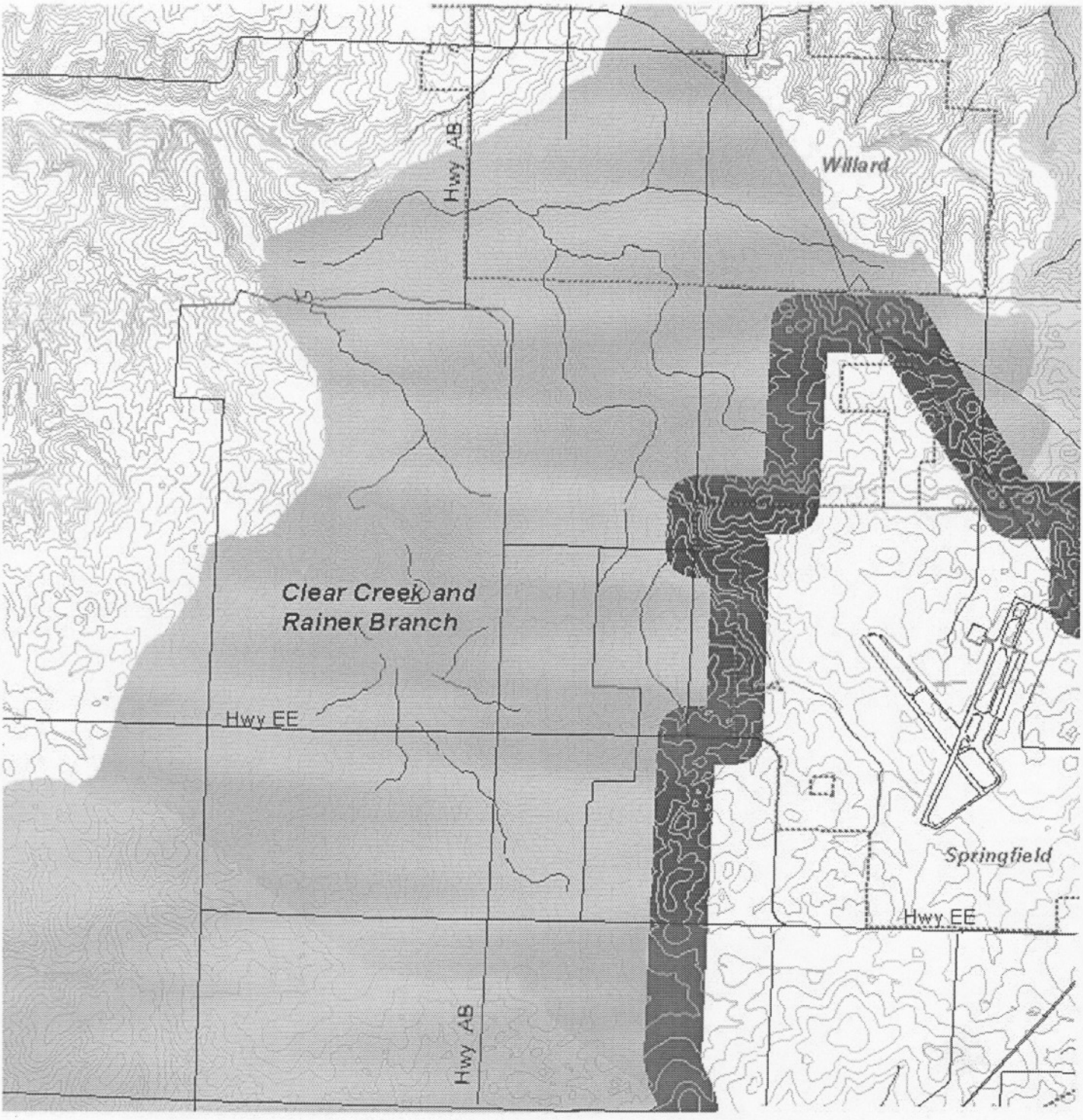
Criteria for Urban Development – Consideration for development at urban intensities will require the following to be satisfied**:**

1. Residential development at urban densities will be discouraged. Residential development may be considered appropriate following more detailed study and will be required to have access to both public sanitary sewer and a municipal water supply.
2. Non-residential development generating wastewater requiring special treatment or pretreatment is discouraged. At a minimum, special treatment or pretreatment methods will be reviewed on a case-by-case basis and approval given if reasonable wastewater treatment standards are satisfied.
3. Development should be reviewed on a case-by-case basis and those capable of generating significant amounts of water-soluble or water-borne pollutants through groundwater discharge will be discouraged, or, at a minimum, be required to mitigate potential problems.
4. Development that interferes with airport operations is not acceptable.

Potential for Major Urban Service Extension – Sewer service will be restricted to what can be pumped to the Springfield system. Sewer service extension would require construction of a major lift station and extension of a force main to a gravity sewer.

Criteria for Interim Development –

1. Rural development could be tolerated without public water and sewer provided reasonable standards can be met for sewage disposal and water wells are properly cased and provided that the development is not within an internal drainage area for a sinkhole.
2. Sewer systems such as package treatment plants, which discharge outside of the subarea and outside an internal drainage area for a sinkhole, may be tolerable following review and approval on a case-by-case basis. Discharges within this subarea, including land application, are not acceptable.



Urban service Area Boundary

Clear Creek Rainer Branch

City Limits

Figure A-7
Clear Creek and Rainer Branch Sub-Area

Little Sac River and Flint Hill Branch Sub-Area

Statement of Concern – Protection of Springfield's water supply at Fulbright Spring and the management of potential pollutant sources.

Identification of Problems – This area is a source of community drinking water, not only at its headwaters (Fellows and McDaniel Lakes and South Dry Sac River) but also downstream as a flow component of Stockton Lake.

- Wastewater gaining access to Fulbright Spring, Ritter Spring and Clear Creek via underground conduits.
- Septic tank effluent can reach Fulbright/Ritter Springs, Clear Creek, and private wells virtually undiluted via subsurface streams.
- Water wells, unless properly cased, provide a conduit for contaminants to reach groundwater supply sources.
- Point discharges such as package plants lagoons, etc. can introduce contaminants to water supply sources.
- Surface water runoff may introduce contaminants into Ritter/Fulbright Springs complex.

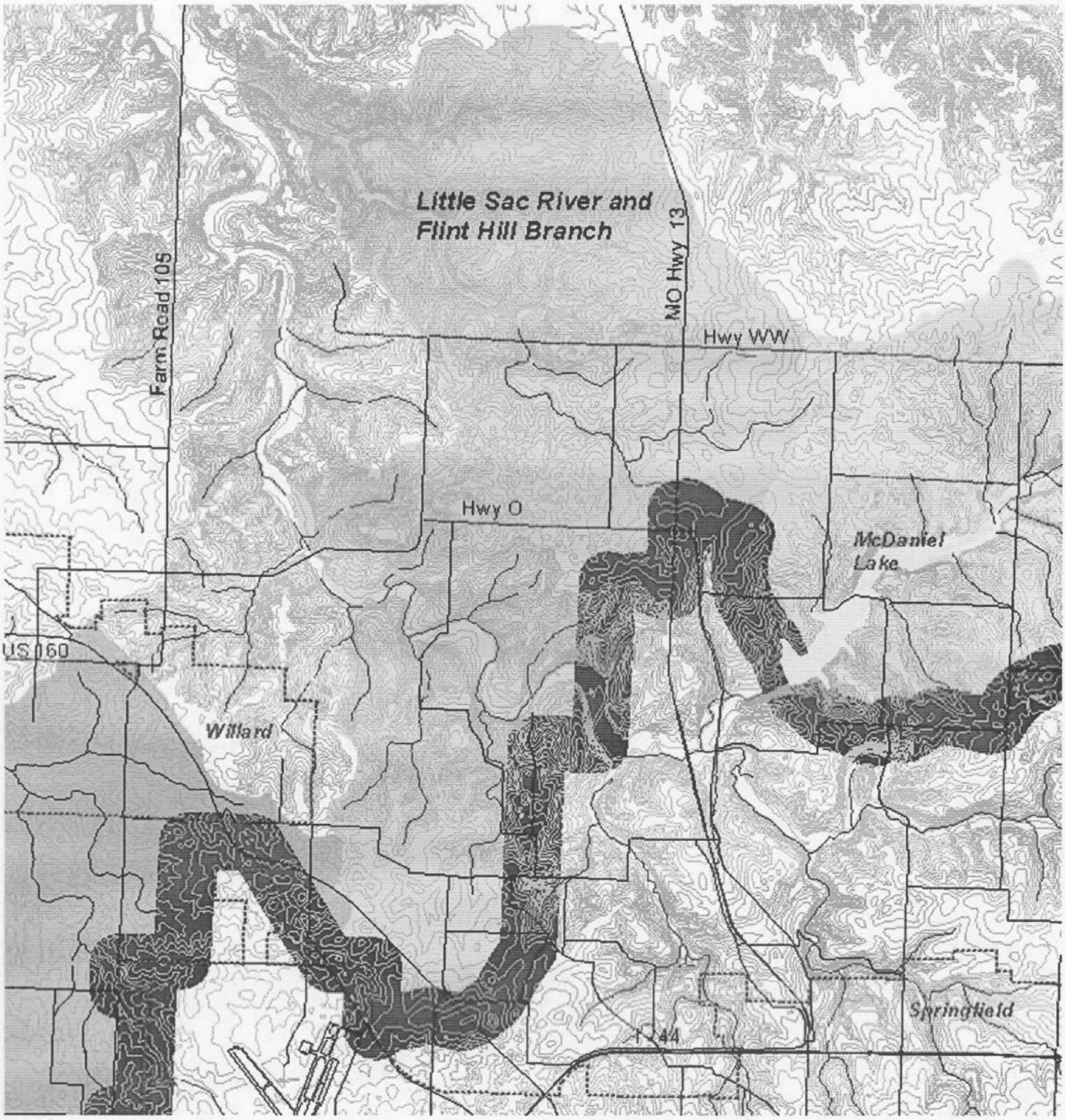
Criteria for Urban Development – Pressure exists for urban development. Development at urban density will require the following to be satisfied**:**

1. Urban development will be discouraged. If it is considered appropriate after more detailed study, access to both public sanitary sewer and the public water supply will be necessary.
2. Non-residential development, generating wastewater requiring special treatment or pretreatment, is discouraged. At a minimum, special treatment or pretreatment methods will be reviewed on a case-by-case basis and approval given if reasonable wastewater treatment standards are satisfied.
3. Development should be reviewed on a case-by-case basis and those capable of generating significant amounts of water-soluble, or water-borne pollutants through ground water discharge will be discouraged, or at a minimum, be required to mitigate potential problems.

Potential for Major Urban Service Extension -- Extension of sewer service would require a trunk line. This is not seen as a growth area. Severe slopes make development at urban densities difficult.

Criteria for Interim Development – Prior to including any of this subarea within the Urban Service Area, development will be required to meet the following**:**

5. Rural development could be tolerated without public water and sewer provided reasonable standards can be met for sewage disposal and water wells are properly cased.
3. Sewer systems such as package treatment plants, which discharge out of this are, may be tolerable following review and approval on a case-by-case basis. Discharges within this subarea, including land application, are not acceptable.



Urban service Area Boundary

Little Sac River and Flint Hill Branch

City Limits

Figure A-8

Little Sac River and Flint Hill Branch Sub-Area

Sac River and Pond Creek Sub-Area

Statement of Concern – Maintain a cost-effective operation of the major urban services and management of potential pollutant sources.

Identification of Problems –

- Septic tank effluent can potentially reach the underlying aquifer in a virtually untreated state via sinkholes.
- Pollution through ground water movement is potentially high.
- Water wells, unless properly cased, provide a conduit for contaminants to reach groundwater supply sources.
- Point discharges such as package plants, lagoons, industry, etc. can introduce contaminants to water supply sources
- Protection of the Stockton Lake water supply.

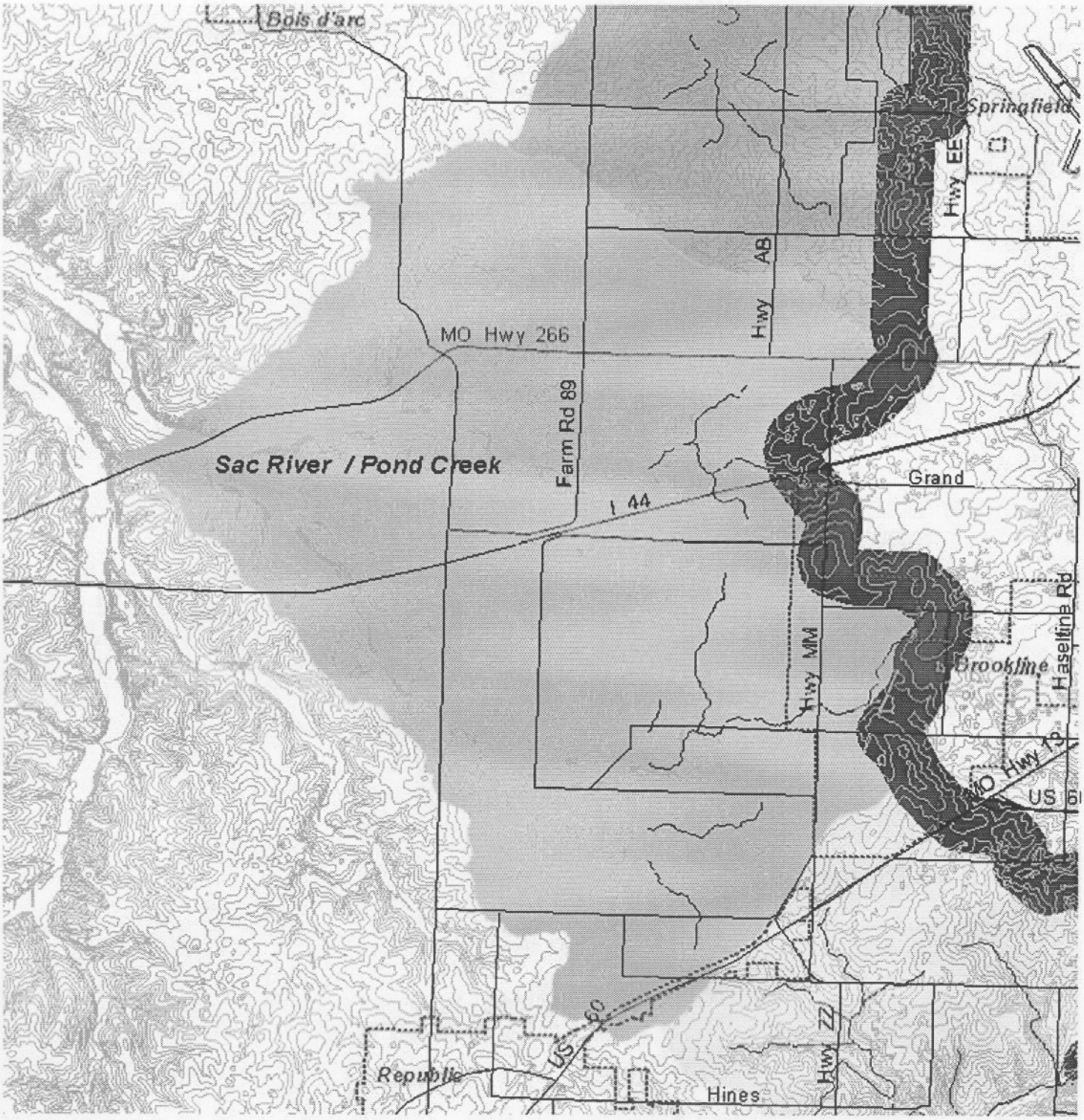
Criteria for Urban Development – Consideration for development at urban intensities will require the following to be satisfied.

1. Urban development will be tolerable on private water wells and septic tanks provided that wells are properly cased and provided that septic tanks discharge into soils suitable for septic tank discharges.
2. Non-residential development generating wastewater requiring special treatment or pretreatment must be reviewed on a case-by-case basis and approval given if reasonable wastewater treatment standards are satisfied.

Potential for Major Urban Service Extension – Sewer service will be restricted to what can be pumped to the City of Springfield System.

Criteria for Interim Development – Prior to including any of this subarea within the Urban Service Area, development will be required to meet the following**:**

6. Rural development could be tolerated without public water and sewer provided reasonable standards can be met for sewage disposal and water wells are properly cased, and provided that the development is not within an internal drainage area for a sinkhole.
4. Sewer systems, such as package treatment plants, which discharge outside of the subarea and outside an internal drainage area for a sinkhole may be tolerable following review and approval on a case-by-case basis. Discharges within this subarea, including land application, are not acceptable.



Urban service Area Boundary

Sac River/Pond Creek

City Limits

Figure A-9

Sac River/Pond Creek Sub-Area

Lower James River Sub-Area

The area shown on the map as the Lower James River Watersheds is made up of a number of drainage basins in northern Christian County. Most of this area is in unincorporated Christian County. Some of the area is in the City of Nixa. At this time there are no plans for the City of Springfield to provide sewer service to this area of Christian County. The James River floodplain forms a significant boundary between Christian and Greene Counties. A large area of karst topography in northern Christian County complicates the development potential and would make the area very vulnerable to pollution. Owners of property located along the county line in unincorporated Christian County have not shown interest in annexing to either Springfield or Nixa.

Urban service Area Boundary

Lower James River Basin

City Limits

Figure A-10
Lower James River Sub-Area