

CITY OF JOHNSON CITY, TENNESSEE

URBAN GROWTH & SERVICES ELEMENT



COMPREHENSIVE PLAN

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URBAN GROWTH & SERVICES ELEMENT JOHNSON CITY COMPREHENSIVE PLAN



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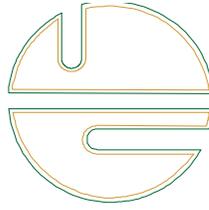
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AUGUST 5, 2004

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PREPARED BY: CITY OF JOHNSON CITY PLANNING DEPARTMENT



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Robert White

Prepared By

The Johnson City Planning Department

601 East Main Street, PO Box 2150, Johnson City, Tennessee 37605-2150

Staff Responsible

James D. Moody, Planning Director

James R. Donnelly, Comprehensive Planning Coordinator

Steve Neilson, Long-Range Planning Coordinator

Stuart Helbus, Planner ³

Monie Honeycutt, Graphics Tech III

Julie Ayers, Administrative Coordinator

¹ Member of the Urban Growth and Services Subcommittee

² Former Planning Commission Member

³ Former Staff Member

TABLE OF CONTENTS

INTRODUCTION

Relationship to the Comprehensive Plan.....	1
Assumptions.....	1
Purpose of the plan.....	2
Review of Previous Planning Efforts.....	2
The Planning Process.....	3

BACKGROUND AND EXISTING CONDITIONS

Recent Growth History.....	5
Annexation – A Factor of City Growth.....	6
Statutory Authority to Annex.....	8
Urban Growth Boundary (UGB).....	9
Effects of Past Growth.....	11
Growth Areas.....	14
Projected Population Growth.....	14
Smart Growth.....	15
City Services and Existing Extension Policies.....	17

GOALS AND OBJECTIVES

Basis for Objectives.....	24
Goal.....	24
Objectives.....	24

GROWTH OPTIONS

Option 1 – Existing Trends (Urban Sprawl).....	30
Option 2 – Compact Growth (Smart Growth).....	31
Option 3 – Growth Center (Smart Growth).....	33
Option Selection.....	34
Summary.....	35

URBAN GROWTH BOUNDARY DEVELOPMENT

Key Issues.....	37
Urban Service Area.....	39
Public Facility and Service Factors.....	39
Delineation of the Urban Service Area.....	40
Development Capacity of the Urban Service Area.....	41
Land Use Projections.....	42

RECOMMENDATIONS

Urban Service Area..... 44
Amending The Urban Service Area..... 45
Infill Development..... 45
Land Use Regulation..... 47
Capital Improvements..... 48
Annexation..... 48

APPENDIX..... 57

LIST OF TABLES

Table 1. Historical and Projected Population Trends: 1960-2020.....	4
Table 2. Annexations: 1960-2004.....	5
Table 3. Population Projections, Selected Areas.....	15
Table 4. Smart Growth vs. Sprawl Development, Comparison of Outcomes.....	16
Table 5. Summary of City Services and Extension Policies.....	22
Table 6. Rating for Evaluating Options.....	35
Table 7. Development Capacity, Urban Service Area.....	41
Table 8. Residential Land Use Needs.....	42
Table 9. Non-Residential Land Use Needs.....	43
Table 10. Area Containing Environmental Constraints.....	43
Table 11. Factors Affecting Infill Potential.....	46
Table 12. Summary of Areas Recommended for Annexation.....	Appendix

LIST OF MAPS

Map 1. Annexation Trends, 1980 to 2002.....	Follows Page	4
Map 2. Washington County UGBs, Planned Growth Areas & Rural Areas.....	Follows Page	9
Map 3. Existing Land Use, 2001.....	Follows Page	10
Map 4. Population Change by Block Groups, 1990 to 2000.....	Follows Page	11
Map 5. Parcels Meeting Urban Service Area Criteria.....	Follows Page	41
Map 6. Proposed Urban Service Area.....	Follows Page	43
Map 7. Washington County Zoning.....	Follows Page	47
Map 8. Areas Recommended for Annexation.....	Follows Page	49
Map 9. Annexation Area #1, Watauga Road/Woodlyn Road.....	Follows Page	51
Map 10. Annexation Area #2, Knob Creek Road/ Mountainview Road.....	Follows Page	52
Map 11. Annexation Area #3, Boones Creek Road/ Old Gray Station Road.....	Follows Page	53
Map 12. Annexation Area #4, Carroll Creek Road/ Bart Greene Drive.....	Follows Page	54
Map 13. Annexation Area #5, State Route 75/Gray Area.....	Follows Page	55

LIST OF FIGURES

Figure 1. Land Use Distribution Trends, 1963, 2001.....	11
Figure 2. Population Density Trends.....	12

Population projections indicate that the next 20 years will be a period of substantial growth in the city's history. The direction and extent of this growth and the provision of city services are factors that will determine the city's future pattern of development. The anticipated development resulting from this population increase will require: the extension of water and sewer services; the construction, upgrading, and maintenance of roads; the building of new schools, recreation facilities, and fire stations; and the extension of services such as police protection, solid waste collection, public transit, senior citizens programs, and regulatory measures, e.g., zoning, building code enforcement, etc. Meeting this challenge and demand will require the formulation of policies directed at managing this growth in the most cost effective and efficient manner.

RELATIONSHIP TO THE COMPREHENSIVE PLAN

The city's dynamic growth that occurred in the 1990s and that is continuing today prompted the city to embark on a program to update its long-range planning efforts. In September 2001, the City Commission adopted the Johnson City Parks and Recreation Master Plan, 2000- 2020 and followed that action with a decision to prepare a comprehensive plan that will address all aspects of the city's development. The ability of Johnson City to adequately serve both existing and projected development with essential public facilities and services is critical to maintaining a high quality of life and attracting and managing high quality development. The Johnson City Comprehensive Plan will serve in this regard as the basis for both public and private decision-making.

As an important part of the Comprehensive Plan, the Urban Growth and Services Element will provide the necessary direction to "provide high quality public facilities with fiscal efficiency." This statement, contained in the Comprehensive Plan's Vision Statement, emphasizes the city's commitment to ensuring a quality of life that is unsurpassed in Northeast Tennessee.

This plan, when viewed within the context of the Comprehensive Plan, is one step in a continuous process of evaluation, policy setting, and implementation. The Urban Growth and Services Element will establish growth policy and guide the timing of service expansions and the timing of annexation.

ASSUMPTIONS

The specific assumptions underlying the plan are presented below to give every person an opportunity to interpret and evaluate the plan in light of the stated assumptions. In the future, the plan can be more readily revised when the basis for recommendations and policies are understood. The following assumptions were used in the development of the Urban Growth and Services Element:

1. The local population will increase as indicated by the forecast in Table 3;
2. There will be an increasing demand by the city's residents for high quality public facilities and services;

3. There will be an increasing public demand to hold the line on tax increases and service fees in order to provide public facilities and services;
4. A low density, sprawling land development pattern is more costly to serve with public utilities and services than infill or compact development;
5. Changing demographics will continue to influence housing types and development patterns;
6. Residents will continue to demand a high quality of life dictated by convenient shopping, employment opportunity, ease of travel, a high level of public facilities and services, and a variety of housing choices; and
7. The capacity of elementary schools will influence city policy regarding utility extension and annexation.

PURPOSE OF THE PLAN

Each element of the Comprehensive Plan has a specific purpose regarding the future development of Johnson City. The purpose of the Urban Growth and Services Element is:

To provide adopted public policy concerning the quantity, quality, timing, and location of growth to guide the physical development of the city's Urban Growth Boundary. This purpose will be accomplished through:

1. Identification of areas of the Urban Growth Boundary (UGB) where intensive development is to be encouraged and supported through the extension of city services and annexation;
2. Identification of city policies for promoting and providing services within the city's corporate limits and within the unincorporated area of the city's UGB; and
3. Identification of methods other than annexation to manage growth within the UGB.

REVIEW OF PREVIOUS PLANNING EFFORTS

Johnson City has had an ongoing planning program that has responded to growth issues and pressures facing the city. The following, summarizes accomplishments related to growth management:

- In 2001, the City Commission adopted a Strategic Plan for Johnson City 2006 & Beyond. The plan identified goals, objectives, and priorities for the major issues concerning the city's development. One of the plan's topics centered around the provision of city services and quality of life.
- In December 1999, the city contracted with Dover, Kohl & Partners to prepare a land use and transportation plan. The plan, Connecting Johnson City: the Land Use and Transportation Plan integrates land use and transportation principles and proposes an approach to growth

while addressing transportation needs as an integral part of the planning process. The plan relied heavily on citizen involvement and the identification of citizen needs and concerns.

- In 1991, the Planning Department prepared the Service Jurisdiction Plan that reviewed projected growth patterns and identified priorities for city service extension in order to accommodate anticipated development.
- In October 1989, the City Commission adopted a series of policies affirming its commitment to logical, responsible growth. The cost effective extension of city services was the focus of the Commission's action.
- In January 1986, the City Commission adopted the city's Land Use Plan. The plan provided policy for infill development; however, it neglected growth outside the corporate limits. The result has been an expanding city limits, absent adopted growth policy, with the city reacting to growth in a manner that has resulted in the costly extension of city services.
- In May 1974, the Planning Department prepared An Annexation Study that delineated areas surrounding the city that should be annexed within five years. For the most part, the proposed areas were annexed during the latter part of the 1970s and the first five years of the 1980s.

The latter part of the 1980s witnessed a series of city-initiated, unplanned, and piecemeal annexations designed to reach a 1990 population of 50,000. Since 1990, the city has followed a policy of annexation by request of the property owner with the extension of city utilities being the predominant reason for the requests. This annexation policy has resulted in a confusing and inefficient city limits boundary in terms of the delivery of public services, particularly emergency services and school bus service.

THE PLANNING PROCESS

Johnson City's leadership role in the Tri-Cities region has been achieved through the decisions of both the public and private sectors. The city must actively manage its growth and respond to changing circumstances if it is to meet the needs of its residents and businesses in the community and retain its leadership role in the region.

The Urban Growth and Services Element focuses on identified development issues facing the city. Following this introductory section, the report:

- Describes the city's past growth and annexation history;
- Summarizes existing conditions, policies, and issues that provide a context for the planning process;

- Identifies plan objectives;
- Reviews and analyzes development alternatives as to how well each meets the objectives of the report;
- Establishes actions to manage growth within the Urban Growth Boundary; and
- Identifies recommendations and implementation policies.

Johnson City’s roots are in pioneer Tennessee beginning at the intersection of three stagecoach routes that eventually became downtown Johnson City. During the area’s early years, prior to incorporation, the community was first known as Green Meadows and then Blue Plum. The community prospered with the coming of the railroads in the 1850s until the economic slowdown in 1893.

In the early 1900s, the establishment of the National Home for Disabled Volunteer Soldiers (1901) and the East Tennessee Normal School (1911), known today as East Tennessee State University, provided the impetus for development. The city has continually expanded in area and population, and today encompasses approximately 40 square miles and a population approaching 57,000 residents. A complete history of Johnson City is contained in the Historic Preservation Element of the Comprehensive Plan.

RECENT GROWTH HISTORY

Annexation is the traditional way a city expands its territorial limits and jurisdictional powers. Johnson City has engaged in this practice since its original incorporation in 1869 when the corporate limits were established as an area within a one-half mile radius from Johnson’s Depot. Annexations are conducted within the authority granted to municipalities by the state through enabling legislation.

In most instances, particularly since 1960, annexation has been the city’s reaction to existing or proposed sprawl development. Although it certainly does not stop development for an extended period of time, annexation, if properly used, can ensure that development takes place in a more orderly fashion. If and when growth around a city’s periphery is inevitable, it should at least meet city standards to ensure that it is not substandard and does not require substantial improvements when annexed.

Prior to 1960, Johnson City expanded its corporate limits from the initial boundary encompassing seven-tenths of a square mile in 1869 to approximately six square miles in 1960. During the 1960-2000 period, the city completed 387 annexations, adding 32.9 square miles and 21,833 residents to the city. The following table summarizes annexations during that period in 10-year increments.

Table 1. Annexations: 1960 – 1999

Time Period	Number of Annexations	Square Miles Added	Population Added
1960 – 1969	31	6.69	4,760
1970 – 1979	32	6.72	6,184
1980 – 1989	141	9.50	9,484
1990 – 1999	183	10.00	1,405
TOTAL	387	32.91	21,833

Source: Johnson City Planning Department

During the 1960s and 1970s there were fewer annexations; however, they were larger in terms of area and population added to the city. Although only 63 annexations were completed, over 13 square miles and approximately 11,000 new residents were added to the city. The 1980s and 1990s experienced a total of 324 annexations, resulting in the addition of 19.5 square miles and 10,889 residents to the city. It is interesting to note that the 1990s experienced the greatest number of annexations and square miles added to the city but only 1,405 people were annexed. The 1990s reflected the city's policy of annexation by request, resulting in a large number of one-parcel requests. However, many of the requests involved larger vacant tracts that were ultimately developed into single-family subdivisions with residents counted in the 2000 U.S. Census.

This policy of annexation by request has continued, and during the period of January 1, 2000 through July 1, 2004 a total of 63 annexations were completed, adding 1.2 square miles and 110 residents to the city. The past history of fewer, but larger annexations has been abandoned in favor of annexation by request. The result is slower growth of the city's population and tax base.

ANNEXATION – A FACTOR OF CITY GROWTH

A city that never planned for growth, that annexed land only when required by crisis (such as failing septic systems), or annexed land only after it had been developed in a manner inconsistent with city policies and regulations would soon find itself in financial difficulty. Nevertheless, this is exactly what many cities have done for years. Johnson City has not escaped annexation for the above reasons; however, in recent years the instances have been rare.

Critics often assert that the city's primary motivation in annexation is to increase its tax base. However, cities have annexed land in many instances only after residents requested services such as water or sewer due to a lack of adequate or nonexistent services. Then, there may be annexation and a substantial expenditure of city funds, attempts to correct conditions that never should have existed, problems in providing utility services and replacing substandard water lines and once again proving the adage that "an ounce of prevention is worth a pound of cure".

If cities are expected to provide services effectively, they should have some control over when and where services are provided. This is particularly true in the case of water and sewer services, which require large capital expenditures and advance planning. When a city allows development to occur anywhere, anytime, and in any form, the result is usually urban sprawl characterized by haphazard, piecemeal development, and in many instances, development not constructed to city standards.

Several problems are likely to arise if development on the city's periphery is not guided in some manner. First, the city may have to provide services in several directions or areas as opposed to a more compact area that could be achieved with some coordination. Second, uncontrolled development will prematurely encroach on more farmland than if it

was restricted to a more compact area. Finally, if and when annexation does occur, the city will often be confronted with the problem of replacing substandard facilities.

Some cities have attempted to avoid these problems by annexing certain areas before urban-scale development begins. The use of zoning and subdivision regulations to keep development compact and consistent with city standards is standard practice. In some cases, the same results can be achieved without annexation through extraterritorial zoning (city zoning outside the corporate limits) and utility extension policies.

Although it is difficult to identify the most appropriate time for a city to initiate an annexation, the most common reasons are fairly obvious. The most important factors relating to the need for annexation appear to be: (1) development (or the expectation of development) in the fringe area outside the city boundaries, and (2) the corresponding need or expectation that the city will provide certain services such as water and sewer to the area.

In most annexation instances, one of the following three situations apply:

1. **Fringe area development has already occurred, and the city is providing some services to the area.** Examples include commercial development along the major arterials leading out of the city, or a small cluster or subdivision of residences. Often, a city provides water, sewer, and refuse collection services to these developments. If such services are provided, property owners have little incentive to request annexation since they are already receiving many of the benefits a city provides without having to pay property taxes.

Some cities refuse to provide services outside their boundaries, or charge higher rates for servicing outside areas. If property owners outside the city are charged higher rates or refused city service altogether, they are more likely to request annexation in order to reduce their costs for services. In Johnson City's UGB and also outside the UGB, the city provides water, sewer, and solid waste collection service at a higher rate than to the properties inside the city.

2. **Fringe area development has already occurred but city services are not provided to the area.** This situation occurs rarely since property owners usually desire at least some of the city's services such as water and sewer service. Even if the development is self-sufficient, it is highly probable that it will request city services at some point in the future. This could occur for many reasons: the development's wells and/or septic systems may begin to fail; or the growing population may desire city schools. Even in cases where no direct services are provided beyond city boundaries, cities generally incur additional costs as a result of development outside the city limits. Residents outside the city often use city streets, parks, libraries, schools, and other facilities as much as city

residents, but do not pay city taxes that pay for the cost of these facilities. They may, however, pay fees or tuition for the use of city services and facilities. In this situation, city taxpayers are subsidizing outside-city residents.

3. **Fringe area development has not yet occurred, but is expected in the foreseeable future.** There are three reasons a city might consider annexation in this situation. The first is when there is still developable land within the city limits and the city desires to direct new growth into those areas, rather than permitting haphazard development outside the city where the costs of providing services are higher due to the increased distances involved. A second reason is where it is inevitable that development will occur outside the city limits in the future, and the city wishes to be able to control the location, character, and extent such development takes. The third reason for annexation prior to development, particularly commercial development, is the sales tax implications as outlined in Public Act 1101. The act places restrictions on a city's ability to collect sales tax if development is completed prior to annexation. In all cases, the city's need to annex will be somewhat dependent upon the county's zoning policy. The more restrictive the county's zoning is, the less the need for the city to annex in order to regulate/manage development in the fringe area.

Ideally, a city should annex territory in advance of development in order that city regulations (zoning, subdivision regulations, building codes, etc.) can be used to ensure the appropriate type and quality of development. Many businesses and residents argue that they located outside the city because they did not desire city services and the associated taxes and fees that accompany those services, or they wished to avoid city zoning and other regulations. Nevertheless, the rights of residents on the urban fringe should be considered within the context of the rights and privileges of every person in the total urban area. When an individual chooses to build or live within the urban fringe, he or she has made the choice to identify with the total urban population and to assume the responsibilities of urban living as well as to receive the benefits by virtue of locating in the urban area. Persons who choose to live in the periphery and fringe area of a municipality must anticipate annexation at some point in time. Once annexed, these citizens receive the rights and privileges of every other resident of the municipality. Until then, city taxpayers subsidize many of the services and facilities available to non-city residents such as parks.

STATUTORY AUTHORITY TO ANNEX

Prior to 1953, the method of annexation in Tennessee was by private acts of the state legislature. A constitutional amendment was passed in November 1953 prohibiting annexation by private act, and in 1955, Chapter 113 of the Tennessee Code Annotated (T.C.A.) was passed providing for annexation by ordinance and by referendum.

On May 19, 1998, the Tennessee General Assembly passed Public Act 1101 which addressed: (1) countywide planning; (2) annexation; (3) plan of services; (4) incorporation of new cities; (5) tax revenue implications of annexation; and (6) the coordination of economic development. This law required the preparation and approval of a growth plan for each county (except those with a metro government) by July 1, 2001. The growth plan, developed by a county coordinating committee, must contain as a minimum each municipality's urban growth boundary (UGB), planned growth areas (PGA), and rural areas (RA), if any within the county. All land within the county must be placed in one or more of the three categories. The goals and objectives of a growth plan as stated in Public Act 1101 are to:

1. Provide a unified physical design for the development of the local community;
2. Encourage a pattern of compact and contiguous high density development to be guided into urban areas (UGB) or planned growth areas;
3. Establish an acceptable and consistent level of public services and community facilities and ensure the timely provision of those services and facilities;
4. Promote the adequate provision of employment opportunities and the economic health of the region;
5. Conserve features of significant statewide or regional architectural, cultural, historical, or archaeological interest;
6. Protect life and property from the effects of natural hazards, such as flooding, winds, and wildfires;
7. Take into consideration such other matters that may be logically related to or form an integral part of a plan for the coordinated, efficient, and orderly development of the local community; and
8. Provide for a variety of housing choices and assure affordable housing for future population growth.

Johnson City's Urban Growth Boundary was ratified by the Washington, Carter, and Sullivan county Coordinating Committees and the Johnson City Board of Commissioners. The state's Local Government Planning Advisory Committee (LGPAC) approved the plan on June 28, 2000. Within its UGB, Johnson City can use any of the annexation methods as provided by Tennessee annexation law contained in T.C.A. Title 6, Chapter 51, including annexation by ordinance and by referendum, as modified by Public Act 1101.

URBAN GROWTH BOUNDARY (UGB)

Johnson City's UGB (see Map 2) consists of the city and contiguous territory where urbanization is expected to occur during the next 20 years and where the city can, over time, efficiently and effectively provide urban services. The UGB encompasses 119.6 square miles and includes portions of Washington, Carter, and Sullivan counties. Johnson City's corporate limits consist of approximately 40 square miles or one-third of the UGB.

The composition of the UGB includes: (1) a central urban core comprising the major employment, commercial, and residential areas of Johnson City and; (2) a developing rural area characterized by lakefront and scattered residential development, linear development along the area’s major roads, and small farms interspersed throughout the entire area. This rural area typifies the sprawling development pattern found around urban areas throughout the country. Table 2 summarizes existing land uses in the UGB.

Table 2. Summary of Existing Land Use in the Johnson City Urban Growth Boundary, 2001

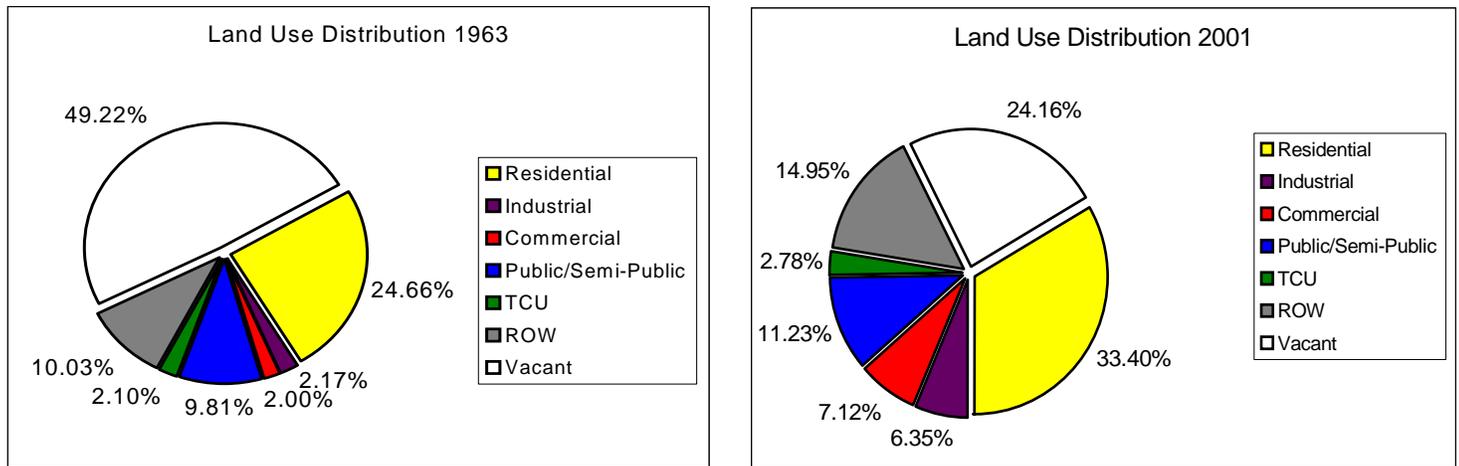
Land Use	City (Acres)	City (Percent)	Outside City (Acres)	Outside City (Percent)	Total Area (Acres)	Total Area (Percent)
Single-family	7,215	28.9	10,233	19.9	17,448	22.8
Multi-family	920	3.7	213	0.4	1,133	1.5
Mobile homes	175	0.7	1,330	2.6	1,505	2.0
Group quarters	38	0.2	0	0.0	38	0.0
Mixed use	28	0.1	213	0.4	241	0.3
Industrial	1,588	6.4	248	0.5	1,836	2.4
Commercial	1,752	7.0	419	0.8	2,171	2.8
Public/semi-public	2,807	11.2	1,484	2.9	4,291	5.6
Tran., Comm., Util.	4,417	17.7	2,646	5.1	7,063	9.2
Vacant	3,708	14.8	8,093	15.7	11,801	15.4
Agriculture	2,330	9.3	26,656	51.7	28,986	37.9
TOTAL	24,978	100.0	51,535	100.0	76,513	100.0

Source: Johnson City Planning Department

Figure 1 depicts the trends in existing land use distribution between 1963 and 2001, when land use surveys were conducted. The most noticeable trends over this 40 year period are:

1. The city’s supply of vacant land has decreased from 49.2 percent to 24.2 percent. Although this represents a sizeable decrease in the percentage of land, the number of vacant acres has actually increased from 4,724 to 6,038.
2. Residential land use in the city has increased from 24.6 percent to 33.4 percent, representing an increase in acreage from 2,367 to 8,348. Residential land use also remains the largest category of developed land, decreasing from 49 percent in 1963 to 44 percent in 2001.
3. The largest percentage increase in developed acreage has involved commercial land use, increasing from 3.9 percent in 1963 to 9.2 percent in 2001, an increase of 136 percent.
4. Industrial land use has increased from 4.3 percent of the city’s total developed land to 8.4 percent in 2001. This increase is the result of the numerous annexations of developed industrial uses that have occurred since 1963, e.g., Siemens, TPI, the Johnson City Industrial Park, and Iris Glen Landfill.

Figure 1. Land Use Distribution Trends, 1963, 2001.



Source: Johnson City Planning Department

The regulation of land use and the standards of development within the UGB are administered by Johnson City through its zoning ordinance, subdivision regulations, and building codes, and by the three counties through their respective zoning and subdivision regulations. The result is a sprawling growth area with varying degrees of regulation and land use objectives. This scattered pattern of development is the result of many different policies at the federal, state, and local levels, including zoning regulations and the city’s utility extension policies that promote and support this form of development. As a consequence, the development pattern is costly and inefficient to serve with public facilities and services.

EFFECTS OF PAST GROWTH

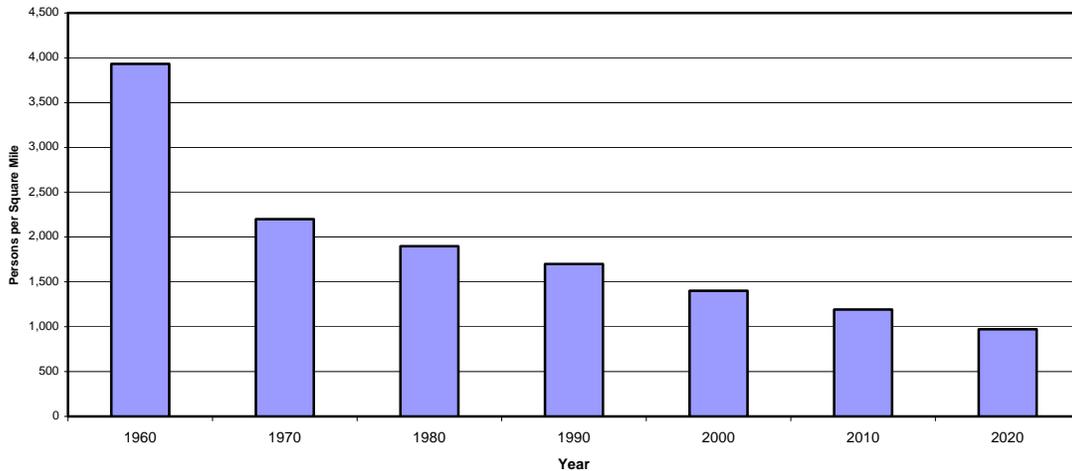
The city’s Urban Growth Boundary includes all or a portion of 17 Census Tracts in Washington County and one each in Carter and Sullivan counties. A review of the city’s older residential areas (comprising Census Tracts 601, 603, 608, and 609) contain some similarities and differences in socio-economic characteristics than the city’s newer developing areas (comprising Census Tracts 604, 605, 606, 611, 613, and 614).

The city’s older residential areas contain significantly higher, but decreasing population densities. In 1980, the city’s older residential areas had an average density of 3,119 persons per square mile, decreasing to 2,903 in 2000, a decrease of 6.9 percent. In contrast, developing residential areas increased 18.4 percent in density from 814 persons per square mile in 1980 to 964 in 2000.

Citywide, since 1960, the city has increased in population from 29,892 to 55,469 in 2000, an increase of 86 percent or approximately 640 residents per year. During the same period, the city’s corporate limits have expanded from 7.6 square miles to approximately 40 square miles, an increase of 410 percent. In contrast, the city’s population density has

decreased from 3,933 persons per square mile in 1960 to 1,401 persons in 2000, a decrease of 180 percent. The result is urban sprawl, with development consuming land at three times the rate it did in 1960. If the city's development trends continue to follow the trends of the past 40 years, the density of population per square mile will continue its downward spiral as illustrated in Figure 2.

Figure 2. Population Density Trends



The sprawling development pattern of the past 40 years has decreased the quality of life and increased the cost to the city to provide services. The characteristics and impacts of sprawl are summarized as follows:

Characteristics/Impacts

- Low density, high cost, single-family residences continue to be the dominant form of new development.
- New commercial uses are in the form of linear or “big box” commercial developments along the area’s major streets.
- Development continues to be piecemeal and haphazard, bypassing vacant land within the city and on the city’s periphery for less expensive land further from the center.
- Existing commercial areas and buildings are abandoned in favor of areas experiencing growth.
- Older residential areas in the center of the city experience commercial and multi-family development pressures and encroachment.
- Multi-family development occurs as infill projects and senior housing developments.
- Local street systems become congested and travel times increase as the dependence on the automobile increases as a result of the low-density development pattern.
- New growth is not directed to areas where school capacity is adequate and public utilities exist.
- Public utilities and services are “stretched” to serve the low density development and are provided at a reduced cost efficiency.

- Productive farmland is lost and existing farming operations are disrupted as development extends outward in an unplanned manner.
- The past amenities or indicators of a complete neighborhood, e.g., the ability to walk to school, parks, shopping areas, etc. become topics of concern but unrealistic to achieve.
- Residents often oppose any form of new development, citing increased traffic on rural roads, overloaded schools, and other fears related to property values and safety.

In summary, the sprawling development pattern has created fiscal burdens on both the city and the county and is consuming large areas of agricultural land and open space that once attracted so many of the area's residents.

In addition, other changes are occurring within the city's residential areas. The older residential areas now contain a lower percentage of school age children, decreasing from 20.3 percent in 1980 to 16.8 percent in 2000, a decrease of over 17 percent. The newer outlying residential areas while containing a larger percentage of school age children experienced an even greater decrease in the percentage of children. In 1980, the newer residential areas contained a school age population of 23.4 percent. That percent had declined to 17.1 percent in 2000, representing a decrease of 27 percent. The small difference between the percentage of school children in new residential areas (17.1 percent) and older neighborhoods (16.8 percent) may reflect a number of families or single-parent families with children choosing to live in older areas where housing costs are more affordable than the newer upscale neighborhoods on the city's fringe. Citywide, the percentage of school age children has decreased from 23.5 percent in 1980 to 18.2 percent in 2000 while in absolute numbers it has increased from 9,349 in 1980 to 10,106 in 2000.

The percentage of senior citizens, age 65 and above, in the city's older neighborhoods (17.7 percent) is similar to the percentage (16.8 percent) in the city's developing areas. Since 1980, the older neighborhoods have remained fairly constant between 17 and 17.7 percent in terms of senior citizens. The developing areas have seen a dramatic 80.6 percent increase between 1980 and 2000 in the percentage of senior citizens. This trend may be indicative of a number of senior citizens relocating to the area for retirement and choosing to live in the newer subdivisions that surround the city, and/or it may be a reflection of an aging rural/farm population.

In terms of occupancy, homeownership in the city's older areas (38.2 percent) is considerably lower than the newer low density residential neighborhoods (68.4 percent) that are characterized by single-family homes on one-third acre lots. The percentage of owner occupied housing has remained fairly constant in the newer and older residential areas during the 1980-2000 period with owner occupancy decreasing slightly in the older areas from 42.3 percent to 38.2 percent. The lower percentage of home ownership in the inner city neighborhoods may be the result of single-family conversions to apartments and a lack of stability and confidence in single-family investment. It may also be characteristic of many infill developments in recent years that have been multi-family in

nature. Citywide, owner occupied housing increased from 54.4 percent in 1980 to 57.2 percent in 2000.

GROWTH AREAS

In addition to an increasingly dispersed population, changes are also occurring in the historical distribution of the area's population. A comparison of census data for the past 20 years reveals that the older residential areas around the city's downtown have lost population. These areas include all or part of seven Census Tracts and include the Carnegie, Davis Park, Gilmer Park, Keystone, King Springs, Piney Grove, Tree Streets, and Y-Section neighborhoods.

The Boones Creek Census Tract, north of Carroll Creek Road, has experienced the greatest increase in population, increasing from 6,045 in 1980 to 10,123 in 2000, an increase of over 67 percent. In addition, the 2000 U.S. Census indicates that all census tracts north and northwest of Oakland Avenue within the city's UGB have experienced growth rates of over 35 percent since 1980. During the same period, the area between Carroll Creek Road and Princeton Road has experienced population growth of over 1,900 or 37 percent. The remaining areas within the city have experienced growth rates between 7 and 20 percent.

The increase in population growth within the UGB, but outside the corporate limits, can be attributed to: (1) the large supply of vacant land and choices within the area; and (2) the relatively higher costs of land within the city for subdivision development.

PROJECTED POPULATION GROWTH

Washington County is projected to grow steadily in the years ahead – but at a moderate rate of approximately 1.0 percent each year. This growth rate means the total county population will increase approximately 1,000 persons each year as it increases from 107,198 in 2000 toward a projected 126,095 persons in 2020.

How will that growth affect different parts of the county? It is projected that the geographic distribution of population over the next 20 years is likely to follow the same pattern as current trends. This means that population growth will be concentrated primarily in Johnson City's UGB – just as it has in the past with all areas of the county experiencing at least some growth.

Since 1960, Johnson City's population as a percentage of the county's has fluctuated from a low of 44.8 percent in 1980 to a high of 53.5 percent in 1990. In 2000, the city's percentage decreased to 51.7 percent reflecting a significant amount of growth in the county's rural areas, particularly Boones Creek.

Johnson City's population is expected to grow during the planning period, primarily because of annexation and infill development. The extent and location of this increase depends upon several factors, including job growth, regional economic development, and

the city’s annexation policy, which in turn is dependent upon the city’s ability to accommodate new growth through the expansion of city services and utilities.

Table 3. Population Projections, Selected Areas

Area	2000 Census	2010	2020	Percent Change 2000-2020
United States	281,421,906	297,716,000	322,742,000	14.7
Tennessee	5,689,283	6,180,000	6,529,000	14.8
SMSA	480,091	491,170	517,810	7.8
Washington County	107,198	114,920	126,095	17.6
Johnson City	55,469			
A. Slight annexation		60,790	66,540	19.9
B. Moderate annexation		63,910	72,435	30.5
C. Aggressive annexation		66,250	76,650	38.5

Source: U. S. Bureau of the Census
 Woods & Poole Economics, Inc.
 Johnson City Planning Department, Vision 2020

SMART GROWTH

The preceding section provided a summary of past and projected growth trends. Throughout the United States, the past characteristic of growth, “sprawl”, is being replaced by what may be termed “smart growth”. The American Planning Association defines smart growth as using comprehensive planning to guide, design, develop, revitalize, and build communities that:

- have a unique sense of community and place;
- preserve and enhance valuable natural and cultural resources;
- equitably distribute the cost and benefits of development;
- expand the range of transportation, employment, and housing choices in a fiscally responsible manner;
- value long-range, regional considerations of sustainability over short-term, incremental, geographically isolated actions; and
- promote public health and healthy communities.

Table 4 provides a comparison of smart growth and sprawl that further describes the principles of smart growth.

Table 4. Smart Growth VS. Sprawl Development, Comparison of Outcomes.

Topic	Specific Consideration	Comparison	
		Smart Growth	Sprawl
Land supply, land use, and urban form	Land consumption	Efficient use of land as a limited resource	Inefficient and excessive land consumption
	Directional focus of growth	In: Infill and redevelopment (maximum use of existing developed areas)	Out: “Greenfield” development (expansion into new/undeveloped areas)
	Density/intensity	Higher	Lower
	Urban form	Compact and contiguous	Scattered, dispersed, and leapfrogged
	Land use	Mixed: jobs-housing balance	Single-function and separated
Natural resources and the environment	Values/ethics	Land as a resource; sustainability	Land as a commodity; satisfy market preferences
	Open space provision	Maintain, enhance, and expand	Provide when supported by market forces
	Open space locations	Proximate to all users; connected	Inaccessible; unconnected; includes “remnant” parcels or left-over pieces from plats
	“Brownfields”	Clean up and reuse	Abandon
	Energy	Conservation	Consumption
Housing	Values/ethics	Choice; diversity, affordability	Provide what the market will bear
	Location	Disperse in all locations, especially in city/activity centers	Predominantly in exclusive residential areas (subdivisions)
	Type of unit; mixes	Wider variety; mixtures of types	Predominantly detached, single-family; rigid separation of types and price
	Cost	Sufficient for all incomes (i.e., “mixed income” housing)	Market fails to provide affordable units for all incomes

Topic	Specific Consideration	Comparison	
		Smart Growth	Sprawl
Transportation	Modes	Multiple modes	Automobile-dominant
	Road system and network pattern	Grid or network of streets	Hierarchy of arterials, collectors, and local streets
	Accessibility	Interconnectivity encouraged	Separation encouraged
	Predominant streets	Through streets with alleys encouraged	Cul-de-sacs and collectors
	Street pavement widths	Skinny; concept of street "diets"	Wide/excessive
	Pedestrian facilities	Routinely provided; walkability encouraged	Generally not provided; walking not encouraged
	Transit	Provide choices for use of transit	Densities are too low and patterns too spread out to provide transit
Other Infrastructure	Water and sewer	Timely and concurrent provision of systems	Use lowest cost means (e.g., wells and septic tanks where permitted)
	Funding considerations	Concern with unfair development costs; maximize existing investments	Public subsidies; extension of facilities without efficiency and equity considerations
Permitting Processes	Modes	Focus on reforming procedures for greater timeliness, efficiency, and fairness	Multiple, uncoordinated processes; time consuming
	Goals	To facilitate new objective	To frustrate unwanted uses
Other	Values/ethics	Concern for social equity and environmental justice	Not-IN-My-Backyard (NIMBY); Citizens Against Virtually Everything (CAVE)
		Regionalism	Parochialism

Source: Smart Growth Audits, American Planning Association, Jerry Weitz and Leora Susan Waldner, 2001

The "smart growth" initiative is an approach that has been increasingly used by cities as a method to reverse sprawl, to improve an area's quality of life, and to provide public services more efficiently.

CITY SERVICES AND EXISTING EXTENSION POLICIES

The ability of the Urban Growth Boundary to accommodate growth is dependent upon the city's ability to provide the necessary services. This in turn is dependent upon the type, timing, and location of new developments. For the purposes of this section

development is categorized as residential and nonresidential. Residential uses generally require the full extent of city services, and based on the type of residential development is in most instances the most costly to serve. City services requiring extension or capacity to serve residential development include:

1. **Water service** is necessary to provide domestic water use and fire-fighting capability. The Water and Sewer Department operates as an Enterprise Fund with funding derived from tap fees and monthly usage fees. The approximate cost for materials and installation of a minimum sized water line of six inches is \$28-30 per linear foot. The extension of both water and sewer service is necessary for urban development.

Extension Policies

- *To subdivisions within the city – the city will extend service at 100 percent of the cost where practical. In addition, the city will furnish all mains six inches and larger including fire hydrants, valves, etc. The subdivider will install and furnish all lines and fittings less than six inches. The subdivider will deposit with the city the estimated cost of six-inch pipe fittings. The city will furnish the pipe and reimburse the subdivider for the full amount of the pipe if accepted in writing by the city and upon receipt of “as built” drawings.*
 - *To subdivisions outside the city and within the Planning Region – the city will extend service at 100 percent of the cost if the cost does not exceed \$500 per lot within the subdivision.*
 - *To unplatted property within the city – the city will make extensions where practical as determined by the Water and Sewer Department.*
 - *To subdivisions outside the city limits and outside the Planning Region – the city will extend mains to new subdivisions if the cost does not exceed \$200 per lot within the subdivision.*
 - *To unplatted property outside the city limits in the Planning Region – the city will extend mains to serve new customers if the revenue from the new customers at the time of installation will reimburse the city’s cost in seven (7) years.*
2. **Sewer service** is essential to accommodate development at urban densities and to reduce the need for large lots that contribute to urban sprawl. As with water improvements, funding is derived from tap fees and customer rates through the Water and Sewer Department’s Enterprise Fund. The approximate cost for materials and installation of a minimum sized gravity sewer line of eight inches is \$35-45 per linear foot.

Extension Policies

- *To subdivisions within the city – the city will extend mains to new subdivisions where practical. In addition, the city will furnish pipe, precast manholes, and castings for the main and service lines. The subdivider will install all pipe and manholes to the city’s specifications. The subdivider will deposit with the city the estimated cost of the pipe and manholes. The city will reimburse the subdivider for the full cost of the pipe, manholes, and castings, if accepted by the city upon receipt of “as built” drawings.*
 - *To subdivisions outside the city and within the Planning Region – the city will extend mains to the subdivisions if the cost does not exceed \$700 per lot within the subdivision.*
 - *To unplatted property within the city – the city will make extensions where practical as determined by the Water and Sewer Department.*
 - *To subdivisions outside the city limits and outside the Planning Region – the city will extend mains to subdivisions if the cost does not exceed \$300 per lot within the subdivision.*
 - *To unplatted property outside the city limits and within the Planning Region – the city will extend mains to serve new customers if the revenue from the new customers at the time of installation will reimburse the city’s cost in seven years.*
3. **Street maintenance** services are performed by the Street Division of the Public Works Department with funding provided by the General Fund. Services include: engineering, paving public streets, maintaining sidewalks, curbs, and drainage facilities, bridge maintenance, tree trimming and mowing, street sweeping, snow removal, and leaf and brush pick-up.

Extension Policy

All services are extended to public rights-of-way following the effective date of annexation at the same level of service of the existing city.

4. **Street lighting** including traffic lights, is the responsibility of the Public Works Department with funding provided by the General Fund. The city provides approximately 12,000 street lights with size and spacing based on street classification and site specific criteria such as the location of intersections, curves, etc. Typically, street lights are provided at 21 lights per linear mile of publicly-maintained street. The approximate annual capital and operating cost per light is \$45.00 Ornamental street lights when provided at the request of a developer are spaced at a lesser interval due to pole height, wattage, and reduced efficiency.

Extension Policy

Street lights are provided to developed areas utilizing existing pole structures where possible. Newly developed areas are provided with street lights based on locational determinations by the city's Engineering Division.

5. **Police protection** services are provided by the Johnson City Police Department with funding primarily provided by the General Fund. Services include patrolling, criminal investigation, and the enforcement of city laws relating to public safety.

Extension Policy

All services are extended to annexed areas on the effective date of annexation.

6. **Fire protection** services are provided to residents, businesses, and property owners of the city by the Johnson City Fire Department. The Fire Department receives its funding through the General Fund and provides service to all incorporated areas of the city and identified contracted areas. The city currently has an insurance rating of three (3) providing property owners with relatively low insurance premiums and a high level of service.

Extension Policy

All services are extended to annexed areas on the effective date of annexation.

7. **Solid waste collection** services including weekly pick-up and recycling are provided by the Sanitation Division of the city's Public Works Department. The Sanitation Division operates as an Enterprise Fund and receives its funding through fees from customers. The Sanitation Division serves all incorporated areas of the city and contracted customers outside the city limits.

Extension Policy

All services are extended to annexed areas on the effective date of annexation.

8. **Leisure facilities** and services are maintained and operated by the city's Parks and Recreation Department and are available to all residents of the city and surrounding areas. In addition to parks, the service includes the Senior Citizens Center, Freedom Hall, and the city's two golf courses. The department is funded by the General Fund with user fees and registration fees contributing to the operating expenses of the department. The two golf courses are operated as an enterprise fund. Continued residential growth particularly in the Boones Creek area will result in the need for additional recreation facilities.

Extension Policy

All services are extended to residents of annexed areas on the effective date of annexation (many of the facilities and services are available to non-city residents on a year-round basis).

9. **Education services** and facilities are administered and maintained by the Johnson City Board of Education. Funding is provided through the city's General Fund, Washington County, and state and federal revenues. The ability of the city's schools to accommodate the projected population growth is the single most important factor in determining the desired location and timing of new development.

Extension Policy

School bus service is provided to students residing more than 1 ½ miles from school. Elementary students are expected to attend the elementary school in the school zone in which they legally reside. Students may transfer to schools in other zones if capacity is available and in accordance with Board of Education policy. The Board of Education reserves the right to reassign any neighborhood based upon school capacity. Middle school and high school students attend Indian Trail and Science Hill respectively.

10. **General administration** involves services from the functions of the city's general administration departments and divisions. General administration is funded by the city's General Fund and serves the jurisdictional area of the city. Functions include: Finance, Judicial, Human Resources, Purchasing, Planning, Risk Management, Legal, and Community Relations.

Extension Policy

On the effective date of annexation all residents, businesses, and property owners will be subject to all debts, laws, ordinances, and regulations in effect and shall be entitled to the same privileges and benefits as the existing city.

Commercial, institutional, and industrial development provides the necessary service and employment components of a city. For the most part, these segments of development depend on, or require, the services that assist or promote development through extended or improved infrastructure or relate to health and safety concerns.

City services required for nonresidential development include: water and sewer; street maintenance; police protection; fire protection and solid waste collection.

The following table provides a brief summary of the public facilities and services provided by the city of Johnson City, the basis upon which the services are provided, and the city's policy regarding the extension of services to annexed areas and areas outside the city limits.

Table 5. Summary of City Services and Extension Policies

City Service	Basis For Provision of Service	Source of Funding	City Policy Regarding The Provision of Service	
			To Annexed Area	To Area Outside the City
General Administration 8	Population	General Fund	All services are provided	Services are not provided
Police Protection	Land Area	General Fund	All services are provided	Services are not provided
Fire Protection	Land Area	General Fund	All services are provided	Services are not provided
Street Maintenance	Street Mileage	General Fund	All services are provided	Services are not provided
Street Lights	Street Mileage	General Fund	All services are provided	Service is not provided
Building Inspection	Customer	Fees	All services are provided	Service is not provided
Solid Waste Collection	Customer	(Enterprise Fund) Fees	All services are provided	Service is provided at outside city rates, if requested
Water Service	Customer	(Enterprise Fund) Fees	All services are provided within a specified time	Service is provided at outside city rates if service is available
Sewer Service	Customer	(Enterprise Fund) Fees	All services are provided within a specified time	Service is provided at outside city rates if service is available
Leisure Services 3	Population	(Enterprise Fund) General Fund/Fees	All services are provided	Services are available to non-city residents
Schools	Population	General Fund 9	All services are provided	Service is provided on a tuition basis
Mass Transit	Customers/ Street Miles	General Fund 9	Services are provided on a fixed route basis	Service is not provided
School Bus Service	Students/ Distance From School	General Fund	Service is provided to area 1 ½ miles or more from school	Service is not provided
Washington County - Johnson City EMS	Land Area	City, County, Charges for Service	All services are provided	All services are provided

Source: Johnson City Planning Department

1. Includes: Finance, Human Resources, Purchasing, Planning, Risk Management, and Community Relations
2. Includes Parks and Recreation, Senior Citizens Center, Freedom Hall, and Pine Oaks and Buffalo Valley golf courses
3. Other sources of funding may include: Washington County, State of Tennessee, and the Federal Government

The infrastructure and services discussed in the preceding provide the necessary ingredients for land development and an area's resulting livability and quality of life. If inadequate attention is given to the quality/quantity of an area's infrastructure and services, high costs can be expected for repairs and improvements. Already, peak hour traffic congestion, schools nearing or exceeding capacity, and the need for additional park facilities and street improvements are major areas of concern in the city and developing areas within the UGB.

The preceding section identified the major growth issues facing Johnson City. These issues are the result of years of growth which continues today in the city's fringe areas. Past attempts at managing this growth have taken the form of piecemeal annexations. The result has been a sprawling low density development pattern that characterizes the majority of the country's suburban areas.

BASIS FOR OBJECTIVES

The way Johnson City will function and look in the future will be the result of the city's vision for the future and the commitment the city is willing to make to achieve that vision. The Comprehensive Plan's Vision Statement is ambitious and represents an expression of the Planning Commission's aspirations. The Urban Growth and Services Element will serve as the city's framework for growth for the next 10-20 years. As such, the plan should be based on achieving objectives to provide direction for the city's physical development and its realization of the Vision Statement.

The objectives of the Urban Growth and Services Elements were developed from a variety of sources, including:

1. The 2003 Citizen Survey that assessed citizen opinions on growth issues facing the city and determined priorities for the quantity and quality of future growth;
2. The goals and objectives of Public Act 1101 as they relate to the development of the city's Urban Growth Boundary;
3. The Comprehensive Plan's Vision Statement that addresses the city's response to key issues and concerns facing the city;
4. The City Commission's 2001 Strategic Plan which identified and ranked the city's goals and objectives for the future; and
5. The Visual Preference Survey which uses citizen responses to photographs to gain insight on the public's opinions of various development types.

GOAL

The Urban Growth and Services Element's goal is –TO PROMOTE THE ORDERLY GROWTH AND DEVELOPMENT OF THE URBAN GROWTH BOUNDARY. This goal summarizes the essence of Public Act 1101 and its accomplishment involves the identification of objectives which provide the basis for implementation policies and actions.

OBJECTIVES

Objectives best suited to achieve the above goal include:

- TO REDUCE URBAN SPRAWL AND PROMOTE INFILL DEVELOPMENT.

This objective addresses how we should grow. Johnson City is becoming a community that is increasingly urban and a regional destination. Growth must be redirected into a more efficient land use pattern to prevent the sprawling pattern of development experienced the last 30 years. Sprawling infrastructure, historical development approvals, and market demands for larger lots have led to decreased urban density. This plan represents one step in the city's efforts to balance the pressures for outward growth with the benefits of more compact development.

The results of the Citizen Survey indicated that urban sprawl was the major negative urban growth issue/concern of respondents. Public Act 1101 was passed to address this and other growth issues facing Tennessee's local governments.

- **TO PROVIDE UTILITIES AND SERVICES IN A COST EFFECTIVE MANNER.**

In Tennessee, providing utilities and services for meeting basic health and safety needs is primarily a local government responsibility. Increased traffic, utility demands, rising school enrollments, and the need for improved police and fire protection are challenging the city's ability to keep pace with growth. Given the city's limited fiscal resources, the provision of these utilities and services must be cost effective to ensure maximum efficiency. Management of the city's future growth through proactive decision-making and long-range planning will greatly assist in ensuring the efficient delivery of utilities and services.

The Comprehensive Plan's Vision Statement, the 2001 Strategic Plan, and Public Act 1101 identified this objective as essential to orderly growth.

- **TO PROMOTE THE PROTECTION AND PRESERVATION OF PRIME AGRICULTURAL LAND AND OPEN SPACE FROM PREMATURE DEVELOPMENT.**

The city's continued outward expansion combined with increasing development outside the city, but within the Urban Growth Boundary, has fueled a desire on the part of citizens to preserve prime agricultural land and open space. The Parks and Recreation Master Plan 2000-2020 identified areas for parkland use, and park areas used in association with greenbelts and significant natural areas such as floodplain areas form the basis of an open space system. Protection of prime agricultural lands from premature development through zoning and utility extension policies will assist in the implementation of this objective.

This land use concern received the highest ranking in the Citizen Survey regarding urban growth initiatives.

- TO PROMOTE THE DEVELOPMENT OF LIVABLE NEIGHBORHOODS.

Neighborhoods are the building blocks of a city and have a direct influence on its quality of life. As a city grows, its livability is measured by the character of its neighborhoods. Livability and character are determined by stability; safety; pedestrian scale and orientation; a variety of building types, uses, and intensities; green spaces for neighborhood use and enjoyment; and civic buildings, such as a neighborhood school. Therefore, planning at the neighborhood level is fundamentally important in the city's planning process.

The conditions and character of Johnson City's neighborhoods vary greatly. The needs of an older inner city neighborhood, for example, are different from the needs of a new or developing neighborhood located on the fringes of the city. When planning at the neighborhood level, the importance of the following is essential:

- Protecting the character, stability, and integrity of existing neighborhoods while meeting changing demands;
- Developing neighborhoods that are people-oriented by giving attention to sidewalks, trees and landscaping, benches, and other streetscape amenities; and
- Correcting zoning where uses and residential densities are in conflict with existing zoning.

Eighty-three percent of the respondents to the Citizen Survey considered the quality and character of neighborhoods as "very important." The Strategic Plan, Visual Preference Survey, and Vision Statement support the survey results and acknowledge this objective as necessary for orderly growth.

- TO ENCOURAGE A VARIETY OF HOUSING CHOICES.

The strength of the city's housing stock is of major importance to the overall health of the city and its economic growth potential. To create a strong and diverse employment base, Johnson City needs a variety of housing choices. This includes a wide choice of housing types, prices, and locations in an environment that is quiet, safe, attractive, stable, and conveniently served by retail uses and public facilities.

It is expected that the number of dwelling units within Johnson City will increase over the next 20 years from 25,730 units in 2000 to 32,565 in 2020, a 27 percent increase. It is anticipated that 57 percent, or 3,895 units, of the net increase projected will be single-family units. During the period from January 1, 2000 to January 1, 2004, approximately 790 single-family units or 20 percent of the projected 3,895 units have been constructed. Although single-family housing is expected to continue to increase in absolute numbers during the 2000-2020 period, the percentage share of such units is projected to decline by approximately two percent as the demand for multi-family housing increases.

How Johnson City provides housing opportunities will determine to a large extent its ability to maintain its reputation as a desirable residential community. The provision of housing choices is identified in the Vision Statement, Public Act 1101, and the Strategic Plan.

- **TO PROVIDE A SAFE AND EFFICIENT TRANSPORTATION SYSTEM DESIGNED TO ACCOMMODATE FUTURE GROWTH.**

The transportation system of the community provides mobility for citizens, connection between land uses, and a framework for the overall pattern of development. In Johnson City, the transportation system consists of a roadway network with a hierarchy of roadway types, public transit in the form of buses, sidewalks, and bicycle facilities. This system provides a means of commuting to work (daily approximately 12,000 people commute into the city and 7,000 people commute out of the city), to shopping and dining areas located throughout the city, and to social and recreational destinations. Orderly growth within the Urban Growth Boundary requires attention to all modes of transportation, interconnected to provide an efficient network to all land uses.

The Strategic Plan and Vision Statement identified an improved transportation system as a necessary requirement in improving the area's livability. Fifty-nine percent of the respondents to the Citizen Survey identified traffic congestion as a problem in the city.

- **TO PROTECT NATURAL FEATURES AND ENVIRONMENTALLY SENSITIVE AREAS.**

As Johnson City has grown in population and expanded its boundaries through annexation, there has been a growing recognition of the need to protect and preserve the city's natural assets. Methods to protect these assets will include the management of wastes, regulation of noise and air pollution, and stormwater management, all by-products of urbanization. By definition, urbanization infers an alteration of the natural environment. However, development can occur in an intrusive or in a sensitive manner. To a large degree, the future livability of Johnson City will be determined by the approach to development the city chooses to take.

As the city continues to grow and develop, the preservation of the natural environment will be a high priority. The public's reaction to rezoning requests has already touched on natural environment issues. Planning and development within the Urban Growth Boundary will be based on the analysis of environmental factors and the integration of environmental elements such as stormwater management and open space preservation. These elements cross political boundaries and require coordination or total regulatory authority to be effective.

The Strategic Plan and the Vision Statement both identified the natural environment as a key element in the city's future. Johnson City's natural beauty ranked first in the Citizen Survey when respondents were asked what they liked best about the city. Preserving the natural environment ranked third out of 16 growth issues, behind improving public education and recruiting technological jobs in the survey. Clean air and water ranked second in importance out of 22 factors related to the quality of life.

- **TO PROMOTE HIGH QUALITY ECONOMIC DEVELOPMENT.**

Although Johnson City initially developed as a center of commerce around the railroads, it has evolved into a city of diversity. While some manufacturing jobs have been lost, new jobs have been created and the tax base in Johnson City and Washington County has continued to increase. The challenge of finding new ways and means to strengthen the area's economy continues. Factors such as future shifts in employment patterns, the fierce competition for new business and industry, and the limited resources including land available for economic promotion and recruitment have inspired the community to begin formulating aggressive new strategies to achieve a healthy economy. Through the city's 2003 Economic Summit, a new process was initiated to promote Johnson City's economic future. The Comprehensive Plan is a major step in the process.

Contained in the Vision Statement, Public Act 1101, and Strategic Plan, economic development is considered essential to improving the overall quality of life in Johnson City. In the Citizen Survey, 86 percent of the respondents considered the provision of a variety of employment opportunities as the number one issue facing Johnson City and the surrounding area.

- **TO PROMOTE A HIGHER QUALITY OF LIFE.**

A successful community doesn't just happen; it must be continually managed and guided. Johnson City must actively manage its growth and respond positively to changing circumstances if it is to meet the needs of its residents and retain the quality of life that attracted those residents to the city. The long-term desirability of Johnson City will require an ability to maintain:

- A positive environmental image in order to support the highest possible degree of safety, comfort, and livability;
- A positive social image in order to provide opportunities for economic and educational attainment;
- A strong tax base in order to provide amenities and services necessary for a high quality of life; and
- A positive business climate that will attract the business and industry essential to employment growth and diversification.

The Strategic Plan, Vision Statement, VPS Survey, and Citizen Survey all emphasized a desire to improve the quality of life for city residents.

- TO ENCOURAGE CITIZEN PARTICIPATION IN THE DECISION-MAKING PROCESS

The frequent protests over zoning changes and their impact on neighborhoods illustrate the demand for citizen involvement and input in the planning and decision-making process. As the urbanization of Johnson City continues, expectations will increase for more involvement opportunities, not just as a means of protest, but also as a way to gain more control over the changes occurring in the community. People want to be involved in the overall planning process – not just on a piecemeal basis, one zoning change at a time.

The basic need is to establish efficient, convenient, and dependable methods of communication. Citizens must be willing to see themselves as members of the overall community, as well as residents of a particular neighborhood or subdivision.

The Strategic Plan, Citizen Survey, and VPS Survey have identified the need for and solicited community input as part of the city’s planning process.

Although Johnson City’s UGB will not become entirely urbanized within the next 20 years, it will in all probability happen during the 21st century. With over 40,780 acres (63.7 square miles) considered vacant or in agricultural use there is still time for proactive decision-making so that the area can evolve into a livable urban community with a high degree of quality of life in the future. Today’s subdivisions will become tomorrow’s neighborhoods as development continues to occur on a parcel by parcel basis.

The primary purpose of the Urban Growth and Services Element is to develop a growth management strategy for the UGB reflecting the most efficient and orderly growth policy for the area. The city must decide whether it wishes to continue and facilitate the current pattern of development or choose a growth option, which influences the type, location, and timing of new development.

Three growth options for development within the UGB were identified and evaluated: (1) the continuation of existing trends; (2) delineation of compact growth areas; and (3) the promotion of growth centers. The following analysis reviews the advantages and disadvantages of each option by focusing on: the distinctions of land use; demand for public facilities; cost to provide services; and the impact on the UGB.

OPTION 1 – EXISTING TRENDS (URBAN SPRAWL)

In option 1, the city continues to grow and expand outward and is characterized by haphazard and piecemeal growth. This option, commonly referred to as “urban sprawl” follows the path of least resistance. Less expensive land outside the city is developed, bypassing vacant land within the city or on the city’s immediate periphery, which is already served by utilities. The higher cost, desirability, or unavailability of land inside the city has made it less desirable for infill development and new residential subdivisions followed by commercial development continues to occur outside the city.

This sprawling pattern of development is subsidized by the city’s current practice, as previously discussed, of financing the full cost of utility extensions to outlying property. In addition, the city reimburses the developer for the water and sewer materials within a subdivision provided that the development is annexed into the city. These practices have provided the impetus for the city’s continued growth of desirable residential subdivisions provided with a full complement of public utilities and services. At the same time, the resulting development pattern is characterized by sprawl – developed areas that are costly to serve with public utilities and services and interspersed with tracts of agricultural and vacant land.

Impact/Issues – Option 1

- Land consumption continues to increase at a faster rate than the city’s population.
- Large-lot single-family subdivisions dominate the development pattern.

- Public utilities and services are extended in an inefficient manner. However, without public utilities, developments would occur that lacked public water and sewer systems and required larger lots thereby further reducing density and increasing sprawl.
- The “leap frog” development pattern that is characteristic of urban sprawl disrupts existing farming operations and replaces productive farmland.
- Commercial uses continue to follow residential development resulting in “strip commercial” development along major arterials.
- The resulting “strip commercial” development creates: (1) increased traffic congestion; (2) the need for road improvements; and (3) increased travel times and distances.
- The “strip development” of the area’s major arterials also results in empty or underutilized retail centers as retailers and service uses relocate further out to serve new residential development.
- New nonresidential development outside the city is often substandard and deficient in terms of building construction, site development, landscaping, buffering, signage, etc. As these areas are ultimately annexed with their inherent deficiencies, the city’s overall livability and appearance declines and costs to correct deficiencies are passed on to the city’s taxpayers.
- Areas that will ultimately become part of the city, whether immediate or in the distant future, are developed under county zoning regulations which, in many instances, allow substandard conditions such as deficient stormwater control and landscaping, absence of pedestrian amenities, and often land use incompatibility.

OPTION 2 – COMPACT GROWTH (SMART GROWTH)

Option 2 relies on the provision of water and sewer services to guide the timing and location of new development within the UGB. For the most part, the UGB is a line between existing and projected urbanization and rural land. In many instances, regulatory techniques such as zoning are used to prevent urban development outside the UGB. While this approach may seem reasonable, its practical application is difficult when two or more jurisdictions have zoning authority within the area. Within Johnson City’s UGB, the city has zoning authority only within the corporate limits and limited subdivision jurisdiction outside the corporate limits. Zoning authority within the unincorporated portion of the UGB is the responsibility of Washington, Carter, and Sullivan counties. The absence of city zoning authority within the unincorporated area results in a reliance on utility extension policies as the sole method of growth control. In Carter and Sullivan counties, the administration of subdivision regulations within the UGB is solely the responsibility of the respective counties. In Washington County, the regulation of subdivisions is the responsibility of the county and the city within designated areas. This mixture of regulatory authority makes it extremely difficult to implement a land use policy with consistency toward an overall objective.

The compact growth option focuses on directing urban growth rather than containing it by linking infrastructure needs and growth. A growth option focusing on compact growth would establish public infrastructure systems around an identified area and as growth occurs an extension of public services is allowed. The purposes of this option are to:

- Promote cost-efficient urban infrastructure;
- Reduce urban sprawl;
- Encourage reinvestment in existing urbanized areas that might otherwise be neglected; and
- Create a higher density land use pattern that encourages a mix of use, less reliance on the automobile, and patronage of public transit.

This option directs new development inward and is characterized by infill development or redevelopment with moderate outward growth. The option involves the designation of an area based on the location of existing utilities and service areas. A developer desiring to develop property outside of this area may be required to pay the full or partial cost to extend utilities to that property. The city would continue to pay the cost to extend utilities to under-served areas within the designated area. In addition, the city could continue to offer material reimbursement to targeted areas to promote development in desired locations. Another deterrent to growth would require county cooperation or city zoning authority within the UGB. Acting in concert, the extension of utilities and services and the enforcement of restrictive zoning would enable the growth of the UGB to proceed in a managed fashion.

It is important to control or manage growth, but not to restrict it to the extent that it is discouraged. Johnson City and its UGB are not a closed system. People and businesses will continue to relocate in the area for a variety of reasons including: the quality of life, moderate climate, low crime rate, expanding medical services, reasonable housing costs and taxes, and a high quality education system. However, if growth regulations are too restrictive and there are not a variety of development choices, then people and businesses will look elsewhere. The key is to encourage growth and to direct it into desired areas where utilities and services are already available or can be provided in a cost efficient manner – the result is lower costs for the city and the developer and ultimately the homeowner or business.

Impact/Issues – Option 2

- More efficient utilization of public utilities and services.
- Reduction in the consumption of land for urban uses.
- Decreases urban sprawl through the direction of growth into designated service areas.
- Reduces the consumption and disruption of productive agricultural land for a longer period of time.
- Promotes pedestrian use and public transit patronage.

- Encourages an opportunity to provide housing diversity.
- Reduces/delays the need for extensive road improvement projects.
- Provides the city with an opportunity to plan for capital improvement projects designed to address future needs related to growth within a designated area.

OPTION 3 – GROWTH CENTERS (SMART GROWTH)

This option is similar to Option 2 in that it either: (1) directs development toward the urbanized area; or (2) encourages the creation of compact growth centers in outlying areas within the UGB. The focus of this option is the development of growth centers serving a variety of purposes located at the intersection of major highways. Examples of this pattern of development would be the Gray community, the Boones Creek area, and Piney Flats.

Growth centers would be designated for retail uses, entertainment activities, employment centers, and other automobile-oriented services. Supporting residential development would occur at varying densities and housing types with the highest densities occurring near the center. This option places an emphasis on urban design, building location, and the creation or expansion of neighborhoods provided with convenience services, parks, and schools.

The character and livability of the neighborhoods would be regulated through a new “Traditional Neighborhood” zoning district. This district would regulate basic design features of a structure as well as lot size, parking, and building placement. This new zoning district would also be applicable to the second option and would provide an alternative to the typical suburban growth pattern that we see today. This alternative is described in detail in Dover-Kohl’s Connecting Johnson City, The Land Use and Transportation Plan for Johnson City and its Environs.

Impact/Issues – Option 3

- Requires the extension of public utilities (water and sewer) to the designated growth centers.
- Protects prime agricultural land from sporadic/piecemeal development.
- Reduces urban sprawl through the direction of growth into designated growth centers.
- Maintains a degree of open space primarily in the form of agricultural land located between the growth centers.
- Provides for an efficient provision of public facilities and services within the growth centers.
- Requires the implementation and enforcement of zoning regulations designed to achieve a desired effect.
- Reduces the distance and time to convenience shopping needs.
- Provides an opportunity for a mix of housing types and costs.

OPTION SELECTION

The three options for future development each indicate how a particular strategy of public investment might impact the growth of the city and the unincorporated UGB. In order to determine which course of action to follow it is necessary to compare these options and determine which one best reflects the objectives of the Urban Growth and Services Element. Moreover, it is also necessary to determine how each of these options reflect the development realities and aspirations of the area's local governments and residents.

Evaluation Process

The evaluation process used to determine which option best describes the desired development pattern is objective-oriented. The key element in determining whether or not a given option is best is how well it achieves the study's objectives.

In the evaluation process objectives were identified, the performance of each option was determined, and the option which best achieves the objectives was selected. Table 6 illustrates the result of this evaluation and indicates that an option oriented to compact growth and the reduction of urban sprawl is best suited to the achievement of the study's objectives.

Table 6. Rating for Evaluating Development Options

OBJECTIVE	OPTION		
	Existing Trends	Compact Growth	Growth Centers
To reduce urban sprawl and promote infill development.	—	+	+
To provide utilities in a cost effective manner.	—	+	0
To promote the protection and preservation of prime agricultural land and open space.	—	+	+
To promote the development of livable neighborhoods.	—	+	+
To encourage a variety of housing choices.	0	+	+
To provide an efficient transportation system designed to accommodate future growth.	—	+	+
To protect natural features and environmentally sensitive areas.	—	+	+
To promote high quality economic development.	0	0	0
To promote a higher quality of life.	—	+	+
To encourage citizen participation in the decision-making process.	—	+	+
Acceptance rating*	— 8	+ 9	+ 8

*Number of plus factors minus number of negative factors

Objectives were developed from a variety of sources including: 2003 Citizen Survey; Public Act 1101; Comprehensive Plan Vision Statement; 2001 Strategic Plan; and Visual Preference Survey (see page 24).

- + = Positive contribution toward achievement of objective
- 0 = Achievement of objective not decisively effected
- = Negative impact toward achievement of objective

SUMMARY

The existing urban sprawl trend of development should be replaced with a planned growth strategy. A land use pattern for a livable urban area with a desired quality of life reflects the following characteristics:

- Stable, attractive, and diverse neighborhoods that are the building blocks of the future land use pattern;
- Diverse employment opportunities for all segments of the population through the creation of new businesses and the expansion of existing businesses;
- A high level of public facilities and services which provide the framework and support for future development – such as roads, transit, water and sewer, parks and recreation facilities, schools, and health and safety services; and
- Centers of activity at the neighborhood, community, and regional levels, with an urban center redeveloping and becoming a dominant area of significance.

The Urban Growth and Services Element of the Comprehensive Plan addresses the questions of what land will and should be developed and when this development should occur. Johnson City is becoming a diversified urban area with a diversified population with differing needs and interests. The economy has shifted toward a service base including retail, medical, and educational services.

The question is not whether Johnson City will become a major urban area, but what kind of urban area it will become. Creating a quality livable community is a key concept of the Comprehensive Plan and can be accomplished through the direction and management of future growth within the UGB. The increased urbanization that has taken place during the past 20 years has brought new strengths to the area:

- Johnson City is becoming an urban area that contains variety and contrasts. The city's educational, medical, and retail opportunities are broadening because of the increased demands and needs of a growing population.
- The city is responding to the continuing change through the provision and upgrading of a full-range of city services and facilities including schools, recreation facilities, police and fire protection, improved transportation facilities, library services, and all the other services necessary to provide an improved quality of life for all its citizens. The impact of I-26 will undoubtedly introduce new and increased growth pressures on the city.

KEY ISSUES

Historical growth cycles have shaped growth patterns and growth attitudes within the city, the UGB, and the region. During recent periods of growth, utilities, roads, and other services have been extended to serve development with little regard to the long-term costs. This uncontrolled growth has also fostered a citizen concern and resentment toward development in general. **The citizen survey identified “sprawling development” as the number one dislike among survey respondents. This dislike was followed by “lack of vision and sound leadership,” both may be contributing factors to sprawl.**

A review of the existing land use pattern within the UGB reveals an area that is rapidly losing its rural character with scattered retail developments, businesses, subdivisions, apartments, and mobile homes, etc. dominating the landscape. As in the city, future development outside the city is becoming a matter of infill as vacant/agricultural land is consumed at an alarming rate.

A review of past development trends and the 2003 Citizen Survey identifies several issues that are of concern and that are addressed in this plan. They include:

- City/County Coordination – With Johnson City's corporate limits located in portions of three counties, the importance of working together is becoming increasingly evident. Issues such as traffic congestion, land use

- compatibility, public facilities and services, historic and open space preservation, and the retention of an acceptable level of quality of life unfortunately do not stop at jurisdictional boundaries.
- Land Use Compatibility – Residents are becoming increasingly concerned that commercial encroachment or poorly planned residential developments will negatively impact the quality of life in their neighborhoods. Residents also appear to recognize the value of developing residential units of various price ranges and types, e.g., condominiums, apartments, and housing for senior citizens. However, they also want assurances that new development will not reduce their property values, generate excessive traffic, or create stormwater runoff problems.
- Compact Development – Residents want to preserve the agricultural and open space land surrounding the urban area and in particular their neighborhood. Unfortunately, this is what contributes to sprawl and a haphazard and piecemeal development pattern. They also want the benefits of a more efficient street system and city services. Sprawling infrastructure, previous development approvals combined with annexation, and market demands for larger lots has resulted in decreasing densities.
- Adequate Public Facilities – Increased traffic, utility and service demands, the need for additional parks, and increasing school enrollments are challenging Johnson City to keep up with growth. The quality of life in the community is directly related to maintaining an acceptable level of public facilities and services. As streets become congested or in need of repair and schools become crowded, residents begin to resent growth. Schools, utility improvements/extensions, street condition and capacity, and fire and police protection will remain the primary constraints to growth and concern of residents.
- The Cost of Growth – Growth can help stimulate the economy through the addition of new consumers. However, growth that does not adequately fund the construction of new public facilities and services creates a continual drain on the city’s budget. In addition to funding operating and maintenance costs through taxes and fees, existing residents and business owners continually provide funds for road improvements, water and sewer improvements, new fire stations, park improvements, and new schools. If new growth funds the capital costs for which it is directly responsible, then local taxes and user fees can be maintained at more affordable levels than are required to maintain existing facilities and correct existing deficiencies.

URBAN SERVICE AREA

The discussion of Growth Options involved an evaluation of three possible growth scenarios. The evaluation of each option, revealed that a strategy centered around, smart growth and the efficient provision of utilities and services was best suited to the achievement of orderly growth and development of the city's Urban Growth Boundary.

The compact growth strategy promotes the identification of an area or areas within the UGB where intensive development and city services are to be directed in a cost effective manner. This area, termed the Urban Service Area (USA), relies primarily on the city's willingness and ability to extend city services including: water and sewer facilities, police and fire protection, and educational services. This more intensive and compact development offers several advantages over the sprawling suburban and rural land use pattern that has dominated since the 1950s:

1. It provides a framework for the development of neighborhoods versus scattered and disconnected subdivisions;
2. It supports a more efficient use of public facilities and services;
3. It reduces traffic congestion and travel times and promotes pedestrian facilities where residences, shopping areas, and employment centers are developed as part of the total community; and
4. If properly planned, it provides residents with a choice of housing opportunities and with assurances regarding future development potential and its impact on their neighborhood.

In addition to utility extension policies, annexation plays a major role in the shaping of the city's growth patterns. Residents and businesses, for the most part, want city services and their associated benefits such as reduced water and sewer rates, reduced solid waste fees, and reduced fire insurance premiums. Many new residents also want city educational services and the variety of programs and opportunities offered by city schools. The value of a trained and professional police and fire department is also an important consideration in many families' choice of a place of residence.

PUBLIC FACILITY AND SERVICE FACTORS

The purpose of any level of government is the provision of services whether it be national defense or the repairing of potholes. The efficient, cost effective provision of services is a goal all governments strive to achieve. The cost of providing city services and facilities are based on three primary factors:

- **Service Level** – Municipal services are provided based on the city's policy regarding the level of service it is willing or can afford to fund. For example, the city may want to increase its level of fire protection through a change in the spacing between fire stations. Decreasing the distance between stations would result in more overlap and a decrease in response time, while increasing the distance between stations may result in an

improved level of coverage. Either alternative would have an impact on the number of personnel, apparatus, and stations, which would have an impact on the city's budget for fire protection. The city's development pattern and policy regarding annexation will also have a major influence on the level of service that is needed.

- **Density** – The density of development, has a direct affect on the cost of providing services. Higher density or compact growth generally results in a lower cost of services on a per unit (residence, business, or household) basis. For instance, a fire station responds to emergencies within a certain distance of the station and with the population of the city located within a smaller area fewer fire stations will be required to provide fire protection resulting in a lower overall cost of fire protection to the city. Conversely, a low-density sprawling city increases the need for more stations, apparatus, and personnel as development is spread over a larger geographical area. The density of development has had a direct bearing on the cost of many city services including, water and sewer service, school bus transit, solid waste collection, street maintenance, and the need for schools, and parks. Johnson City's trend over the past 40 years of a decreasing density has a direct impact on the cost of the provision of all services. Unless this trend is reversed, the city will continue to spend more money in the future for a decreased level of service or be forced to increase taxes to maintain the current level of services.
- **Location** – The location of new development also affects the cost of providing services. The further development is located from existing infrastructure, the higher the cost of extending service. The primary services affected by the location of development is water and sewer service, school bus transit, police and fire protection, solid waste collection, and street maintenance. The city's annexation policy has a direct impact on this aspect of service costs. Presently, the city's corporate limits extend approximately 17 miles north and south and 10 miles east and west resulting in a fractured, confusing, and inefficient service area.

DELINEATION OF THE URBAN SERVICE AREA

The city's Urban Growth Boundary is a line between urbanization and rural land and is intended to prevent urban development outside the growth boundary. The Urban Service Area focuses on directing urban growth by linking infrastructure and growth rather than merely containing it within the Urban Growth Boundary.

The intent of the Urban Service Area is to:

- Provide efficient city services;
- Preserve agricultural land and open space;

- Encourage reinvestment in existing older urbanized areas that might otherwise be neglected; and
- Reduce sprawl and create a higher-density development pattern that encourages a mix of use, patronage of public transit, and pedestrian activity.

The plan proposes and area(s) as a first priority for future growth and the provision of urban level services. This area, the Urban Service Area includes:

1. The city limits and areas of vacant land (infill) or areas suitable for redevelopment within the city limits; and
2. Areas of vacant land outside the city limits including; (1) areas where utilities and services are presently available or can be extended in an economical and cost efficient manner; (2) areas of infill development; or (3) areas that have an economic development potential.

The following criteria was used in the identification of areas outside the city limits that are included in the Urban Service Area:

- **Water Service** – provided to property through a minimum line size of six (6) inches or is within 200 feet (Map 5);
- **Sewer Service** – provided to property or is within 200 feet (Map 5);
- **Fire Protection** – property is within 1 ½ miles of an engine or pumper company (Map 5);
- **Infill development** – property is outside the city limits; however, its developed density and/or location is such that the expansion of the city is appropriate;
- **Economic Development** – the property’s location and its development are essential to the economic vitality of the city.

DEVELOPMENT CAPACITY OF THE URBAN SERVICE AREA

The Urban Service Area, delineated on Map 6, consists of 59.4 square miles or 49.6 percent of the Urban Growth Boundary. Approximately 66 percent of the Urban Service Area is located within the city limits and 34 percent is located outside the city limits.

Table 7. Development Capacity, Urban Service Area

	URBAN SERVICE AREA	OUTSIDE CITY LIMITS	INSIDE CITY LIMITS
Area (Acres)	38,034	13,056	24,978
Area (Sq. Miles)	59.4	20.4	39.0
Percent Developed	61.5	33.9	75.8
Acres of Vacant Land	14,663	8,625	6,038

Source: Johnson City Planning Department

LAND USE PROJECTIONS

In order to determine if there is adequate land area within the Urban Service Area (USA) to meet the projected growth it is important to understand what the city’s projected land use needs are, how much of the land in the USA is vacant, and how much of that vacant land is suitable for development.

Residential Land Use

Johnson City’s population is projected to increase from 55,469 in 2000 to 72,435 by the year 2020, a growth of approximately 17,000 persons. According to ZHA’s “Real Estate Market Condition and Outlooks Report” Johnson City will need 6,835 new residential units to accommodate this population growth. Specifically, the study concluded that the city would need approximately 3,895 single-family units and 2,940 multi-family units.

Over the period from 1990 to 2002, the average new residential lot size was 18,960 square feet. If this trend continues, the city will need an additional 1,695 acres of residentially zoned land to accommodate the new single-family units. In addition, it is important to factor in an additional 15 percent for new street construction. This brings the total to 1,950 acres of additional land for single-family use. The average density of multi-family development over the same time period was approximately 7.1 units per acre. At this density the city would require approximately 415 acres of multi-family zoned land to accommodate the projected multi-family growth. In summary, the city will need approximately 2,365 acres to meet the expected demand for residential development.

Table 8. Residential Land Use Needs

Housing Type	Acres
Single-Family	1,695
+ 15% for Streets	255
Multi-family	415
Total Estimated Area	2,365

Source: Johnson City Planning Department

Non-Residential Land Use

By the year 2020, Johnson City’s population is expected to increase approximately 30 percent. To determine non-residential land use needs, a proportional methodology was used. The assumption is made that the non-residential land use categories will expand proportionally to the residential uses. This assumes that the demand for future commercial and industrial uses will remain a constant. Based on this methodology, the city will need an additional 1,852 acres of non-residential land to accommodate the projected population growth. To accommodate these proposed land uses it is important to factor in an additional 15 percent for new street construction. This brings the total non-residential land area required to serve the projected population to 2,130 acres.

Table 9. Non-Residential Land Use Needs

Land Use Classification	Existing Acreage	Additional Acreage
Mixed Use	28	8
Industrial Use	1,588	476
Commercial	1,752	526
Public/Semi-Public/Institutional	2,807	842
Total	6,175	1,852
x 15% for Streets		278
Required Land Area		2,130

Source: Johnson City Planning Department

In Summary, to accommodate the projected growth, the city will need approximately 4,495 acres of developable residential and non-residential land through the year 2020.

Environmental Constraints

There are a number of constraints that can impact the suitability of land for development. These include extreme topography or steep slopes, marginal or poor soils, sinkholes, and floodplain areas. Of the 14,663 acres of vacant land within the USA, 5,888 acres are impacted by some form of environmental constraint that reduces their suitability for urban development. The land may be suitable for some limited, low density uses but it is not suitable for more intensive urban development.

Table 10. Area Containing Environmental Constraints

Environmental Constraint	Acres
Steep Slopes	1,607
Marginal/Poor Soils	3,570
Sinkholes	151
Floodplain Areas	560
Total	5,888

Source: Johnson City Planning Department

Summary

Of the 14,663 acres of vacant land within the USA, 5,888 acres are impacted by some form of environmental constraint. This leaves a total of 8,775 acres of vacant land suitable for development. It is projected that the city will need a total of 4,495 acres of residential and non-residential land to accommodate the projected population growth. This is approximately 51 percent of the vacant land within the USA. Even if some of the vacant land is not available for development (owner unwilling to sell, historic property, etc.) there should be more than a sufficient amount of land within the USA to meet the projected growth needs.

The achievement of a more efficient and more compact development pattern requires a combination of regulatory tools and actions that include:

- Utility and service extension policies – to provide utilities and services in a cost effective manner;
- Annexation – to assist in the management of growth and the extension of services;
- Subdivision regulation – to ensure quality infrastructure to serve new development;
- Zoning – to control the use of land and the timing of development; and
- Capital expenditures – to provide major facilities such as schools, fire stations, and parks.

These regulatory tools and actions, working in concert toward a desired end, can produce the type of community that benefits the city, its residents, and its businesses. The delineation of the Urban Service Area and the adoption of the necessary measures to ensure its success form the basis for the Urban Growth and Services Element of the Comprehensive Plan.

URBAN SERVICE AREA

The adoption of the Urban Service Area represents a departure from the city’s previous policies concerning the extension of city utilities and annexation. The purpose of the Urban Service Area is to define that area where the city can provide utilities more cost effectively and efficiently, encourage compact growth, and reduce urban sprawl.

Policy: It is the policy of the city to establish the Urban Service Area (USA) as shown on Map 6, as the basis for the city’s future development pattern.

Policy: It is the policy of the city to annex only within the USA, except consideration may be given to nonresidential properties when it can be demonstrated that existing water and sewer services are available and when the annexation results in a positive fiscal impact for the city.

Policy: It is the policy of the city to extend water and sewer services under present policies, to proposed developments within the USA. Water and sewer services shall be extended at the developer’s cost to developments outside the USA.

Policy: It is the policy of the city to reimburse developers for water and sewer materials only in approved subdivisions annexed into the city within the USA.

Policy: It is the policy of the city to direct new growth and the extension of city services in accordance with the USA and policies consistent with the Land Use Element of the Comprehensive Plan.

Policy: It is the policy of the city to consider the capacity of elementary schools for each annexation request and the impact the projected number of students would have.

AMENDING THE URBAN SERVICE AREA

Any proposed amendment to the Urban Service Area's boundary should be considered carefully to determine whether or not it is consistent with the Urban Service Area's criteria and the adopted goals, objectives, and policies of the city. The cumulative effect of several minor changes may be a dramatic policy shift, even though the incremental impact may be minor. Each proposed amendment to the boundary should be evaluated in terms of its significance and impact regarding city policies.

Policy: It is the policy of the city, acting through the Johnson City Regional Planning Commission, to conduct a review of the Urban Service Area boundary every three years following its adoption and recommend any change to the City Commission.

Policy: It is the policy of the city that any approved change to the Urban Service Area boundary shall be consistent with the following criteria:

- 1. Any change shall ensure sufficient land exists within the USA to accommodate twenty years of projected population growth and economic development;**
- 2. No change shall include land that is not economically feasible for utility extension; and**
- 3. No land that is not contiguous to the USA boundary or that does not promote compact development shall be included.**

Policy: It is the policy of the city that three years following the adoption of the Urban Service Area's boundary by the City Commission that any property owner may request an amendment to the USA boundary. The Planning Commission shall review each request for consistency with the criteria in the boundary's development and shall present its recommendation to the City Commission for approval or denial of the change in the boundary.

INFILL DEVELOPMENT

Vacant, skipped-over parcels of land can be identified in every area of Johnson City. These "infill" sites can result from a lack of access to public services, physical/environmental constraints, the unwillingness of the property owner to develop or sell the property, or general unattractiveness in the current market. Encouraging the development of such parcels is an objective of the city to increase service efficiency. This objective is the result of: (1) a decreasing capability to expand infrastructure and services to the urban fringe; (2) pressures to preserve open space and agricultural land; (3) the need to strengthen older neighborhoods through preservation and redevelopment; and (4) an interest in improving/increasing public transit accessibility and ridership.

Infill development is a method of preserving land while at the same time accommodating growth.

The following table summarizes factors affecting infill potential.

Table 11. Factors Affecting Infill Potential

FACTOR	HIGHEST POTENTIAL	LOWEST POTENTIAL
Growth	Rapidly growing population; high demand for new housing	Low population growth; limited demand for new housing.
Employment Centers	Strong downtown; long commuting distances	Weak downtown; short commutes to employment areas.
Building Conditions	Extensive investment in neighborhood preservation and upgrading	Little or no investment in existing buildings or upgrading
Resident Incomes	Land located in a variety of neighborhoods serving many income groups	Vacant land concentrated in low income neighborhoods
Land Prices	Low land price change from urban fringe to inner city areas	Steep land price change from urban fringe to inner city areas
Growth Controls	Limits on outward growth	No growth controls
Availability of Services	Developments at fringe pay costs of service extensions	Extensive preservicing; little developer costs

Source: Urban Land Institute

Policy: It is the policy of the city to promote infill development as the most desirable and efficient means of accommodating future growth.

This policy is to be implemented by the following actions:

1. Creating and maintaining an inventory of vacant land within the city limits to assist developers and organizations interested in infill sites;
2. Promoting the use of incentives, e.g., density bonuses or parking credits, to encourage infill development;
3. Working closely with neighborhood residents to identify attitudes and opinions regarding infill opportunities and choices; and
4. Preparing neighborhood plans and identifying future actions, e.g., zoning changes, to increase infill development interests and opportunities.

Policy: It is the policy of the city to improve the image and aesthetics of inner city neighborhoods to make them more attractive for infill development.

This policy is to be implemented by the following actions:

1. Promoting neighborhood organizations;
2. Encouraging and facilitating neighborhood cleanup campaigns;
3. Improving pedestrian safety and amenities;
4. Creating greenspaces;
5. Improving traffic safety;
6. Implementing street, sidewalk, and street light improvements and maintenance; and
7. Targeting public safety enforcement.

Policy: It is the policy of the city to make excess city-owned land available for development or redevelopment at a minimal cost consistent with neighborhood goals and adopted land use policies.

LAND USE REGULATION

The use of zoning and subdivision regulations are two important methods of implementing the Urban Growth and Services Element. Zoning is intended to regulate the use of land, while subdivision regulations govern the process of lot creation and street and infrastructure construction.

Ideally, the regulation of land use and subdivisions within the Urban Growth Boundary and more specifically the Urban Service Area should occur under zoning and subdivision regulations administered by Johnson City since the city is responsible for providing services necessary for development. Land within the Urban Growth Boundary will at some point in the future become part of Johnson City, and its development should be consistent with city objectives, policies, and standards for development. This will reduce future problems and at the same time provide the city the assurance necessary to make infrastructure investments.

Before the city could enforce extraterritorial zoning controls, each county would have to relinquish its controls and agree to allow Johnson City to enforce its zoning regulations. Regarding the subdivision of land, Johnson City does have extraterritorial jurisdiction within a designated area, but only within Washington County. This practice was initiated in 1960, and the area originally comprised a five-mile planning area outside the 1960 city limits restricted by the Town of Jonesborough and Washington County political boundaries. Since 1960, the city has annexed a large portion of this area and the result is a fragmented pattern of development with Washington County having zoning authority outside the city limits. The extension of a city's subdivision jurisdiction to an area encompassing the entire Urban Growth Boundary was previously allowed and later encouraged through Public Chapter 1101. As of September 1, 2003, fifty (50) cities in Tennessee have taken advantage of this authority granted to cities by the Local Government Planning Advisory Committee.

Policy: It is the policy of the city to adopt and enforce development and land use regulations within the Urban Growth Boundary.

This policy is to be implemented by the following actions:

1. The extension of the city's subdivision jurisdiction throughout the entire Urban Growth Boundary; and
2. The extension of the city's zoning jurisdiction within the Urban Service Area.

CAPITAL IMPROVEMENTS

The availability, quality, cost, and convenience of public facilities are major components for the successful implementation of the Urban Service Area concept. The city's growth management strategy requires facilities planning to be an integral component of the development process. A capital improvement program establishes a schedule and funding basis for extending and improving public facilities necessary to support urban growth. If well-planned, coordinated, and constantly updated, the provision of adequate public facilities can be effective in directing growth into desired areas.

Policy: It is the policy of the city to require review by the Planning Commission and recommendation to the City Commission of nonrecurring capital improvements to ensure consistency with the Urban Service Area and its objectives.

This policy is to be implemented by the following actions:

1. Review of capital improvements contained within the city's Capital Improvement Program and located within the Urban Growth Boundary including, but not limited to, land acquisition, water and sewer extensions, school construction, road improvements, park improvements, and fire station construction.
2. Investigate and promote methods of financing needed capital improvements such as land dedication, fee in lieu of, and development fees on new construction.

ANNEXATION

As Johnson City has expanded its city limits through annexation, enclaves have been created that are surrounded in varying degrees by the city limits but remain outside the city and under the jurisdiction of Carter, Sullivan and Washington counties. These enclaves create confusion in providing emergency services and are not cost effective to serve for both the city and the respective counties.

Policy: It is the policy of the city to implement an annexation program designed to: (1) protect the long-term economic vitality of the city; (2) eliminate inefficiencies in providing services; and (3) ensure regulatory control over the development of land within portions of the Urban Growth Boundary where the city has a major interest.

Policy: It is the policy of the city to review all requests for annexation in accordance with adopted criteria and to consider annexations only where applicable criteria are met.

The following criteria or guidelines shall be used in evaluating each annexation request:

1. Revenues from annexed areas shall enhance the financial stability of the city;
2. Providing city services to areas considered for annexation shall be efficient and cost effective;
3. To the extent possible, requests for annexation shall be accompanied by specific development proposals; and
4. Areas considered for annexation shall be consistent with adopted land use policies of the city.

Policy: It is the policy of the city to consider the annexation of developed areas where there is a pending threat to the health, safety, and general welfare of the residents, e.g., from widespread septic tank failures even where other criteria for annexation may not be met.

Policy: It is the policy of the city to utilize fiscal impact analysis of areas considered for annexation to ensure the continued economic stability of the city.

Policy: It is the policy of the city to require a request for annexation for all requests for water and sewer service within the Urban Service Area.

Policy: It is the policy of the city to avoid the annexation of:

- A. Active farmland where development is not imminent; and
- B. Areas that result in illogical and confusing city limit boundaries and threaten efficient public safety services.

Policy: It is the policy of the city to initiate annexations to “fill in” developed and developing areas within the Urban Service Area where providing services is cost effective.

The identification of areas recommended for annexation is the first step in a program to redefine the city’s current confusing and inefficient corporate limits boundary. Twenty-two areas ranging in size from less than five acres to over 700 acres have been identified and analyzed for possible annexation. These areas have been divided into two categories (see Map 8 for specific locations).

Five areas are strongly recommended for annexation (indicated in red on Map 8). Land within this category is: (1) developed at urban density; (2) optimal for urban development; (3) functions as an enclave; and/or (4) is desirable in terms of reducing inefficiency and confusion in providing services. If urban development is to occur within these areas, it should be under the jurisdiction of Johnson City. Areas within this category vary from 60 to 470 acres.

The following provides a description of the five areas as well as a map of each indicating specific boundaries and existing development.

Area #1: Watauga Road/Woodlyn Road: Area 1 is located in the northeast portion of Johnson City between Watauga Road and Woodlyn Road adjacent to the Eddie Williams Industrial Park. The area is surrounded on three sides by the city’s corporate limits and contains approximately 257 acres consisting mainly of industrial, mixed residential, and agricultural uses. Industrial uses include Kennametal, Inc., Alemite Corporation, and Abrasive Technology. Water and sewer services are available to a portion of the area and fire protection is provided by the Douglas W. Buckles fire station. The impact of the annexation on student enrollment will be minimal with an estimated population of 120 and a K-12 population of 17.

Existing Land Use	Units	Acres	Percent
Residential	51	66.8	25.9%
Commercial		0.0	0.0%
Industrial		53.3	20.7%
Public/Semi-public		2.0	0.8%
TCU		27.4	10.6%
Vacant/Agriculture		108.1	42.0%
Total	51	257.6	100.0%

Assessed Valuation (estimated) \$9,982,998

Annual Revenue (estimated) \$242,909

Linear feet of roads 22,622

Estimated Cost to Provide Services

General Administration	\$32,145
Police	\$59,275
Fire	\$30,510
Public Works	\$74,470
Public Schools	\$20,290
Transportation	\$13,855
Total	\$230,545

Area #2: Knob Creek Road/Mountainview Road: Area 2 is located along the west central portion of Johnson City in the vicinity of the Knob Creek Road/Mountainview Road intersection, encompassing a portion of the State of Franklin Road corridor. The area contains approximately 470 acres of agricultural land and limited, mixed residential uses. The area is adjacent to several major commercial developments and the Med-Tech Regional Business Park as well as several residential subdivisions, including Berkshire, Stoneridge, and Roundtree. The availability of utilities and services to the area are limited, with the exception of water service. Multiple stations, including stations 4, 5, and 6, provide fire protection. The impact of the annexation on student enrollment will be minimal with an estimated population of 70 and 10 students in grades K-12. The area is recommended for annexation to guide future development in a major growth area. Projected revenue is anticipated to increase significantly as the area develops.

Existing Land Use	Units	Acres	Percent
Residential	33	46.6	9.9%
Commercial		0.5	0.1%
Industrial		0.9	0.2%
Public/Semi-public		9.9	2.1%
TCU		93.3	19.9%
Vacant/Agriculture		318.2	67.8%
Total	33	469.4	100.0%

Assessed Valuation (estimated) \$1,568,025

Annual Revenue (estimated) \$45,464

Linear feet of roads 21,660

Estimated Cost to Provide Services

General Administration	\$15,245
Police	\$22,700
Fire	\$11,685
Public Works	\$74,035
Public Schools	\$11,935
Transportation	\$13,580
Total	\$149,180

Area #3: Boones Creek Road/Old Gray Station Road: Area 3 is located in the northwest portion of Johnson City at the intersection of Boones Creek Road and Old Gray Station Road in the vicinity of North Roan Street. The area is completely surrounded by the city’s corporate limits and contains approximately 118 acres. Major land uses include single-family residential, agriculture, and industrial. Mini-Fibers and the building formerly occupied by Faneuil IGS Inc. comprise the industrial uses and buildings. The area is fully-served by water and sewer, and the newly relocated Station #6 on Boones Creek Road provides fire protection. The area has an estimated population of 137 and an estimated K-12 student population of 19.

Existing Land Use	Units	Acres	Percent
Residential	60	44.3	37.4%
Commercial		0.8	0.7%
Industrial		20.4	17.2%
Public/Semi-public		1.5	1.3%
TCU		7.7	6.5%
Vacant/Agriculture		43.6	36.9%
Total	60	118.3	100.0%

Assessed Valuation (estimated) \$3,266,515

Annual Revenue (estimated) \$92,050

Linear feet of roads 6,593

Estimated Cost to Provide Services

General Administration	\$17,640
Police	\$26,265
Fire	\$13,520
Public Works	\$23,940
Public Schools	\$22,675
Transportation	\$4,055
Total	\$108,095

Area #4: Carroll Creek Road/Bart Greene Drive: Area 4 is located in the northwest portion of Johnson City along Bart Greene Drive and Carroll Creek Road in the vicinity of North Roan Street. The area contains approximately 160 acres of agricultural, mixed residential, and commercial uses. Commercial uses include a variety of retail and service businesses that include Comcast Cablevision, Hamilton Meats, Inc., and Tri-State Equipment Sales. The area is fully-served by water and sewer, and the newly relocated Station #6 on Boones Creek Road provides fire protection. The estimated population of 150 and projected student population of 21 in grades K-12 is anticipated to have a minimal impact on student enrollment in the Lake Ridge Elementary district.

Existing Land Use	Units	Acres	Percent
Residential	90	47.9	29.6%
Commercial		7.8	4.8%
Industrial		0.0	0.0%
Public/Semi-public		1.2	0.7%
TCU		5.2	3.2%
Vacant/Agriculture		99.9	61.7%
Total	90	162.0	100.0%

Assessed Valuation (estimated) \$5,539,854

Annual Revenue (estimated) \$200,967

Linear feet of roads 4,680

Estimated Cost to Provide Services

General Administration	\$15,005
Police	\$22,345
Fire	\$11,500
Public Works	\$18,835
Public Schools	\$23,870
Transportation	\$3,070
Total	\$94,625

Area #5: State Route 75/Gray Community: Area 5 is located in the extreme northwest portion of Johnson City in the Gray community along State Route 75 in the vicinity of I-26. The area is adjacent to the city’s corporate limits and contains approximately 60 acres consisting mainly of several commercial strip centers and small industrial uses. The area is fully-served by water and sewer, and Station #8 at the Gray Towne Center provides fire protection. Due its exclusive commercial and industrial nature, the area will have no impact on K-12 student enrollment.

Existing Land Use	Units	Acres	Percent
Residential	0	0.0	0.0%
Commercial		16.3	26.7%
Industrial		25.3	41.4%
Public/Semi-public		5.2	8.5%
TCU		6.5	10.6%
Vacant/Agriculture		7.8	12.8%
Total	0	61.1	100.0%

Assessed Valuation (estimated) \$4,973,099

Annual Revenue (estimated) \$309,088

Linear feet of roads 4,340

Estimated Cost to Provide Services

General Administration	\$12,320
Police	\$18,345
Fire	\$9,445
Public Works	\$14,185
Public Schools	\$0
Transportation	\$0
Total	\$54,295

Policy: It is the policy of the city to initiate annexations to regulate the timing, location, and type of land use to ensure it is consistent with the city land use plan and policies.

Seventeen areas (indicated in orange on Map 8 and summarized in Table 12 in the Appendix) are recommended for annexation with no specific priority attached to the areas. The majority of the land in this category is vacant or agricultural or is an enclave. Areas of vacant or agricultural land are recommended for the purpose of land use control through zoning regulation.

Table 12: Summary of Areas Recommended for Annexation

Existing Land Use	Area 6		Area 7		Area 8		Area 9		Area 10		Area 11	
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Residential	37.5	60.6%	18.3	14.3%	1.7	14.4%	2.6	10.4%	4.4	7.7%	0.0	0.0%
Commercial	1.3	2.1%	2.9	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Industrial	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Public/Semi-public	0.0	0.0%	10.7	9.1%	0.0	0.0%	0.0	0.0%	0.1	0.2%	19.5	96.1%
TCU	6.8	11.0%	0.4	0.3%	0.3	2.5%	0.8	3.2%	1.4	2.4%	0.8	3.9%
Vacant/Agriculture	16.3	26.3%	89.9	76.3%	9.8	83.1%	21.5	86.3%	51.6	89.7%	0.0	0.0%
Total	61.9	100.0%	122.2	100.0%	11.8	100.0%	24.9	100.0%	57.5	100.0%	20.3	100.0%
Housing Units	88		7		1		2		3		0	
Population (estimate)	195		15		2		5		10		0	
Student Population (K-12 estimate)	30		2		0		1		1		0	
Assessed Valuation												
Residential & Farm property	\$1,466,025	\$403,350	\$46,975	\$64,150	\$307,275	\$0						
Commercial & Industrial	\$286,000	\$78,480	\$0	\$0	\$0	\$0						
Personal property	\$7,250	\$14,640	\$0	\$0	\$0	\$0						
Total	\$1,759,275	\$496,470	\$46,975	\$64,150	\$307,275	\$0						
Annual Revenue												
Property tax	\$37,669	\$10,359	\$1,010	\$1,379	\$6,606	\$0						
Personal property tax	\$156	\$315	\$0	\$0	\$0	\$0						
Sales tax (estimate)*	\$10,951	\$24,428	\$0	\$0	\$0	\$0						
State-shared taxes	\$20,855	\$1,764	\$252	\$504	\$756	\$0						
Total	\$69,631	\$36,866	\$1,262	\$1,883	\$7,362	\$0						
Linear feet of roads	5,075		774		215		870		1,485		870	
Estimated Cost to Provide Services												
General Administration	\$16,297	\$32,173	\$3,107	\$6,556	\$15,139	\$5,345						
Police	\$24,267	\$47,907	\$4,626	\$9,762	\$22,542	\$7,958						
Fire	\$12,491	\$24,659	\$2,381	\$5,025	\$11,603	\$4,096						
Public Works	\$19,727	\$2,084	\$748	\$3,643	\$5,455	\$3,546						
Public Schools	\$32,223	\$2,387	\$0	\$1,193	\$1,193	\$0						
Transportation	\$3,108	\$340	\$132	\$665	\$995	\$660						
Total	\$108,113	\$109,550	\$10,994	\$26,844	\$56,927	\$21,605						

*pursuant to Public Chapter 1101

Existing Land Use	Area 12		Area 13		Area 14		Area 15		Area 16		Area 17	
	Acres	Percent										
Residential	12.7	73.8%	36.5	52.5%	40.8	39.0%	3.0	100.0%	6.3	84.0%	21.9	92.0%
Commercial	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Industrial	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Public/Semi-public	0.0	0.0%	0.0	0.0%	6.6	6.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%
TCU	0.1	0.6%	6.4	9.2%	2.2	2.1%	0.0	0.0%	1.2	16.0%	1.9	8.0%
Vacant/Agriculture	4.4	25.6%	26.6	38.3%	55.0	52.6%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Total	17.2	100.0%	69.5	100.0%	104.6	100.0%	3.0	100.0%	7.5	100.0%	23.8	100.0%

Housing Units	4	60	47	2	5	15
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Population (estimate)	10	140	110	5	10	35
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Student Population (K-12 estimate)	1	20	15	1	2	5
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Assessed Valuation						
Residential & Farm property	\$135,075	\$1,074,475	\$614,175	\$9,675	\$44,900	\$189,400
Commercial & Industrial	\$0	\$0	\$399,320	\$0	\$0	\$51,640
Personal property	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$135,075	\$1,074,475	\$1,013,495	\$9,675	\$44,900	\$51,640

Annual Revenue						
Property tax	\$2,904	\$23,101	\$21,790	\$208	\$0	\$5,182
Personal property tax	\$0	\$0	\$0	\$0	\$0	\$0
Sales tax (estimate)*	\$0	\$0	\$0	\$0	\$0	\$0
State-shared taxes	\$1,008	\$15,122	\$11,699	\$504	\$1,260	\$3,781
Total	\$3,912	\$38,223	\$33,489	\$712	\$1,260	\$8,963

Linear feet of roads	25	8,062	5,609	0	0	2,700
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Estimated Cost to Provide Services						
General Administration	\$4,528	\$18,298	\$27,539	\$790	\$1,975	\$6,266
Police	\$6,743	\$27,247	\$41,008	\$1,176	\$2,940	\$9,331
Fire	\$3,471	\$14,025	\$21,108	\$605	\$1,513	\$4,803
Public Works	\$175	\$12,012	\$21,622	\$97	\$233	\$9,545
Public Schools	\$1,193	\$23,869	\$17,902	\$1,193	\$2,387	\$5,967
Transportation	\$5	\$5,051	\$3,706	\$5	\$10	\$1,675
Total	\$16,115	\$100,502	\$132,885	\$3,866	\$9,058	\$37,587

Existing Land Use	Area 18		Area 19		Area 20		Area 21		Area 22	
	Acres	Percent								
Residential	36.1	40.3%	64.7	43.8%	158.2	21.6%	61.2	47.1%	64.2	19.4%

Commercial	5.9	6.6%	0.0	0.0%	2.3	0.3%	1.6	1.2%	4.4	1.3%
Industrial	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Public/Semi-public	3.5	3.9%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.5	0.2%
TCU	41.8	46.7%	2.8	1.9%	15.0	2.1%	4.1	3.2%	38.5	11.6%
Vacant/Agriculture	2.2	2.5%	80.3	54.3%	555.9	76.0%	63.0	48.5%	224.0	67.6%
Total	89.5	100.0%	147.8	100.0%	731.4	100.0%	129.9	100.0%	331.6	100.0%

Housing Units	72	16	95	98	67
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Population (estimate)	140	40	170	215	135
Student Population (K-12 estimate)	20	5	25	30	20

Assessed Valuation					
Residential & Farm property	\$814,750	\$1,227,250	\$1,784,575	\$815,325	\$1,376,182
Commercial & Industrial	\$499,920	\$44,400	\$69,720	\$82,720	\$555,240
Personal property*	\$0	\$23,618	\$0	\$3,750	\$3,902
Total	\$1,314,670	\$1,295,268	\$1,854,295	\$901,795	\$1,935,324

Annual Revenue					
Property tax	\$28,265	\$27,340	\$39,867	\$19,308	\$41,526
Personal property tax	\$0	\$508	\$0	\$81	\$84
Sales tax (estimate)*	\$49,699	\$0	\$19,374	\$13,478	\$37,064
State-shared taxes	\$15,079	\$4,308	\$18,233	\$23,158	\$14,541
Total	\$93,043	\$32,156	\$77,474	\$56,025	\$93,215

Linear feet of roads	28,907	690	19,764	4,053	19,570
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Estimated Cost to Provide Services					
General Administration	\$23,564	\$38,913	\$192,565	\$34,200	\$87,305
Police	\$35,088	\$57,944	\$286,739	\$50,926	\$130,001
Fire	\$18,060	\$29,825	\$147,591	\$26,213	\$66,915
Public Works	\$100,238	\$2,550	\$68,887	\$18,362	\$68,226
Public Schools	\$23,869	\$5,967	\$28,643	\$35,804	\$23,869
Transportation	\$18,249	\$356	\$12,331	\$2,793	\$12,310
Total	\$219,068	\$135,555	\$736,756	\$168,298	\$388,626