

CityVision *2010*

Gastonia's Comprehensive Plan

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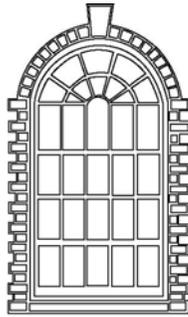
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Adopted July 18, 1995

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The Citizens who attended the 2010 informational & neighborhood meetings.

INTRODUCTION

CityVision 2010 is Gastonia's first comprehensive plan. Gastonia has been *planning* for many years, with products such as small-area, corridor, thoroughfare, and utility plans. In addition, the City engages in land use planning on a short-range basis through such functions as zoning and subdivision approval. *CityVision 2010* builds upon earlier planning efforts, incorporating them into a comprehensive planning document.

The *CityVision 2010* planning process was initiated by the Gastonia Planning Commission in 1991.

ORGANIZATION OF THE PLAN

The plan is divided into three major sections. The initial section lays out the context of Gastonia and this plan, with chapters on Gastonia's community setting, growth & change, and major development issues.

Following this are ten chapters which cover specific planning subjects. These subjects are:

- Community Economy
- Transportation
- Community Facilities
- Built Environment
- Annexation
- Housing & Neighborhoods
- Public Utilities
- Natural Environment
- Recreation & Open Space
- Land Use

Each chapter has an overview section detailing the background and trends of the particular subject. This is followed by a list of major issues. Concluding each chapter is a section of objectives and tools. Objectives are "action goals" that the City wants to accomplish. Tools are used to implement the objective. Tools can be statements of policy, recommended changes to Gastonia's ordinances, or priorities for City programs. To aid the user, the tools are cross-referenced to related tools within the same chapter or in other chapters. The "Policy References" can help you quickly find all the policies that relate to the proposed US 321/74 Bypass, for example. The policy references also help illustrate relationships between the various chapters.

The final section of the plan contains the six sector plans. The sector plans are an integral part of the comprehensive plan, but they are structured so that they can stand alone as well. At the end of each sector plan is a strategy map, which graphically shows such things as neighborhoods, greenways, growth areas and proposed roads.

ADOPTION AND IMPLEMENTATION

CityVision 2010 was adopted by Gastonia City Council on July 18, 1995, and it is both a statement of policy and a guide to future decision-making. Unlike a zoning ordinance, the plan is not law, and it places no specific restrictions on any person or their property.

The plan is expected to be revised over time, with minor changes made on an annual basis, and a thorough update every five years. The Planning Department will also prepare an annual implementation guide, which will be used to monitor the progress in implementing the plan.

We hope you find the plan both informative and helpful.



VISION STATEMENT

In shaping the future of Gastonia it is our community vision to provide a high quality of life, characterized by the efficient delivery of public services combined with land use planning that is sensitive to the needs of both human opportunity and natural resources. We will recognize the contributions of our neighborhoods and their variety of lifestyles. We will respond to the challenges of regional and global change in a proactive manner, leading the area as both a regional partner and a competitor. Gastonia of the year 2010 will enhance its image and growth opportunities building on its strengths of economic vitality, environmental sensitivity, beauty, historic character, education and safe healthy living. As Gastonia grows to include new areas as they urbanize, it will form a compact city that combines the freedoms of a small town with all the amenities of a major metropolitan area.

WHY IS PLANNING IMPORTANT TO GASTONIA?

Everybody plans.

From shopping for the evening meal to making arrangements for retirement, we plan for a multitude of things in our lives. We plan vacations: well in advance we begin saving money, researching destinations, making reservations; all these things are involved in planning a typical vacation. Business people plan new products and services, plan for expansion and plan in order to survive setbacks. Many of us plan to buy a house. Again, this involves starting far ahead of the actual purchase, putting together a down payment, deciding on a neighborhood, evaluating our needs.

Planning starts with a look at the present situation and then ahead to the future. What do we want to change, what do we want to preserve, where do we want to go? By thinking about these things we begin to set goals for the future. Next we decide on what needs to be done to achieve those goals. By setting objectives, we develop a framework for making things happen. Getting back to the house purchase, one objective is to save enough money for a down payment on a mortgage. Once the objectives have been set, it's time to decide on what needs to be

done and what tools are to be used to achieve the objectives. If you want to save the money for a down payment on a house, your tools might be not only setting up a savings account, but also cutting your

spending and increasing your income so that you can save the required amount faster than if you did nothing.

Goals, objectives and tools. A good planner will use these tools to achieve the objective, all the while

keeping the goal in front. Failure to do this lets short term problems and desires intrude. If while saving for the down payment you decide instead to buy a sports car, you have not achieved your goal, even though you have used the tools and

accomplished one of the objectives (saving money.) Short term satisfaction has taken place of the long-term achievement.

City planning is not so different from everyday planning. A community is a reflection of the people who live and work in it. Most communities value good schools, but some will sacrifice them in order to keep taxes low. Some cities promote tourism, others promote industrial development. Large cities are dense, diverse places that offer excitement and access to wide variety of experiences. Rural communities are often tranquil, friendly and close to nature. A community is shaped by millions of individual decisions occurring all the time. Change is inevitable; even places that don't appear to change much are always evolving. We cannot prevent change. What we can do is prepare for it and act to achieve the future that we want.

Planners use a number of methods to help people think about the future and decide their goals and

“If you don’t know where you’re going, you might end up someplace else”

—Casey Stengel

“Where there is no vision, the people perish”

—Proverbs 29:18

how they will accomplish them. Some of these devices are:

Evaluating the current situation

How much sewer capacity do we have? How many parks are there? What is the capacity of our roads?

Forecasting population change

How many elderly people will we have in 20 years? How many school age children?

Gathering economic data.

What are the growth prospects for the textile industry? How much medical office space do we need?

Identifying resources.

How can we get enough clean water for all our needs in 20 years? What industry can we attract?

Surveying attitudes and desires.

Does the public of Gastonia want a system of greenways? Do they want more five-lane roads?

Some thoughtful and intelligent people have maintained that city planning is unnecessary and may even be counterproductive. “Let the free market decide, the rest will sort itself out.” This position ignores the everyday planning that people do at every level. If the City of Gastonia were to abandon all planning, we might expect such things as overloaded sewers, clogged traffic, pollution, overcrowded schools, a lack of good sites for new industry, lower property values and a general spread of ugliness and a decline in the quality of life. Such things have happened in other communities. Indeed, the modern profession of planning developed out of concern over just such things in 19th-century cities.

City planning embodies a number of values that guide decision making. Some of these values are:

Health.

Perhaps the fundamental charge of city governments is protecting the public health and welfare. This includes clean air and water, safe streets, and fire protection.

Conservation of resources.

Our natural environment is an integral part of the quality of life in the community. Natural resources are vulnerable to short-term exploitation. Had Crowder’s Mountain been strip mined in the 1960’s, this prominent natural feature would have been lost forever. Good stewardship of our natural environment allows us to benefit from it without destroying it.

Efficiency.

A universal value. Planning now can save us money in the future. Often we can identify future expenditures and plan for them now, such as purchasing land for a new school before an area is fully developed and

“The art of progress is to preserve order amid change, change amid order.”
—Alfred North Whitehead

“Dig the well before you are thirsty.”
—Chinese Proverb

while the price of land is still low.

Beauty.

We strive for an urban environment that has long-lasting quality, visibility and psychological uplift. Good land use policy helps avoid both cluttered, clashing conditions and sterile, boring ones. Public investments such as street trees improve everybody’s enjoyment of Gastonia.

Equity.

Social equity is influenced by public plans. Can people live close to their jobs? Are police protection and schools better in some neighborhoods than others? Land use policy and public spending can produce windfalls for some sections of the city while

cutting others off. Equity means pursuing a balance so that all people have a chance to fulfill their needs and achieve their dreams.

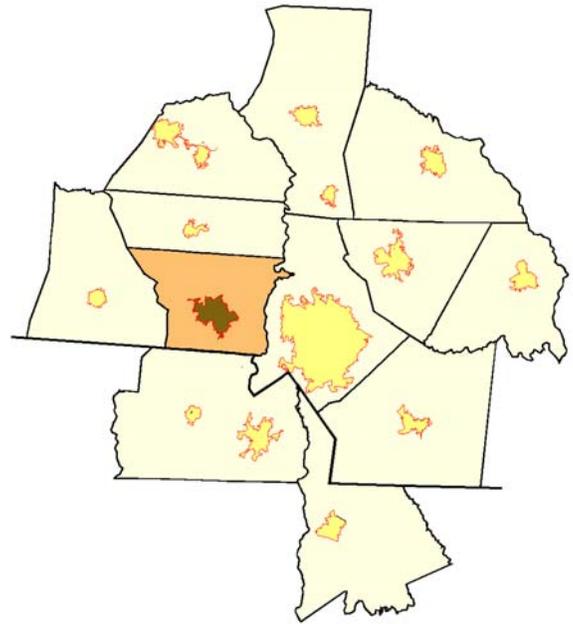
Democratic participation.

Planning is the government activity that generates the most citizen participation, and for many people involvement in planning decisions is their only participation in public decision-making other than voting. From zoning hearings to neighborhood meetings to opinion surveys, planners are always trying to get a sense of the public interest. One of the basic principles of city planning is that the best

decisions are those that are made with lots of citizen participation.

This plan is not intended to be a blueprint. Decisions will continue to be made day to day, month to month and year to year. Rather it is a *guide* to decision-making, setting out the goals and desires of our community and providing tools for achieving them. Growth and change will come to both our city and region over the next twenty years. We can either plan ahead for the community that we want or we can allow events to shape Gastonia how they will. The choice is ours.

GASTONIA'S COMMUNITY SETTING



HISTORICAL DEVELOPMENT

Gaston County, formed from the southern portion of Lincoln County in 1846, had a population of 9,000 with growth centers developing naturally along the waters of the Catawba and the South Fork Rivers. Early settlers, who were of Scotch-Irish, German, Dutch and English origins, planted corn, rye, wheat, barley and later cotton. Farming was the main industry at this time and supported the distilleries, a very profitable enterprise. The stills as well as the early mills depended on their location next to the water for power. Perhaps Gaston County and especially Gastonia owe their status as manufacturing leaders to two specific events: first of which was the switch from water power to steam and secondly the introduction of the railroads in the mid 1870's.

Gastonia, centered in the middle of Gaston County, began as a railroad junction settlement between the Charlotte and Atlanta Airline Railroad, now the Southern Railway, and the Chester and Lenoir Narrow Gauge line. The location of the railroads in Gaston County shifted the focus of the land from essentially agriculture to what would become one of the greatest centers for textile production in the world. By 1876 a population of a little more than 200 people made this junction crossroads, called Gastonia Station, their home. With the increase of employment and social opportunities the community petitioned the North Carolina General Assembly to grant a charter of incorporation. On January 26,

1877, Gastonia incorporated with its limits extending 1/2 mile from the railroad junction.

Following the development of a new population center came the need for real estate services, agricultural suppliers, and other commercial businesses. Only four years after its incorporation Gastonia boasted a newspaper, *The Gastonia Gazette*. Soon a hardware, drug store and opera house began to fill out the central business district. The first financial institution, the private banking house of Craig and Jenkins that later became *The First National Bank of Gastonia*, was established ten years after the town's incorporation. By 1910 Gastonia was home to 11 cotton mills, a public school system, electric lights and began paving roads. Hence the town of Gastonia grew and slowly outdistanced its neighbors as the central hub of political and social activity and in 1911 replaced Dallas as the county seat.

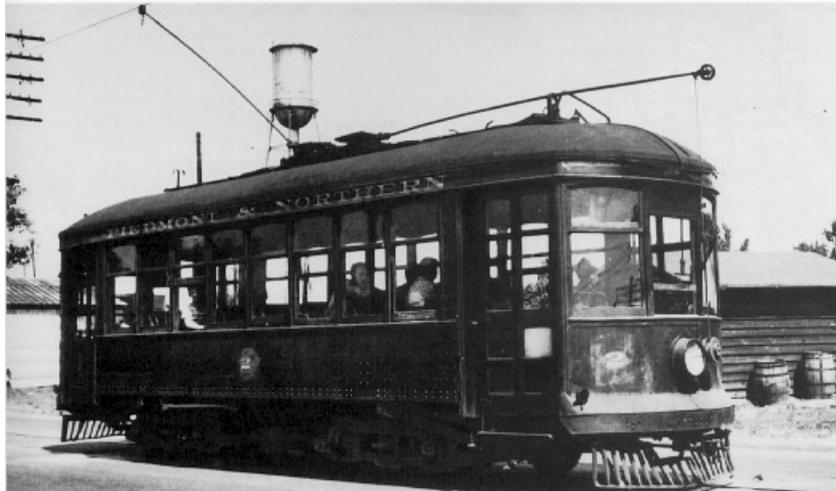
Also in 1911, Gastonia doubled its size when it annexed the huge Loray Mills and its surrounding settlements (to the west of the city limits). The mill petitioned the legislature to incorporate as an independent town, although Gastonia, in its new position as the county seat, quickly acted to defeat the move and annexed the area itself. During the next several decades no further annexations occurred and growth slowed, partially because of the First and Second World Wars and the Great Depression. In the late forties annexation picked up again and in 1959 a new law passed by the North Carolina

Legislature allowed cities to annex contiguous areas without their consent .

Another significant annexation occurred in 1964 when the city annexed a large tract of land to the east and increased its size again by about one half. This area also includes what is now the retail center for the region. The development of Gaston and Eastridge Mall led to a decline in the central business district as stores relocated to the new shopping centers. Gastonia continued to grow by annexation in the seventies and became even more aggressive in the eighties annexing the airport in the south east and the industrial area in the northwest (Figure 1).

In 1911 the Piedmont and Northern Railroad (P&N) an interurban line began running from Gastonia to Charlotte and furnished the city with its first and only streetcar. The streetcar ran directly along Franklin Avenue starting at Webb street and continuing to Church Street. The line continued to Groves Mill before connecting with the P&N. In later years with the increased use of the automobile this location became a source of aggravation for many motorists and in 1948 Gastonia retired its last street car. In the late 1920's Wilkinson Blvd. was built and became North Carolina's first four lane highway.

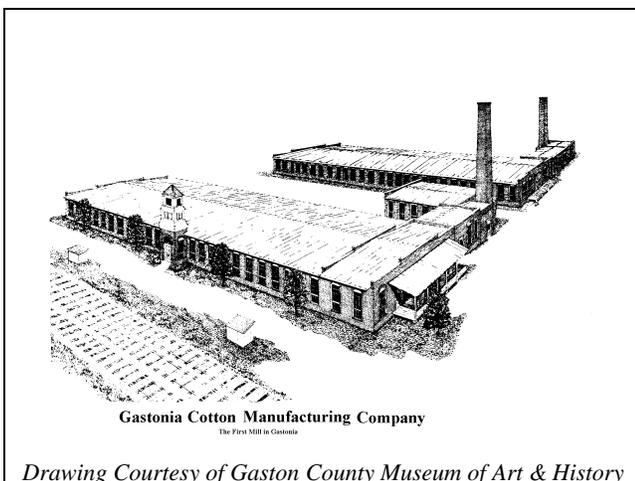
Physically, Gastonia has many influences, past and present, affecting its development. Originally people



The P & N Streetcar traveled on Franklin Blvd. from 1911 to 1948.

and industries settled along the rivers because of fertile lands and water power. After the technology for steam power became available, factories no longer depended on their location next to water and began setting up along the rail lines to take advantage of their easy and affordable transportation. Naturally, villages followed the mills and Gastonia developed as a collection of dispersed communities complete with their own shopping, civic and religious centers, usually tied to the mill itself (Figure 2). As the population increased and industries diversified, Gastonia began to fill out. Like many other cities that developed under the influence of the automobile Gastonia witnessed a decline of commercial and residential uses in its central core and an increase of strip developments along major thoroughfares. A movement of residential uses to the periphery has also been evident.

By 1930 the population had increased to 17,093 with about 22% of that population employed in the textile mills. Before the end of the year one of two mill workers was unemployed and most employed workers were on part-time schedules. Mill workers brought in from the mountains, skilled only in farming and factory work, were idle unless they could return to the land. December of 1930 saw half of the population unemployed, and the First National Bank closed its doors followed by four other local banks. Textile mills either combined, incorporated or closed.



Drawing Courtesy of Gaston County Museum of Art & History

In 1933, however, with the passing of FDR's National Industrial Recovery Act the economy showed slight signs of improvement and began to move forward. The forty hour work week was established, plus a minimum wage and the abolishment of child labor. Social problems, once the concern of mill management and the clergy, became government's responsibility to provide relief. The depression brought about an awareness in Gastonia for a need to diversify the economy, and several new businesses sprang up, including the Wix

Corporation and Klutz Machine & Foundry. As Gastonia and Gaston County retrenched, a hauling company started by two brothers from Cherryville would later become Carolina Freight Carriers, a leader in today's trucking industry. Another trucking firm, Akers Motor Lines, started during the depression and also became a national leader. Gastonia was shedding its image of being strictly a mill town.

With the onset of the second World War, again the textile industry soared filling many orders for



The Loray Mills

THE LORAY STRIKE

Drawing Courtesy of Gaston County Museum of Art & History

Gastonia is most defined by her industries and rich labor history. Known as the fine combed yarn capital of the world and a leader of processing activity, it is also an excellent example of a city that developed as a direct result of the Reconstruction era. Gastonia's mill villages reflect the industrial transformation that took place in the South and the development of industrial relations, specifically paternalism. Mill owners supplied housing, schooling, community stores with lines of credit, social programs and churches. In effect, management regulated every aspect of community life, even the spiritual as more often than not churches relied on management for monetary support. Management's isolation of workers from outside influences, the South's distaste for foreign interference and the nature of the textile industry itself are why unionization as a means of handling grievances never fully took hold in the South.

During the 1920's Gastonia continued to grow and textiles replaced other forms of labor as the backbone of the economy, although wages were lower than the national average. As the number of mills grew, other forms of manufacturing were disappearing, such as: ironworks, mining, tanneries and distilleries. In 1929 some laborers grew dissatisfied with working conditions of long hours and low pay. One mill in particular, the Loray Mill which had northern owners, changed labor practices and expected workers to cover extra machines and work longer days without additional pay.

Gastonia was ripe for outside influence and an ambitious organization with roots in communism called the National Textile Workers' Union led a group of Loray workers to strike in protest of their conditions. At first strikers received some sympathy and management expressed a willingness to negotiate with them, but under no circumstances would they talk with labor organizers. The strike gained national attention and Gastonians were angered by the bad press and the negative image given their city. With the City growing less sympathetic towards the strikers, the National Guard was called to restore order. The local papers, churches, the uptown community and mill management condemned the strike as nothing more than communists trying to destroy their community.

The strike waned and revived in momentum several times. One of the final blows dealt to the unionizing effort was a violent eruption between several of the strike organizers and the local police. In the end the police chief was killed and three officers wounded, as well as one striker. The community violently turned against the remaining strikers and a mob scene ensued, destroying their tent city and running many strikers out of town. The strike organizers, later captured and tried for murder in highly emotional trials, received varying sentences. The most infamous organizer, Fred Beal, even fled to Russia to avoid serving his sentence but later returned after denouncing communism. In the 1940's Beal received parole after serving only four years of his term. At the end of the strike a new upheaval came to Gastonia and the Nation in the form of the Great Depression.

military supplies. All efforts turned toward the war and mills ran round the clock with plenty of work for anyone willing and capable. Most of these positions were filled by women and older men as almost all of the young men had left to serve in the war. The gradual recovery from the depression of the 1930's and rationing practices related to the war effort were over by the early fifties and an era of peace and prosperity prevailed. Gastonia began looking to attract different kinds of industry through the development of the Gastonia Industrialization Diversification Commission. New industries such as Homelite Chain Saws and Westvaco boxes helped to balance the economy.

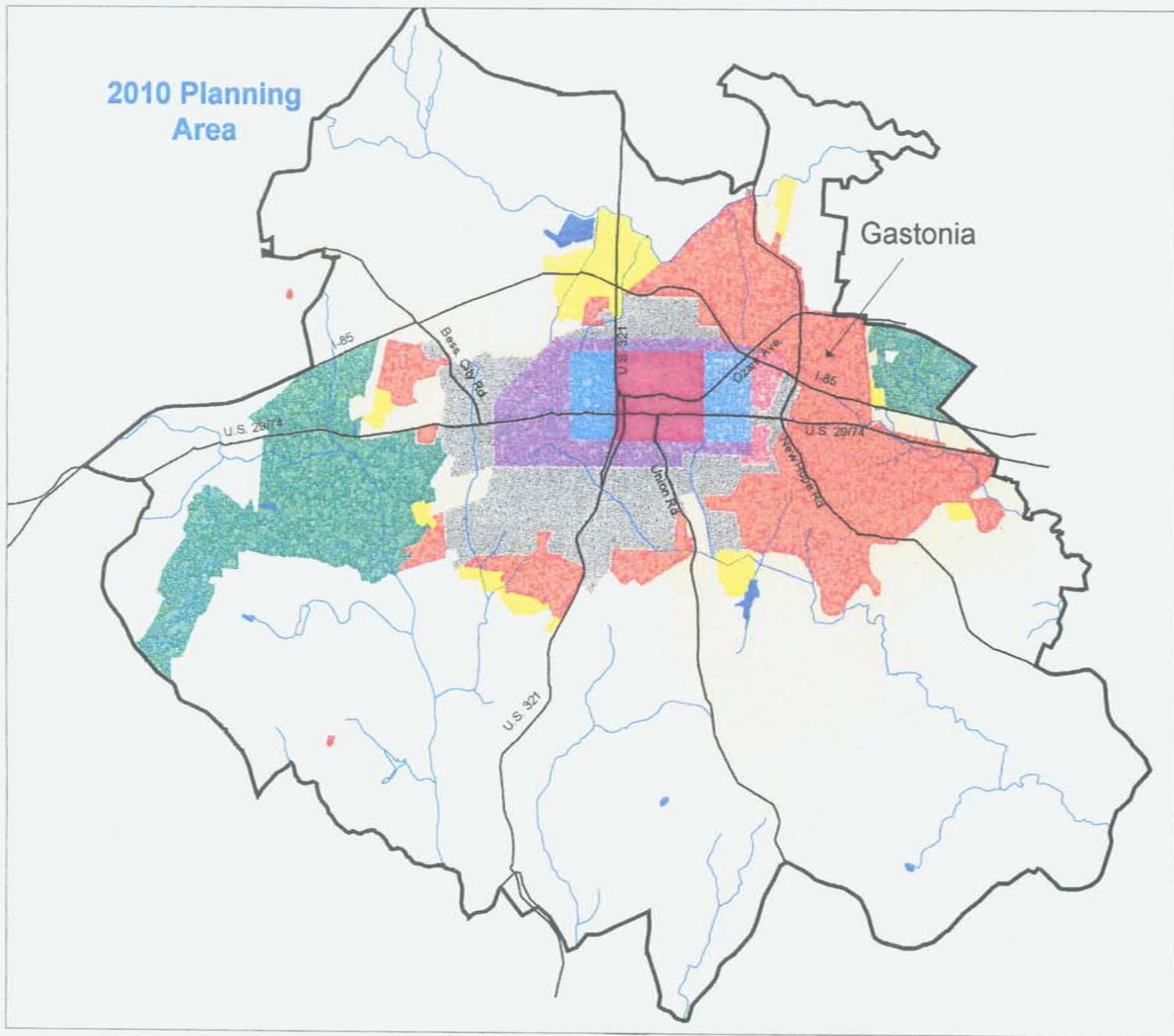
The 1960's brought to Gastonia much of the same political and social turmoil that faced the rest of the country, but to a lesser degree than some southern cities. By the time the civil rights movement had reached the area, Gastonia's black community had several prominent citizen leaders, a successful business community and a noted high school. Early on citizens of the black community achieved many "firsts." In 1909 Dr. Herbert J. Erwin began his practice in the predominantly black Highland neighborhood, one of Gastonia's oldest. Erwin was the first black physician on this side of Charlotte and portions of South Carolina, later he founded the Gastonia Colored Hospital. Dr. C. W. Blair joined him as the neighborhood's first pharmacist. Nathaniel Barber became the first black city councilman in the United States to be elected treasurer.

Gastonia served as a pace setter during the integration years and made strides nonviolently in the areas of human relations and civil rights. Leading the area in 1962, Gastonia quietly integrated its schools and had already peacefully integrated many of its businesses and public facilities. Much of this success can be attributed to the work of a thoughtful and sensitive Human Relations committee, made up of leading citizens to address concerns of both races. One such member of this committee, Thebaud Jeffers, was an outstanding citizen whose career as an educator, school administrator and Gastonia's first black mayor.

By the end of the early sixties I-85, originally the U.S. 29 Bypass, had worked its way through Gastonia, and because of annexations the population grew from 37,000 to a little over 40,000 by 1970.

A new era in medical treatment began in the 1970's for the city and the surrounding region with the opening of the Gaston Memorial Hospital complex in 1973. In 1976 Gastonia appointed its first black mayor in a majority white city, Thebaud Jeffers, an uncommon event in the South at that time. Jeffers would serve as mayor until he died in 1984. The recession of the 1970's again brought unemployment to the area with rates as high as 9% in the city and 14% in some parts of the county. In 1978 a \$1.4 million urban renewal project was completed giving a two-square block of the downtown business district a new look. The package included a new underground electrical system, landscaping and pedestrian crossings, new street lighting and traffic control signals. Redevelopment continued into the eighties with a plan to minimize the divisive effects of the Southern Railway on the downtown area by sinking the tracks in a trough and overpassing them with bridges. Other projects included plans for a biosphere expansion to the Schiele Museum and a new governmental complex and civic center.

Gastonia's population as of 1992 is estimated at 55,198, and continues to grow through redevelopment and annexation. Annexation remains a significant tool in long-range land use planning allowing the city to expand its tax base and increase land available for new industry. A new courthouse, police station, industrial park and many transportation and utility improvements are either underway or approved as a means of handling increasing demands. Gastonia's city limits encompasses 31.29 square miles and its planning area can be expanded up to three miles from the City limits, an effective measure that helps to ensure comparable development standards in areas that might be annexed in the future. Careful integration of new development with existing uses and a thoughtful and informed approach to long and short range goals will provide a future of opportunities for Gastonia's residents.



**Figure 1
Historical Growth
of Gastonia**

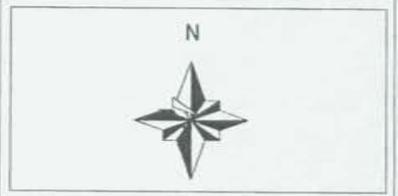
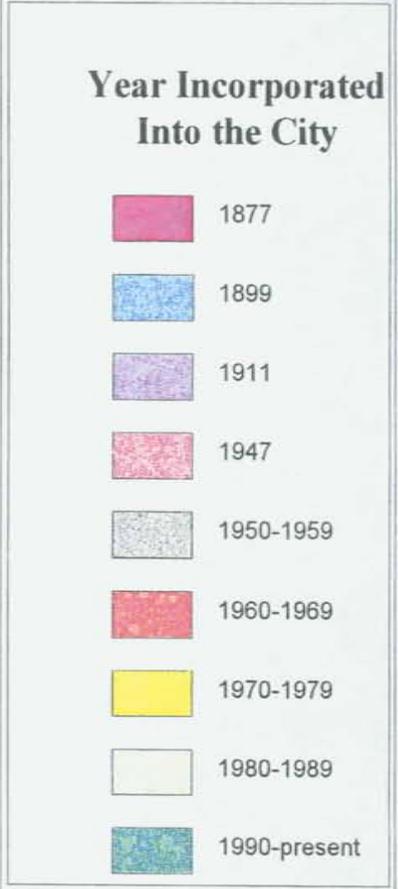
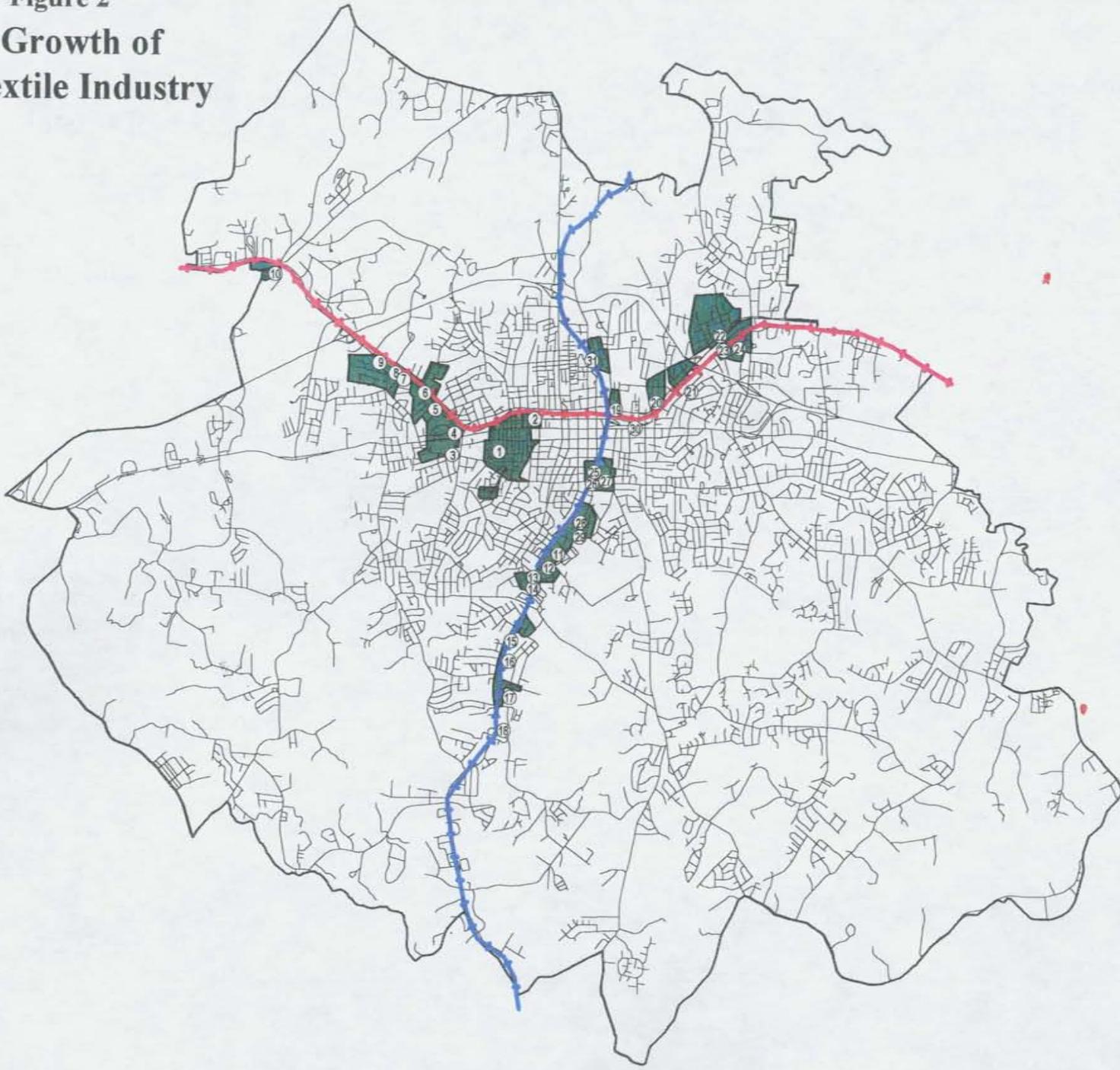


Figure 2
Early Growth of
the Textile Industry

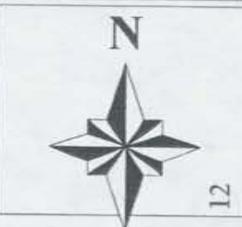


Textile Mills

1. Firestone
2. Trenton
3. Parkdale
4. Gray
5. Mutual
6. Threads
7. Myrtle
8. Arkray
9. Arlington
10. Ragan
11. Ruby
12. Dixon
13. Victory
14. Winget
15. Myers
16. Pinckney
17. Hanover
18. Ridge
19. Gastonia Weaving Company
20. Modena
21. Ozark
22. Groves
23. Flint #1
24. Flint #2
25. Dunn
26. Armstrong
27. Clara
28. Osceola
29. Seminole
30. Avon
31. Holland

-  Southern Railroad
-  C & NW Railroad

 Mill Village Area



PHYSICAL AND ENVIRONMENTAL SETTING

Gastonia is located in the Piedmont, a region of rolling hills, frequent streams and rivers, and red clay soils. The Piedmont rises out of the Atlantic Coastal Plain and follows a general northeast to southwest axis, extending from south central Virginia to northeast Georgia. To the west of the Piedmont lie the Blue Ridge and Appalachian Mountains. The region was once covered by an oak and hickory forest. The original virgin forest has been virtually eliminated through clearance for agriculture, pasture and urban development. Replacing the original forest in undeveloped areas is a second or later growth forest of mixed hardwoods and evergreens. Tree species cultivated today are those that provide benefit to urban areas through beauty, erosion control, privacy and shade. Such trees include oak, maple, dogwood, evergreens, and flowering trees.

GEOLOGY

The story of Gastonia's physical and environmental setting begins with the earth and land forms underneath that shape such features as rivers and streams, hills and valleys, drainage patterns and soils.

Gastonia's landscape is a series of rounded hills and ridges that follow a general northeast to southwest direction, with elevations rising toward the west and southwest. The drainage pattern of the watercourses such as Long Creek, Crowder's Creek and the South Fork River result from the shape and direction of the land in Gastonia and Gaston County. The water also has shaped the land, by cutting through rocks that have unequal resistance to erosion, resulting in a varying pattern of broad and steep valleys. This is what makes the Catawba River such an excellent site for the hydroelectric dams that now straddle it: where the river cuts through resistant rock, it forms a narrow valley that is easily closed off by a dam.

Another dramatic example of the varying resistance of the rocks underneath Gaston County is Crowders Mountain. This

mountain, like Kings Mountain, Spencer Mountain and others that jut out from the rolling land around them, are called monadnocks, because they are not part of a range, but are instead the ancient remnants of a time when all the land in this area was at a higher elevation. As the surrounding terrain has subsided and eroded, the monadnocks have done so much more slowly, taking the form of our Gaston County Mountains. The Monadnocks of Gaston County are some of the oldest mountains in the world. Of all North Carolina mountains, only the Uwharrie range is older.

A number of important minerals are located in Gastonia and its general vicinity. Gold was first discovered in the region on the Reed farm in Cabarrus County in 1799. For the next 140 years gold was mined with varying success throughout the Charlotte region, including Gaston County. Indeed, from 1800-1830 this was the United States' major gold producing region, and it was responsible for the early growth of Charlotte, which became home to a branch of the United States Mint. The region was later bypassed by California, but gold continued to be mined in Lancaster County as late as 1942, and can still be found throughout the region. The most important gold mine in the Gastonia area was the Long Creek Gold Mine, which was located about six miles northwest of Gastonia. Remnants of old mines can still be found, particularly to the northwest of the City.

Iron ore was another commercially important



Crowders Mountain dominates the horizon as seen from West Hudson Blvd.

resource found in Gaston County. It was found in a belt that extended from Iron Station in Lincoln County southwest to Cleveland County. Iron Smelting began before the American Revolution and was important in the early nineteenth century, with seven iron processing plants in the area. Unfortunately, good quality iron ores were in short supply and the industry never fully developed. The last iron production ceased in 1936 and attempts to revive it during World War II were unsuccessful.

A more recently exploited mineral resource Gaston County is lithium, a strategic metal used in the aircraft, pharmaceutical and defense industries. Lithium is currently mined in the western portion of the county near Bessemer City. The lithium belt in Gaston, Lincoln and Cleveland Counties is the largest in the world, and it is Gastonia's most internationally-important mineral resource.

WATER

Water is of great importance to Gastonia, literally supporting all the life we have. Beyond the use of water for drinking and growing things, it also supports industry in Gastonia and provides opportunities for recreation. Our location near the Catawba River is one of Gastonia's most important natural features. The Catawba has three man-made lakes which are in close proximity to Gastonia: Lakes Wylie and Norman and Mountain Island Lake. Gastonia draws its drinking water from Mountain Island Lake, which is considered the best source in the region due to its location below Lake Norman, which acts as a large settling basin, allowing sediments and pollutants to drop out of the water. The water released into Mountain Island Lake is thus cleaner and clearer than that of Lake Norman. All three lakes provide recreational opportunities, wildlife habitat, and enhance the quality of life in Gastonia.

SOILS

Soils in the Gastonia vicinity can be grouped into 5 general categories, with varying suitability for land development, roads and septic fields. Soils have different capacities for drainage, load bearing, and fertility. Identifying soil characteristics allows us to evaluate land development with regard to its physical suitability. The following soil types are found in Gaston County¹:

- **Cecil-Pacolet:** Mostly used for pasture and cropland. Erosion is a concern, particularly on steep slopes. These soils cover 28% of Gaston County and are found mostly in the central and northwestern parts of the county.
- **Cecil-Urban Land:** Similar in characteristics to Cecil-Pacolet, this category also includes areas that are covered with buildings and pavement. This soil type covers 18% of the county and is found mainly in the commercial, industrial and residential areas of Gastonia.
- **Tatum:** This soil presents hazards of erosion and shrinking-swelling. It is covered mainly with woodland, cropland and pasture. The soil covers 16% of the county and is found mostly in the southwestern to west-central parts of the county.
- **Madison:** Found mainly in the central and southwestern parts of the county. This soil is covered with mostly cropland or pasture on gentle slopes and woodland steep slopes. It is relatively unsuitable for urban development, due to erosion on steep slopes. Madison soils cover 7% of the county.
- **Cewalca-Congaree:** This soil group is found along major streams throughout Gaston County. It is poorly drained and prone to flooding; the least suitable of the Gaston County soils for urban development. This soil group covers 7% of the county.

¹ *Soil Survey of Gaston County, North Carolina*. United States Dept. of Agriculture, Soil Conservation Service, 1989. Pp. 7-12.



Mountain Island Lake is cleanest water supply in the region and the source of Gastonia's drinking water.

Figure 7 shows the general soils map for Gaston County.

Suitable soils are important to successful urban development. Choosing an area with good soil for a building site can help the owner avoid flooding, erosion, foundation problems and septic tank failure. All of these problems can appear if a site has unsuitable soils. Fortunately, the Gastonia area has an abundance of good soils for development. The primary areas where soil problems occur are in flood plains and on steep, rocky slopes, sites which are unsuitable for numerous reasons. The predominance of good soils for urban development is also a defining characteristic of the Piedmont, a region in which the soil renders agriculture somewhat difficult.

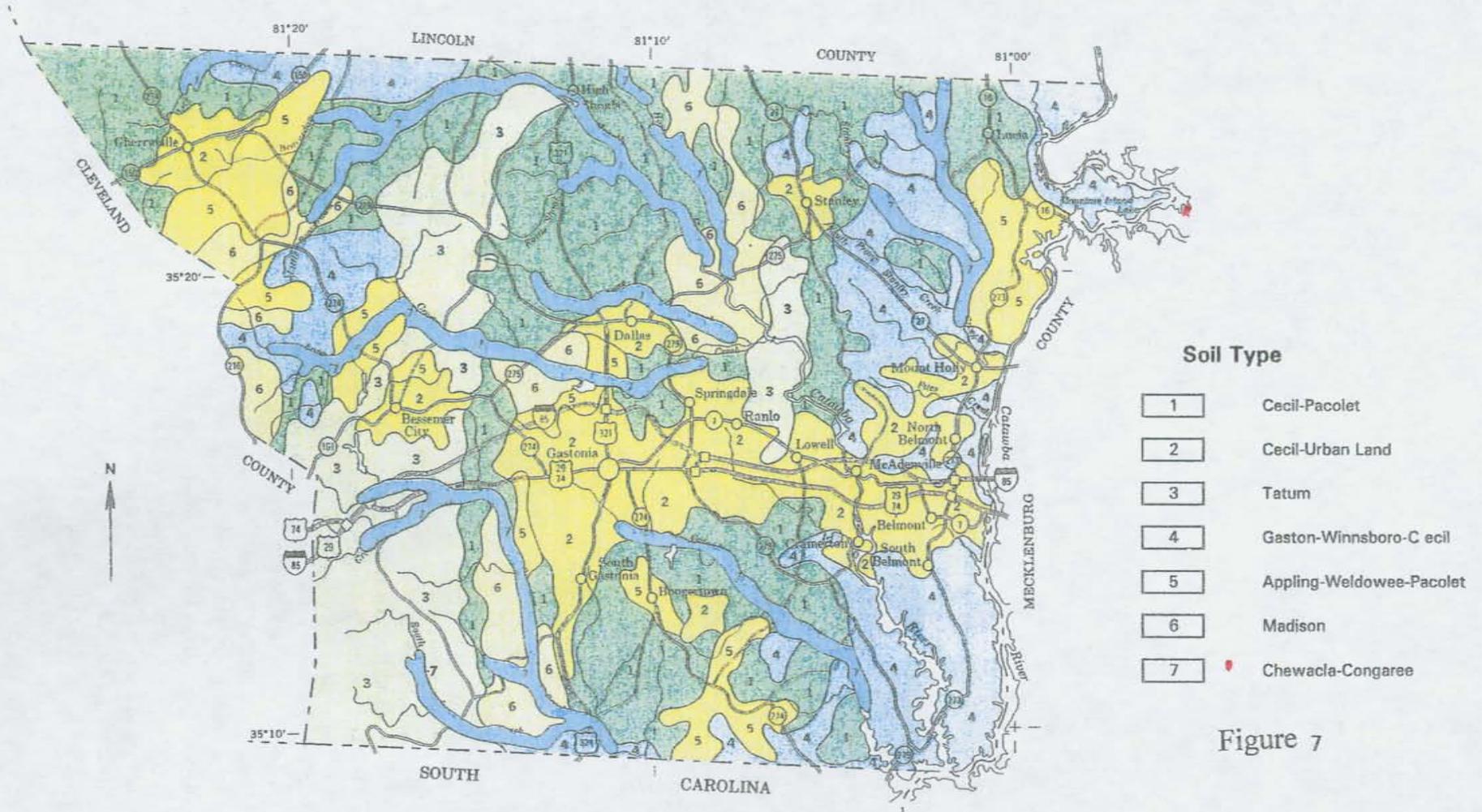
PHYSICAL SETTING AND HUMAN SETTLEMENT

The physical and environmental setting of Gastonia has affected our pattern of settlement: where we

work, live and play. Early mining of gold and iron ore played an important part in the development of industry in the Gastonia vicinity and the Charlotte region. During this same period, the presence of many swiftly flowing streams, such as the South Fork River at High Shoals and the Catawba River at Mountain Island, provided the first power for cotton mills, later the pre-eminent industry in Gastonia. The decision of the railroads to locate their tracks along the ridge lines in Gastonia brought cotton mills out of the stream valley. The subsequent settlement of workers around the mills on the higher ground set a pattern of settlement that Gastonia has followed to this day. Rather than growing out of the valley or off a central hilltop as many communities across the country have done, Gastonia has grown together from a collection of communities located along the ridges. This has left the flood-prone bottom land relatively untouched by development. Floodplain development ordinances now restrict development within these valleys, leaving them open for recreational development and allowing the streams to follow a more natural, less channeled course.

The shape and character of the land has enhanced the quality of life in Gastonia. From the rolling land all around us which provides varied and interesting vistas, to the dramatic rise of Crowder's Mountain to the west, the form of the land in Gastonia is visually stimulating. These land features provide recreation opportunities, including Crowder's Mountain State Park as well as the lakes along the Catawba River, which are possible because of the Catawba's narrow and steep valleys. As Gastonia looks toward the 21st century, these assets are likely to become both more important and more threatened by an increasingly urbanized region.

General Soils of Gaston County



Soil Type

1	Cecil-Pacolet
2	Cecil-Urban Land
3	Tatum
4	Gaston-Winnsboro-Cecil
5	Appling-Weldowee-Pacolet
6	Madison
7	Chewacla-Congaree

Figure 7

REGIONAL SETTING

Gastonia is located in the middle of the Piedmont, a region of low rolling hills that extends from south-central Virginia to northeast Georgia, on a northeast to southwest axis. The Piedmont is bordered by the Blue Ridge Mountains on the northwest and the Atlantic Coastal Plain on the southeast. The distinguishing physical features of the Piedmont are the hilly terrain, an abundance of streams and red clay soils. The region was once covered by an oak-hickory forest. The Piedmont has excellent characteristics for urban development, and one of the distinctive features of the region is the thickly settled countryside, with numerous towns and small settlements. Thus the Piedmont can be described as both "rural and dense." This pattern is repeated in the development of the Piedmont's larger cities. The urban portions of the Piedmont are characterized by clusters of cities, rather than one large city with a surrounding hinterland. The Greensboro-Winston-Salem-High Point urban area is a case in point, as is the Charlotte-Gastonia-Rock Hill urban area. Gastonia lies in the heart of the Piedmont, half way between Atlanta and Raleigh.

On a finer scale, Gastonia is also part of the Charlotte urban region. The two cities are only twenty miles apart, and they have a strong economic and social relationship. Charlotte is the primary city in the region, with three second-tier cities: Gastonia, Rock Hill and Concord-Kannapolis. Each of these second tier cities is the center of its own smaller area-of-influence within the Charlotte region.

The service economy in the Charlotte region is highly centralized: most banking, insurance, and professional services are located within Mecklenburg County. Charlotte is also the retail, entertainment and cultural center of the region. Finally, wholesaling and distribution are also concentrated in Mecklenburg County. The region's manufacturing, in contrast, is located primarily in the counties surrounding Mecklenburg, particularly Gaston, Cabarrus and York.

Gaston County and Gastonia have grown over the last twenty years, but the growth here has not been as explosive as in some of the other counties

surrounding Charlotte. From 1970 to 1990, Gaston County had a population growth of about 18%, from 148,415 to 175,093 people. This rate of growth was the lowest of the seven counties adjacent to Mecklenburg. This slower rate of growth is perhaps characteristic of the greater maturity of the Gastonia urban area. Further, the Catawba River has probably been a hindrance to spillover growth from Charlotte. Residential growth, driven by the Charlotte market, in the counties adjacent to Mecklenburg has tended to occur first near the County line.

Gastonia is the pre-eminent manufacturing area of the Charlotte region. Historically a textile-manufacturing center with an emphasis on yarn and thread mills, Gastonia's manufacturing base has diversified over the past 20 years to include machinery, transportation equipment, precision equipment and other industries. Gastonia has also seen tremendous growth in retailing, drawing shoppers from Cleveland, Lincoln, York and Mecklenburg Counties.

Gastonia is the center of its own sub-region, comprised of Gaston, Lincoln, Cleveland and northern York Counties. It is an employment and retailing center as well as a transportation hub. The trend, however, is toward greater integration with the Charlotte region. Housing, employment, shopping, transportation are issues which must be viewed in a regional context. In addition, the various cities of the Charlotte region are expanding geographically and by 2030 the region is expected to become a single urban mass, with annexation opportunities curtailed as the unincorporated areas between the cities dwindle. A sustainable, functional urban environment can be achieved in this urban mass through planning, good site design, and regional cooperation.

Figure 8
Charlotte Metro Region Population Change, 1970-1990
(Ranked by 1990 Population)

County	1970 Population	1980 Population	1990 Population	Change 1980-90	Change 1970-90
Mecklenburg	354,656	404,270	511,433	107,163	156,777
Gaston	148,415	162,568	175,093	12,525	26,678
York	85,216	106,720	131,497	24,777	46,281
Catawba	90,873	105,258	118,412	13,154	27,539
Rowan	90,035	99,186	110,605	11,419	20,570
Cabarrus	74,629	85,895	98,935	13,040	24,306
Iredell	72,197	82,538	92,931	10,393	20,734
Cleveland	72,556	83,435	84,714	1,279	12,158
Union	54,714	70,436	84,211	13,775	29,497
Lancaster	43,328	53,361	54,516	1,155	11,188
Stanly	42,822	48,517	51,765	3,248	8,943
Lincoln	32,682	42,372	50,319	7,947	17,637
Total	1,162,123	1,344,506	1,564,431	219,925	402,308

Gastonia's position in both the Piedmont and the Charlotte Urban Region provide the City with advantages in natural setting, educational and cultural opportunities, economic development and quality-of-life that a city of 55,000 people would otherwise not have. As we look toward the future, it is clear that decisions made locally will have a

regional impact and also that decisions made in the region will have an effect on Gastonia. Regional evaluation of both problems and assets is essential for understanding our future, and regional cooperation will be the key to a successful shared future in both the Piedmont and the Charlotte Urban Region.

GROWTH & CHANGE

THE PIEDMONT CRESCENT

Gastonia lies at the heart of the Piedmont region, equidistant from Atlanta and Raleigh. The Piedmont forms a crescent from south-central Virginia to northwest Georgia, following the corridors of Interstate 85 and the old Southern Railroad. The region has both rural and metropolitan areas. The major metropolitan areas include Raleigh-Durham, Greensboro-Winston-Salem-High Point, Charlotte-Gastonia-Rock Hill, Greenville-Spartanburg, and Atlanta. Figure 1 shows the Piedmont Crescent. The rural countryside between these metropolitan areas tends to be more densely populated than rural areas in other regions, with an abundance of small farms, homesteads and small towns.

The Piedmont region is the growth engine of the South. Over the last two years, the Southeast has gained 23,000 jobs during a period which saw the loss of 450,000 jobs in the Northeast and West Coast. This gain in jobs in the South has been almost an entirely metropolitan phenomenon, with 90% of the job gain outside Florida and Texas occurring in the metropolitan areas.

Culturally, the Piedmont is firmly in the New South, in contrast to the Old South of plantations, cotton, and ports. The bulk of the growth in the South has not occurred in the areas that dominated before the Civil War, such as Savannah, New Orleans and Charleston, but has instead focused on the Piedmont cities, many of which did not become significant until after Reconstruction. Gastonia is a case in point, with its beginnings as a transportation junction and its growth (after Reconstruction) due to the emergence of steam-powered textile mills. The Piedmont today is characterized by a diversifying manufacturing base, a fast-growing service economy, and an increasingly urban population. The Piedmont of the New South has a strong bias for growth, using such tools as relocation incentives,

worker training, and wage differentials to attract industry and economic development. The region has been successful in a series of national competitions, from Atlanta's 1996 Olympics to Greenville-Spartanburg's BMW plant to Charlotte's NBA and NFL teams.

Several national trends are evident in the Piedmont:

- The growth of households is occurring at a faster rate than population growth, and the declining size of the average household. This trend is significant because a large part of demographic research and many planning decisions are based on household growth rather than raw population growth. The growth and evolution of households are what drive the housing market, for example. Decisions on land use, education, recreation and transportation are based at least in part on changes in households.
- The aging of the population in the United States has implications for planning decisions as well. By 2010, the oldest members of this generation, born in 1946, will be reaching retirement age. This inevitable trend has implications for housing, land use, and transportation.
- The suburbanization of metropolitan areas will continue as cities spread out. This trend of development at the fringe includes housing, retail, offices and industry. A counter-trend in the metropolitan Piedmont is the increasing acceptance of high-quality, high-density residential developments, both single-family and multi-family.
- The emergence of the service economy in the United States is particularly evident in the major cities of the Piedmont region. Throughout the

1980's and 1990's, the growth sector of the economy of the region and the nation has been in such non-manufacturing areas as finance, insurance and real estate, services, and information-related businesses. At the same time, manufacturing has continued to diversify and has remained an important part of the regional economy.

As the Piedmont region matures, Gastonia is poised to benefit from the growth and prosperity that is increasingly evident in the region. The City's position in the new metropolitan southeast, rather than the old rural southeast, is ideal for growth, and Gastonia can draw on both the strengths and opportunities of the Piedmont as well as the Charlotte region.

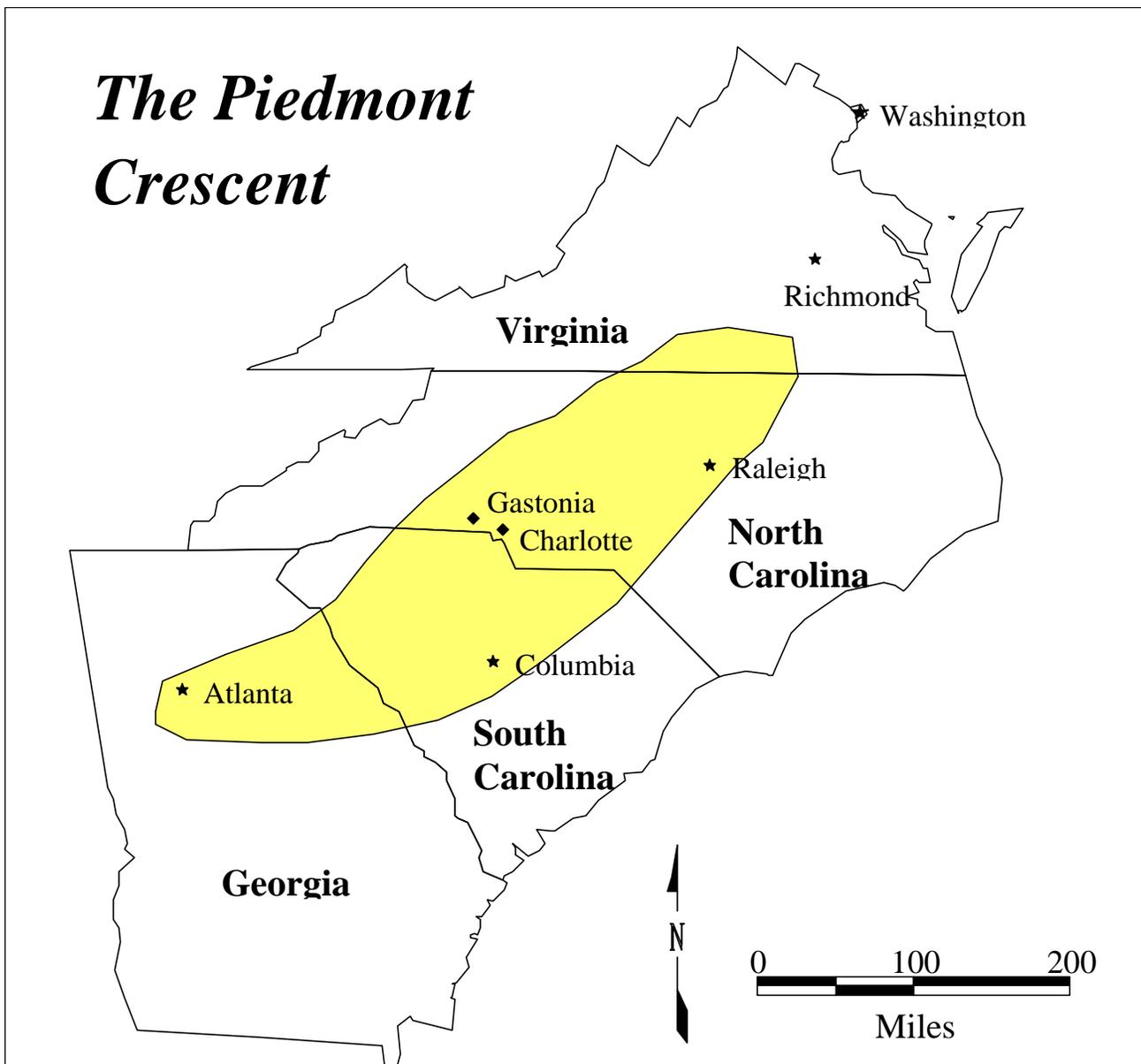


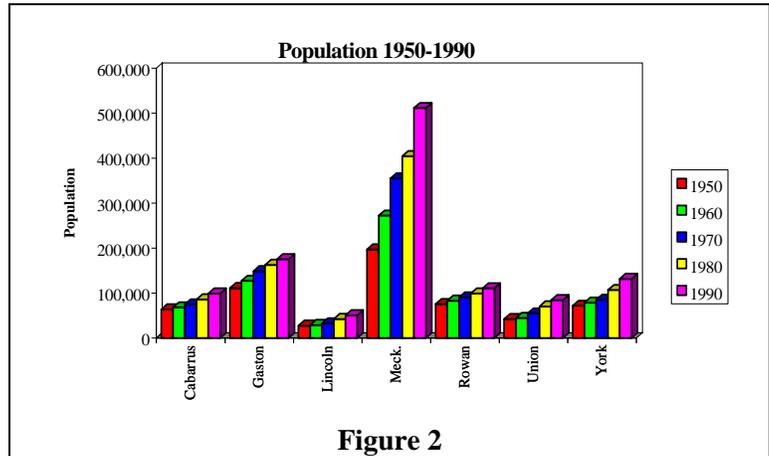
Figure 1

GROWTH TRENDS IN THE CHARLOTTE REGION

The Charlotte region can be defined in a number of different ways. The U.S. Census defines the Charlotte-Gastonia-Rock Hill Metropolitan Statistical Area as the following counties: Mecklenburg, Gaston, Lincoln, Cabarrus, Rowan, Union and York (SC) Counties. In 1972, the University of North Carolina at Charlotte, in the *Metrolina Atlas*, endorsed a somewhat larger definition of the Charlotte region, which included all of the Census counties as well as Cleveland, Catawba, Iredell, Lancaster, Stanly and Anson Counties. This is generally considered the most inclusive definition, but recently Chester County, South Carolina, expressed interest in being considered part of the Charlotte region, even though it is equally distant from Charlotte and Columbia. In addition, Catawba County is increasingly included in regional studies, especially in the fields of transportation and economic development.

The concept of a cohesive Charlotte urban region has evolved over time. In 1960, the census definition of the Charlotte MSA included only Mecklenburg and Union Counties. In 1970, Gaston County was added to the Charlotte MSA. The greatest change came in 1980, when the definition of the area was expanded to include the present counties. Prior to 1980, Cabarrus and Rowan Counties were treated by the Census as a separate metro area, even though their economic and social ties to Charlotte had been identified since the late 1960's.

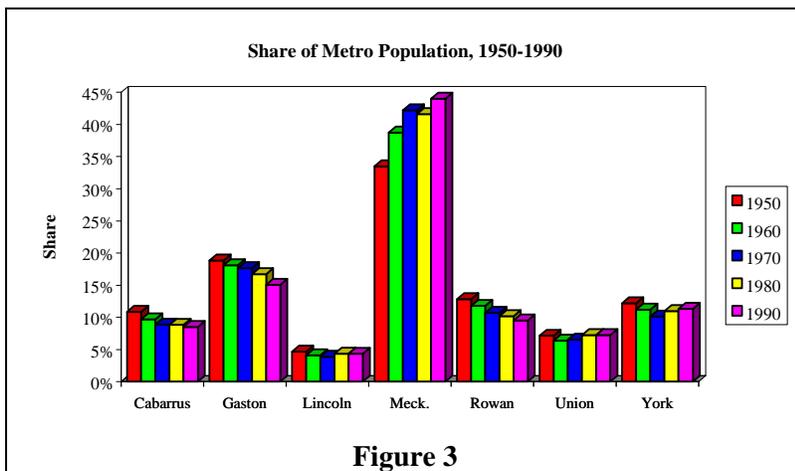
The Charlotte region is, first and foremost, a



growing region. The population of the region has grown by 34% from 1970 to 1990, increasing from 1,185,611 to 1,587,905 people. As shown in Figure 2, the growth of Gaston County has been somewhat slower than that of the region, with an 18% increase from 1970 to 1990, compared with over 50% growth for Union and York Counties. This pattern is reflected in the City of Charlotte's directional growth over that same period. The City of Charlotte has grown most strongly toward the south (York) and southeast (Union), with relatively little growth toward the west (Gaston). Gaston County has nonetheless grown steadily in population from 1950 to 1990.

Another way of looking at population shifts in the region over the last 40 years is to examine the change in the share of the region's population for each county. Figure 3 shows those shares and how they have changed from 1950 to 1990. Gaston County has a smaller share of the region's population now than it did in 1950, although it grew in population.

More dramatic than the growth in population has been the growth in households in the Charlotte region. Household growth has followed population growth, as Figure 4 shows, but it has been more pronounced because the average size of households has been decreasing. The decrease is



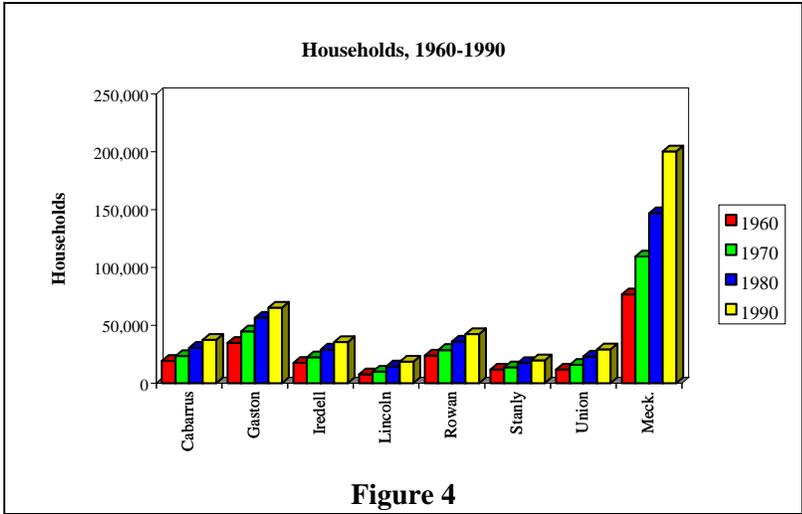


Figure 4

somewhat higher owner-occupancy rate which has increased over time. One reason for the greater owner-occupancy rate outside of Mecklenburg is the more suburban nature of the surrounding counties. Indeed, much of the growth in counties such as Union and Cabarrus has been due to the strong growth outward from the City of Charlotte. This suburban growth has favored single-family housing which is typically owner-occupied. In Gastonia, the regional demand for housing has contributed to the growth of new housing on the City's southeast side.

due to a number of factors, including families having fewer children, more single-person households, an increase in the divorce rate, and an aging population. Each of these trends is expected to continue, although the divorce rate in the United States appears to have leveled off. One of the effects of a decreasing average household size is the relationship of population to the number of housing units. The difference in population growth and household growth was most evident in the 1990 Census, when communities did not see an increase in population equal to the number of housing units added. The housing market has also been affected, with an increase in new housing suitable for smaller families, such as apartments, condominiums and townhouses. Average household size decreased in the Charlotte region from 3.49 persons in 1960 to 3.24 persons in 1970 to 2.78 persons in 1980 to 2.54 persons in 1990.

As the population has grown, the racial composition of the region has changed very little (see Fig. 5). Non-white households, which include African-Americans, Asians, Native Americans and other people of color, have increased by 1½ percent over the last 40 years.

Ownership of housing has increased in the Charlotte region over the last twenty years, with a greater gain occurring in the 1970's than in the 1980's. Owner-occupancy has a spatial trend within the region, with greater owner occupancy rates in counties outside of Mecklenburg (see Figure 6). During this time Mecklenburg County's owner occupancy rate has held steady at 60%, but the outlying counties have a

The citizens of the Charlotte region have improved their educational attainment over the past 40 years. Figure 7 shows that in 1950, over half of the adults in the Charlotte region had only an elementary education, a proportion that has steadily declined to about 10% today. The percentage of adults with some high school increased in the 1960's, then declined in the 1970's and 1980's. This may be due to the increasing education demanded of a working class adult, shifting from elementary education in 1950, to a high school diploma in 1970, to education beyond high school in 1990, either in college or specialized training. Over the 40 years, the number of people with college experience and college diplomas increased steadily, again reflecting the greater demands of the workplace, as well as the in-

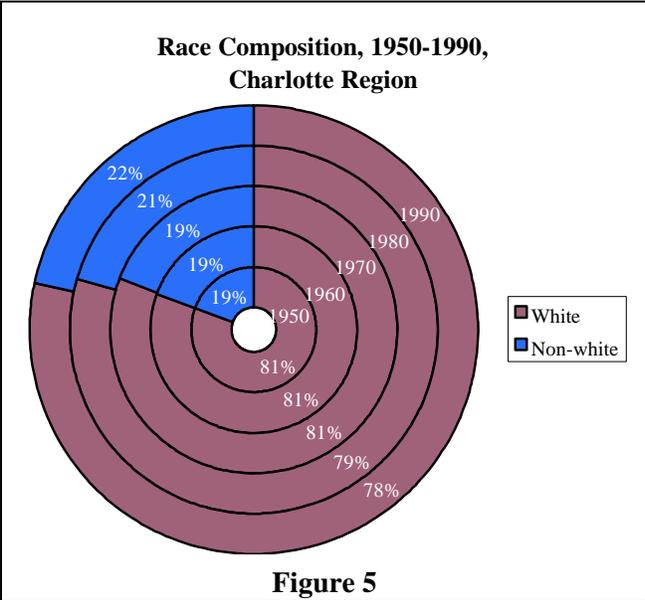


Figure 5

creasingly white-collar economy of the region.

The dominant economic characteristic of the Charlotte region is the pattern of manufacturing and non-manufacturing employment. Charlotte is the center of the region in population, cultural facilities, education and non-manufacturing employment. Conversely, Figure 8 shows that the counties surrounding Mecklenburg, particularly Gaston, York and Cabarrus, have the largest concentration of manufacturing. It is this pattern of employment which led geographers and statisticians to first recognize the cohesive nature of the region. In essence, Charlotte is nearly unique among large cities in that it does not have a large manufacturing sector within the city, but it does have a manufacturing belt surrounding the city, which forms an essential part of the regional economic engine. Thus, the economy is complete only through the contribution of all

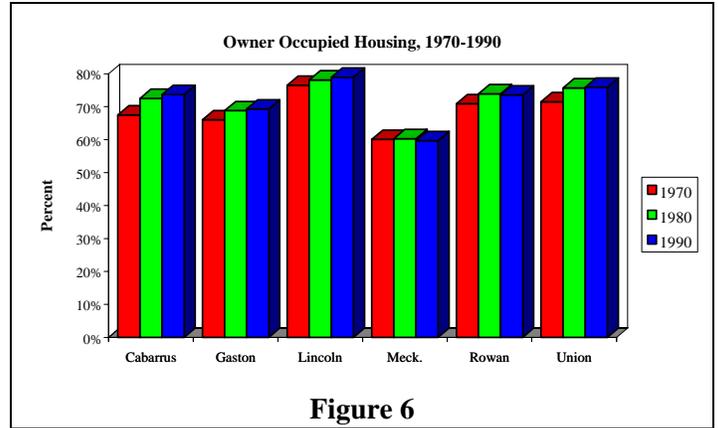


Figure 6

parts of the region.

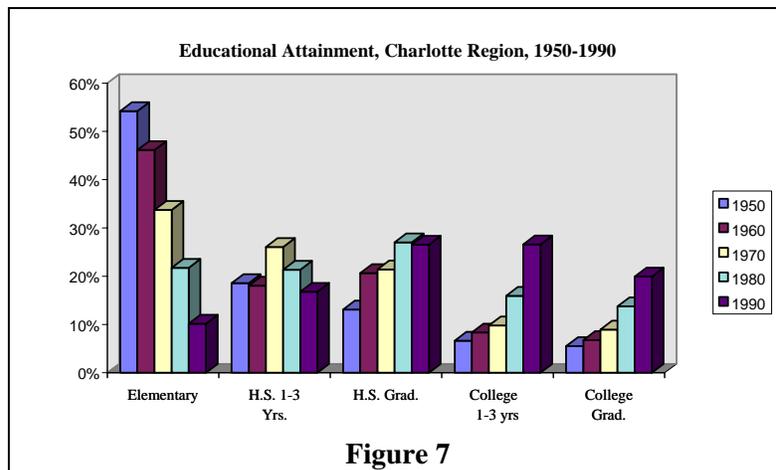


Figure 7

Further indicators of the growth and increasing national prominence of the Charlotte region include the dramatic growth of the Charlotte-Douglas International Airport, a major hub for USAir. The airport now has 500 flights per day, compared

with 70 flights per day in 1970. After New York and San Francisco, Charlotte is the largest banking center in the United States, with headquarters for two of the ten largest banks, NationsBank and First Union. Other evidence of the region's growth include the NBA Charlotte Hornets and the NFL Carolina Panthers. The region also offers a growing state university, The University of North Carolina at Charlotte, which was established in 1965. UNCC has grown to 15,000 students and is projected to have an enrollment of 25,000 students by 2010.

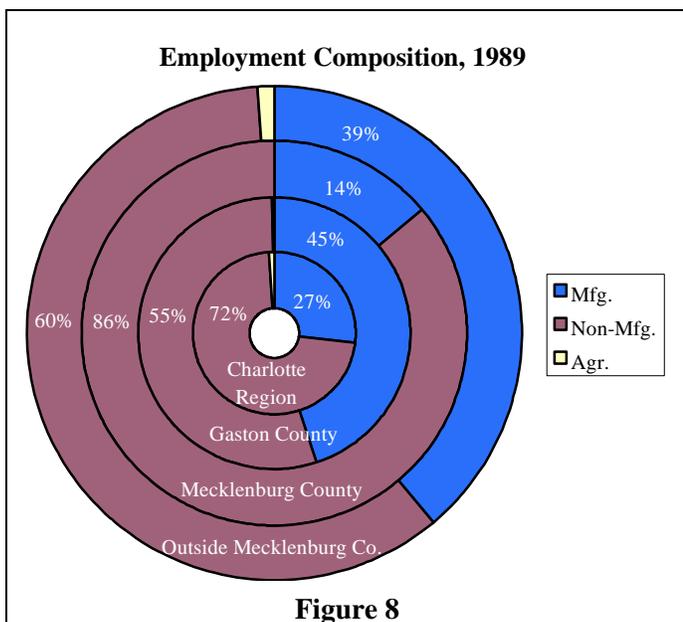


Figure 8

COMMUNITY POPULATION & ECONOMY TRENDS

The study of population is fundamental to comprehensive city planning. Changes in population dictate where new housing needs to be built, where new water and sewer lines need to be extended, whether the community needs more schools or more services for senior citizens. By knowing about population change, Gastonia can tailor its community development efforts and social services to the areas that need them most. Other services such as police and fire protection need to grow as the population does, and they need to be expanded where the population growth is.

Gastonia's population is *always* changing. Even in a community in which nobody moved in or moved out, people would still get older, babies would be born, and people would still die. Births, deaths and aging are the major components of population change. To that we must add migration: people moving into Gastonia and people leaving Gastonia. These factors are the basis of the *demographic equation*, which is a simple way of expressing population change:

$$\text{Population Now} + \text{Births} - \text{Deaths} + (\text{Migration In} - \text{Migration Out}) = \text{Future Population}$$

If you know or can reasonably estimate these four things, you can forecast or project how the population will change at some future date. In the case of Gastonia and most other North Carolina cities, we must add another element to this equation: annexation.

As Gastonia annexes land, the people living on that land become city residents not by birth or migration, but through a change in their status from unincorporated to municipal. Thus in order to accurately project the population for a city like Gastonia, a planner must also make an assumption about which areas on the city's fringe will become urban and will be annexed.

The concepts outlined above only cover the *overall* population change. What is much more interesting

and informative is the *character* of the population change. Any characteristic of a person can also be a subject for population study. The major topics of population study include the following:

- The age of the population (useful for planning classroom space).
- The income of the population (helpful for planning social services).
- The educational level of the population (this can point to a need to offer more job training).
- The race of the population (Fair Housing efforts and political redistricting are at least partly based upon race.)
- The size of households and families and total number of households (Very important for planning for housing that will meet the needs of the community.)

Other information that could be useful include occupation, marital status, group quarters population, place of work and commuting time. These topics are not only useful for planning physical changes to the community, such as housing, water lines and fire stations, but also serve as an indicator of the general quality of life of the population. This list of examples is by no means all-encompassing. Just about anything that can be measured can also be a topic for population study.

Change in population has an impact on most kinds of planning, from housing to transportation planning to public utilities and community facilities. Knowing the extent and the character of the population change is pivotal to a meaningful comprehensive plan. Inaccurate projections can lead to false assumptions and wasted efforts, but careful projections will help prepare Gastonia for the inevitable changes of the future.

PAST POPULATION CHANGE

In little more than a century, Gastonia has grown from a railroad junction to a large, industrialized city with a diverse population. Figure 9 shows Gastonia's population growth from 1880 to 1990. Gastonia has had roughly four stages of growth over the past century.

The first stage, from 1880 to 1910, was a period of relatively modest growth, as Gastonia grew from a crossroads into a town. Following this was a significant increase in the pace of growth from 1910 to 1950, hardly slowing at all for the Great Depression. These were the formative years for the city that we know today. Most of Gastonia's textile industry and the City's older neighborhoods were formed during this period.

The next 20 years, 1950 to 1970, were boom times for Gastonia. The City had the fastest population growth in its history during this time. Not coincidentally, these were also years of growth and prosperity for the Charlotte region, North Carolina and the United States as well. Two regional trends and one local trend also probably contributed to Gastonia's impressive growth in the 1950's and 1960's.

The first of these was the historic reversal of the out-migration experienced throughout the South from the post-Civil War period to the 1950's.¹ The second was the beginning of a regional housing market made possible by improvements in the regional transportation network that fueled suburban housing growth in Gastonia. The local trend was the diversification of Gastonia's manufacturing economy at a time when textiles were still strong, adding to the City's job base.

Gastonia entered its fourth stage of growth in 1970. From then until now, population growth has been much more modest than in the previous period, due in part to the City's cautious annexation policy, job losses in the textile industry, and a generally poor economy during parts of the 1970's and 1980's. A renewed round of annexation in the late 1980's helped boost Gastonia's population by 7,000 in the 1980's, compared with virtually no net growth in the 1970's. This modest rate of growth, however, is not

necessarily detrimental to Gastonia's fortunes. A moderate, steady and deliberate rate of growth can be the best of both worlds: taxes can be kept low, people remain employed and Gastonia's community facilities are not stretched to the breaking point, as they are in some dramatically growing communities. Gastonia doesn't face the traffic, overcrowded schools and other quality-of-life problems of "explosive growth" communities.

GASTONIA AND THE 2010 PLANNING AREA

Projecting the population of any North Carolina city can be tricky due to the ease of annexation in this State. Assumptions must be made about future annexation in order to get an accurate population projection. For this reason and others, this plan is based upon a *planning area*, which includes both the City proper and the surrounding areas influenced by Gastonia. This planning area could also be called the *functional city*; that is, the region in which decisions made in Gastonia affect growth, character and quality of life. As businesses and people relocate to Gastonia, they tend to look at the functional city rather than the municipal city. The local job, housing and retail markets likewise do not respect city boundaries but rather are components of the functional city.

The maps show both the City limits and the 2010 planning area. It should be noted that the boundary of the planning area does not imply that an area will be annexed or become part of the City's extra-territorial jurisdiction. Rather it is a defined area that can be studied in a systematic manner that will lead to meaningful planning and decision making.

James W. Clay and Douglas M. Orr Jr., eds., *Metrolina Atlas* (Chapel Hill: The University of North Carolina Press, 1972) 90¹

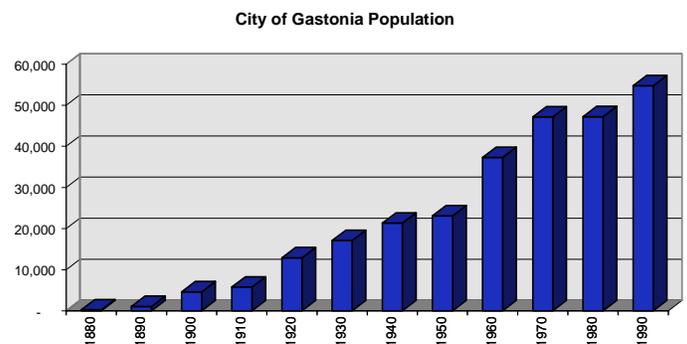


Figure 9

1970-1990 POPULATION TRENDS

As can be seen in Figure 10, the population growth in Gastonia and the 2010 area was not evenly distributed. Instead, population growth was highest on the City's southeast side, lowest in the central area and along the south US 321 corridor. Ten census tracts within the City lost population between 1970-1990.

One of the reasons for the population loss was declining household size. Every tract in Gaston County has seen a decline in household size from 1970 to 1990. Some tracts which lost population during this period actually gained households, but the smaller size of those households still resulted in an overall population loss. The trend in households may actually be more important than the trend in population, as most planning and research for City services are based on households. Figure 11 shows the change in the number of households from 1970 to 1990.

Between 1970 and 1990, household and family incomes have increased approximately fourfold. Because of inflation, however, the incomes earned in 1969 are not directly comparable to those earned in 1989. That is, an annual income of \$20,000, for example, went much further toward supporting a family in 1969 than it did in 1989.

Figure 12 shows the median income by census tract for 1969, 1979 and 1989. Rather than show the actual income, the maps show income quartiles (25%), which indicate the position of each tract relative to the rest of the County. Thus, a median income in the top quartile indicates a median income in the highest 25% for Gaston County.

Another trend in Gastonia is the educational level of the population. One measure of this is the percentage of high school graduates among the population age 25 and older. Figure 13 shows the percentage of high school graduates for 1970, 1980 and 1990, with the same ranges used for each map. The whole 2010 Planning Area has seen gains in the percentage of high-school educated adults, with the southeast quarter of the 2010 area showing the highest percentages.

THE FINE PRINT: How the 2010 Projections Were Calculated

Gaston County has few areas that perfectly mirror the trends of the larger area. Instead, most small areas of the County are either gaining or losing share relative to Gaston County. If that trend can be identified and extended, it is possible to predict whether an area will grow faster or slower than Gaston County as a whole. It should be noted, however, that the population increase or decline still depends on the change in Gaston County over the time period, because each of these shares is simply a percentage of the overall growth in Gaston County.

For this set of projections, the small area used for analysis was the Transportation Analysis Zone (TAZ), which is a small, fixed geographic area that does not change over time (City boundaries do change over time). TAZ's are essentially subdivisions of census tracts; that is, several TAZ's can usually be combined to form one census tract. Thus they are versatile areas for dealing with local, state and federal statistical information.

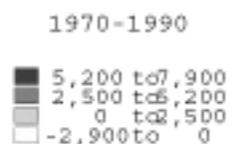
For each TAZ, the populations and shares of population were calculated for 1980 and 1990, based on the U.S. Census. The trend in share was then determined, and this change over ten years was then applied to the next ten years, giving a new share of population for each TAZ in 2000. Some TAZ's will have a larger share of the County population than they did in 1990, some will have a smaller share. The share was then applied to the Gaston County population projection, "stepping down" to the TAZ projection. This process was repeated for the 2010 projection.

The population projections presented in Figures 17 and 18 show three variations of the Gastonia Planning Area population. The first (low) population projection was arrived at by simply allowing the trend in the share of population for each TAZ to continue through 2010. This resulted in some rather large losses for several TAZ's, beyond what we would normally expect, given the knowledge of the area. Thus for the second projection (Medium), several of the TAZ's which had highly unlikely population changes were adjusted to reflect the 1990 share of the population, rather than a sharply plummeting share. The main characteristic that these areas shared was an older population, one that was "aging out" and would gradually be replaced by a younger population. The third projection (high) was arrived at by applying the rate of increase or decrease for each decade to each TAZ. This resulted in a geometric rate of growth for some areas, similar to the concept of doubling (2...4...8...16...32...64...128) which leads to ever higher population increased over time. This method can be accurate for an area with unlimited space, but it does not account for "build-out," the slowing of population growth due to a lack of buildable land.

Figure 10

Change in Population

Gastonia 2010 Planning Area
1970-1990



N

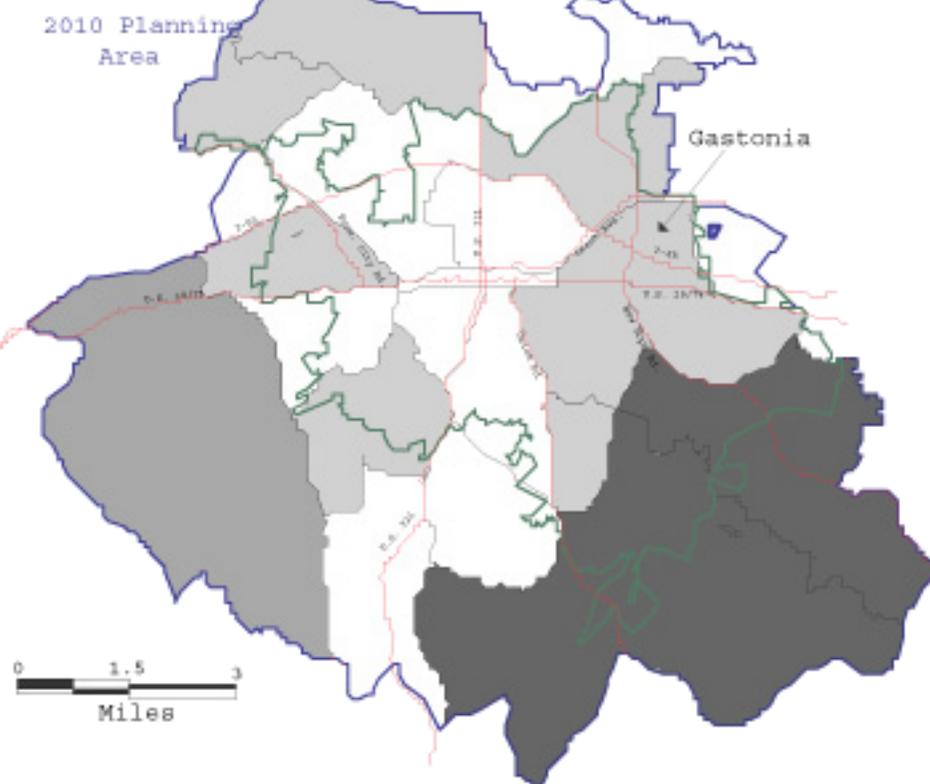
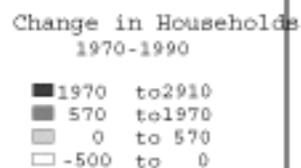


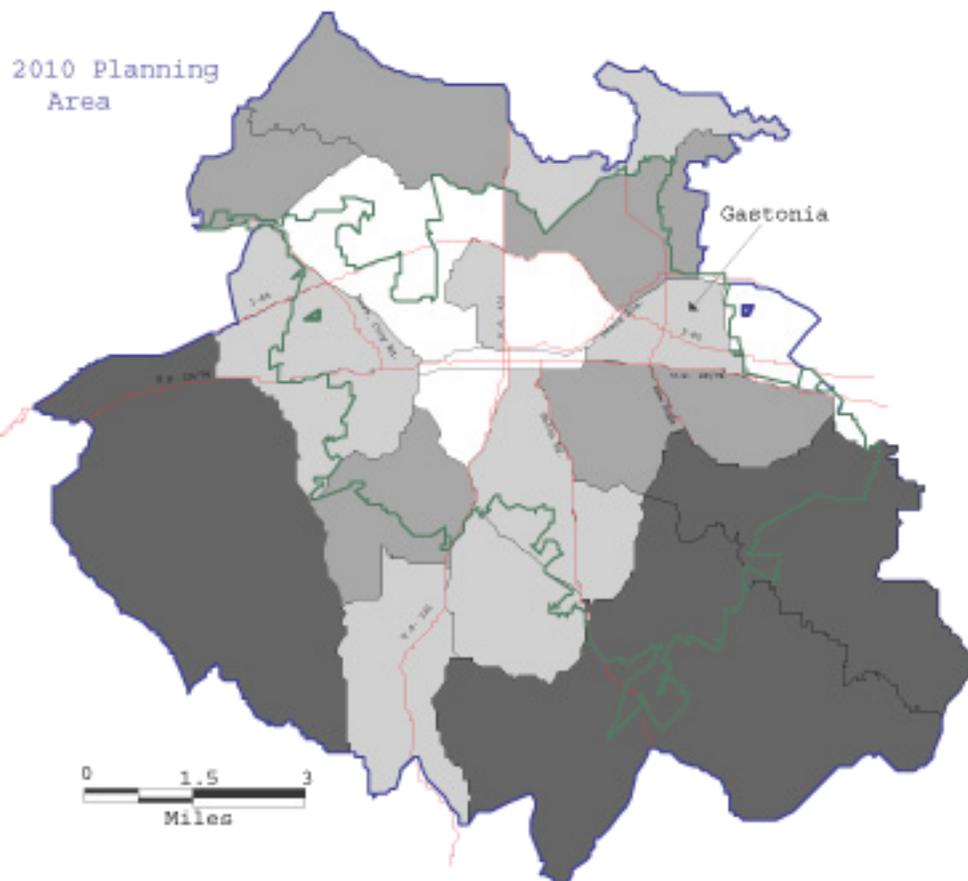
Figure 11

Change in Households

Gastonia 2010 Planning Area
1970-1990



N



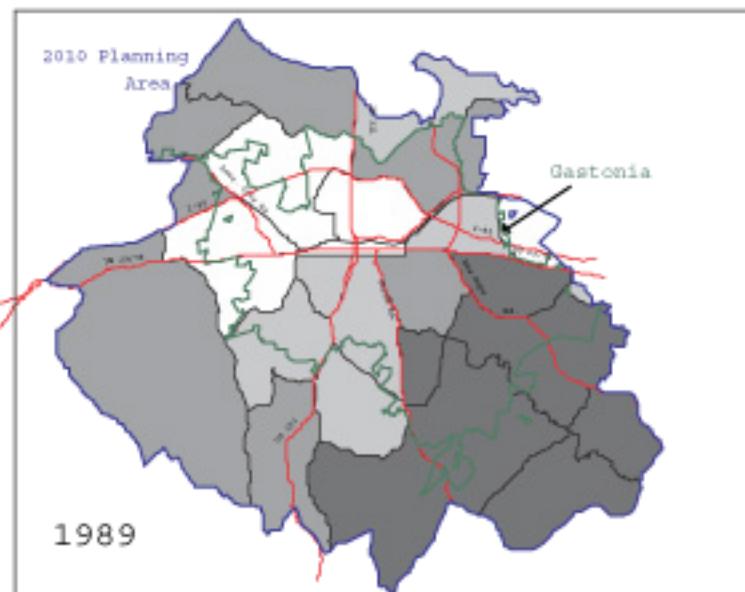
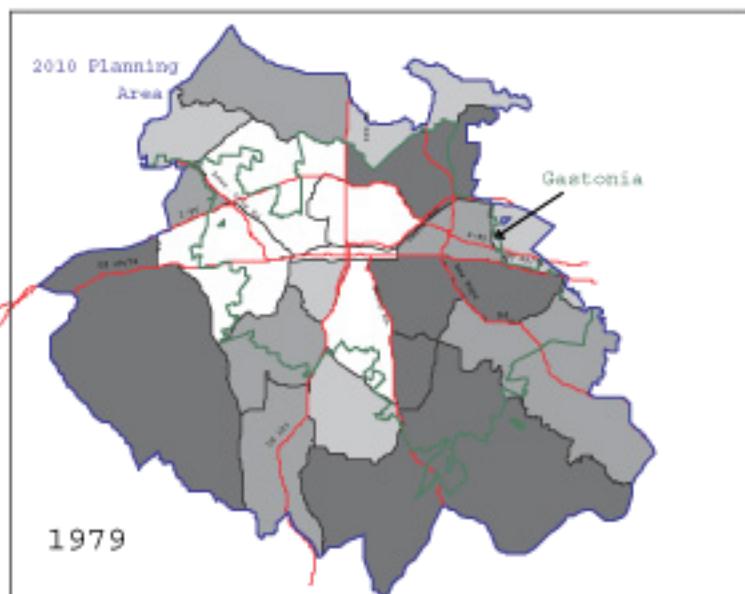
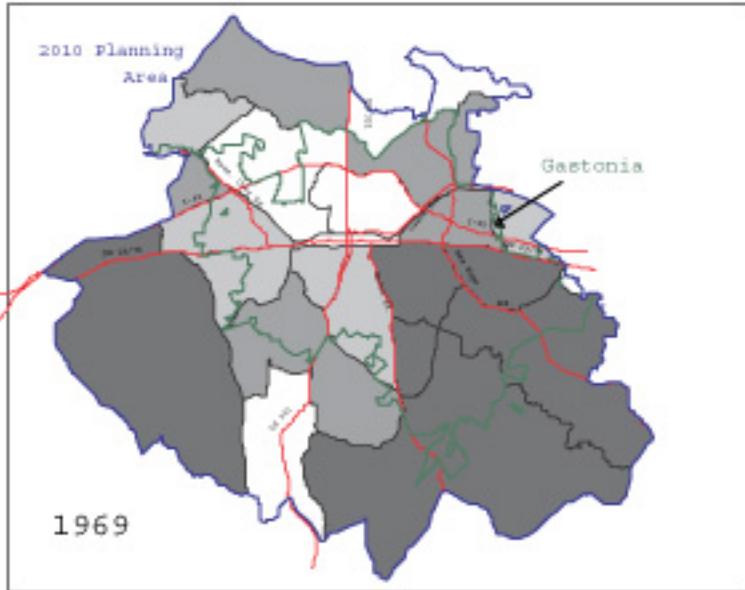


Figure 12

Median Household
Income

1969, 1979, 1989

Gastonia 2010
Planning Area

Household Income
By Quartile

-  Top Quartile
-  Second Quartile
-  Third Quartile
-  Fourth Quartile

N

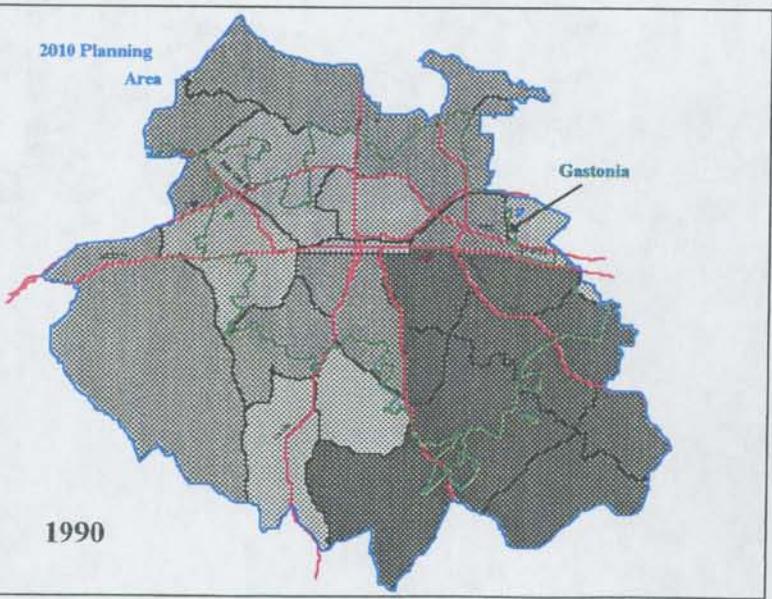
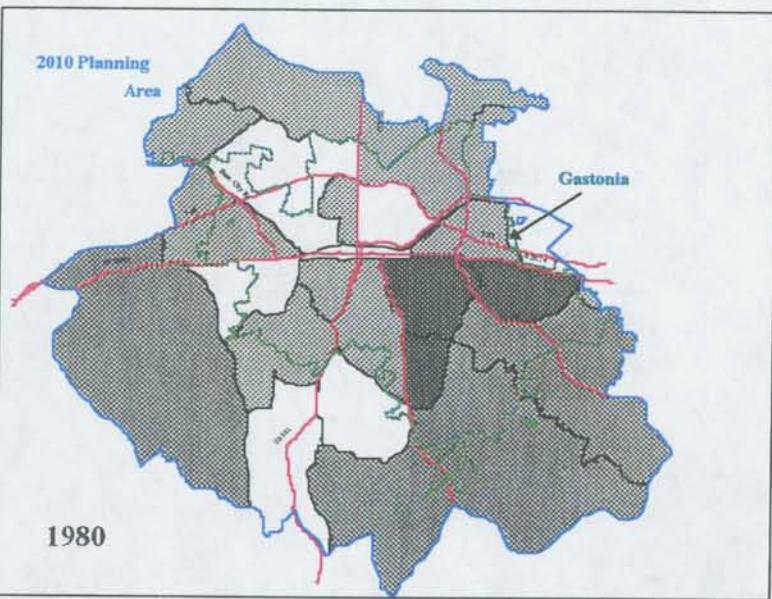
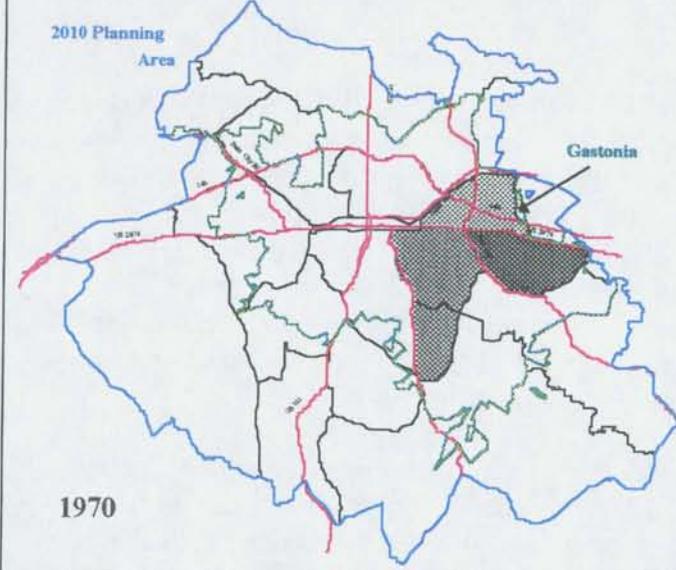
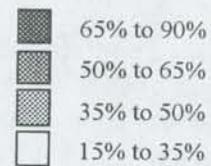


Figure 13

**Percent High School
Graduates
1970, 1980, 1990**

**Gastonia 2010
Planning Area**

**Persons 25 and Older
1970, 1980, 1990**



Source: U.S. Census: 1970, 1980, 1990

POPULATION PROJECTIONS

Population projections for Gastonia and the 2010 planning area were obtained using the *ratio-share* method. Ratio-share is a set of procedures that takes advantage of the presence of well-known or accepted population information for a larger geographic area such as Gaston County. By establishing a relationship between the way Gastonia and the 2010 Planning Area perform demographically compared with the County, that relationship can be used to estimate or project the population.²

The North Carolina State Data Center has published population estimates and projections for Gaston County from the present through 2010. The Data Center's information enjoys wide acceptance and is the basis for allocation of population-based State funds, such as road-building subsidies. The projections are the result of a *cohort-component* analysis, which makes use of information on births, deaths and migration, the components of the demographic equation in the introduction. This is generally considered to be the best and most accurate method of population projection. The smaller an area is geographically, however, the harder it is to do a cohort-component analysis. This is because the smaller the area is, the harder it is to predict migration, *and* migration becomes a larger factor in population change. Thus the cohort-component method is less reliable for areas that are smaller than a county or large city.

We have selected the ratio-share method, which is commonly used to "step down" to a small area from a reliable projection for a large area. In this case the step down is from the County to the Planning Area. This ratio share method involves establishing the percentage or share of population that a sub-area of the county has in a given year. Thus the City of Gastonia, with a population of 54,732 in 1990, contained 31% of

the County population, which was 175,013. We can either assume that this share of the population will stay the same in the future or that it will change. Either way, the population of Gastonia will change, because even if the share remains the same, the County is expected to grow, and 31% of 190,000 (the projected Gaston County 2000 population) is 59,391. Therefore if the City of Gastonia maintains its share of the County population, it will grow by about 4,000 people between 1990 and 2010.

In fact, Gastonia's percentage share of the County population has been declining slightly, due to faster growth in other parts of Gaston County, such as the unincorporated areas southeast of the City. If Gastonia were to maintain its present boundaries, the population would grow only slightly, as shown in Figure 14.

During this time period the City's share of the County population would drop from 31% to 29%, but the overall growth in the County leads to a prediction of growth for Gastonia with its present boundaries. In essence, the Gastonia's growth areas will slightly outweigh its declining and stable areas, leading to a net growth in population for the City.

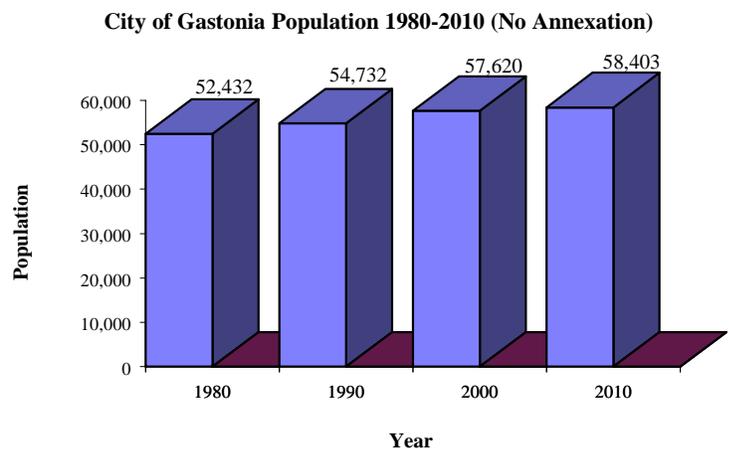


Figure 14

²Sallie M. Ives, *Applied Community Research* (American Chamber of Commerce Researchers Association, 1991) p.7.

PLANNING AREA PROJECTIONS

Figure 15 and Figure 16 show the high, medium and low projections for the Gastonia 2010 Planning Area. The details of the process used to derive the projections are given in the sidebar. Using local knowledge of the area, the projections were adjusted to account for both the “build out” of certain neighborhoods and the transition to younger families in other neighborhoods. Also considered were developable land and the presence of non-residential land uses.

It should be noted at this point that any population projection is a prediction of the *future* based upon what we know *now*. Projections are subject to a number of variables. Population growth can be enhanced through concentrated effort and investment. This can include ambitious efforts to extend water and sewer lines, improve roads and to promote the City and County within the region. The relocation of a major employer to the area, as BMW

Figure 15
Population Projections, Gastonia 2010 Planning Area

Year	Gaston Co. Population	Planning Area Low	Planning Area Med.	Planning Area High
1980	162,568	75,279	75,279	75,279
1990	175,093	80,596	80,596	80,596
2000	190,384	87,769	93,081	98,846
2010	199,519	91,409	102,545	129,337

has done in the Greenville-Spartanburg area, can turn an optimistic population projection into a cautious projection overnight. Conversely, a major downturn in the economy or an impasse in the ability to make critical local decisions can depress the rate of growth. The key to population projection is to make an educated prediction, based on trends in the city, region and nation, while taking into account the possibility of a departure from those trends.

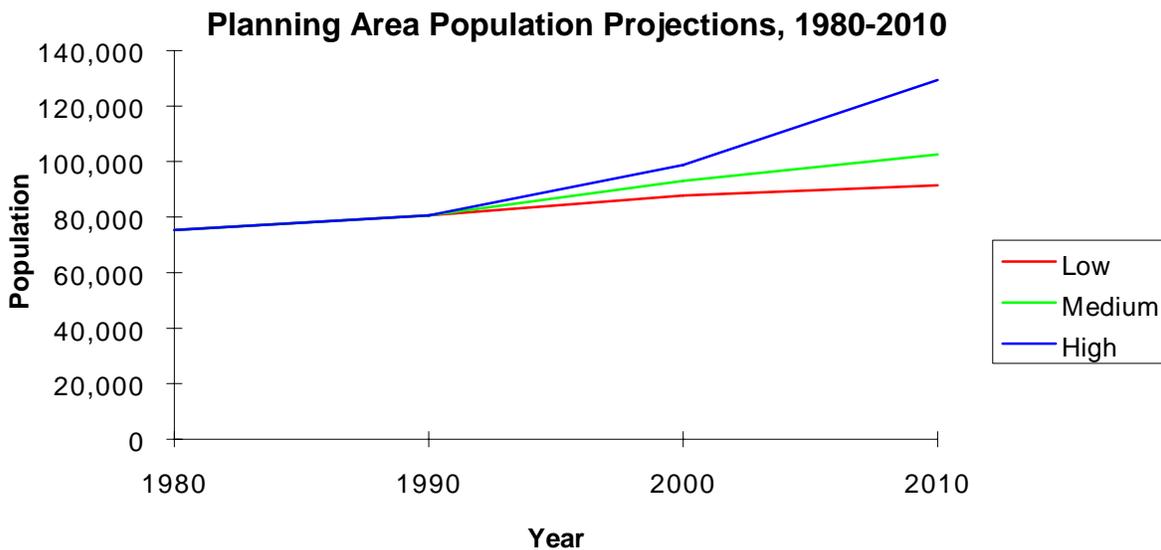
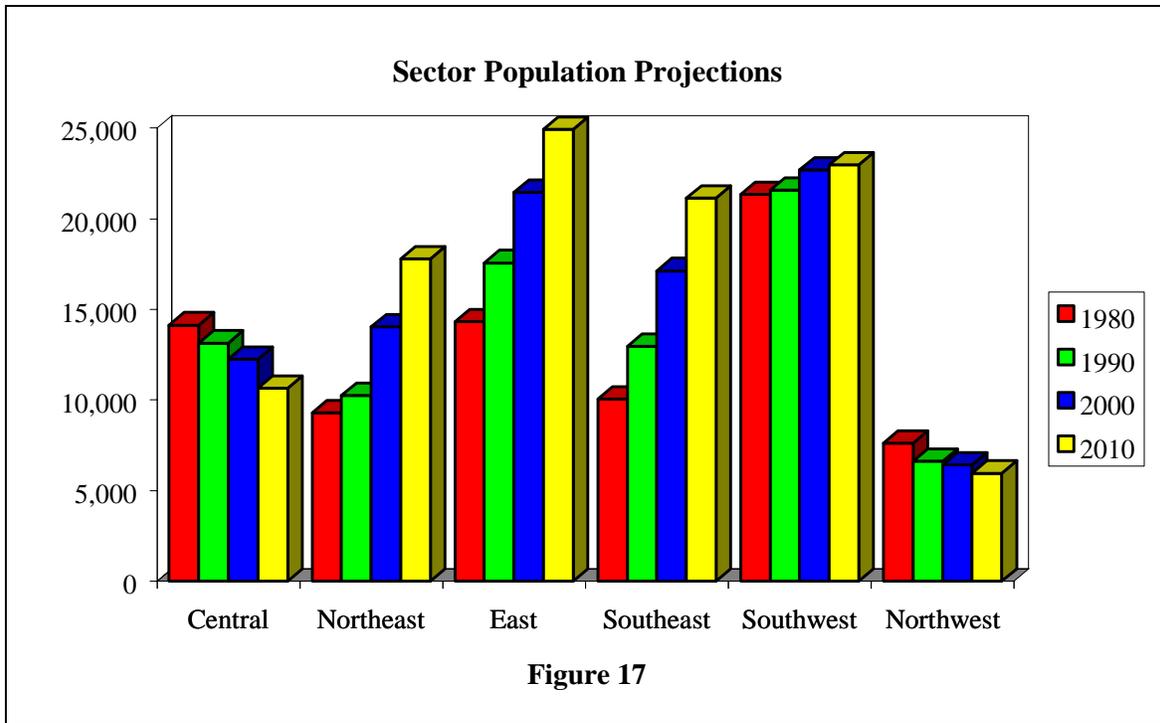


Figure 16



SECTOR POPULATION PROJECTIONS

The planning area is divided into six sectors in order to focus on smaller areas for land use study and planning. These sectors are: Central, Northwest, Southwest, Southeast, East and Northeast. The population projections for these areas are shown in Figures 17 and 18..

As can be seen in the graph, the strongest growth areas are in the east and southeast, with more modest growth in the northeast and southwest. The central and northwest portions of the City are projected to have a population decline. Each of the sectors will be examined in detail in the Land Use chapter of this plan.

Figure 18
Sector Population Projections

	1980	1990	2000	2010	% Growth 1990-2010
Central	14,138	13,141	12,230	10,659	-19%
Northeast	9,289	10,233	10,941	11,660	13%
East	15,256	19,000	23,452	27,504	45%
Southeast	9,099	11,526	15,113	18,542	61%
Southwest	21,334	21,580	22,695	22,978	6%
Northwest	7,604	6,604	6,432	5,956	-10%

AGE AND SEX POPULATION PYRAMIDS

The Age and sex population pyramid is a graphical technique for showing the distribution of the population in five-year age increments, divided into male and female, with males on the right and females on the left.

The pyramids for 1980 through 2010 (Projected) are shown in figures 19 through 23. The most striking trend shown in this series of graphs is the aging of the baby-boom generation, shown clearly as a bulge in the pyramid rising steadily in age from 1970 to 2010.

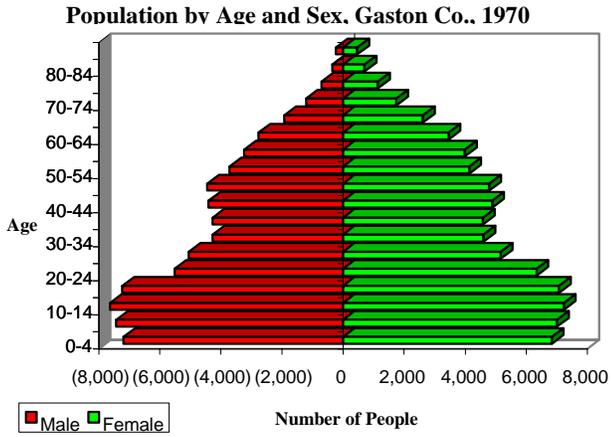


Figure 19

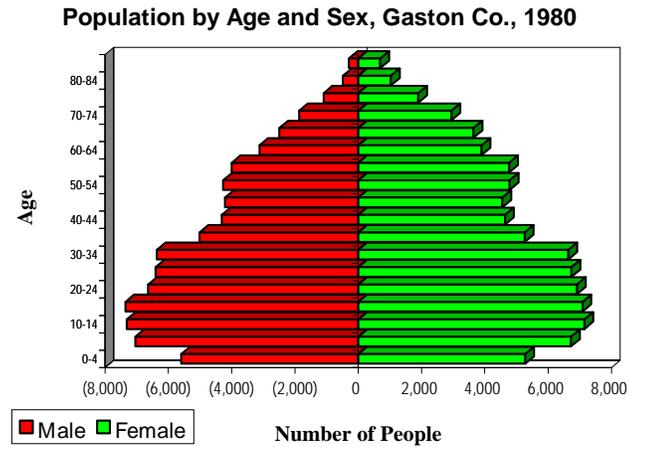


Figure 20

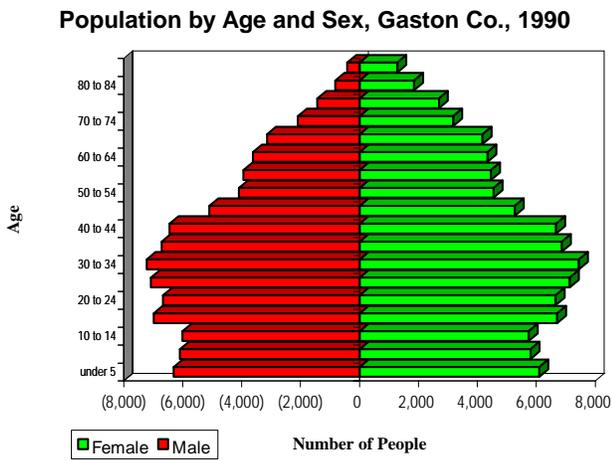


Figure 21

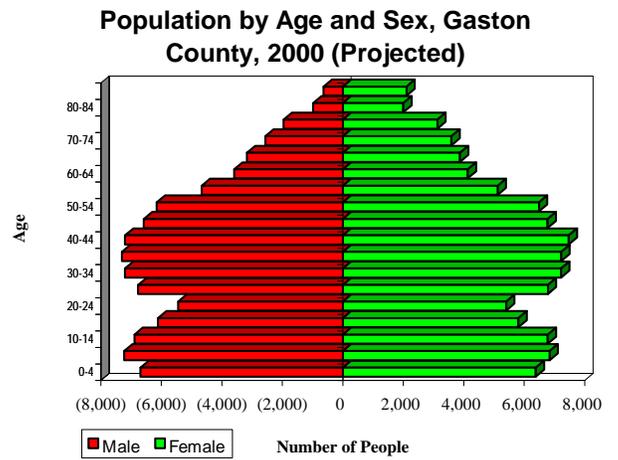


Figure 22

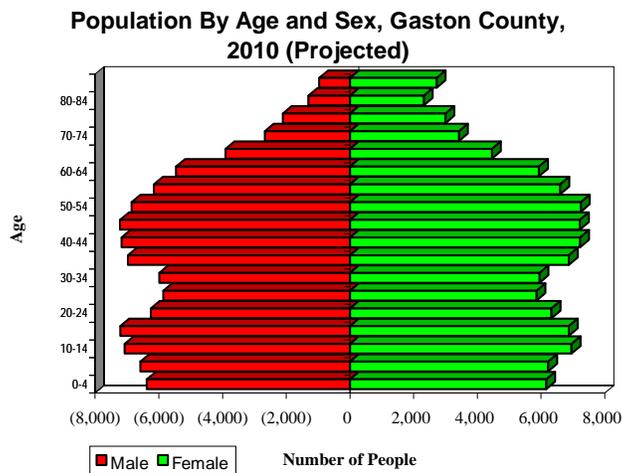


Figure 23

MAJOR DEVELOPMENT ISSUES

KEY ISSUES IN THE FUTURE DEVELOPMENT OF GASTONIA

ECONOMY

1. Gastonia is a community for working and living. Maintaining the primary economy here is crucial to the fiscal health of the city and the prosperity of its inhabitants.

REGIONAL GROWTH

2. Located at the geographic center of the Piedmont, Gastonia is in the heart of one of the fastest growing regions in the United States, and poised to take advantage of the shift of capital, jobs and people to the sunbelt. An integral part of the Charlotte urban region, Gastonia is a partner in the region's housing and job markets. Gastonia is also a competitor within the region, seeking a fair share of good jobs and high-quality development.

MUNICIPAL BOUNDARIES

3. The City of Gastonia should encompass the full urban Gastonia community. Efficient provision of municipal services depends on the City's ability to annex areas as they become urbanized. Gastonia should use its power of annexation as the urban area grows in order to have municipal growth match urban growth.

GROWTH DIRECTION

4. Gastonia is not growing in a geographically balanced fashion. In recent years the west side has fallen behind the east side, leaving the west side with an aging population, fewer shopping opportunities, and an increased poverty class. To achieve a more balanced growth pattern, strategies should be undertaken to address the problems of the west side and support quality growth in areas that are experiencing stagnation or decline.

THE OLDER CITY

5. The older part of Gastonia including downtown, the surrounding neighborhoods, and the outlying mill villages are declining even as the newer areas of Gastonia grow. Efforts to fight crime, reduce visual blight, develop jobs, and redevelop land can help overcome this trend. One or more major public/private projects can become a catalyst for reinvestment and/or growth. (One example is the re-use of the Firestone Mill)

UTILITIES AND GROWTH

6. The Catawba Creek sewage treatment plant covers a drainage basin that includes Gastonia's two major growth corridors, Union Road and New Hope Road. The Catawba Creek plant, however, cannot be expanded beyond its present capacity. Furthermore, its treatment technology is outdated. Expansions in system capacity must take place at other wastewater treatment plants in other drainage basins. Further expansion of the Long Creek and Crowders Creek Plants will

be required to accommodate growth throughout the whole city. Since *development follows the extension of sewer service*, Gastonia can guide and direct its future suburban growth by planning the location and extension of sewer service into new drainage basins.

DENSITY AND SPRAWL

7. Housing is permitted at densities that are too high for development supported by individual wells and septic tanks, and oftentimes too low for areas with water and sewer service. The efficient use of land will become ever more important as land costs increase and environmental regulations tighten. Well planned growth, greater densities where appropriate, and innovative use of land can avoid sprawl and save money through more effective use of land, roads, water and sewer service. Density *in and of itself* does not constitute a problem. Residential development densities greater than Gastonia's prevailing R-15 standard should be welcomed when good design is incorporated and supporting public services and facilities are available.

COMMUNITY IMAGE

8. Gastonia's entrances, the major thoroughfares leading into the City, provide the visitor with his



An aerial view of downtown Gastonia

or her first impression of the community. Some major entrances such as West and East Franklin Blvd., Long Avenue, and South US 321, are visually cluttered and give an unfavorable first impression of Gastonia. The entrances should be beautified through investments such as landscaping and special entrance signs. With the cooperation of businesses and civic groups joint public/private efforts can be undertaken to develop strategies for each major corridor and to carry out those strategies. Gastonia should also establish corridor overlay zones providing new development guidelines for land uses, signs, parking lots and building placement.

ENVIRONMENT

9. Increasingly, good stewardship of our environmental resources will be necessary to improving Gastonia's quality of life and competitiveness.
10. Gaston County is a National Ambient Air Quality Standard non-attainment area for ozone pollution. The EPA has set a goal of 15% reduction in Mecklenburg and Gaston Counties by 1996. Coordination of land use and transportation is crucial to maintaining and improving our air quality. Conservation of open spaces will be important as we continue to urbanize as a region. This can be done through acquisition and/or expansion of local and state park lands, development of greenways, and private efforts such as land conservancy trusts.

GROWTH SCENARIOS

Designing an avenue by which public effort is structured is the catalyst by which strategy becomes reality. A community's values in terms of quality of life, character and scale, urban form, esthetic appeal and integration of new development with the existing and future city fabric must be the starting point. Certain assumptions must be made when assaying the opportunities and challenges facing the community and then determine how to achieve the priorities through and aggressive implementation program that emphasizes practical results.

ALTERNATE GROWTH SCENARIOS

In order to determine the appropriate approach and response to future development, four alternative growth scenarios were analyzed. The growth scenarios illustrate different patterns of generalized land use and planning area levels.

EXISTING TRENDS SCENARIO

The underlying assumptions for this scenario may be summarized as the continuation of existing conditions and trends. The major driving forces are market-based development and a flexible planning approach:

- Continued outward expansion similar to growth that has occurred in east and southeast sectors of the planning area since 1970;
- Availability of new areas for potential development is influenced by transportation and other infrastructure improvements;
- Future expansion of utility service will be guided by the Sewer Improvement Program;
- Planning for the redevelopment of downtown is emphasized by the Downtown Association and the City with limited infill, development and redevelopment occurring in the urbanized core of the city.

INFILL/REDEVELOPMENT SCENARIO

The infill development and redevelopment growth scenario is characterized by utilizing undeveloped land within the city's existing service area, resulting in a more compact city.

- Infill sites result from a lack of or insufficient access to public services, physical/environmental limitations, or a general unattractiveness to the market;
- Undeveloped tracts in urban and suburban areas not used during earlier growth would be developed with minimal outward expansion;
- Large tracts of open land remaining in certain areas within the urbanized portion of the city represent significant opportunities for future infill development; and,
- Redevelopment of declining or transitional areas would be the objective of urban revitalization.

TRANSPORTATION CORRIDORS SCENARIO

The transportation corridors growth scenario is characterized by linear development along major transportation routes. Downtown represents a dense, urbanized core, with many potential development locations along transportation corridors:

- Density of development decreases with distance from the urbanized core.
- Timing of development is influenced by construction of street improvements, with high visibility commercial development at intersections; and,
- Residential development occurs along streets connecting these commercial corridors.

GROWTH CENTERS SCENARIO

The Growth Centers scenario is characterized by a dynamic central city and peripheral growth centers. This strategy is best illustrated in the Garden Cities in England and New Towns in the United States.

- Central core area, regional growth centers, and community growth centers represent varying mixes and levels of services and activities where people live, work and play;
- Regional growth centers with mixed use development in suburban and rural areas connected by arterial streets and highways; and,
- Regional growth centers contain uses and resources to support day-to-day activities.

PREFERRED GROWTH SCENARIO

In order to take advantage of the positive attributes of each of the four scenarios described earlier, a combination of scenario characteristics is considered the preferred approach to future development within the city and planning area.

The Preferred Scenario derives the majority of its characteristics from refinement of the Infill, Growth Center and Transportation Scenarios. The Existing Trends Scenario is considered only as the future growth of the area impacts development which is currently in place.

The intent of the Preferred Growth Scenario is to focus activities into community growth centers which include a mix of activities for people to live, work and play. The focus of these growth centers and of the overall Planning Area is the Central Core Area, the Eastern Core, medical/retail, and the industrial growth area in the Northwest.

Infill and redevelopment in the CBD will increase commercial/office and retail activity, and promotion of housing in the area will promote and reinforce a “24 hour” activity center. The CBD should be the major center for all governmental activities, major financial institutions, cultural and entertainment activities and community events.

Other growth areas include regional centers and community and neighborhood centers. These mixed use centers will support the surrounding neighborhoods for retail and service needs and will serve as locations for potential employment. Community and neighborhood centers will provide retail and service establishments and will support adjacent neighborhoods providing basic consumer goods and other immediate needs of the citizens.

These centers will have their own identity and sense of place. Unique character of the areas will be reinforced through the use of unifying urban design and development controls for signs, building setback, landscaping and other elements which will enhance the visual quality of the centers.

Connecting these centers will be major thoroughfares. Development along these transportation corridors will not be precluded but will be allowed densities which will not hinder traffic flow and will encourage use of the existing and planned



Franklin Square is one element of Gastonia's 3,000,000 square-foot regional retail center.

transportation network. The corridor will also have their unique character.

Each of the community and neighborhood centers will emulate a sense of place with their own urban design guidelines.

A redevelopment and infill effort concentrating on core area single-family neighborhoods will be encouraged. Through the use of incentives, financing, and other techniques, vacant land and substandard housing in the core area will be developed and redeveloped to promote gentrification and the efficient use of existing and planned infrastructure. A secondary effort to infill outside the core area neighborhoods will also be promoted to use existing and proposed infrastructure to its fullest extent without overloading or over-saturating the systems.

The purpose of the preferred scenario is many fold; however, several key points should be emphasized. These key points include:

- Promotion of economic development and the continued economic vitality of the area through the revitalization of the Central Core Area;
- Development of recognition of the diversity in character and unique qualities of areas in the city and planning area through enhancement of the unique sense of place these areas have; and,
- Protection and recognition of the environment through sound urban planning and design techniques.

The preferred scenario capitalizes on the positives, attempts to correct or reverse the negatives and suggests a sound approach to development with a basis in strong urban planning and design, which can be satisfying and rewarding from the citizens of today and tomorrow.

COMMUNITY ECONOMY

GOAL *A diversified economy that is built on our traditional strength in manufacturing, with increasing shares of communications, trade, and service employment; the transportation and utilities infrastructure to support these activities, and a well educated and competitive work force.*

BACKGROUND AND TRENDS

Gastonia is a prime example of the combined effects of the arrival of the railroad and industrialization of the South following the Reconstruction Era. From the time John Craig and Laban Jenkins led a group of investors in 1887 to build Gastonia's first cotton mill, through today, the community's economy has been primarily based on industry. Further, up until recent years it has been overwhelmingly dominated by textiles. One cannot overstate the importance of the textile industry in the growth and development of Gastonia and Gaston County. By the turn of the century, Gaston County had become one of the nation's major textile centers—and Gastonia, the “combed yarn capital” of the world.

Gastonia began as a small depot at the crossing of two railroads where a small commerce center began to develop. It was with the transformation of the textile industry from water power to steam power that allowed Gastonia to grow and become the dominate center of the county. With steam power, the Gastonia Cotton Mill demonstrated the value of locating along the railroad lines instead of river bottoms.

Gastonia saw rapid growth in the late nineteenth century, and by 1910 boasted twelve textile mills. A year later, the county seat was moved to Gastonia and it began to emerge as the dominant commercial and service center of the county. It is worth noting that from 1916 to 1921 the number of cotton mills in Gaston County increased from 46 to 75.

With the advent of the Great Depression, many local textile mills went under but many of those were combined, sold, or reorganized under new management. In 1929, twenty-two percent of the County population was employed in textiles and by 1940 the number had increased to twenty-eight percent. Thus, the local textile industry fully rebounded from the effects of the Depression.

DIVERSIFICATION

The post-war years saw progress in Gastonia's economy, but concerned citizens began to see the need for a more diversified economy. In the early 1950's, the Gastonia Industrialization Diversification Commission, predecessor to today's Gaston County Economic Development Commission, was formed. In the 1950's the City saw Homelite chain saws, Westvaco boxes, and many other products added to its economic output. In 1939, J.D. Wickes began manufacturing automotive filters in Gastonia and during the three post-war decades, Wix Filters grew tremendously and was finally acquired by Dana Corporation in 1979. Much of Gaston County's industrial growth and diversification has been in textile machines and other products related to textiles, examples being A.B. Carter Company, Gaston County Dying Machine Company, Warner and Swasey Company, and scores of medium and small machining shops that sprang up in the City and throughout the County. In the early 1970's, Marshall

Rauch moved Pyramid Mills from Bessemer City to Gastonia and formed Rauch Industries, which today is the world's largest manufacturer of Christmas tree ornaments.

The event that marked the coming of age for our industrial diversification was the opening of the Freightliner parts plant in Gastonia in 1978 and its truck manufacturing plant in Mount Holly in 1979. Today, Freightliner has around 2,500 employees in Gaston County.

Industrial diversification did not come too soon to Gaston County. The mid 1970's recession heavily impacted the county—in one 1974 month, the unemployment rate hit fourteen percent. The community was further awakened to challenges of foreign competition faced by the textile industry. Today, the industry has, to the greatest degree feasible, tried to deal with these challenges through automation and further mechanization. But, the 1970's recession underscored the extent our local economy is subject to economic downturns, particular with the textile industry.

RECENT TRENDS

During the late 1970's and the 1980's, Gaston County's economy experienced major shifts. In 1970, manufacturing represented 46% of all jobs, but 20 years later only 38% of all jobs were manufacturing. In 1970, textiles represented 64% of manufacturing jobs, but by 1990 the textiles employed only about half of all the County's manufacturing jobs. It may be assumed that these trends were somewhat magnified within the City. Gaston County's trends in textiles and apparel employment were similar to trends of the metro region. Unlike some counties in the metro region,

Gaston County experienced an actual net gain in total factory employment during the two previous decades—nearly 2,000 jobs. But, the County's real gain was in non-manufacturing employment—about 13,000 jobs.

Gastonia and its immediate area lost industrial employment between 1981 and 1994 in terms of new plant locations or expansions of 25 or more jobs versus plant closings. During the same period manufacturing jobs created by plant openings and expansions (exceeding 25 jobs), outside the immediate environs of Gastonia totaled 1,405 but losses through closures totaled 2,526. These figures show there is a greater disparity between jobs created and jobs lost by major employment events inside the City and its immediate environs than in the rest of the County. However, there remains a commonly held perception that recent industrial growth has largely taken place outside the immediate Gastonia area.

Gaston County's textile industry appears to have curtailed its losses in recent years by increased production through automation and improvements in the trade balance. It is hoped that future losses will be smaller than in the past. The effect of the North American Free Trade Agreement with Mexico remains to be seen. Textiles, apparel and related industries (e.g. textile production supplies and machinery) still compose a major portion of our economy. Thus, while significant improvement has been made, our local economy remains extremely vulnerable to textile downturns.

Figure 1 shows manufacturing employment changes from 1970 to 1990. Figure 2 shows non-manufacturing employment changes.

One way of gauging basic industry is through the use of the location quotient, a technique that measures the concentration of an industry in Gaston County by comparing local employment to regional employment. A location quotient of exactly 1 would mean that the area is producing exactly the amount of goods sufficient for local needs. A quotient above 1 indicates a basic industry, allowing Gaston County industry to export to other areas. A quotient below 1 indicates a non-basic industry, in which Gaston County must bring in more goods than it produces to meet local needs. Figure 3 shows the location quotients for Gaston County manufacturers by employment category.

Figure 1
Manufacturing Employment Change
Gaston County, 1970-1990

SIC Code	1970 Employment	1990 Employment	% change 1970-1990
Textile	27,880	18,620	-33%
Apparel	2,010	2,110	5%
Printing	480	720	50%
Chemicals	460	1,420	209%
Rubber & Plastics	270	860	219%
Stone, Clay & Glass	*	930	*
Metal, Primary & Metal Fab.	270	1,540	470%
Non-electric Machinery	4,900	4,560	-7%
Transportation Equipment	*	3,890	*
Miscellaneous Mfg.	300	490	63%
Other Manufacturing	1,390	1,870	20%
Total	37,960	36,810	-3%

*Disclosure Suppression

Source: North Carolina Employment Security Commission Data

Much of the industrial growth of the 1970's and 1980's in the metro region has been attracted by superior services and distribution facilities offered in adjoining Mecklenburg County. However, increasing cost and scarcity of sites in Mecklenburg are driving industries to locate in surrounding counties, particularly Gaston County. These companies can have access to Charlotte's airport and city life amenities, while enjoying lower land and

labor costs in Gaston County. Even though manufacturing in general is no longer a high growth component of the U.S. economy, Gastonia can expect a good rate of industrial growth and *maintain its position as a key regional manufacturing center if it applies appropriate strategies.*

Figure 2
Non-Manufacturing Employment Change, Selected Categories
Gaston County, 1970-1990

Industry	1970 Employment	1990 Employment	% change 1970-1990
Trans/Comm/Public Utilities	334	4,050	21%
Trade	7,320	15,890	117%
F.I.R.E.	1,100	1,870	70%
Service & Misc.	4,040	11,030	173%
Government	4,840	7,820	62%
Total	17,634	40,660	131%

Source: North Carolina Employment Security Commission Data

Figure 3
Location Quotients for Manufacturing Employment
Gaston County, 1990

Industry	Number of Firms	Number of Employees	Location Quotient
Food	6	433	0.4
Tobacco Products	0	0	0
Textiles	99	18,620	32.7
Apparel	26	2,460	3.0
Lumber & Wood	10	124	0.2
Furniture	6	345	0.8
Paper	8	277	0.5
Printing	41	804	0.6
Chemicals	10	1,084	1.6
Petroleum	2	10	0.1
Rubber & Plastics	19	887	1.3
Leather	2	10	0.1
Stone/Clay/Glass	8	750	1.8
Primary Metals	5	102	0.2
Fabricated Metals	50	2,232	1.9
Industrial Machinery	151	3,400	2.2
Electronic Machinery	9	750	0.6
Transportation Equipment	3	3,500	2.4
Instruments	3	75	0.1
Miscellaneous	9	391	1.3

Source: Census Bureau, County Business Patterns: 1990.

Historically, industry has been the “bread and butter” of Gastonia’s economy. If Gastonia is to recommit itself to being one of the major industrial centers of the Piedmont, it must recognize the challenges posed by external forces beyond our control. We must recognize fundamental shifts in the United States economy and the world that are today shaping the future of our local economy. At the same time, Gastonia must capitalize upon its local strengths and deal with its local weaknesses.

INDUSTRIAL OUTLOOK

Industry of the future will be different. It will employ fewer people yet will require higher skilled employees to operate highly automated facilities. More land will be required per industrial job. An illustrative example of this trend was the 1991 opening of the Walkisoft USA plant (a maker of

non-woven paper products) near Stanley. This highly automated \$20 million plant occupies a 36 acre site but employs only 65 people. Industrial clients, today and in the future, will also demand attractive sites free from undesirable or incompatible neighbors and greater capital investment, as well as adequate utility services and good transportation facilities. If we are unable to offer industry what it needs, we will fail in this highly competitive field. Not only are these important for recruitment of new industry but they are equally important for retention of existing industry. Our challenge today is to identify and recognize the needs of industry so that we can become more aggressive and competitive in retention and recruitment. This challenge is made greater since our competitors are no longer just the adjoining counties or states. They are now global.

Economic development efforts must also recognize that quality of life issues extend to environmental as

well as economic factors. Promotion of new jobs must be done in a way that does not overly impact air and water quality, public infrastructure, the carrying capacity of land, and other environmental elements that must be maintained and improved to keep our community desirable. Local, state and Federal standards will require future development be clean enough to sustain our natural environment.

We have come to realize that the era of a semi-skilled labor intensive textile industry is gone. Unfortunately, we have not fully addressed the challenges presented to transform our work force to meet the needs of the future. Industry today, and increasingly in the future, will seek primarily one of two types of work forces—highly skilled or low wages. We cannot (nor do we want to) compete globally for the low wage sector. We must work aggressively to continually improve the skills of our work force through better public elementary and secondary education, technical education, and retraining.

It is a generally held premise that residential development alone does not foot the bill for public services. Allowing our community to become primarily a work force supplier to Charlotte will necessarily result in higher taxes. Therefore, the ability of our City and County to provide needed public services at reasonable cost will be dependent on industrial, office, and other non-residential development.

OTHER ECONOMIC SECTORS

In recent decades, Gastonia has emerged as a retail,



Freightliner's arrival in Gastonia was a watershed event in our industrial diversification efforts.

finance, health care and other services center for Gaston County and portions of neighboring counties. These employers will continue to provide the greatest portion of new jobs to supply a growing work force and can provide replacement jobs for those lost in the industrial sector. Further, Gastonia must look to build new sectors in its economic base. For example, we can capitalize on the growth of tourism and convention business in the Charlotte region. The development of the Daniel Stowe Botanical Garden as one of the Carolina's premier attractions, together with existing attractions such as the Schiele Museum and the Art and History Museum, will offer increased opportunity for our development of tourism.

COMMUNITY ADVANTAGES

Looking at our strengths, Gastonia provides an ideal setting for industrial development:

- A large blue-collar work force with values rooted in employer loyalty and a strong work ethic;
- The second largest utility system in the metro region;
- An updated highway system including I-85, U.S. 321 freeway connecting to I-40, and a future U.S. 74 Bypass freeway connecting Charlotte's outer belt and I-77;
- Location on a major national railway;
- Twenty minutes time from an international airport having over 500 daily departures; and
- A reputation for having a good local business climate.

These factors contributing to manufacturing growth can also contribute to growth of non-manufacturing employment. Gastonia's population is increasingly white collar. The greatest proportion of these new people, however, work in Charlotte. Gastonia offers some distinct advantages for residential location. When this is coupled with our excellent transportation and communications network and airport proximity, it would appear that we can credibly promote the community for the development of externally

oriented services, assuming obstacles are addressed. The recent choice of Gastonia by Mutual of Omaha for the location of a 200-job claims processing center is a successful example of such development.

Gaston County is the largest of several sub-areas of the Charlotte metropolitan area. While these sub-areas still compete for potential developments, they are increasingly aware that each is tied to the future of the metro region. This common bond will be an important component in successful future development strategies. We must also recognize the importance of our role in the next regional tier. This is the major urban chain running from Atlanta to Raleigh-Durham. This greater area has emerged as one of the nation's great metro regions competing on a world scale. Gastonia finds itself near equal distance between the geographic extremes of this larger region.

NATIONAL TRENDS IN ECONOMIC DEVELOPMENT

Today, economic development is recognized as more than just "industry hunting." Increasing competition, bigger and bigger enticement packages, as well as fewer jobs in the industrial sector have pointed economic development efforts in many cities toward a more holistic approach. In fact, nationwide there are about 10,000 economic development agencies but there are less than 1,700 new plant locations each year—many of which are small plants, few of which are Fortune 500 companies. The "Freightliners" of local industrial development are truly few and far between.

Economic development efforts should further emphasize capacity building in local businesses to meet internal and external demand for products and services. New approaches to economic development make a priority of finding needs that new or existing local businesses can satisfy by helping identify market opportunities and promotion of local

demand. Such efforts often involve helping the private sector take a second look at market opportunities that have been previously rejected or overlooked.

Innovation is key in the development of new enterprises; however new ideas may be in need of business nurturing and risk sharing to get started. Local innovation can be fostered through community sponsored business development centers which can provide financing and risk-sharing with private lenders, technical assistance and business incubation centers. Incubation centers can lease flexible space to accommodate growth needs, and share support personnel, office equipment and technical assistance. With these shared-cost facilities and services, budding companies can get started at lower cost, operate stable while incurring development costs, and project a competitive image. The Ben Craig Center located the University Research Park near UNCC is an example of a business incubation center.

Supporting programs which encourage Gastonia area businesses and public to "buy local" can also help develop the local economy. By assembling directories of local businesses, local economic development programs help to link up producers and consumers, and assist firms in meeting local demand.

The birth, development, and retention of local businesses which make up Gaston County's primary or export economy must be recognized as core to a sound economic development program. Unfortunately, these efforts don't often attract as much attention, and therefore resources, as recruiting new industries. Gaston County should embrace both new plant recruitment and existing business development as co-equal strategies for economic growth.

ISSUES

1. The textile industry has gone through major restructuring during the last two decades, and so has Gastonia's economy. Further diversification of our community economy, not only *within* the manufacturing sector, but also *between* the manufacturing and non-manufacturing sectors will be vital to Gastonia's future economic health.
2. Gastonia's key location, local work force, transportation and utility system makes it ideally suited to compete for manufacturing jobs. These factors are also marketable for the creation of new jobs in required services distribution.
3. Insufficient sites prepared with appropriate infrastructure is our single greatest impediment to future industrial and non-retail business development.
4. Most remaining sites in or around Gastonia are not marketable for either large scale or high technology employment due to the site itself or surrounding environmental influences. There has been little or no recent public, private, or other efforts to develop prime quality planned business/industrial parks in or around Gastonia.
5. Improving the quality of public education, technical education, and work force retraining programs will be essential as our work force competes for jobs in a global marketplace.
6. Gastonia's textile industry will continue to lose some employment. Many of our other local industrial jobs of today will not exist in future years due to the continued restructuring of the U.S. economy and world competition. The best of success in industrial development will not likely supply enough jobs to replace these losses. It will be necessary for us to seek our other employment sectors such as regional services and tourism to sustain our local economy and to bring dollars *into* our community.
7. Development strategies must recognize our regional ties. Gastonia exists as the core of the largest of sub-areas which ring Charlotte. But, the growth of the Gaston County urbanized area has been at a slower rate than areas to the north, south, and east of Charlotte.
8. Gastonia has emerged as a services and retail center for Gaston County and portions of adjoining counties. Maintaining this position will be important for our local economy and our competitive position. A rule of thumb is that each new dollar brought into a local economy multiplies effect two and one-half times before it leaves.



Eastridge Mall is the largest single center in a 3,000,000 square-foot concentration of retailing on Gastonia's east side.

9. The growth of Charlotte as a major services, distribution and financial center has provided new job opportunities for Gastonia residents and has brought new residents to Gastonia, primarily of middle and upper income. These opportunities are welcomed, but we must stress the continuation of Gastonia as an employment center. The ability of local government to provide needed services at a reasonable cost is dependent upon a healthy amount of quality non-residential development.

10. Gastonia needs to continue its support of industrial development by extending major lines to new industrial park sites. However, the City needs to balance new industrial development growth with long range capital improvements plans for water and sewer supply, treatment and distribution.

11. Increasing concern for the environment and future quality of life will dictate that economic development efforts be tempered by community stewardship. This will include local policies as well as Federal and state mandates. Having been determined “air quality non-attainment” will have major implications on future industrial development in Gaston County.

12. Much of the growth in new job development occurs with small business- particularly small “home-grown” businesses. Economic development efforts will increasingly need to take into account the start-up and cultivation of small businesses as a major component of local employment growth potential.



Gaston College is an important resource for education and retraining.

13. Industry will continue to relocate to more modern, single floor facilities accessible to major trucking corridors and on land in lower cost and expansive suburban locations. Thus, new uses will need to be found for land and/or buildings which have become obsolete for industrial usage.

14. The City will need to allocate more land space for industry and the space needs to be at locations appropriate for industry’s modern needs. Industry today seeks more expansive sites to accommodate single floor operations, employee parking and adequate truck loading areas. Also greater automation will mean fewer and fewer jobs per acre of industrial land. Much of Gastonia’s industrially zoned land today may not be relevant to the industrial needs of the future.

OBJECTIVES AND TOOLS

Objective 1: *Further development of Gastonia’s existing businesses and the initiation of new “homegrown” businesses.*

- 1-a)** Encourage efforts to expand new market opportunities for local businesses.
- 1-b)** Encourage a joint effort with the Economic Development Commission and Chamber of Commerce to study the need and development alternatives for a local business incubation center. Another joint effort could examine whether this could be a feasible re-use for part of the old Firestone Mill building.
- 1-c)** Support programs which encourage Gastonia area business and public to “buy local.” The EDC and Chamber should continue to enhance local businesses directories to link up producers and consumers and assist firms in meeting local demand.
- 1-d)** The City Planning Department should actively promote itself as a data source to local businesses. The Planning Department will maintain a wealth of information on computer such as, Census data down to the block level, transportation and infrastructure data, and data on the various geographic systems of the community.
- 1-e)** Assign to one city staff person the duties of “business ombudsman” to assist businesses with such matters as hearing concerns about the local business climate, particularly with respect to government, and helping them expedite and route requests (permits, etc.) through local and state governmental channels.
- 1-f)** Encourage the continued expansion of private association services to meet the ever changing needs of local business. Such services are typically provided through the Chamber of Commerce and other business associations and public entities providing services; e.g. the hospital. These services can include joint employee benefits programs; health care alliances, training programs, and joint marketing efforts to mention a few.

Objective 2: *Further diversification of Gastonia’s manufacturing and industrial base by securing new plant locations within Gastonia and Gaston County*

- 2-a)** The City should organize and initiate a major public-private effort to establish a first-class “high tech” industrial/business park with attractive surroundings in or near our city limits. The city should play active roles, as needed, in development entity organization, land acquisition, installation of infrastructure, and marketing. Such a project could involve the use of the existing non-profit development entity created by the EDC.
- 2-b)** Cooperate with the EDC on continuing its program of working with

Policy References

Economy: 5-d; **Land Use:** 1-h

Economy: 1-e; **Housing:** 2-a;
Transportation: 4-a

Economy: 1-d; **Housing:** 2-a;
Transportation: 4-a;
Land Use: 4-e

Economy: 3-b;
Built Environment: 1-b, 1-c;
Land Use: 1-k

Economy: 2-b, 2-e, 6-a.

Economy: 2-a, 2-e, 6-a

private developers on business/industrial park “master planning” and land assembly efforts.

- 2-c) Keep all inventories of industrial sites in and near Gastonia up to date. Use Geographic Information Systems (GIS) as a method to graphically portray and organize data on available industrial sites.
- 2-d) Determine whether adequate resources are being devoted to industrial recruitment for Gastonia and its environs, and if deficiencies are revealed, determine alternative measures enhancing efforts for Gastonia.
- 2-e) Following completion of advance planning and location studies for the proposed US 74/321 Bypass, the corridor should be fully evaluated for economic development opportunities by determining the best locations for well-planned business and industrial parks.

Utilities: 5-c

Utilities: 4-a

Economy: 2-a, 2-b, 5-c, 6-a;
Transportation: 1-f; | 1-f;
Land Use: 1-j

Objective 3: *Continue to cultivate an effective public interest partnership between local government and private business.*

- 3-a) The City and the County should partner with private business in a strategic planning effort. A strategic planning program would be citizen based and guided by a steering committee. The steering committee would appoint several task forces to develop strategies to deal with a selected issue areas (e.g., economic development, education, quality of life, infrastructure, image, etc.).
- 3-b) Continue to maintain a strong positive relationship between the City of Gastonia and the Chamber of Commerce. Channels of communication always need to remain open and constantly active.

Economy: 1-f;
Built Environment: 1-b, 1-c

Objective 4: *Improved education and training of the work force.*

- 4-a) Encourage the continued improvement of Gaston County Schools to the end that key performance indicators reach and remain at or above the average among the State’s major school systems.
- 4-b) City policies and practices should continue to be consistent with the optimal operation, development and improvement of local and regional educational systems (schools, Gaston College, and four year colleges). City policies and investment decisions should always be consistent with the goal of education. Examples include zoning and land use policies, policies which effect investment or disinvestment in areas, infrastructure projects, city work force training, use of college and university outreach services, etc.
- 4-c) Explore the need, efficacy and feasibility of extending public transportation service to Gaston College. If feasible, outside funding sources should be sought.
- 4-d) Cable television franchise agreements should, when feasible, accommodate educational needs which can be met through

Economy: 4-c, 4-d

Economy: 4-b;
Transportation: 2-a

Economy: 4-b

telecommunications.

- 4-e) The City Planning Department should coordinate with the EDC, educational institutions and other agencies to be certain that decision makers have adequate information on the labor market, particularly with respect to education training needs.
- 4-f) Participate in, and be supportive of cooperative programs between private business and education providers such as mentoring programs and the Tech Prep Program.

Objective 5: *Continued improvement to and better utilization of our existing transportation and utilities infrastructure.*

- 5-a) New business and industrial park development should be planned to take advantage of existing or programmed infrastructure where possible.
- 5-b) Choices among alternative infrastructure investments should be evaluated, *in part*, on their ability to stimulate economic development and the *quality* of such development as measured in such terms as the number and quality of potential jobs, costs and benefits to the public sector, and consistency with the Comprehensive Plan.
- 5-c) The proposed US 74/321 Bypass will bring many new economic development opportunities to Gastonia. It will directly link the southern half of the county to Charlotte with only a few minutes drive to Charlotte Douglas International Airport, the I-77 corridor, and the I-485 Belt Line. Support for the Bypass should be garnered not only for the transportation need, but also for its economic development benefits.
- 5-d) Examine alternatives to re-use existing older industrial sites for economic development opportunities. These sites are oftentimes well served by existing public infrastructure.
- 5-e) Support the development of a regional general aviation airport to better serve Gastonia-area businesses and residents.

Transportation: 2-g;
Land Use: 5-d

Housing: 5-e;
Transportation: 2-f;
Natural Environment: 2-b;
Annexation: 2-c, 3-b

Economy: 2-e; **Housing:** 5-h;
Transportation: 3-b, 3-d;
Built Environment: 1-f;
Land Use: 1-j

Economy: 1-b; **Land Use:** 1-h

Objective 6: *Attract new office, service and tourism employment.*

- 6-a) Promote the development of one or more large first rate office/business parks along the I-85 corridor in or adjacent to Gastonia. A park of this nature could be developed as a totally private venture or under the non-profit development corporation of the EDC.
- 6-b) Gastonia should assert itself as gateway to the Stowe Botanical Garden.
- 6-c) Welcome and accommodate regional sporting events and tournaments as a means to promote tourism.
- 6-d) Determine whether to build a Civic Center and Performing Arts Auditorium. Since it would be a regional facility, countywide funding

Economy: 2-a, 2-b 2-e

Natural Environment: 3-e

Community Facilities:
5-a, 5-b, 5-c

would be a more fair way to finance construction costs.

- 6-e)** Continue to support and promote the Schiele Museum as Gastonia's premier tourist attraction.
- 6-f)** Coordinate with the Charlotte Convention and Visitors Bureau on tourism opportunities in Gaston County. Side trip offerings will become particularly important as Charlotte's convention business increases with the new Convention Center.
- 6-g)** Continue to support the lodging tax as a means to support local tourism development.
- 6-h)** Market Gastonia for a full service hotel, including meeting facilities.

Objective 7: *Effect the development of new retail businesses in under-served areas such as the western side of the City and the Central City area.*

- 7-a)** Short Range Strategy: Promote the development of a discount department store in the western half of Gastonia.
- 7-b)** Long Range Strategy: Promote a major retail development in the US 74 West area near where the proposed US 321 Bypass would interchange. Such development could be the hub of a second regional retail center for Gastonia.

Housing: 5-c; **Land Use:** 1-c

Land Use: 1-j, 1-l.

Objective 8: *A first-rate community image for a first-rate community.*

- 8-a)** Identify and communicate effectively our community strengths.
- 8-b)** Examine successful marketing efforts in other communities.
- 8-c)** Use proven techniques to communicate a positive community image, particularly within the Charlotte area.
- 8-d)** Identify and address concerns which can contribute to negative images.
- 8-e)** Develop and implement a community marketing strategy.

Natural Environment: 3-a;
Land Use: 2-e, 2-f

Economy: 8-e

Built Environment: 5-g;
Land Use: 2-e

Land Use: 2-d

Economy: 8-b; **Land Use:** 2-e

HOUSING AND NEIGHBORHOODS

GOAL *An adequate supply of decent housing that provides a variety of choices, is located in a livable setting, and is affordable to families of all income levels.*

BACKGROUND AND TRENDS

Housing in Gastonia has reflected several market trends evident in the region, the state and nationwide. The most evident of these trends is the supply of multi-family housing, which has jumped over the decade from 11.8% of the housing to 27%, nearly a three-fold increase. During the same time the rate of owner-occupancy has increased somewhat, making the most dramatic gain in the 1960's and leveling off since then. Considering the increase in multi-family housing, the rise in overall owner-occupancy seems to indicate a much larger shift in the ownership of single-family homes. One trend, evident nationwide and North Carolina, is virtually absent in Gastonia. Manufactured housing, which was always a tiny part of the housing stock, has not increased in Gastonia as it has elsewhere. Another trend in Gastonia has been the increase in housing cost, which has typically increased at a faster rate than inflation, particularly in the high-growth 1980's. Although the figures presented are not adjusted for inflation, they do reflect a nearly eight-fold increase in home prices and a six-fold increase in rent from 1960 to 1990.

It is expected that housing in the planning area will increase from 30,114 units to 37,980 units over the next twenty years, reflecting a steady growth in the number of households in Gastonia and the surrounding area.

The style of housing and neighborhoods in Gastonia have followed changes in the transportation available to people. Prior to World War II when cars were less affordable and less common, neighborhoods tended to be relatively dense and close to shopping, churches and public transportation. Textile mills built housing for their workers, and these mill villages were almost always within walking distance of the mill; the larger communities, such as the Loray (Firestone) Mill

village, had their own shopping areas as well. After World War II, cars became more readily available, public transportation began its decline, and the mills began divesting their housing. The return of soldiers and the subsequent baby boom also created a housing shortage in the 1940's followed by a construction boom in the 1950's and 1960's. The character of the housing built in this period was different from the pre-war variety. Larger lots, fewer sidewalks and more self-contained neighborhoods characterized the newer developments. Shopping centers such as Akers Center, Dixie Village and Gaston Mall were also new to the post-war era, and they generally required a car to reach them. Thus the shift in Gastonia was from an urban style of living before the war to a more suburban style after the war.

HOUSING CONDITION

Substandard housing can be defined in a number of ways. The United States Department of Housing and Urban Development bases its definition on plumbing

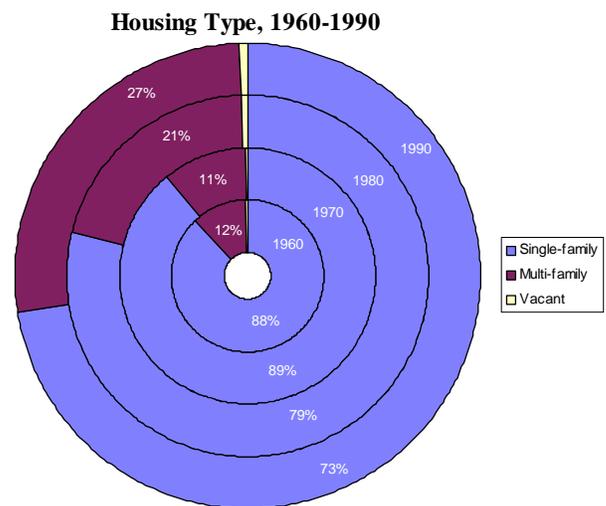


Figure 1

HOUSING CONDITION

Substandard housing can be defined in a number of ways. The United States Department of Housing and Urban Development bases its definition on plumbing and overcrowding: houses without complete plumbing or with more than one person per room in the house are considered to be substandard.¹ A broader definition of substandard housing would include houses or apartments that are in need of substantial repair. Factors affecting the safety and cleanliness of a house are particularly important: leaking roofs, exposed wiring, subsiding foundations and rodent infestations are indications of a substandard condition. Substandard housing needs major improvements, beyond normal maintenance, to bring it into good repair.

Housing without complete plumbing has virtually disappeared from Gastonia, falling from 890 units in 1960 to just 50 units in 1990. As the housing stock in the central city and the historic mill villages has aged, however, housing in bad repair is still a persistent problem. The Gastonia Comprehensive Housing Affordability Strategy, a five year plan to guide housing assistance, shows 4,151 housing units in bad repair. This accounts for about 19% of the housing in Gastonia. Most of this housing can be repaired and rehabilitated, but approximately 405 units are considered to be beyond repair and should be torn down.

HOUSING ASSISTANCE

Gastonia has a wide variety of housing available in a broad range of prices. Single-family houses, garden apartments, luxury communities, condominiums, mill villages, patio homes and historic neighborhoods are all available within the city. Unfortunately, this market in all its variety has not been able to fill the need for housing for Gastonia's lowest income residents. The need for below market or assisted housing has been recognized in the United States by social reformers and advocates for the poor since the Industrial Revolution, but publicly assisted housing did not appear until the Housing Act of 1937. Further housing acts in 1949 and 1954

¹ City of Gastonia, *Comprehensive Housing Affordability Strategy* (1994), p.3.

Figure 3
Cost of Housing

	1960	1970	1980	1990
Median Home Value	\$8,100	\$12,500	\$32,500	\$59,300
Median Monthly Rent	\$57	\$56	\$117	\$378

Source: U.S. Census, 1960, 1970, 1980, 1990

strengthened the federal role in insuring decent housing for low income people.²

In Gastonia, a series of land use policy decisions in the 1960's resulted in the placement of the vast majority of assisted housing on the City's west side. The concentration of low income people has also resulted in the concentration of social problems such as family breakdown, unemployment, drug use and high crime rates that continue to plague poor communities everywhere. The concentration of these social problems also appears to have had a detrimental effect on the marketability of west side housing, depressing both the price of existing housing and the development of new housing.

Several factors relating to the need for affordable and assisted housing are evident in Gastonia:

- Several neighborhoods are "aging in place," with high concentrations of elderly people. These homeowners often have trouble maintaining their homes, due to both income and health.
- Neighborhoods such as Highland, Jenkins Heights and Flint-Groves have large numbers of substandard single-family rental houses along with owner-occupied houses.
- Decline, consolidation and technology improvements in the textile industry have reduced the number of workers needed by these companies. Many of the twenty mill villages in Gastonia are increasingly home to elderly and low income people, and this housing is shifting from worker housing to general low-income housing.

² Frank S. So, et al, eds., *The Practice of Local Government Planning* (International City Management Association, 1979), pp. 41-47.



Substandard apartment buildings on Vance Street will be transformed into these condominiums.

Several factors relating to the need for affordable and assisted housing are evident in Gastonia:

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- Neighborhoods such as Highland, Jenkins Heights and Flint-Groves have large numbers of substandard single-family rental houses along with owner-occupied houses.
- Decline, consolidation and technology improvements in the textile industry have reduced the number of workers needed by these companies. Many of the twenty mill villages in Gastonia are increasingly home to elderly and low income people, and this housing is shifting from worker housing to general low-income housing.
- The social and economic distance between the east side and west side of Gastonia is increasing. The east side is undergoing a building boom, fueled by the regional job market and rapid growth of amenities in the area. The west side has seen little of this growth, and it has an aging and increasingly low-income population.
- School district assignment in Gastonia affects the demand for housing, especially single-family housing. Houses of similar size and features can have vastly different market appeal based on the perceived quality of the local school.

Housing Assistance in Gastonia is primarily the responsibility of two agencies: the Gastonia Housing Authority and the City Community Development Division. The Housing Authority administers Gastonia’s public housing and issues housing vouchers to low income families who use them to rent housing in

the private market. The City Community Development Division provides assistance to low and moderate income homeowners for repair and rehabilitation of their houses. The City also purchases and repairs housing for resale, and it provides down payment assistance to first-time home buyers.

Gastonia has 1,213 units of assisted, below market rental housing, developed under various federal programs. The demand for this housing exceeds the supply, with typically a six to twelve month waiting period for public housing. The Housing Authority has 945 housing vouchers, which allow families to find rental housing on the private market and pay 30% of their income toward rent. Approximately 400 families are currently on the waiting list for these vouchers, again showing demand exceeding the supply.¹

Federal housing policy since the mid-1970’s has been notable for its lack of direction. New public housing construction is at a standstill and new housing vouchers are rare. This situation is not expected to change very much over the next twenty years, due to caps on federal spending and a policy shift away from the “project-based” assistance of the past 40 years. Housing aid for low-income people will increasingly come from home-ownership initiatives, Community Development Block Grants, from banks and other lenders under the Community Reinvestment Act, and non-profit organizations such as Habitat for Humanity. Community based initiatives such as these may provide a more permanent solution to the housing problems that low income people face. With their emphasis on home ownership and scattered site assistance, they provide an alternative to the concentrations of poverty, crime and social dysfunction found in many big-city public housing projects.

¹ Source: Gastonia Housing Authority

Figure 4

Median Age of Housing 1990

Median Age By Census Block Group

- 44 to 55 Years
- 32 to 44 Years
- 20 to 32 Years
- 8 to 20 Years



2010 Planning Area

Gastonia

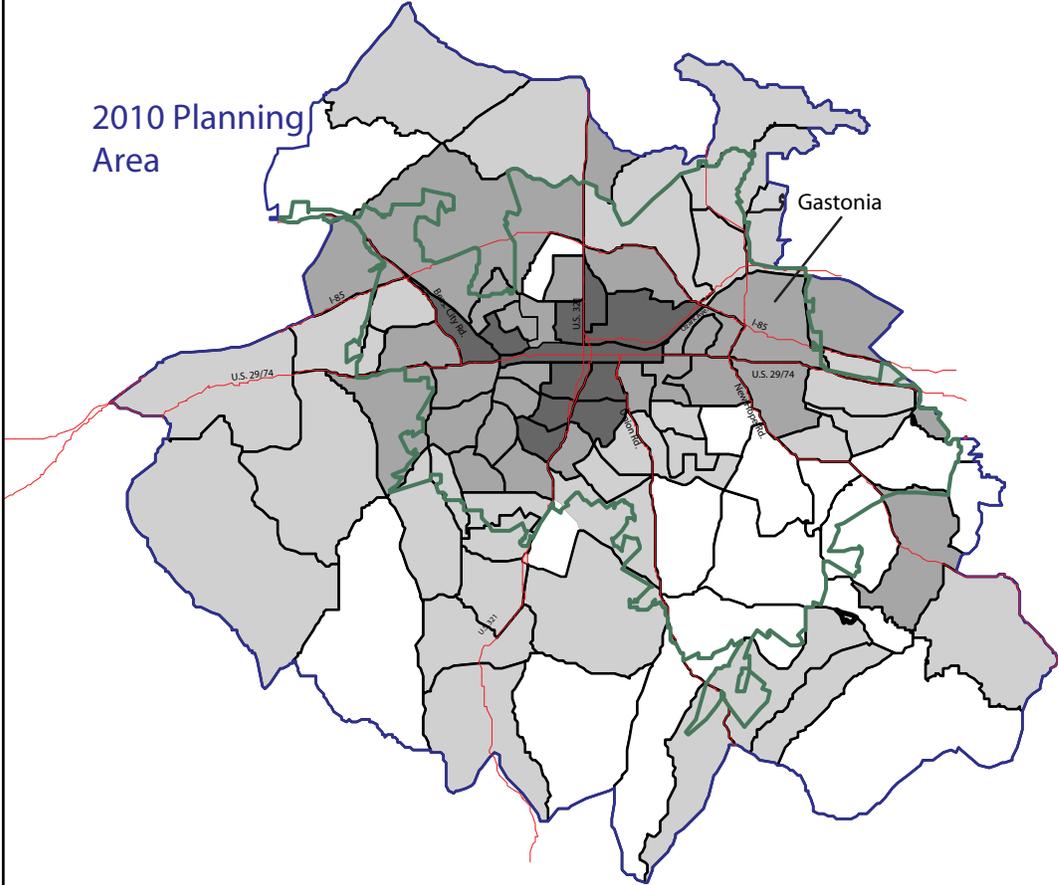


Figure 5

Median Housing Value, 1990

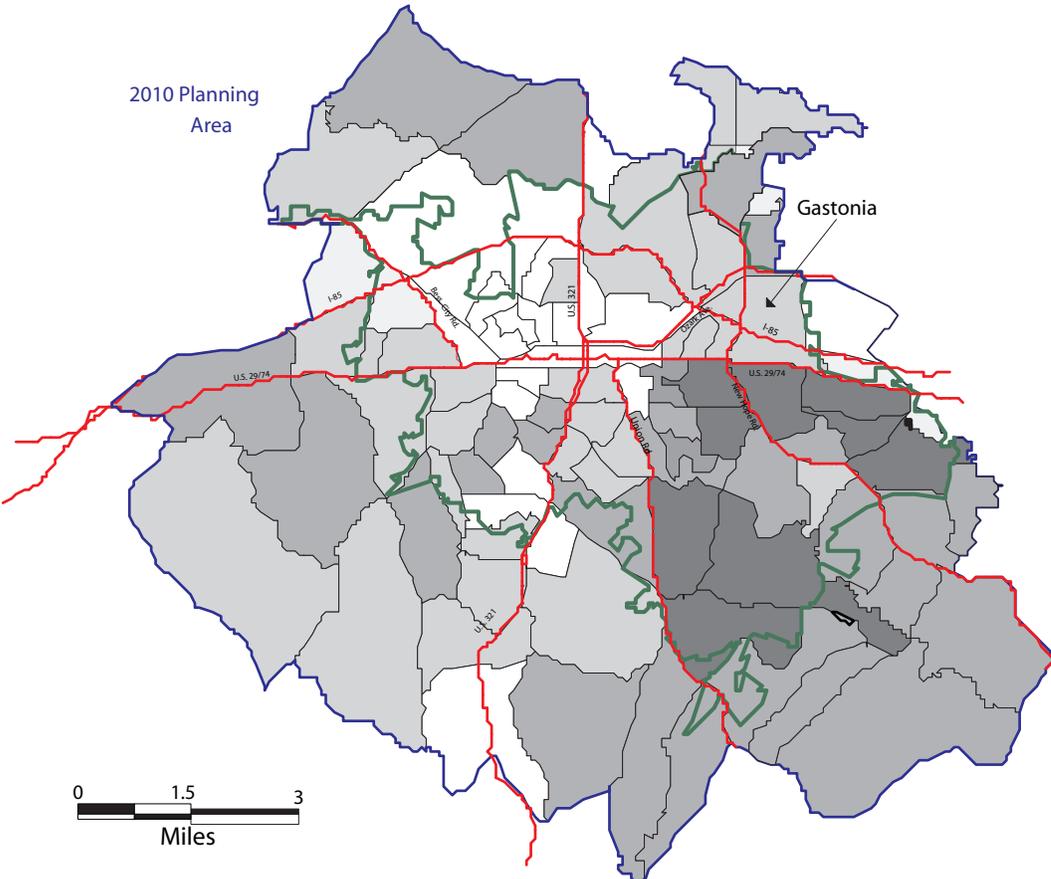
Median Value By Census Block Group 1990

- \$80,100 to 136,700
- \$57,900 to 80,100
- \$42,200 to 57,900
- \$28,400 to 42,200



2010 Planning Area

Gastonia



INFILL HOUSING AND NEIGHBORHOOD STABILIZATION

New housing construction in Gastonia has focused heavily on the development of new subdivisions. This type of development requires the construction of infrastructure, such as roads, drainage, water and sewer lines. In addition, utility trunk lines must sometimes be extended in order to serve outlying subdivisions. The City of Gastonia provides a subsidy to new subdivisions in the form of some road improvements and water & sewer rebates. Nonetheless, the costs of the other infrastructure improvements are passed on to buyers in the form of higher house prices. It is now difficult to build a marketable new subdivision with houses costing less than \$80,000. Gastonia's Comprehensive Housing Affordability Strategy determines that housing costing \$49,000 or less is affordable to low and moderate income families, leaving a \$30,000 affordability gap.

For this reason, the vast majority of affordable housing in Gastonia is older, existing housing. This housing is sometimes in need of either minor repair or substantial rehabilitation. Nonetheless, approximately 90% of the available affordable housing is safe and sound. Gastonia's community development efforts such as down payment assistance, owner-occupied housing rehabilitation, and purchase-rehab-resale help insure the continued supply of low-cost housing in Gastonia. Banks and other lenders, under the Community Reinvestment Act, are targeting some of their mortgages toward low and moderate income buyers. The positive effects of these efforts include not only the direct benefit to the property, but also the stabilizing effect on the surrounding neighborhood.

Another way to help stabilize these important neighborhoods is through the development of infill housing on vacant lots. The bonus of infill housing is the infrastructure which is already in place, generally requiring only a utility hook-up to take advantage of it. This can save 10 to 20% over the cost of a similar house in a new subdivision. Modular housing is another way to save money in infill development. Infill

housing, because of its scattered site nature, will probably never be a major source of affordable housing, but it can be a good adjunct to other affordable housing efforts. It can also help stabilize a neighborhood, bringing in fresh investment and perhaps drawing further investment.

SPECIAL NEEDS POPULATIONS

Disabled people have been leading independent lives in ever greater numbers. Housing that is suitable for disabled people is characterized by an absence of physical barriers. New and rehabilitated housing should be routinely constructed with as few architectural barriers as possible. Apartment complexes must now meet the requirements of the Americans with Disabilities Act and greater awareness of barrier-free design is evident in house construction. Location near bus routes and shopping areas would help facilitate the transportation needs of some disabled people.

Gastonia has a homeless population of approximately 200 people. Service to the homeless is provided by several local agencies, such as the Salvation Army and Cornerstone Christian Ministries. It is estimated that approximately 35% of the homeless are individuals or families in transition, who want and need permanent housing, but don't have it due to financial crisis. This group also includes women and children escaping abusive situations. The larger proportion of the homeless in Gastonia, however, are "street people," who either do not want permanent housing or cannot maintain themselves in housing due to mental illness, substance abuse or other personal problems. Almost all of these are single adults.

Several populations in Gastonia are best housed in group situations so that they can receive comprehensive care, counseling, guidance or assistance. These include developmentally disabled people, recovering substance abusers, and elderly people needing nursing care. The trend for group homes is increasing integration into residential neighborhoods, in order to provide a normal living environment and reduce the isolation of these people with special needs.

HISTORIC HOUSING

Gastonia's rapid growth and prosperity in the early part of the century has left the City with a legacy of historic housing, ranging from modest bungalows to grand mansions. The largest concentration of historic housing is located south of downtown in the York-Chester neighborhood. York-Chester is a local historic district of approximately 500 homes, apartments and businesses, in which changes to the built environment are given more careful consideration and evaluation with regard to their historic value. Exterior alterations, construction of new buildings or signs, and removal of large trees are some of the activities that must first be approved by the Gastonia Historic District Commission. These changes must contribute to the unique aesthetics and historic environment of the neighborhood. This process is intended to stabilize the neighborhood and maintain the historic nature of York-Chester. As other neighborhoods age, they too may be considered for historic designation. Neighborhoods that have possible historic merit include: Fairmount Park, Old Country Club, Brook-wood, Hillcrest, and the Firestone Mill Village.

In addition to the York-Chester historic district, several landmark and historic buildings are scattered throughout Gastonia. Some of these properties may be eligible for placement on the National Register of Historic Places, a list maintained by the U.S. Department of the Interior. Figure 6 shows the properties in Gastonia which have been placed on the National Register.

The National Register does not involve the building and land use guidelines that the local historic designation does. Placement on the Register will, however, forbid the use of federal funds in projects (such



Formerly Gastonia High School, Ashley Arms is now a luxury apartment building.

as road construction) that would cause the house to be torn down. Additionally, federal tax credits are available in conjunction with renovation of National Register properties.

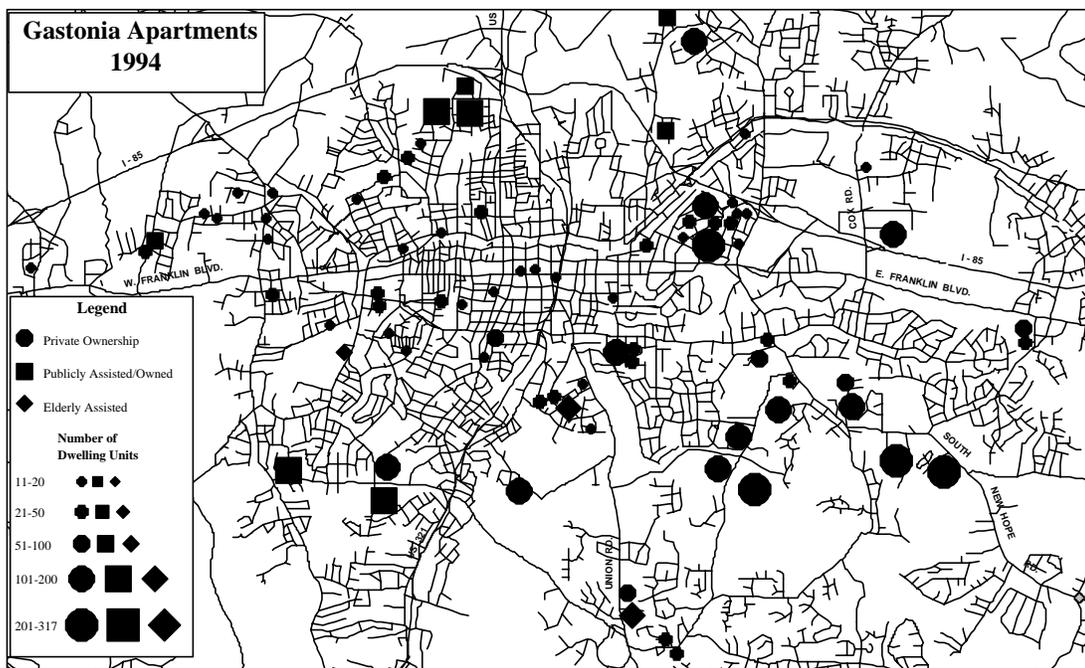
FUTURE HOUSING TRENDS

Demographic and social changes will affect the size, style and density of housing that will be built over the next twenty years. Average household size in Gastonia has been decreasing steadily and it is expected to drop to 2.44 persons per household by 2010. A smaller household requires less space than a large one, and the average square footage of new housing may decrease by 2010. Another trend is the increasing proportion of elderly in population due to longer life expectancy and the size of the baby-boom generation. The oldest baby-boomers, born in 1946, will be just entering the senior citizenry in 2010, with the rest of the generation to follow. Older people have a greater demand for condominiums, small homes and congregate living facilities. A third trend in housing is the dwindling supply of developable land. As land becomes more scarce and more costly, innovative solutions combining higher densities with good design will be needed. These trends all point toward the single-family, large-lot, detached home becoming less common, although by no means extinct, in the future.

Name	Address	Year Built
Cephas Stroup House	2206 Armstrong Park Road	1865
David Jenkins House	1017 E. Airline Ave	1876
Ashley Arms	800 S. York St.	1922

ISSUES

1. Decreasing average household size, an aging population and higher land, lumber and construction costs point toward a market shift to smaller houses on smaller lots and developments of greater density such as condominiums, town homes and patio homes.
2. Land in Gastonia and the surrounding area is becoming more scarce and prices for raw land in prime areas appear to be increasing to perhaps some of the highest in the region. This situation, combined with appreciation of existing home prices at a rate faster than inflation, leads to higher prices and decreasing affordability of housing.
3. The east side of Gastonia is undergoing a building boom, taking advantage of the Charlotte regional housing market and the growth of amenities in the area. In contrast, the west side housing market is stagnant, with increasing concentrations of poor and elderly residents.
4. Development of assisted housing in Gastonia has focused almost exclusively on the west side. Local and federal policies have led to a concentration of the very low income underclass, with a concurrent concentration of social problems such as family breakdown, truancy, juvenile delinquency, unemployment, drug use and high crime rates.
5. Assisted housing is likely to continue its shift toward community-based efforts such as neighborhood stabilization and home ownership programs, and away from construction of public housing projects. This trend will require further resourcefulness and creativity on the local level.
6. The majority of new housing is out of reach to low and moderate income people. The existing housing market will be the major source of housing for these families. Neighborhood stabilization efforts, including the development of new infill housing, will help insure the continuing supply of affordable housing in Gastonia.
7. Several single-family neighborhoods are declining rapidly due to the proliferation of slum rental housing and the blight and social problems that are associated with this housing. These formerly stable neighborhoods are in danger of declining into slums.
8. New and expanded roads, cut-through traffic and commercial encroachment can all threaten the stability of older established neighborhoods.



OBJECTIVES AND TOOLS

Objective 1: *Build more flexibility into the City's residential land use policies in order to allow builders and developers to adapt to changing market conditions.*

1-a) Decrease required lot sizes in single-family zones that have City water and sewer service.

Policy References

Housing: 5-b;
Transportation: 2 d, 2-m;
Natural Environment: 1-f, 2-d

1-b) Allow innovative developments such as patio homes, attached single-family housing and cluster developments either conditionally or as of right in single-family zones, with landscaping and siting requirements to insure the good quality of these developments.

Housing: 1-c, 5-b;
Transportation: 2-m;
Land Use: 3-c, 6-f

1-c) Streamline the zoning approval process for planned unit developments.

Housing: 1-b;
Land Use: 3-b, 6-f

Objective 2: *Adjust City land use policies to remove barriers to the development of affordable housing.*

2-a) Provide information, technical assistance and incentives to the private sector to maintain a housing production capacity sufficient to meet the required demand.

Economy: 1-d, 1-e;
Transportation: 4-a

2-b) Continue to treat modular housing consistent with site-built housing.

2-c) Explore allowing a full or partial utility hook-up rebate for infill housing in established neighborhoods.

Housing: 5-f;
Transportation: 2-l

Objective 3: *Focus City and community housing efforts on the stabilization of neighborhoods in danger of decline.*

3-a) Target endangered neighborhoods for systematic code enforcement on a periodic basis.

Housing: 5-a; **Land Use:** 1-f

3-b) Down-zone historically single-family neighborhoods to discourage the proliferation of conversions to multi-family units.

Land Use: 5-e, 5-g

3-c) Continue community development assistance to homeowners and potential first-time home buyers.

3-d) Explore the establishment of an urban homesteading program, in which acquired property can be sold at a reduced price primarily to owner-occupants.

Land Use: 1-g

3-e) Continue to apply for any federal or state funding that may be beneficial to the improvement of the housing stock and neighborhoods of Gastonia.

Housing: 4-a; **Land Use:** 1-g

Objective 4: *Maintain and improve the existing public housing stock.*

4-a) In conjunction with the Gastonia housing authority, continue to apply for any funding that can be used to improve or rehabilitate Gastonia's public housing.

Housing: 3-e

4-b) Explore tenant management and/or ownership of Gastonia's public housing.

Objective 5: *Promote the development and improvement of housing in central-city neighborhoods, the historic mill villages, and on Gastonia's west side.*

5-a) Increase code enforcement activities in neighborhoods where code violations are most prevalent, including concentrated regular inspection in the neighborhoods with extensive blight.

Housing: 3-a; **Land Use:** 1-f

5-b) Consistent with Gastonia's land development regulations, allow on a demonstration basis mixed use and other innovative reuses of the existing housing stock which will result in the removal of substandard housing units.

Housing: 5-f;
Transportation: 2-m;
Natural Environment: 1-g;
Land Use: 1-g, 3-c, 4-g, 6-f

5-c) Promote the development of a mid-level shopping center on Gastonia's west side, in order to increase local shopping opportunities for west-side residents.

Economy: 7-a;
Land Use: 1-c, 1-i

5-d) Develop incentive strategies to encourage more home ownership developments on the west side.

Housing: 5-g; **Land Use:** 2-a

5-e) Employ utility extension strategically to encourage growth in areas where growth has been lacking.

Economy: 5-b,
Transportation: 2-f;
Natural Environment: 2-b;
Annexation: 2-c;
Land Use: 1-a

5-f) Employ policies to encourage infill compatible with the existing development pattern.

Housing: 2-e, 5-b;
Transportation: 2-l, 2-m;
Land Use: 6-f

5-g) Support and encourage the elimination of other barriers to west side development and improvement, such as the existing pupil assignment system.

Community Facilities: 4-b;
Land Use: 1-b

5-h) Support the construction of the US 321/74 Bypass as a means of making west side neighborhoods more accessible to Charlotte.

Economy: 5-c;
Transportation: 3-b, 3-d;
Land Use: 1-f

Objective 6: *Continue the good stewardship of Gastonia’s historic housing resources.*

- 6-a)** Assist the rehabilitation and adaptive reuse of historically significant housing through technical assistance and land use regulations such as transfer of development rights. **Housing:** 6-b;
Natural Environment: 3-f;
Built Environment: 2-a
- 6-b)** Provide technical assistance to property owners in applying for and utilizing state and federal assistance programs for historic housing. **Housing:** 6-a; **Land Use:** 2-a
- 6-c)** Consider the establishment of additional local historic districts in neighborhoods that will age and become historically significant by 2010. **Built Environment:** 2-b

Objective 7: *Continue to provide for the special housing needs of disabled people, elderly people and appropriate people in transition.*

- 7-a)** Continue to allow group homes as of right in single-family neighborhoods, while keeping a separation requirement to avoid the clustering and segregation of these homes. **Land Use:** 6-d

Objective 8: *Minimize negative effects of public and private development actions upon Gastonia’s neighborhoods.*

- 8-a)** New residential development layout should avoid creating “cut through” streets while maintaining connectivity between neighborhoods. **Housing:** 8-b;
Transportation: 2-l;
Land Use: 6-c
- 8-b)** Avoid creating situations which will channel non-local traffic from business areas or thoroughfares onto neighborhood streets. **Housing:** 8-a;
Transportation: 2-i
- 8-c)** Residential areas should have adequate buffering from non-residential uses. Existing buffer standards should be kept up to date and properly enforced. Where special circumstances warrant it, additional buffering may be required through the conditional use process. **Housing:** 8-g;
Land Use: 6-c, 6-d, 6-e
- 8-d)** Staff rezoning reports should, where applicable, assess the general impact of proposed rezonings on any adjoining residential areas. Appropriate mitigating measures should be offered when needed. **Housing:** 8-f
- 8-e)** The pre-design planning process for a new or widened thoroughfares should include a general assessment of the impact of such thoroughfare on adjoining neighborhoods, and where appropriate, measures which could be undertaken to mitigate negative impacts. **Transportation:** 2-h
- 8-f)** Include applicable neighborhood organizations in rezoning notification process. **Housing:** 8-d
- 8-g)** Avoid non-residential rezonings which intrude into existing residential areas unless such rezonings are otherwise in accord with the Comprehensive Plan. **Housing:** 8-c; **Land Use:** 6-c

TRANSPORTATION

GOAL

A safe, comprehensive and efficient transportation system that allows the movement of goods and people within Gastonia and from Gastonia to other places.

BACKGROUND AND TRENDS

Access to transportation was pivotal to Gastonia's origin and growth, first as a settlement and later as a city. Gastonia began with the establishment of Gastonia Station on the newly built Charlotte & Atlanta Airline railroad, which is now the Norfolk Southern railroad running east-west through the County. The station was located at the junction of that railroad and a north-south railroad, now also part of the Norfolk Southern system. This junction and the excellent access to rail service spurred Gastonia's growth. Textile mills, freed from the necessity of locating near a river, began to locate along the two rail lines, which allowed them to bring in raw materials and ship finished products to distant markets. Gastonia eventually overtook Dallas first as the business and population center of Gaston County and later as the county seat.

Although rail transportation has declined in importance since that time, the overall transportation system has never been more crucial to Gastonia than it is today, and that significance is expected to grow over the next twenty years. Our *physical* transportation system consists of sidewalks, bikeways, roads, rails and airports. The *operational* transportation system includes cars, trucks, buses, airplanes, trains, bicycles, shuttle vans and pedestrians. *Specialized* transportation for products such as water and natural gas is provided by pipelines that run through Gastonia, giving customers access to these products.

Gastonia's street system consists of five different kinds of roads, distinguished by function. *Interstates* carry regional traffic at high speeds. They have no at-grade intersections and do not allow driveway access from adjoining land. *Major thoroughfares* carry traffic that is primarily moving through the City or to points outside Gastonia. Although local access to the road is permitted, the primary function of the road is for through traffic. *Minor thoroughfares* move traffic between major thoroughfares. Minor thoroughfares typically have two or three lanes and can also serve as collector streets. *Collector* streets serve a neighborhood or subdivision (either residential, commercial or industrial), allowing traffic to exit the neighborhood and use a thoroughfare for further travel. Collector streets are distinguished from minor thoroughfares in that collector streets are not intended for through traffic from outside the neighborhood. Finally, *local* streets serve only the properties that abut the street, allowing access to the rest of the street system. The major and minor thoroughfares within the 2010 Planning Area are shown in Figure 1.

The street system in central Gastonia is primarily a grid, with most streets intersecting at right angles. Outside of the central city, the road system is primarily based on a system of old farm-to-market roads. The old farm roads tend to follow the ridge lines throughout the County, and as a result they can be winding. Roads that are parallel inside the City

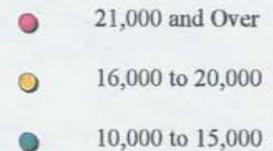
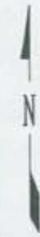
Average Daily Traffic Volume

Major Roads and Intersections

Roads



Intersections

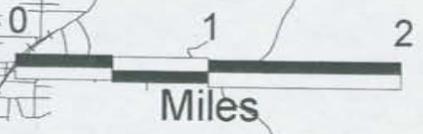
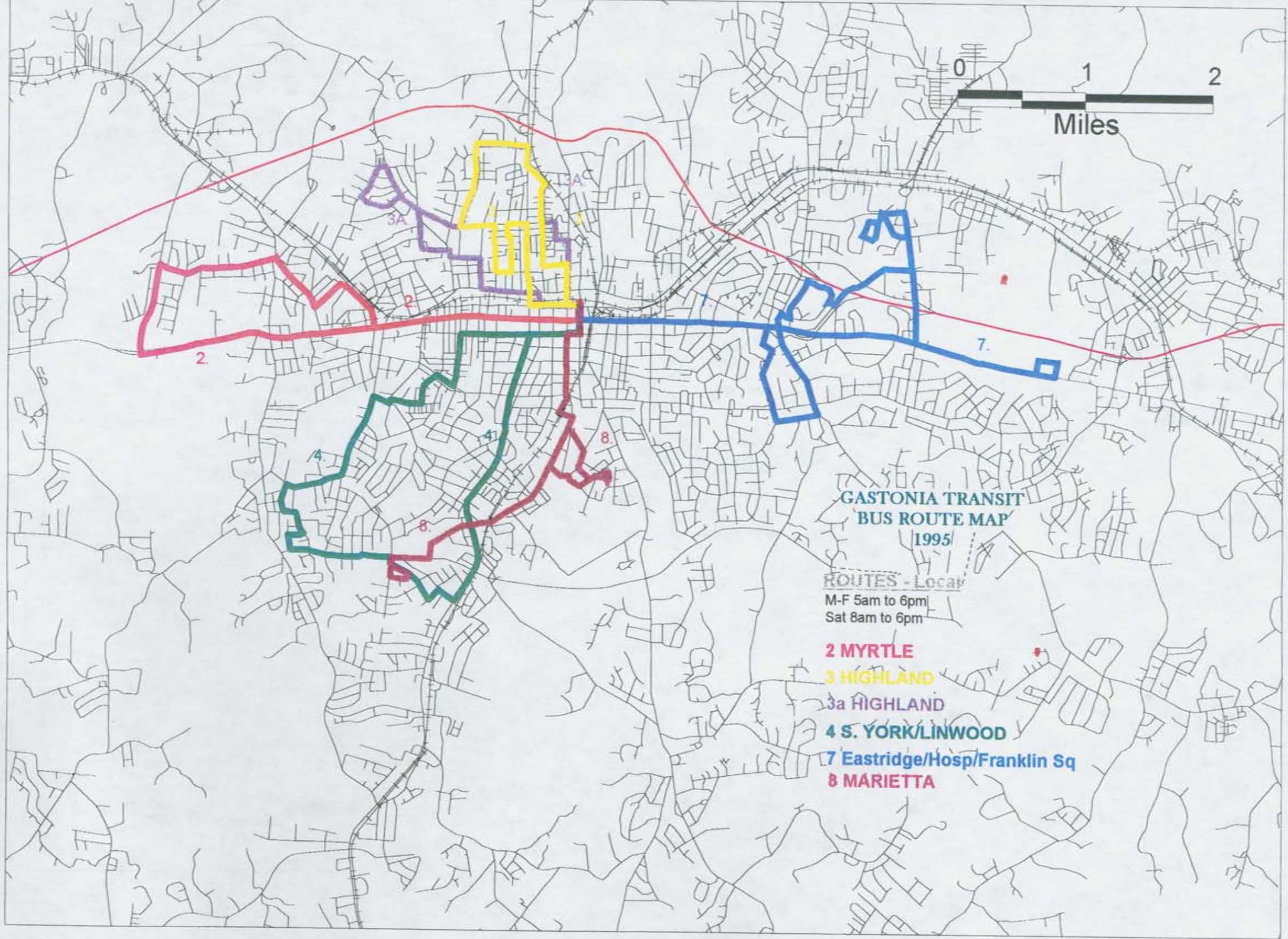


City of Gastonia



Miles





**GASTONIA TRANSIT
BUS ROUTE MAP
1995**

ROUTES - Local
M-F 5am to 6pm
Sat 8am to 6pm

- 2 MYRTLE**
- 3 HIGHLAND**
- 3a HIGHLAND**
- 4 S. YORK/LINWOOD**
- 7 Eastridge/Hosp/Franklin Sq**
- 8 MARIETTA**

may intersect farther out in the County. Thus local knowledge of the road system is generally necessary for navigation in the more suburban and rural parts of Gaston County.

Population increase in the 2010 Planning Area puts an added pressure on the road system to move more persons to work and shopping. The amount of commuting from Gastonia to Charlotte and other areas in the region has increased over the past 20 years. The large retail centers in the eastern part of the City also concentrate traffic in these areas. Traffic volumes on some of Gastonia's important thoroughfares are illustrated in Figure 2. How effectively the City deals with these problems will influence the future quality of life in Gastonia.

One of the particular problems of this area is the numerous substandard State-maintained streets within the 2010 Planning Area, with many of our roads having only nine- to ten-foot lanes. Lack of lane width contributes to accidents within the 2010 Planning Area. In addition, pedestrians and cyclists are forced to use the same substandard roads as cars and trucks.

The State of North Carolina uses an Equity Formula [G.S. 136-17.2(a)] to divide the federal and state road funds among local areas. An important component of the Equity Formula is the number of *unpaved* road miles in each County, but Gaston County has *fewer unpaved* roads

than any other county in NCDOT Division 12*. We have, however, more narrow (substandard) roads than any other county in the division has, placing Gaston and other urban counties at a relative disadvantage. The Interstate 85 widening also contributes to the funding problem, showing large allocations to Gaston County for what is in fact a road of statewide importance.



The Cox Road and Franklin Blvd. intersection is one area that is increasingly congested.

The problem of funding of maintenance projects points to another difficulty that the City will need to deal with more and more in the future. In 1989 the General Assembly approved the Highway Trust Act to develop a statewide intra-state system of roads. In recent years, however, a decreasing number of local projects have been funded through NCDOT. The need for additional funding of State funding was recognized by Gastonia when its voters approved over \$40 million to improve or build roads within the City, many of which are maintained by the State.



Interstate 85 is being widened to six lanes in Gastonia

road projects.

The inability on the part of the State to fund many of its road projects is due, in part, to the General Assembly's action of moving \$180 million annually (one-third of the fund) from the Highway Trust Fund to other priorities. If this trend continues into the future, Gastonia and many other cities will be required to increasingly fund their own

*Gaston, Cleveland, Lincoln, Catawba, Iredell and Alexander Counties

AIR QUALITY

In 1991 Gaston County was found to be in non-compliance for the level of ozone in the air. The EPA has combined Gaston and Mecklenburg Counties into a single unit for air quality evaluation. In 1995, the EPA ruled that Gaston and Mecklenburg were now in compliance for ozone, due to five years with no days in violation of the ozone standard. Air quality is a transportation issue because the primary generators air pollution in this region, particularly of ozone, are cars and trucks. Close cooperation between Charlotte and Gastonia is essential to the continued improvement of air quality and compliance with EPA standards.

MASS TRANSPORTATION

Gastonia has been served by public transportation at least since 1911. That was the year that the Piedmont and Northern railroad began interurban service between Gastonia, Mt. Holly and Charlotte. Interurban railroads, operating on electricity, with closely spaced stations and hourly or semi-hourly schedules, were the forerunners of today's light-rail systems. The P & N was popular because of its convenient schedule, low prices and the absence of smoke, dirt and cinders that accompanied a steam railroad. Transit within Gastonia was available by streetcar and bus, providing an inter-connected system for both local and regional travel.

Following World War II, Gastonia experienced an unprecedented level of growth. Lower density housing, new shopping centers with large parking lots and a dispersed pattern of settlement emerged in these post-war years. The post-war development was predominately suburban and the design of the new developments favored the car over other forms of transportation. The City of Gastonia removed the streetcar tracks from Franklin Boulevard in 1952, and the P & N ceased passenger operations two years later. The bus system continued to operate, but rising costs and declining ridership forced City Coach Company and Gastonia Transit company to discontinue service in 1978. In July of that year, the City of Gastonia acquired the assets of Gastonia Transit Company, creating the Gastonia Transit Department, which has operated the transit system ever since.

The City transit system consists of a fleet of seven passenger buses, five of which operate on regular schedules and routes at any one time, with the remaining two used for backup. The current routes and service areas are illustrated in Figure 3. Transit serves primarily persons without cars or individuals who cannot drive due to age or infirmity. This population consists of 12-13% of the total City population with approximately 25% of the population considered to be transit dependent.

A driving force behind the modernization of Gastonia's transit systems is the Americans With Disabilities Act of 1991 (ADA). The ADA guarantees access to public facilities to all persons and mandates sweeping physical changes in order to eliminate barriers. Many of the changes to the transit system have eliminated barriers and expanded service to those with disabilities. For example:

- New buses are equipped with wheelchair lifts.
- The Bradley Station Transfer Point is fully accessible.
- The Bradley Station will improve the efficiency of the community-responsive van pool system.

To augment the existing transit fleet and the County's human service transportation, the City will soon be developing a "dial-a-ride" van service for the disabled in the community. The grants for the purchase of these vans have already been approved by the Federal Transit Administration and NCDOT. This "dial-a-ride" system could be eventually expanded to transport individuals from the less densely populated areas of the City to connect with the regular bus system.



The Bradley Station

The new Bradley Transfer Station is the focal point of the system, providing an all-weather terminal, public rest rooms and ticket sales. One of the national, state and local goals in transportation is to integrate such services in order to make them easier to use and more efficient. Thus, the Bradley Station was designed to enhance transit system integration and coordination. It can accommodate city buses, vans and intercity commuter buses in one location, simplifying transfers between the different modes of transit.

Gastonia's transit system, relies in part on the federal and state governments for operating assistance, as does every other public transit system in North Carolina. Continued assistance will be vital to maintaining service into the next century, especially if parking stays plentiful and gasoline remains cheap. As that situation persists, the riders of transit will continue to be only those who must depend upon it.

AIRPORTS

Gastonia owns a general aviation airport with a lighted and paved 3,500-foot runway. It is the busiest general aviation airport in North Carolina and it serves as a reliever for Charlotte-Douglas International Airport. Gastonia Municipal Airport is in a rapidly developing area of Gastonia, and it is approaching obsolescence. Modern corporate aircraft require a runway longer than the 3,500 feet provided at Gastonia Municipal Airport. Unfortunately, the opportunities for expanding the airport at its present site are both limited and costly. Furthermore, surrounding property owners are on record as opposing any additional expansion of the airport at its present site.

The best opportunity for a new airport appears to be a regional general aviation airport developed in conjunction with Cleveland County. This proposal, which would include adjacent industrial space for just-in-time delivery and assembly, could be used for regional economic development as well as local air transportation needs. An airport of this kind is envisioned to have a 5,500-foot runway and be

located in the vicinity of Cherryville, Bessemer City and Kings Mountain. A modern airport is critical to maintaining and improving Gastonia's competitive position within the region.

Gastonia has better access to Douglas Airport than most cities in the Charlotte region have. Charlotte-Douglas Airport is used by USAir as a hub in its national flight network, giving Gastonians access to about 500 daily flights to cities throughout the United States and several international destinations.

CITIZENS ADVISORY COMMITTEE FOR SURFACE TRANSPORTATION

The Citizens Advisory Committee on Surface Transportation was formed by City Council in June, 1985 to study Gastonia's road needs and recommend solutions to surface transportation problems. The Committee initially recommended a \$5 million bond issue for roads, passed in 1986, and later recommended an additional \$35 million bond issue, which the voters of Gastonia approved in 1990. The bond money will fund road widening, intersection improvements, new construction of roads, sidewalk construction and right-of-way acquisition.

The committee selection process for surface transportation projects focused on projects that could be funded and completed within two to seven years, that could make the greatest use of the limited funds, and projects that could be leveraged with additional state funding. A list of improvements is given in the Objectives and Tools section of this chapter.

TRANSPORTATION PLANNING

Transportation planning in Gastonia and Gaston County has long been a regional undertaking. The Gaston Urban Area Metropolitan Planning Organization (MPO) was established in 1974. It is a partnership of the City of Gastonia, Gaston County and 10 other towns and cities in the urbanized area surrounding Gastonia. The City of Gastonia serves as the lead planning agency for the MPO.



Gastonia Municipal Airport

Another agency that advances regionalism in transportation planning is the State of North Carolina Department of Transportation (NCDOT), which serves as an important partner to the MPO, assuming primary responsibility for all traffic and environmental modeling for local transportation studies.

The guide for transportation improvements is the Gaston Urban Area Transportation Plan which consists of the:

- *Thoroughfare Plan*, the highway element of the plan that was developed locally and was adopted in 1991.
- *Transportation Development Program*, the mass element of the plan is also developed locally and was revised and adopted in 1993.
- *Congestion Management Plan* is required by federal law and is developed and revised by NCDOT in coordination with the local area. This plan is to be completed by 1995.
- *Bicycle and Pedestrian Movement Plan*. A bike map and new bike routes are to be developed by NCDOT and local staff by the end of 1995. The local staff will be developing a bikeway plan by the end of fiscal year 1995.
- *Collector Street Plan* that coordinates the development of collector streets in the urban area. Although a formal plan has not been adopted some coordination has been possible through review of site plans urban wide.
- *Transportation Improvement Program*. NCDOT and MPO staff review bi-annually the traffic and transportation needs for the entire urban area.

The MPO uses models developed by NCDOT to evaluate the road system. The priorities for improvement and upgrading of roads are then incorporated within the Transportation Improvement Program.

Transportation plans are analyzed locally by monitoring the growth patterns in the local area and maintaining computer inventories of population and economic development. All of the towns and cities in the urban area, except two, have placed into their subdivision and zoning ordinances the requirement that MPO staff review site plans prior to approval. MPO review allows land use and development to be coordinated with transportation plans, preserving corridors and saving time, money and frustration over the long run.

REGIONAL TRANSPORTATION

Gastonia's transportation system does not stand alone. Rather it is the means by which the entire region is linked and unified. Solutions to our transportation needs are increasingly being proposed on a regional basis. The MPO's of the area have had a dialogue for years on an informal basis. Common concerns such as clean air, improvement of thoroughfares, and mass transportation issues have been addressed through cooperation between the MPO's.

Charlotte has taken an important role in improving cooperation and developing solutions with the formation of the Committee of 100. This group is a Charlotte based committee that has reached out and included the cities and counties surrounding Mecklenburg to develop proposals for surface transportation, land use and regional mass transit.

A key recommendation of the Committee of 100 is to pursue a region-wide transportation and land use strategy. This strategy, known as "Centers and Corridors," builds upon the strengths of the Charlotte region, namely the radial transportation network and the tremendous infrastructure investments already in place in the cities and towns of the region. By emphasizing high density corridors between Charlotte and the major ring cities (Gastonia, Rock Hill, Concord, Mooresville and Monroe), persons living near the corridors will have easy access to the radial routes leading to and from Charlotte. Addi-

tionally, the higher population density within the corridors will increase the feasibility of regional mass transit and in the future, light rail transit. Another advantage of the corridor strategy is that it builds upon the infrastructure investments already made, rather than investing in a completely new infrastructure on a rural site.

As the name implies, the “Centers and Corridors” strategy is committed to the cities of our region, particularly Charlotte and the large ring cities such as Gastonia. Again, the great investment in infrastructure is already on the ground in these places, and the regional strategy would capitalize and build upon this investment.

Development of the “Centers and Corridors” regional strategy is likely to have far reaching influence on the region’s transportation system, with investment in transportation directed toward the region’s strengths rather than away from them. Realization of the “Centers and Corridors” strategy would bolster Gastonia’s position as the region’s Second City.

A proposed metro area roadway plan developed by the Committee of 100 is shown in Figure 4 . Prominent on this map are the US 321/74 bypass, the US 321 link to Hickory, and a proposed major road link between Gastonia and the Lake Norman area.

Metro Area Roadway Plan

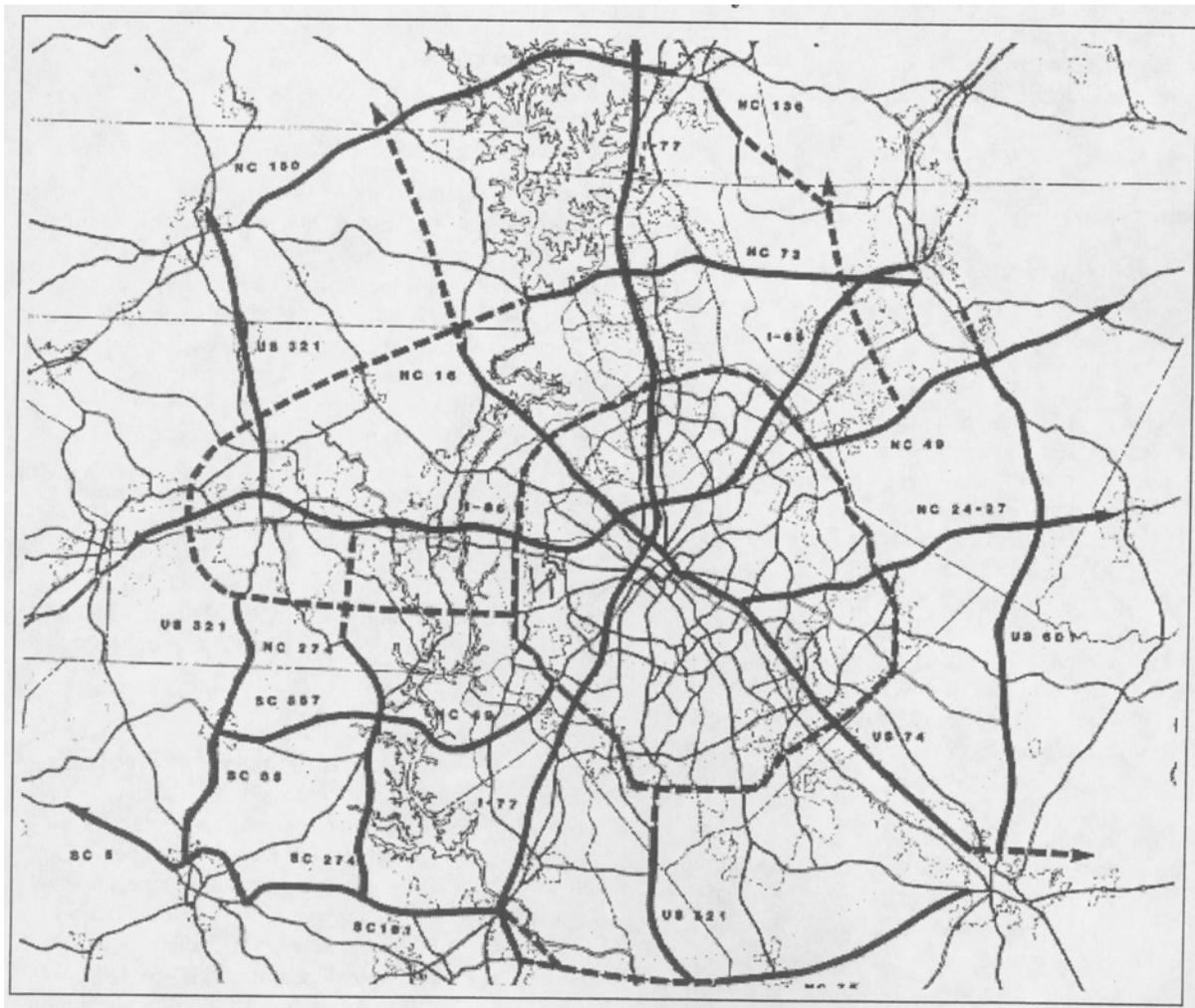


Figure 4

ISSUES

1. Transportation improvements are needed to better connect Gastonia to other cities in the region, particularly Charlotte. An additional bridge over the Catawba river will be needed because of increases in traffic on Interstate 85 and US 74, neither of which can be widened any further.
2. The separation of industrial, retail and residential land uses in Gastonia, sometimes distant from one another, tends to increase the amount of travel required for persons to work, go to school, shop and conduct their daily business.
3. The Gastonia airport is approaching obsolescence, due to inadequate runway length, traffic congestion and encroaching development. A new airport is important both locally and regionally, as our airport is a reliever for the Charlotte-Douglas Airport.
4. Transportation planning decisions are increasingly driven by their impact on air quality. Gaston and Mecklenburg Counties are evaluated as a single entity with regard to air quality. Thus transportation decisions made both here and in Charlotte will affect both the regional air quality and any restrictions imposed by the Federal government to further improve the situation.
5. Many of the State-maintained streets in the 2010 Planning Area do not meet State minimum standards for width. The State standard is twelve feet per through lane. Many of the thoroughfares in the area have nine to ten foot lanes.
6. The number of roads in Gastonia that need to be built or improved is increasing as the State of North Carolina's willingness to fund such projects is decreasing.
7. Other Federal measures such as the Americans with Disabilities Act (ADA) will increasingly influence transportation planning decisions in Gastonia.
8. Aside from its street system, Gastonia has few accommodations for bicycles. Gastonia's thoroughfares are in some places too fast, narrow and heavily trafficked to be safe for cyclists.
9. The only practical way to travel between Gastonia and Charlotte, the regional business and service center, is by private automobile, and the majority of those trips are made by persons driving alone.
10. Urban sprawl development greatly increases the cost and reduces the efficiency of Gastonia's transportation system. The miles traveled increase at a greater rate than the population and tax base do, and mass transit becomes less effective in serving the public.
11. Gastonia's zoning policies have allowed the development of continuous commercial strips, often with small lots and multiple driveways. Roads with strip development cease to function as efficient thoroughfares.
12. Downtown Gastonia is no longer the primary business center for the City and County. The suburbanization of work and shopping reduces the effectiveness of mass transit in meeting the transportation needs of workers and shoppers.

OBJECTIVES AND TOOLS

Objective 1: *Implement the Gaston Urban Area Thoroughfare Plan within the Gastonia 2010 Planning Area.*

- 1-a)** Establish a right-of-way authority in conjunction with other Gaston County cities. The authority could pool money and purchase critical rights-of-way in danger of closing due to development pressures.
- 1-b)** As areas at the fringe of Gastonia become urbanized, upgrade the thoroughfares to meet current standards and install curb and gutter.
- 1-c)** Work with the local legislative delegation to revise the State's Highway Equity Formula and Highway Trust Fund to increase the amount of road dollars that come to Gastonia and Gaston County.
- 1-d)** Implement the projects recommended by the Metropolitan Planning Organization and Citizens Advisory Committee on Surface Transportation as shown in Figure 5.
- 1-e)** Ensure the implementation of the local road improvement projects on the North Carolina Transportation Improvement Program 1995-2001, as shown in Figure 5.
- 1-f)** Implement the projects in the 2010 Planning Area that are on the Gaston Urban Area Local Needs List as shown in Figure 5.
- 1-g)** Update the Thoroughfare plan by 1997.

Objective 2: *The impact of land use on the transportation system should be always be evaluated when plans are adopted and policy decisions are made.*

- 2-a)** Development that caters to the transit-dependent population (e.g. elderly, disabled or disadvantaged persons) should be located on or within walking distance of a bus route, unless private on-site transportation services are provided.
- 2-b)** Implement land use policies to restore downtown Gastonia, the focus of the transit system, as a destination rather than just a transportation junction.
- 2-c)** If light-rail transit becomes a likelihood by 2010, designate a mixed use, high density zone around the future rail station(s).
- 2-d)** Portions of the 2010 Planning Area with utility service should have permitted housing densities of 3 to 4 units per acre or higher. Large lot zoning should be reserved for land that will not have utility service.

Policy References

Transportation: 2-j, 3-b

Economy: 4-c; **Land Use:** 4-g

Natural Environment: 1-c;
Land Use: 4-g, 6-c

Transportation: 3-c;
Built Environment: 4-c;
Land Use: 3-d, 4-g, 6-e

Housing: 1-a;
Natural Environment: 1-f, 2-d

FIGURE 5 AUTHORIZED AND PLANNED TRANSPORTATION CONSTRUCTION

City of Gastonia Bond Projects

Widening of Existing Roadways

Road	From/To	Lanes
Airline Ave	Franklin to Chester	3 lanes
Hoffman Rd	Robinwood to Duke	4 lanes
Marietta St	Franklin to 6th	3 lanes
Neal Hawkins	Union to Valleywood	3 lanes
Redbud Dr.	New Hope to City Limits	3 lanes
Robinwood Rd.	Union to New Hope	4 lanes
Union Rd.	Rivermont to Niblick	5 lanes
Union Rd.	4th to 6th	5 lanes

Intersection Improvements

Intersection	Widening
Bess. City Rd & NW Blvd	NB & WB approaches
Franklin Blvd & New Hope Rd.	SB approach
Linwood Rd & 5th Ave	NB approach
New Hope & Robinwood Rd.	NB & SB approaches
2nd Ave & Chestnut St.	EB & WB approaches
York Road & Clyde St.	NB & SB approaches

Realignment & New Construction

Project	Construction
Chestnut St.	New Alignment
Efird St.	New two-lane road
Garrison & Marietta	Realign & widen NB & SB
Linwood & Myrtle Sch. Rd.	Widen all 4 approaches

Right-of-Way

Corridor	From/To
Hudson Blvd.	Davis Pk. to 74 Bypass
Linwood Rd.	East Dr. to Hudson Blvd
Linwood Rd.	East Dr. to Franklin Blvd

Sidewalk Construction

Locations to be determined

NCDOT Seven-Year Transportation Improvement Program (TIP)

Project	From	To	Lanes
I-85	US 29/74	Main St	6
I-85	(At Main St)		New Interchange
US 321 Bypass	S of Gastonia	N of Gastonia	New Freeway
Hudson Blvd	US 321	New Hope	4 (New Road)
Bessemer City Rd	Franklin	NC 275	5
New Hope Rd	Ozark	NC 275	5
Cox Rd Ext.	Duke St	Armstrong Park	New Sections
Linwood Rd	East Dr.	Crowders Creek	Realign
US 74 Bypass	NC 279	NC 160 in Meck. Co.	New Road

Local Priorities for Placement on the TIP (Not Funded)

(In Order of Priority)

Project	From	To	Lanes
Widen Myrtle School Rd	Franklin	Hudson	3
Widen Bessemer City Rd	NC 275	Maine	5
Widen Linwood Rd	Franklin	Chronicle	4
Widen US 321	Tenth	Davis Pk	5
Widen New Hope Rd	Burtonwood	Garrison	5
Southern By-pass of US 29/74	US 29/74 West	Catawba River	Frwy
Realign Linwood Rd	Chronicle	White Ln	New Rd
Widen Cramerton Rd	US 29/74	Lowell-Bethesda	4
Widen Beaty Rd	Union	US 29/74	5

- 2-e)** Large regional shopping centers should be supported by at least two major thorough-fare streets, and located so that they do not cause traffic back-ups onto freeways. **Land Use:** 6-b
- 2-f)** Where possible extensions of water and sewer trunk lines should be coordinated with road improvements in the seven-year Transportation Improvement Plan (TIP). **Economy:** 5-e; **Housing:** 5-e; **Natural Environment:** 2-b; **Annexation:** 2-c, 3-b
- 2-g)** Approval of major traffic-generating developments through rezoning or conditional use should be granted only if the road capacity is in place or improvements are scheduled within the scope of the seven year TIP. **Economy:** 5-a; **Land Use:** 5-d
- 2-h)** Improvements to and new construction of roads should be routed and designed to minimize negative impacts on established neighborhoods. **Housing:** 8-e
- 2-i)** The transportation system should be structured to encourage through traffic on thoroughfares and discourage it on collector and local streets. **Housing:** 8-a, 8-b
- 2-j)** Consider seeking or establishing alternative funding sources for road-way improvements. **Transportation:** 1-a
- 2-k)** The City’s parking requirements should include adequate, safe and convenient bicycle parking for institutions and businesses that can reasonably be reached by bicycle. **Transportation:** 6-d, **Natural Environment:** 1-e
- 2-l)** Remove regulatory barriers to quality infill housing in central city neighborhoods that already have their transportation infrastructure in place. **Housing:** 2-e, 5-f
- 2-m)** Create “traditional neighborhood” zoning tools that emphasize small lots, mixed uses, and shops and services within walking distance. **Housing:** 1-a, 1-b, 5-b, 5-f; **Natural Environment:** 1-g; **Land Use:** 3-c, 3-d, 4-g, 6-f
- 2-n)** Driveway accesses, particularly residential, should be made from collector or secondary streets instead of opening directly onto thoroughfares.
- Objective 3:** *Strengthen Gastonia’s connection to the regional transportation network.*
- 3-a)** Support the creation of a regional transit authority and the establishment of rush-hour bus service to Charlotte. **Transportation:** 3-c, 3-f; **Natural Environment:** 1-d
- 3-b)** Plan for and reserve the right-of-way for the 321/74 Bypass. **Economy:** 2-e, 5-c; **Housing:** 5-h; **Transportation:** 1-a, 3-d; **Built Environment:** 1-f
- 3-c)** Protect the right-of-way for a light-rail corridor to the Charlotte-Douglas Airport and downtown Charlotte. **Transportation:** 2-c, 3-a; **Natural Environment:** 1-d; **Recreation:** 4-f

3-d) Develop a cooperative effort with Gaston County to protect the right-of-way of the 321/74 Bypass corridor.

Economy: 5-c; **Housing:** 5-h;
Transportation: 1-a, 3-b;
Built Environment: 1-f

3-e) Support and promote the “Centers and Corridors” concept for the future shape of the Charlotte urban region.

Land Use: 4-f

3-f) Work with the State of North Carolina to evaluate the need for a restricted lane (buses, carpools) on Interstate 85 by 2005.

Transportation: 3-a, 5-c

Objective 4: *Enhance the visibility and public image of the Gastonia Transit system.*

4-a) Develop and maintain accurate and easy-to-use informational materials.

Economy: 1-d, 1-e;
Housing: 2-a; **Land Use:** 4-a

4-b) Implement a marketing program that makes the public aware of the existence and advantages of transit service.

4-c) Stations, bus stops and buses should be attractive and distinctively identified with the transit system. Shelters should be provided at major bus stops.

Transportation: 6-f, 6-g;
Natural Environment: 1-c

Objective 5: *The City should take the lead in reducing the level of ozone pollution 15% by 1996.*

5-a) Gastonia should explore creating a City vehicle fleet that uses clean fuels. New non-emergency City vehicles could be outfitted to use clean fuels at a low cost.

5-b) The City, in partnership with a private utility, could establish a central refueling station for natural gas and LP gas.

5-c) Gastonia should lead in the development of park and ride and van-pool programs to supplement the mass transportation programs already provided. The City should also work to improve private sector participation in carpooling and van pooling.

Transportation: 3-f

5-d) Cost-effective transportation system management (TSM) techniques should be implemented to maximize road capacity and improve traffic flow and safety. TSM improvements include: exclusive turn lanes, reversible lanes, and other measures that improve efficiency without major new construction.

5-e) Periodically review the need for existing traffic signals at minor intersections.

5-f) Gastonia should work with the legislative delegation to increase the amount of mass transit funding for cities in North Carolina.

Objective 6: *Assist the development of pedestrian and bikeway systems for*

both recreation and transportation purposes.

- 6-a)** Develop a policy and plan for sidewalk construction with an eye toward more and better walkways. The sidewalk policy will cover sidewalk construction funded by the City and sidewalk construction in new development. Moreover, the sidewalk policy will determine the location and priority of new sidewalks on street projects constructed by the City. **Land Use: 7-a**
- 6-b)** All urban bridge projects should include at least one sidewalk.
- 6-c)** Sidewalks should be constructed in manner that feels safe for the user, particularly on busy streets. Sidewalks should be separated from the traffic lanes, either by on-street parking or a planting strip.
- 6-d)** Prepare and implement a bikeway plan that designates and marks safe, efficient and pleasant routes for bicycle travel within the Gaston urbanized area. **Transportation: 2-k;**
Natural Environment: 1-c
- 6-e)** Where greenways are built, they should be built with a transportation function in mind. Greenways can thus be used to connect to sidewalks and bikeways. **Natural Environment:**
1-e, 3-b, 3-c, 6-a
- 6-f)** Transit stations and stops should be reachable from sidewalks, greenways or bikeways. **Transportation: 4-c**
- 6-g)** Examine the feasibility of coordinating and linking Gastonia Transit with bikeways and bike users. **Transportation: 4-c**

PUBLIC UTILITIES

GOAL *Water and sewer systems which provide a high quality of service to all development in the existing service areas at the lowest self-supporting cost. Further, systems should be able to support new growth and economic development consistent with the Comprehensive Plan, and be environmentally safe. Our City electric system should deliver quality service at costs comparable to private utilities while providing revenues to help support other City services.*

BACKGROUND AND TRENDS

WATER SUPPLY

The City of Gastonia has operated water treatment and distribution systems since the 1920's. The initial water supply source was Long Creek, with an adjacent two-acre raw (untreated) water reservoir. The water treatment plant has been at its present location on Long Avenue since that time. Later in the 1920's the City built Rankin Lake, an 80-acre, 275 million gallon reservoir. The supply source continued to be Long Creek until 1954, when a severe drought forced the City to turn to the South Fork River as a temporary source of water. The following year, the South Fork became the primary source of raw water after a pump station and 36-inch main were built. In the 1970's a second pump station was built and a parallel 36" main was laid between the station and Rankin Lake.

The City's water system has a 27.3 million gallons per day (MGD) treatment capacity, with an average maximum daily use of 19.3 MGD. The water system has a fire flow capacity of 7,500 gallons per minute (GPM) or 10.8 million gallons per day (MGD). The water distribution system consists of approximately 300 miles of pipe line and 8 million gallons of elevated storage.

The City currently serves the cities of Lowell, McAdenville, Ranlo and Cramerton with treated water. The City also has water system interconnections with the cities of Dallas, Bessemer City, and Belmont for use in emergency situations.

During the early 1980's it became apparent that the South Fork River was becoming polluted and costs for treating the raw water were becoming more and more expensive. Also during this period, it became conclusive that the South Fork River was unable to provide the quantity of water required by the demand on the City's system. This was especially apparent during drought conditions. These circumstances led the City to begin looking for a new raw water source that would not only provide the *quantity* of water to meet the demands of the City's system, but would also be a *quality* source of raw water that could be protected from the pollutants which had degraded the South Fork River source.

In 1986, a Raw Water Supply Study was prepared for the City. One of the principal recommendations of the study was that the raw water supply be shifted from the South Fork River to Mountain Island Lake. The lake, which forms part of Gaston County's eastern border, has significantly better water quality than the South Fork. Mountain Island Lake will also be a more reliable source than the South Fork, as it doesn't have the South Fork's flow problems during summer droughts.

MOUNTAIN ISLAND LAKE

In 1986, the voters of the City approved a \$14,000,000 General Obligation Water Bond Issue, \$4.4 million of which was used to finance the construction costs for a raw water pumping facility and the acquisition of rights-of-way for approximately ten miles of raw water transmission lines from Mountain Island Lake to Gastonia. The remaining \$9.6 million of the General Obligation Water Bond funds were used to upgrade and expand the City's water distribution system.

In 1993, the City issued a \$13,675,000 General Obligation Water Bond to finance the actual construction of the raw water transmission lines and the installation of raw water pumps and electrical equipment at the raw water pumping facility. Construction of the raw water transmission line and installation of the raw water pump equipment began in October 1993, on time and under budget, and is expected to be completed in May, 1995. At that time, Mountain Island Lake should be on line as the City's new raw water supply source. Figure 1 shows the location of the new Mountain Island Lake intake and new raw water main.

The initial phase of the Mountain Island Lake project is designed to convert the principal raw water supply source from the South Fork River to Mountain Island Lake. This new source will supply the existing water treatment plant as well as a proposed new water treatment plant to be constructed in Phase II.

Mountain Island Lake is a man-made lake that was formed by damming the Catawba River between Lake Norman and Lake Wylie. The Lake covers an area of about 3,300 acres, and it stores about 6.3 trillion gallons of water when filled to capacity. The watershed, or drainage area, for Mountain Island Lake covers 1,819 square miles. The Lake's high water quality is mainly due to two factors: First, Lake Norman acts as an enormous settling basin, removing pollutants before the water flows into Mountain Island Lake. Second, the Mountain Island Lake watershed contains relatively few point and non-point sources of pollution. Point sources come from specific locations, such as wastewater treatment plants, while non-point sources come from all over, such as runoff of fertilizer, pesticides or oil from roads.

Watershed protection is a controversial issue in North Carolina at this time. A *secure and protected watershed is the best and only guarantee* that it will even be possible to meet increasingly stricter drinking water standards. In addition, the cost, technological complexity and effectiveness of drinking water treatment is a direct function of the water being treated. Poor sources of water can be five to twenty times more costly to purify than good sources. Further, the technological complexities of treating very poor water could well go beyond the capacity of affordable equipment and personnel, and compliance with water quality requirements could become unattainable. Therefore, maintaining the quality of the water supply will provide a tremendous long-term savings.

Some further development of the Mountain Island Lake watershed appears to be inevitable. Recreational development does not appear to be a serious contributor to the denigration of water quality. Intensive residential and commercial development, however may not be as benign. Lake Wylie has shown some serious harmful effects due to receiving increasing pollutant loads from the growing populations of Mecklenburg, Gaston and York Counties. The level of development allowed in the Mountain Island Lake watershed by a WS IV classification will tend to lead to the type of conditions now seen in Lake Wylie.



Mountain Island Lake is the cleanest water supply in the region and the source of Gastonia's drinking water.

The Mountain Island Lake watershed is outside the jurisdiction of Gastonia, and the City now relies on the State and the local authorities (mainly, Gaston, Mecklenburg and Lincoln Counties) with jurisdiction over the land to regulate development within the watershed. It remains to be seen whether State controls on the development of the watershed will adequately protect the water quality of Mountain Island Lake. The City of Gastonia cannot simply rely upon others to act on the behalf of our citizens as the decisions are made about the development of the Mountain Island Lake watershed. It is the responsibility of the City of Gastonia to do whatever is necessary to protect our citizens and our interest in Mountain Island Lake. The City must be an active player in obtaining land use controls for Mountain Island Lake which are more comprehensive than the guidelines required under the WS IV classification.

WATER TREATMENT AND DISTRIBUTION

Rankin Lake's 275 million gallons provides a 17-day supply of water if the lake could be drained completely. The usable supply, however, is limited to about 8 days due to sedimentation and algae growth in the lake. The estimated pumping capacity of the Rankin Lake pumping facility is 31 million gallons per day (MGD).

The water treatment plant was expanded in 1988 to its current capacity of 27.3 MGD. The treatment plant currently averages 17-18 MGD, with peak flows of 21-22 MGD. When the raw water supply is converted to Mountain Island Lake, the cleaner water from this source could increase the treatment plant's capacity up to 10% because less filter area will be required for each gallon of water treated.

Based on the projected annual growth rate of 1.5%, it is anticipated that this increase in the treatment capacity of the existing water treatment plant will need to reach at least 30.3 MGD by 1998 to meet anticipated summer peak demands. With continued growth at the anticipated rates, additional treatment facilities will be needed by 2007 in conjunction with the Phase II Mountain Island Lake project. These facilities include:

- Construction of a new state-of-the-art water treatment plant with a capacity of 10 MGD that will supplement the existing water treatment plant in downtown Gastonia.
- Construction of a new finished water facility, including pumps, finished water transmission lines, ground and elevated storage facilities designed to integrate the treated water from the new water treatment plant into the water distribution system.

Subsequent phases of development beyond the initial 20 year period of implementation for Phase I and II, will revolve around expansion of the 10 MGD water treatment plant. These improvements will include:

- Incremental increases in capacity of the new water treatment plant to a maximum capacity of 75 MGD.
- Eventual phasing out of water treatment functions at the existing downtown water treatment plant, but still utilizing this facility as a clearwell storage facility and finished water pumping station.
- Upon transfer of water treatment functions to the Mountain Island site, the raw water mains between the two water treatment plants will become finished water transmission lines.
- Installation of additional raw water pumps at the Mountain Island Lake pumping facility.
- New parallel raw water transmission mains from Mountain Island Lake to the new water treatment plant.
- Major expansions to the finished water distribution system to serve parts of the City of Gastonia and the potential to serve major portions of Gaston County.

The City's water distribution system was evaluated by Pitometer Associates Engineers in 1985. The study identified three goals for the City's water distribution as it expands:

1. Adequate flows for fire-fighting purposes;

2. Provision for industrial and commercial consumption;
3. Provision for domestic consumption, including summer sprinkling loads.

Many of these projects have now been completed and reflect approximately \$3.8 million dollars in new water line investments—nearly half the total cost of the 1985 recommendations.

The City of Gastonia has an unusually high level of water consumption, approximately 250-300 gallons per person per day. This is almost twice the rate for Charlotte, and it is due to the presence of several industrial users that consume large amounts of water. Gastonia has about 20,000 water customers, but the ten largest, “wet industry,” customers use about 41% of the water. Pitometer projected in its study that the per capita level of consumption would increase to 286 gallons per day by the year 2000

Water conservation, especially among the wet industries, can have a significant impact on the amount of water that the City will be required to deliver in the future. Increases in both population and the geographic limits of the service area will bring more customers into the City’s system. Consolidation of water service with the surrounding towns and/or the County will do the same. Since the City’s financial return on major treatment improvements can be dependent upon continued consumption by certain key wet industries, it would appear that minimum purchase level contracts would be appropriate where such industrial constructions and expansions cause the need for water supply increase.

The City’s water and sewer service areas are shown in Figure 1.

The 1986 Raw Water Supply Study and its 1992 update projected that a moderate amount of growth, consolidation of systems, and an increase in the service area would result in an average daily use of 41 million gallons with a peak requirement of 75 million gallons by the year 2050.

WASTEWATER



Water line rehabilitation

The area served by the City of Gastonia wastewater system is located in four major drainage basins:

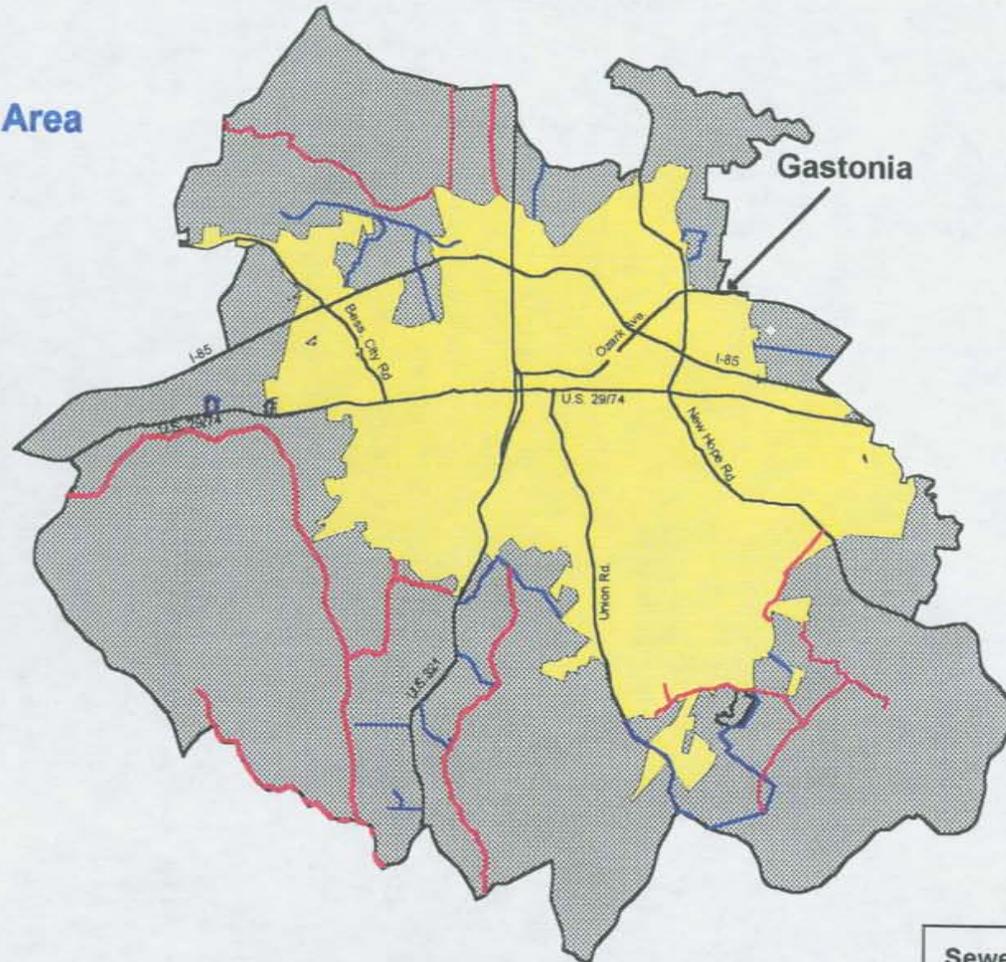
1. *Long Creek*, generally north of the Southern Railroad
2. *Crowders Creek*, generally south of the Southern Railroad and southwest of a line running from Linwood Road to Spencer Avenue to Carolina Avenue to York Road to Neal Hawkins Road.
3. *Catawba Creek*, generally south of the Southern Railroad and located between the Crowders Creek basin and New Hope Road.
4. *Duhart Creek*, generally south of the Southern Railroad and east of New Hope Road.

Railroads and major thoroughfares provide an easy identifier of the boundaries because in Gastonia they run along the ridges which separate the drainage basins. Crowders Creek and Catawba Creek flow into Lake Wylie; Long Creek and Duhart Creek flow into the South Fork River. Sewage in the Duhart Creek basin is pumped to the Catawba Creek wastewater treatment plant. The other three drainage basins each have a wastewater treatment plant of the same name. Because sewer systems operate most efficiently by gravity, the locations of sewer mains and treatment plants are generally at the bottom of a basin. Since pumping the sewage over a ridge from one basin to another is costly, the drainage basin generally serves as the service area for each of the treatment plants.

TREATMENT FACILITIES

City Water & Sewer Areas

2010 Planning Area



Sewer Outfall	
Water Lines	
City of Gastonia	
2010 Planning Area	

The oldest of the treatment facilities is the Catawba Creek plant, built in 1957. The present capacity of the plant is 9 million gallons per day. Prior to the opening of the Crowders Creek Plant the facility was operating in excess of 90% of capacity, and it cannot be expanded beyond the present 9 MGD.

The Long Creek Wastewater Treatment Plant is located on Long Creek approximately 1.5 miles upstream from the South Fork River. It was constructed in 1964 and has a present capacity of 8 million gallons per day. Contracts for expansion of the Long Creek Plant will be awarded in March 1995 with construction to be completed in 1997.

The Crowders Creek plant is the newest of the wastewater treatment plants, built in conjunction with Gaston County and the City of Kings Mountain and opened in 1992. Its present capacity is 6 million gallons per day, and it has been used to relieve some of the load on the other two plants and to eliminate one outdated plant in Kings Mountain. Wastewater that was previously pumped out of the Crowders Creek basin and into the Catawba Creek and Long Creek basins is now being handled within the Crowders basin. Eventually, the limits placed on the Catawba plant may require that the City pump sewage from the Catawba basin to the Long Creek basin.

Prior to the opening of the Crowders Creek plant, the Long Creek plant was running at an average of 7.5 million gallons per day, using 94% of its capacity. The Catawba Creek plant was even more overloaded, with average flows of 9.05 MGD, which is an overload situation. The opening of the Crowders plant has provided some relief, with flow reduced to 6.9 MGD at Long and 7.5 MGD at Catawba, using 86% and 83%, respectively, of the capacity. The Crowders plant is already using nearly 70%. Therefore it is apparent the over all system must be further expanded if additional growth is to be accommodated.

UTILITIES AND GROWTH PATTERNS

The Catawba Creek wastewater plant capacity is a critical issue for Gastonia because the Catawba basin is the location of the City's two major growth axes, southeast along Union Road and New Hope Road. With developments such as the Daniel Stowe Botanical Gardens and the US. 74 Bypass enhancing

growth, pressure for increased sewer capacity in the basin will remain an issue into the next century.

Because sewer service is essential to urban-density growth, the location of sewer mains will determine the pattern of growth at the fringes of Gastonia.

TREATMENT PROCESSES

Treatment of wastewater occurs in three stages. Primary treatment involves the removal of 30-35% of the organic pollutants and up to one-half of the solid material. Secondary treatment removes 80-90% of the organic pollutants and over 80% of the solids. Tertiary or advanced treatment removes specific contaminants from the wastewater, such as phosphate or nitrate. Currently the City uses secondary treatment at the Catawba and Long Creek plants and tertiary treatment at the Crowders Creek plant. Upon expansion to 16 MGD, the Long Creek plant will incorporate tertiary treatment processes. Industrial wastewater requires more treatment than does residential and commercial wastewater. Approximately 25 industrial users are required to pre-treat their wastewater in accordance with the city Sewer use and Industrial Pretreatment Ordinance before discharging it into the sewer system. Continued enforcement of this requirement will help the city achieve its wastewater quality goals in the future.

The Federal Clean Water Act will require Gastonia to adopt additional tertiary treatment procedures in the near future. The final goal of the federal program is that the water discharged must be as clean or cleaner than the water in the receiving stream.

Gastonia regularly performs preventive maintenance of its sewer collection system. The City has an on-going evaluation program to upgrade old sewer systems which are subject to excessive inflows and infiltration. These flows during heavy rains when combined with wastewater flow may exceed the actual treatment plant capacities

The City has taken steps to identify some of the oldest and most susceptible outfall lines in Gastonia. Current capital plans call for the rehabilitation and/or replacement of these major outfall lines over the next five years to help alleviate some of Gastonia's Inflow/Infiltration problems.

FUTURE EXPANSION NEEDS

Utilizing the current per capita flow for each basin, the total capacity required by the City of Gastonia in the Year 2013 is expected to be 45.5 MGD. This breakdown includes Long Creek at 18.3 MGD; Catawba Creek at 13.7 MGD, Duhart Creek at 5.2 MGD; and Crowders Creek at 8.3 MGD.

Under the 201 Facilities Plan, the Phase I improvements are divided into three groups of projects. Included in the group 1 projects of the Group 201 Plan are:

- Upgrade and expand the Long Creek Wastewater Treatment Plant from 8 MGD to 16 MGD. Estimated Cost = \$29,321,435.
- New 54-inch Long Creek outfall and construction of a static aerator to extend 8,800 feet to the new discharge point at the South Fork River. Estimated Cost = \$1.13 million.

The Group II improvements and the estimated costs of each are more particularly described as follows:

- Expansion of the Duhart Creek Pump Station from 6.5 MGD to 10 MGD to divert the existing flows from Catawba Creek Wastewater Treatment Plant to Long Creek Wastewater Treatment Plant. Estimated Cost = \$1,598,040.
- New 24-inch Duhart Creek Force Main from the Duhart Creek Pump Station north approximately 22,500 feet to Ozark Avenue. Estimated Cost = \$2,048,760.
- New 36-inch Dillard Creek Interceptor to pick up the flows from Duhart Pump Station via the new Duhart Creek Force main and extend north approximately 12,500 feet to Long Creek Wastewater Treatment Plant. Estimated Cost = \$1,126,425.

- Catawba Creek WWTP toxicity mitigation measures. Estimated Costs \$1.7 million.

Group III projects are as follows:

- New 48-inch Long Creek Interceptor and new 24-inch Rankin Lake Outfall to extend approximately 40,000 feet which will parallel existing outfall lines to bring in new flows from the west to Long Creek Wastewater Treatment Plant. Estimated Cost = \$3,998,550.
- New 24 inch Duhart Creek outfall to extend approximately 12,000 feet from U.S. 29/74 to the Duhart Creek Pump.

The City of Gastonia's wastewater system was, for the most part, designed to meet its own wastewater collection and treatment needs. The construction of the Crowders Creek facilities deviated from this insular approach in that they were designed as regional facilities to treat not only the city's own expanding needs but also serve other areas within Gaston County. Regionalization of wastewater facilities is a growing trend to be encouraged since it means the elimination of small inefficient systems for better centralized management, lower costs and subsequently more effective environmental protection.

To meet Gastonia and Gaston County's growth requirements from 1993 to 2013 will require significant capital improvements. The selected plan will require major treatment improvements to meet growing stringent effluent limits as well as additional treatment capacity to meet the anticipated growth. The extension of the system, coupled with the anticipated growth will require the system's treatment capacity to almost double from the existing 23 MGD to 45.5 MGD. Associated with the treatment plant expansion, the collection system will have to be expanded to convey the additional waste and to serve outlying areas not presently served.

ELECTRICITY

The City of Gastonia operates an electric system, buying power wholesale and distributing it to customers within the City. North Carolina law grants a supplier of electricity exclusive rights to sell to customers within 300 feet of an electric line. The City and other suppliers, such as Duke Power, generally do not compete with each other for the same customers. Rather, they each have exclusive territory determined by the location of their respective power grids.

Gastonia is completely surrounded by other suppliers of electricity, so opportunities for expansion of the power grid are limited. Since annexed areas are usually developed by the time they are incorporated into the City, they usually have some other electric utility. State law does not allow the City to take over electric service following annexation. For this reason many of the outer areas of the City do not buy their power from the City. In addition, the City is at somewhat of a competitive disadvantage to Duke Power because of excess power capacity at Municipal Power Agency One's unit at Catawba Nuclear Station, which supplies much of the City's power. Debt service for this nuclear unit, combined with the relatively low demand for electricity, has resulted in a need for a 5 to 6% increase in rates per year for the next five years. This puts the City at a competitive disadvantage to Duke Power, which can offer rates approximately 10% lower. All of these factors work against the expansion of the City's electric revenues.

Despite these problems, the sale of electricity still provides a significant portion of City's revenue base. This situation creates a problem regarding annexation. The City's property tax rate of 47 cents per \$100 valuation is too low to be the single major source of revenue for the City's budget. The shortfall is offset by electricity revenues. Newly annexed areas that do not buy power from the City only contribute property taxes and state-shared revenues. The result is a revenue imbalance, with the inner city residents bearing a greater burden than residents of fringe areas, because the inner city residents buy City electricity. This could be considered regressive because many of the low and moderate income areas are in the electric service

area, while many of the high income areas are outside the service area.

The City Electric Department continues the upgrade and expand the system through its Capital Improvements Program (CIP). In 1993, the City completed and put into service its tenth electrical substation, a \$1 million facility serving the rapidly growing east and south sides of the City. Included in the FY 95 through FY 99 CIP are the following projects:

- The installation of an additional 300 load management switches. Load management switches lower the cost of purchased power during peak periods. To date, the City has installed 6,000 load management switches throughout the system.
- Update substations, raise lines on poles, improve clearance to comply with most recent recommendations of ElectriCities. The City will do this work with contracted installation with City staff supervision.
- Program of reconductoring of circuits in areas of the City where lines are undersized. This will assist in restoring electrical service in cases of power outages. This work will be contracted installation with City staff supervision.
- Renovation of Central Business District electric lines. The overhead electric lines serving commercial buildings in downtown area will be put underground.



Overhead electrical lines in the York-Chester neighborhood

ISSUES

1. The Federal Safe Drinking Water Act, amended in 1986, will require the City to improve its treatment of water. Several constituents not considered to be a problem in the past now must be removed from the water.
2. Gastonia has a concentration of “wet industries” (businesses with large daily water requirements), which results in a daily consumption of water per capita of about 250 gallons. Water consumption per capita is unusually high in Gastonia compared to other cities in the region. Gastonia has approximately 20,000 water customers. The ten largest users consume approximately 41% of the water.
3. The problem with the South Fork River water source is being solved with the new intake station at Mountain Island Lake and accompanying 54 inch water line.
4. The Long Avenue water treatment plant is operating in excess of 70% of capacity. The plant’s capacity cannot be significantly expanded due to site limitations.
5. The City has begun to implement the recommendations of the Raw Water Supply Study of 1986 (updated 1992). Presently a pump station and intakes have been constructed on Mountain Island Lake, and land for a new treatment plant and right of way for water lines have been acquired. Bonds to complete the raw water line were approved in November 1992.
6. The Catawba Creek wastewater treatment plant cannot be expanded beyond its present 9 MGD capacity. Expansions in system capacity must take place at the Long Creek and Crowders Creek WWTP’s.
7. Construction of the Crowders Creek wastewater treatment plant has only temporarily relieved the overload of the sewer system. Further expansion of the Long Creek and Crowders Creek WWTP’s will be required to accommodate growth.
8. The Federal Clean Water Act, amended in 1986, mandates that the City improve the quality of its wastewater discharge. Water quality requirements will become tighter in stages throughout the next decade. In the future, the effluent must be as clean or cleaner than the water to which it is being discharged. Wastewater plant discharge limits are based on stream capacity as well as the treatment processes employed.
9. Industrial wastewater requires more treatment than residential wastewater. Approximately 25 industries are classified as “significant industrial users” and are required to comply with the City’s sewer use and industrial pretreatment ordinance and obtain discharge permits for their wastewater before discharging it to the sewer system.
10. Two types of waste stream are generated by treatment: the effluent and the sludge. Currently 100% of the sludge is disposed in liquid form via land application. New Federal guidelines require cities to examine other methods of sludge disposal. Some alternative methods of disposal are composting, incineration and co-disposal with solid waste. The city is currently evaluating the most cost effective method of waste disposal. The City is proposing to continue its land application sludge disposal program through the development of 700 acres at Pasour Mountain into a “resource recovery farm.”
11. Ground water inflow and infiltration into the sewer lines occurs throughout the year. It becomes a problem during heavy rains, when the increased flow of storm water and wastewater can exceed the wastewater treatment plants’ capacities. Inflow and Infiltration pose a greater problem on older mains, which are more porous and prone to breaks. The City has a regular, planned system of maintenance, with several miles of sewer line replaced every year.

- 12.** The extension of sewer lines is necessary for urban-density growth to occur. The decision to build sewers and the locations of the lines will therefore have a long-range impact on future land use in the City.
- 13.** The Crowders Creek wastewater treatment plant was built in conjunction with the City of Kings Mountain and Gaston County to serve the Crowders Creek drainage basin. The federal government favors this regional approach, and regional projects of this kind will be much more likely to obtain future funding than purely local wastewater projects.
- 14.** The sale of electricity is a major revenue source for the City. Opportunities for expansion of the power grid, however, are extremely limited. Most developed areas outside the city are served by Duke Power, and the City does not have the option of taking over service in those areas.
- 15.** Because electricity revenues do contribute substantially to the general fund, areas that do not buy electricity from the City contribute less to the revenue base.
- 16.** Current efforts are under way to correct over multiple years the problem of utility transfers. Recent tax increases from 42 cents to 47 cents per \$100 dollars valuation, combined with absorption of wholesale rate increases and actual decreases in industrial rates, should put the city in a more competitive position with Duke Power. This will mean that in future years the city will depend less upon electric utility transfers to finance other city functions.

OBJECTIVES AND TOOLS

Objective 1: *Complete the development of Phase I of the Mountain Island Lake water supply source.*

- 1-a) Install the initial phase of raw water pumps and associated equipment in the new Mountain Island Lake Water Pumping Station.
- 1-b) Construct a new 54-inch raw water transmission main from the pumping station to the site of the new water treatment plant site on State Route 1935.
- 1-c) Construct a new 48-inch raw water transmission main from the new water treatment plant site to the existing South Fork water main at State Route 2327.
- 1-d) Upgrade Rankin Lake to provide more usable storage capacity.

Objective 2: *By 2005, complete the development of Phase II of the Mountain Island Lake water supply source.*

- 2-a) Construct the new water treatment plant with an initial capacity of 10 MGD and an ultimate capacity of 75 MGD.
- 2-b) Construct a parallel 48-inch main from the new water treatment plant to the distribution system.

Objective 3: *Protect the Mountain Island Lake Watershed.*

- 3-a) Pursue the purchase of lands in Gaston County directly adjacent to Mountain Island Lake, with priority given to lands nearest our own intake.
- 3-b) Advocate WS II status for land adjacent to our intake structures and WS III status for the overall watershed with the stipulation that no new point source permits would be allowed.

Objective 4: *Assure adequate water supply for existing and expanded industrial, commercial and residential customers.*

- 4-a) The City, through its economic development efforts, should encourage the recruitment of new industries while supporting and maintaining the existing industrial base.
- 4-b) All industries should justify their need for allocations of water and sewer capacity. A system of flow allocation is now in place which requires justification for additional water and wastewater capacity.
- 4-c) Establish a method by which major industrial and municipal users are encouraged to “buy into” treatment facilities expansion to the extent that their expanded usage contributes to the needed expansion of facilities.
- 4-d) Develop incentives to encourage new customers to tie into the City

Policy References

Economy: 2-d

Natural Environment: 2-a, 2-e

water and sewer system. This is especially true where properties are adjacent to existing water and sewer lines.

- 4-e) Maintain compliance with the requirements of the Safe Drinking Water Act.

Utilities: 8-b

Objective 5: Upgrade and expand the City's water distribution and fire protection system.

- 5-a) Initiate the immediate update of the 1985 Pitometer distribution study.

Economy: 2-c

- 5-b) Complete the remaining construction projects recommended in the Pitometer study:

<u>Line/Location</u>	<u>Size"</u>	<u>Length'</u>
1. Rolling Meadow Ln/Niblick	12	1,600
2. 321 N. of I-85	16	5,000
3. Edgefield Ave.	12	500
4. Jenkins Rd.	12	5,200
5. Franklin fr. Garrison to Myrtle Sch. Rd/Myrtle Sch. Rd to Davis Pk. Rd./Davis Pk. to Hudson/Hudson to Lynhaven	12	12,500
6. Laurel Ln.	8	700
7. Beaverbrook Ln.	8	300
8. Briarwood	8	1,000
9. Ida St.	8	200
10. Robinson Rd./Little Mtn. Rd/Forbes Rd.	16	16,000
11. Kendrick Rd.	16	10,500
12. NC 275 fr. Vandenburg to NC 279/NC 279 fr. NC 275 to US 321	16	18,000
13. Vance St.(Garrison-Hooper)	8	1,800
14. Easement Line fr. Forest Dr. to Dawnshire Dr.	8	900
15. Duhart Ave.	8	800
16. Weldon	8	1,400
17. Vandenburg Rd./White-Jenkins Rd./NC 279	12	23,600
18. Vance fr. Garrison to W. 2nd/W. 2nd to Firestone/ Firestone St. & Blvd./to easement N. of Rankin	12	4,500
19. Franklin Blvd, Webb-Linwood	12	500
20. Franklin Blvd, Edgemont to Church	12	2,000
21. Hudson Blvd., Robinwood to Windyrush	12	2,000
22. Beaty Rd	16	20,600

Various short connections between major lines.

- 5-c) Develop a Geographic Information System to map and manage the water and sewer system, as well as support of the City Operations.

Objective 6: A phased and planned expansion of the City's wastewater collection system.

- **Phase I:**

Project	Length	Diameter
Long Creek Outfall(1)	8,000'	54"
Dillard Creek Outfall	12,500'	36"
Duhart Force Main	18,800'	24"
Duhart Creek Outfall	12,500'	24"
Long Creek Outfall(2)	22,000'	48"
Rankin Lake Outfall	18,000'	24"

• **Phase II:**

Crowders Creek Outfall	17,700'	30"
Crowders Creek Outfall	12,400'	18"
Crowders Creek Outfall	16,700'	15"
Bessemer City Outfall	5,000'	24"

• **Phase III:**

Little Long Creek Outfall	21,900'	18"
Little Long Creek Outfall	12,200'	15"
Outer Long Creek Outfall	11,500'	30"
Outer Long Creek Outfall	16,700'	36"
Outer Long Creek Outfall	8,300'	24"
Outer Long Creek Outfall	27,100'	18"
Outer Long Creek Outfall	12,500'	15"
Lake Wylie Outfall	15,600'	24"
Lake Wylie Outfall	18,800'	18"
Lake Wylie Outfall	14,600'	15"
Lake Wylie Force Main	35,500'	16"
Crowders Creek Outfall	23,900'	18"
Crowders Creek Outfall	18,800'	15"

Objective 7: *Upgrade and expand Gastonia's wastewater treatment system.*

Phase I

- Expand Duhart Creek Pumping Station from 6.5 to 10.0 MGD.
- Expand Long Creek WWTP from 8 to 16 MGD.

Phase II:

- Expand Long Creek WWTP from 16 to 24 MGD.
- Expand Crowders Creek WWTP from 6 to 9 MGD.

Phase III:

- Beaty Road Pumping Station
- Beaty Road Force Main

Objective 8: *Improve the quality of wastewater discharge.*

- 8-a)** Upgrade Catawba Creek, Crowders Creek and Long Creek wastewater treatment plants to include phosphorous and nitrogen removal in the treatment process.

8-b) Comply with the requirements of the Federal Clean Water Act.

Utilities: 4-e

Objective 9: *Continue to take a regional approach to wastewater management.*

9-a) Where possible continue using the drainage basin as the geographic basis for wastewater planning.

9-b) Cooperate with other municipalities and Gaston County in the development of new wastewater facilities, such as outfalls, pump stations and treatment facilities.

Natural Environment: 2-c

Objective 10: *Seek out opportunities to expand the City Electric System.*

10-a) Target for annexation land that is not already served by other electric utilities.

Annexation: 3-a

10-b) Keep electric rates and incentives competitive with Duke Power and other utilities.

10-c) Modify the City's revenue structure, de-emphasizing electric utility income. In order for this to occur, other forms of revenue, such as property taxes, or new sources, must be enhanced.

Annexation: 3-a

COMMUNITY SERVICES & FACILITIES

GOAL *Community services and facilities that are reliable, responsive, comprehensive and accessible to the public, and which provide a safe and secure environment to all residents of Gastonia.*

BACKGROUND AND TRENDS

Gastonia's community facilities include all of the buildings owned by the public which are dedicated to providing service to the public. These include City buildings such as the police station and the fire stations, City Hall, the Schiele Museum and other buildings. County buildings include the library, the Emergency Medical Service, and Health and Human Services. Also included in the definition are the Gaston County Schools and Gaston College.

Community services are the various public functions that are directly used by the public, including police and fire protection, schools, the library, the hospital, and others. This chapter focuses on the facilities: whether they are adequate for the efficient delivery of public services, what needs are still to be met, and what changes could be made to increase efficiency and accessibility.

POLICE PROTECTION

The 2010 Planning Area is covered by two separate law enforcement agencies. The Gastonia Police Department patrols all the areas within the Gastonia City Limits, and the Gaston County Police Department is responsible for the unincorporated areas.

The Gastonia police department employs 218 full-time-equivalent persons, including 165 sworn officers. It is organized into the following functional units:

- Administration
- Criminal Investigation
- Special Investigation
- Patrol
- Community Services

These units work cooperatively among themselves and with the community to sustain and improve public safety and reduce crime and lawlessness. Patrols are also divided geographically, with five patrol districts covering the City.

The police department, through its community policing program, operates three community substations. These substations are located at Spring Valley Drive, Mountain View Apartments and Barkley Street. In addition, the police department has a mobile substation, using a remodeled City bus, that can be quickly moved to different areas of the City as needed.

The City Council, as a part of its capital improvements plan, will be building a new law enforcement center. It will be financed by certificates of participation, with the land and



The new Gastonia Police Headquarters will open in 1997.

facility pledged as collateral. The law enforcement center is expected to cost \$10 million. It will be located on the north side of Long Avenue just west of Broad Street, adjacent to the new County Courthouse and Jail. The law enforcement center will have sufficient land and expansion capability to allow for joint use of the building by the City and County Police Departments in the future. The location of the new law enforcement center will enhance the safety and perceived security of the Long Avenue corridor.

FIRE PROTECTION

Fire protection is one of the most fundamental services provided by the City, safeguarding both life and property and working not only to fight fires but also to prevent them. Gastonia Fire Department is a full-time, professional fire-fighting service provided by the City of Gastonia to all areas within the City limits and areas under contract outside the City limits. The City Fire Department has 131 full-time-equivalent employees. The area covered by the City Fire Department has an ISO Class IV rating, resulting in relatively low insurance rates for homes and businesses. Portions of the unincorporated part of the 2010 Planning Area are served by six volunteer fire departments.

The volunteer fire departments covering those unincorporated areas are:

- New Hope
- South Gastonia
- Chapel Grove
- Rhyne
- Union
- Agriculture

The Gastonia Fire Department has seven geographical zones, strategically located to minimize response time for all parts of the City. Each zone has its own fire station, in the following locations:

- | | |
|-------------------|---------------------|
| • Fire Station #1 | Second Ave. |
| • Fire Station #2 | New Way Drive |
| • Fire Station #3 | W. Franklin Blvd |
| • Fire Station #4 | S. New Hope Rd. |
| • Fire Station #5 | Hudson Blvd. |
| • Fire Station #6 | Ozark Ave. |
| • Fire Station #7 | Gaston Day Sch. Rd. |

Gastonia currently has no deficiencies in the coverage provided by the seven fire stations. One area in which it may become necessary to locate a new fire station is along Kings Mountain Highway (US 29/74 west). The need for a new fire station will depend on how far and to what extent the City annexes land along the US 29/74 west corridor. If annexation proceeds to the limits of the present agreement with Kings Mountain, then Fire Station #3 will probably have to be replaced with a new station in a location farther west to preserve response time.

In general, the criteria for locating new fire stations include:

- The need for fire protection and the time-distance relationship of the station to built-up areas;
- The location and extent of high-value districts, such as industrial areas, shopping centers, office parks, apartment complexes;

- Fire district regulations; and
- Past experience of the fire department.

The cities and towns surrounding Gastonia which have their own fire protection include Bessemer City, Dallas, Ranlo, Lowell and Cramerton, all of which are primarily volunteer-staffed.

EMERGENCY MEDICAL SERVICES

Gastonia and Gaston County use modern emergency response systems, based on enhanced 911 service. The 911 is a combined emergency dispatch system with one telephone number for police, fire and emergency medical service. Both Gastonia and Gaston County operate 911 systems.

Gaston Emergency Medical Services (GEMS) is operated by the County and responds to medical emergencies by providing initial patient assessment and treatment using paramedics trained and equipped to Advanced Life Support standards, with radio communications to hospitals and physicians. GEMS provides strategically located units throughout the City and County to minimize response time.

CITY OFFICES

Gastonia City Hall, located downtown at Franklin Boulevard and South Street, is an historic structure

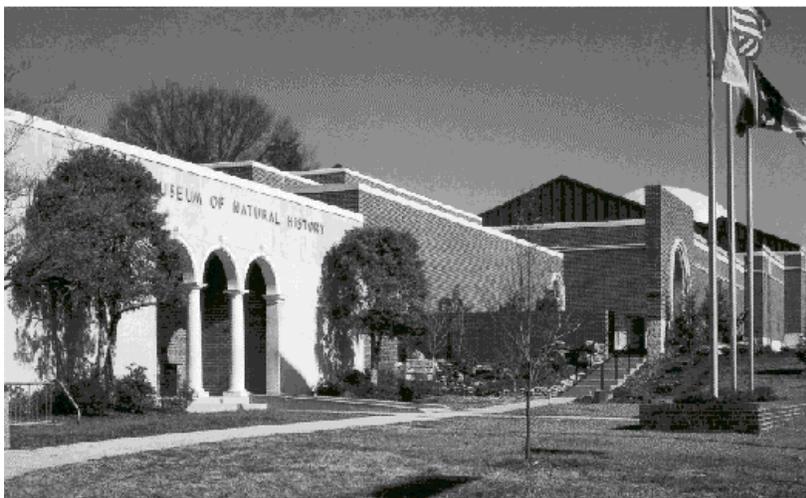
dating to 1922. In its initial years, the City Hall housed all of the City departments, including the police and fire departments. As Gastonia has grown over the past 75 years, the City administration has outgrown the City Hall. Only the central administrative departments and departments that deal extensively with the public remain in the City Hall vicinity today. Nonetheless, the City has outgrown City Hall and must supplement it with office space in two nearby buildings, separated from City Hall by two busy streets.

With departments divided between several buildings, efficiency and convenience to the public has been reduced. Bringing all of these departments back together would both increase efficiency and allow the public easier access to City services.

A new City Hall should be located downtown, which is still the most accessible area to all residents of Gastonia. Possible solutions include:

- A new municipal building on the old Courthouse land, joined to the existing City Hall;
- A new City Hall on another site downtown; or
- A combined City-County government center that would house both Gastonia and Gaston County administrative offices.

SCHIELE MUSEUM OF NATURAL HISTORY



The Schiele Museum of Natural History & Planetarium

The Schiele Museum of Natural History, a facility of the City of Gastonia, is truly one of our community's greatest and best-known assets. The museum has the largest collection of land mammal specimens in the Southeast, an expanded planetarium, and it conducts archeological research and extensive outreach programs with school systems in 46 North Carolina Counties. Outside the Schiele museum is a mile-long loop shaped nature trail, which is also the site of a replica of a

Catawba Indian Village and a pioneer backcountry settlement.

The Schiele Museum has sufficient land to accommodate the growth and expansion anticipated by 2010.

GASTON COUNTY LIBRARY

The Gaston County Library is funded and administered by Gaston County, with the main branch of the library located in Gastonia on Garrison Boulevard. The library provides educational, informational, recreational and cultural materials to the residents of the County.

Gaston County, in cooperation with the City of Gastonia, has established a small branch library in the Erwin Community Center, located in Gastonia's Highland neighborhood. The branch is open from 1 p.m. to 6 p.m., five days a week.

A longer range goal for the City of Gastonia should be a full-service branch library located on the west side of the City. Achievement of this goal depends on a number of factors: the willingness of the County to invest in and operate another branch, available land, funding from other sources, and possible joint use of land and parking. The "Gastonia-West Branch Library" is in its infancy as a concept, but with commitment and creativeness on the part of the City, it could be a reality well before



Gaston County Public Library Main Branch on Garrison Blvd. in Gastonia

2010.

GASTON COUNTY SCHOOLS

The Gaston County School System is responsible for the public education system and is in the process of implementing a long-term plan that will address facility needs and reorganize the district to a middle-school format. Under the new format elementary schools will house grades K-5, middle schools grades 6-8, and high schools grades 9-12. The plan, known as the South Proposal, addresses a number of concerns, including: program inequities, outdated facilities, racial balance, overcrowding in growth areas and under-use of some schools.

The South proposal includes the construction of two new schools: a high school to be located adjacent to Bess Elementary School, and a middle school in the vicinity of Cramerton to serve the southeast portion of the County. The middle school is now under construction, and the high school construction will commence in late 1995. Additions and enhancements are planned for Ashbrook, Bessemer City, East Gaston, Hunter Huss, North Gaston and South Point High Schools to accommodate the movement of the ninth grade to the high schools.

Other changes to physical facilities under the South proposal are:

- Cherryville South will be converted to a middle school
- Highland Jr. High will be renovated and converted to office space in order to consolidate school administration offices.
- Arlington, Gastonia Central and High Shoals elementary schools will be closed.
- Renovations and replacements to improve 17 schools, ensuring that all schools meet North Carolina school facility guidelines.

The South proposal will be financed by General Obligation Bonds totaling \$57,125,000. After implementation of the proposal, the Gaston County

Schools will have 40 total schools, including one new high school, one new middle school and four additional elementary schools. The County also operates two special education facilities and Gaston College. Gaston County also has nine independent and/or religious schools.

PROPOSED CIVIC CENTER

The Civic Center Task Force is studying market conditions, possible sites and financing options for a Gastonia/Gaston County Civic Center. A Civic Center would bring more entertainment opportunities to Gastonia, be a place for large community meetings, and an aid to economic development, including the possible development of a first-class hotel. The Civic Center could also attract small conventions and meetings.

Funding, site location and whether this would be a City or County facility have not yet been finalized. If the Civic Center is approved, however, it would be built within the time frame of this plan.

OTHER PUBLIC FACILITIES

The following is a list of other public facilities operated by the City of Gastonia or Gaston County.

- **Farmer's Market:** Located on Long Avenue, the Farmer's Market is housed in an all-weather building and provides an opportunity for direct sales by farmers and fresh produce and other products to consumers.
- **Downtown Parking:** The relocation of the railroad to a grade-separated cut resulted in the elimination of some of the downtown parking. Sufficient parking is important to downtown's future, and the City will be improving and upgrading the surface parking lot through paving and landscaping. The downtown surface parking lot could be designed and graded to accommodate a future parking deck as demand grows. Improvements in parking should be accompanied by enhancements to the pedestrian crossings over the railroad.
- **Health and Human Services:** The County will be building a \$12 million Social Services Center on Long Avenue. The new Social Services Center will consolidate those formerly scattered functions in one location, improving efficiency and delivery of services. A new County Health Department building was constructed in 1989 and is currently being expanded.

ISSUES

1. The Gastonia Police Department has been lacking a modern police headquarters. A new law enforcement center will greatly enhance the police department's ability to render law enforcement service.
2. The City and County have separate 911 systems, a service which would run more efficiently if consolidated.
3. Gastonia has outgrown its 1920's-era City Hall, which only can house a portion of the City administration. This hampers efficiency and decreases convenience for the public.
4. Although Gastonia is the largest city in Gaston County, it is served by only one full-service library, supplemented by the limited-hours Erwin Center branch. In addition, the main library is no longer located downtown, but rather on the east side of the City.
5. The Schiele Museum is one of Gastonia's most visible community assets. Sufficient funding, management and maintenance will be required to sustain the museum's excellence.
6. Although some of the important public facilities in Gastonia are operated by the County or the Schools, decisions made by the City will affect the future of those facilities.
7. Gastonia and Gaston County have a lack of facilities for large meetings and cultural and entertainment events.
8. Overcrowding of schools is occurring in the growth areas of Gaston County, even as other schools in the system are under used.
9. Racial balances at some schools, primarily within the City of Gastonia, are diverging from the racial balance of the overall system. This includes both schools that have high minority enrollment and schools that have very low minority enrollment.
10. Socio-economic balances are also shifting in similar fashion primarily in schools within the City of Gastonia. This has led to differences in the perceived desirability of various schools.

OBJECTIVES AND TOOLS

Objective 1: *Provide physical facilities that enhance rather than hinder the ability of the City's police and fire departments to provide their essential services.*

- 1-a)** Construct a new law enforcement center on Long Avenue, adjacent to the new Courthouse and Jail.
- 1-b)** Continue operating the community police substations, and explore opportunities to establish new community policing facilities where needed.
- 1-c)** Use the mobile police substation to respond quickly to neighborhood crime problems.
- 1-d)** As the City annexes land along the western US 74 corridor, consider relocating Fire Station #3 if it will improve response time and fire protection to the west side of Gastonia.
- 1-e)** Work toward consolidation of the City and County 911 services to eliminate confusion and duplication of service.

Objective 2: *City administrative facilities should be structured to provide the most convenience to the public and efficient delivery of service as possible.*

- 2-a)** Any new or expanded City and County administrative offices should be located in downtown Gastonia.
- 2-b)** The City of Gastonia and Gaston County should explore the option of constructing a joint City-County government center.

Objective 3: *Gastonia should have library facilities that are accessible to people in all parts of the City.*

- 3-a)** Retain the main library branch in the City of Gastonia.
- 3-b)** Continue operating the Erwin Center branch library.
- 3-c)** Support the establishment of a new full-service branch library located on the west side of the City.

Policy References

Community Facilities: 2-b;
Built Environment: 4-a;
Land Use: 6-c

Community Facilities: 2-a

Land Use: 1-b, 2-d

Objective 4: *Gaston County Schools should provide facilities that best meet the needs of students.*

- 4-a)** Support the South Proposal for new school construction and conversion to a middle school format.
- 4-b)** Support the redrawing of school attendance lines in conjunction with the South proposal in order to address growing imbalances in the socio-economic makeup of schools in Gastonia.

Housing: 5-g; **Land Use:** 1-b

Objective 5: *Determine whether to build a Civic Center to provide space for meetings, community functions, and entertainment, sporting and cultural events in Gastonia and the surrounding region.*

- 5-a)** The size and quality of the Civic Center should be based on a reasonable evaluation of the funds that can be raised both privately and by the public.
- 5-b)** Due to the regional impact of the Civic Center, the City should advocate joint City-County participation in the project, with the public portion of the funding from a countywide bond referendum.
- 5-c)** The Civic Center should be located in or near Gastonia, and in a location where it can stimulate additional private development in its vicinity. Possible locations include: within the Central Sector, on the western side of Gastonia, or along the Interstate 85 corridor.

Economy: 6-d; **Land Use:** 1-d

Economy: 6-d

Economy: 6-d

NATURAL ENVIRONMENT

GOAL *A healthy, attractive and growing city, developed in concert with nature, that maintains clean air, water and soil, and recognizes the need for stewardship of Gastonia's outstanding natural resources to bestow to future generations.*

INTRODUCTION

Located in the southern Piedmont, Gastonia and the adjacent planning area are characterized by gently rolling terrain with several prominent ridges and small mountain ranges. The City averages 800-850 feet in elevation, rising to 1,705 feet at the Kings Mountain pinnacle. Prominent ridges and peaks include Crowders Mountain, Kings Mountain, Spencer Mountain, and Cramer Mountain. These ridges and mountains provide spectacular views and are an important regional resource. The establishment of Crowders Mountain State Park is evidence of the commitment to preservation of this outstanding natural resource.

AIR QUALITY

Air pollution is a problem facing most urban areas across the United States today. In the Charlotte Urban Area, the problems with air quality are due to the large amount of automobile traffic, industrial pollution and unfavorable weather conditions throughout much of the year.

The level of air pollution is judged by measuring five pollutants: total suspended particles (TSP), sulfur dioxide (SO₂), oxides of nitrogen (NO_x), volatile organic compounds (VOC), and carbon monoxide (CO). TSP is a measurement of solid matter (such as soot) that is emitted. The other compounds are gaseous. SO₂ dissolves into water droplets in the air to form sulfuric acid, the major

component of acid rain. NO₂ and VOC undergo reactions in the atmosphere that release ozone, a major environmental pollutant. According to the Environmental Protection Agency, Gaston and Mecklenburg Counties now meet standards for acceptable levels of ozone. Efforts in Gastonia to reduce the level of ozone have included the inspection and maintenance program for cars, traffic signal synchronization to minimize stops and starts, and vapor recovery devices installed at gas stations.

Gastonia can contribute to the reduction of ozone by exercising its leadership role in transportation planning. Improvements to traffic flow and public transit, clean fuels for city vehicles, and regional bus service between Gastonia and Charlotte are all steps that the City can advocate. Gastonia can also track industrial pollution: as older industries upgrade their equipment and convert to cleaner technologies, Gastonia should provide this information to the EPA so that the reductions in pollution will be accounted.

The atmosphere— through the movement of wind, the occurrence of rain and snow, and the vertical movement of air— acts to cleanse the air in a local area. Unfortunately, in the Charlotte-Gastonia-Rock Hill metropolitan area the movement of air, both horizontally and vertically, is minimal. The metro area experiences temperature inversions during almost half the day on average. Normally air closer to the ground is warmer than the air aloft, and as the less-dense warmer air rises, it mixes with cooler air,

carrying polluted air away from the surface and scattering the pollution. Temperature inversions occur when the normal situation is reversed, and a layer of colder air is located at ground level, with warmer air located above. Because cold air is denser and tends to sink, that air stays at ground level and does not mix with the air at higher altitudes. A temperature inversion acts as a lid which holds pollution close to the surface, allowing it to accumulate until the inversion breaks up.

Another problem facing this area is the frequent occurrence of stagnating high pressure. This occurs when a summertime high pressure phenomenon, known as the Bermuda High, extends into the Carolinas. The Bermuda High is like a circular wall, blocking wind that would otherwise move into the region. The air inside the high pressure doesn't mix with cleaner air, and pollutants can accumulate inside the high pressure. Our metropolitan area has the highest occurrence of stagnating high pressures in the eastern United States.

These two weather conditions underscore the importance of air quality management in Gaston County. Weather conditions here tend to allow pollution to accumulate both in the local area and close to the ground, where we breathe it in. With these weather conditions working against us, the same amount of pollution is often more dangerous in our metro area than it would be in various other urban areas.

According to the Gaston County Quality of Natural Resources Commission, the County contains fourteen primary industrial polluters. The heaviest air pollution emissions in the County come from the Duke Power Company's Allen Steam Station south of Belmont. Automobile pollution is much harder to measure and trace because it is not eliminated from a single point (such as a smokestack.) Rather, it is a

non-point source of pollution, and it may account for a majority of the air pollution in Gaston County.

WATER QUALITY

Surface water includes all the water that we can see, including creeks, rivers, lakes and ponds. Most of the drinking water used in Gaston County is drawn from surface sources, such as the South Fork River, Long Creek and Mountain Island Lake. Pollution of surface water comes from industrial discharge, wastewater treatment plants, runoff from roads and paved areas, and leaching of chemicals in the soil. Surface water pollution can be divided into point and non-point sources. Point sources can be traced directly to pipes emptying into streams, rivers and lakes. Non-point sources are much harder to define. They carry pollutants through runoff and are spread over a large area.

The geographic area used to study streams and rivers is the watershed, which includes all the land that drains into the stream or river being studied. Six watersheds cover Gaston County: Indian Creek, Upper South Fork, Dutchman's Creek, Catawba Creek, Crowders Creek and Long Creek. The City of Gastonia and the planning area are located in the Catawba, Crowders and Long Creek watersheds. All of the watersheds in Gaston County eventually empty into Lake Wylie, and the water quality in Gaston County has a direct effect on the water quality in the Lake. Likewise, some of the headwaters for Crowders Creek are located in South Carolina, and pollution received there has an effect on the quality of Crowders Creek as it flows through Gaston County. Thus, surface water quality is a regional problem, crossing municipal, county and state boundaries. The regional nature of the problem has led to an increasing level of involvement of the states in protecting and regulating watersheds.

Greater attention to multi-state water quality problems could lead to some form of federal regulation of land use. Although Gastonia has no land that is covered by watershed restrictions under the North Carolina program within the City limits or planning area, future federal interstate water quality regulations could affect Gastonia. Our water drains into Lake Wylie, which is the water source for Rock Hill, Fort Mill and other South Carolina communities downstream. If such requirements are imposed, they could significantly affect Gastonia's land use strategies and regulations. Regional planning strategies will be needed to address the problem.



This path through the woods forms a natural greenway.

Ground water is the other component of overall water quality. It is an important source of drinking water from private and community wells. According to the QNRC, ground water in Gaston County is generally of high quality. Ground water is obtained from an aquifer, a sand, gravel or rock formation which lies beneath the soil and is saturated with water. Ground water contamination can occur if pollutants seep through the soil and enter the aquifer. Potential sources of pollution include leaks from underground storage tanks, landfills, septic systems, excessive fertilizer application, oil or chemical spills, and animal waste. Comparatively little is known about ground water quality in Gaston County. Ground water monitoring has been limited to well sampling in Gaston County. Results of this sample show that most of the wells have high water quality and are free of contaminants.

The EPA is now regulating the quality of the storm water discharge in cities with populations of 100,000 or more. Although Gastonia is not regulated under this program, the regulations could be revised to apply to smaller cities within the time frame of this plan. Pollution from storm water is a problem that varies widely over space and time. Dirt and oil from pavement, pesticides and fertilizer on lawns, as well as litter are all carried in the storm water to the receiving stream. Often this type of pollution can exceed the water pollution generated by point sources such as industries or sewage treatment plants. Pollution tends to be the worst after a long dry period in which pollutants have a chance to accumulate, then are suddenly carried away during a storm.

Storm water pollution can be reduced by several methods. The first method is structurally, using

detention ponds. Although the primary purpose of detention ponds is flood control, during a large storm they hold the water long enough to allow some of the pollutants to settle out before moving the water to the stream. Retaining as much of the water as possible on-site avoids the water reaching the stream at all. Another method uses public awareness, including such measures as keeping cars in tune to reduce fluid leakage, careful use of fertilizers and pesticides, keeping litter swept, and not pouring oil or other pollutants into storm drains. Land use density controls are effective for rural and semi-rural areas. In urban areas, however, simple low density development can result in further urban sprawl. Cluster development methods can be effective in reducing water pollution from runoff.

DRAINAGE

Storm water drainage is the overland flow of water during and immediately following a storm. In a natural environment the water flows by gravity toward the local point of lowest elevation. The areas of peak elevation—ridges—define the boundaries of a drainage basin. The basins direct the water toward a stream, river or lake. The land also absorbs rain in a number of ways. First, the trees, shrubs and ground cover absorb the impact of rain drops, allowing the water to slowly reach the soil, where most of it is absorbed and some of it flows along the surface to streams and rivers. The natural rise and fall of the land determines where the water will go. Vegetation slows down the water and the roots help hold the soil in place, both of which retard erosion. Also, plants soak up some of the water through their roots

and release it back into the air. The major drainage basins in the 2010 Planning Area are shown in Figure 1.

The need for an urban drainage system arises when land is developed. Water generally cannot percolate through construction materials and pavement. The natural situation is reversed: almost all of the water stays at the surface and very little is absorbed. Furthermore, the water that is running off is not slowed down by vegetation. During a heavy storm, water can accumulate very quickly, and as it drains, it can contribute to erosion and flooding downstream. Water that is not drained off can flood the immediate area because little is absorbed or transpired. For this reason it has become necessary for cities to build drainage systems to efficiently remove the water and carry it to a stream or river.

Urban drainage and flood control have traditionally focused on removing the water as quickly as possible through structured systems such as curbs, gutters, pipes and culverts. We have come to realize, however, that emphasizing quick drainage can cause flooding and erosion downstream from the city because this fast delivery of storm water overwhelms the natural drainage systems.

The current emphasis in drainage is on-site management of the storm water. Rather than draining away all of the water at once during a storm, a portion of it is detained on the property for a period of time, and then released slowly to the drainage system. Detention provides two benefits: first, the volume of water sent to the stream during the critical period of the storm is reduced; and second, some of the water is removed naturally on site by absorption into the soil and evaporation. Another related trend is the movement toward natural (rather than structural) drainage systems, such as swales and retention ponds, which also allow the water to evaporate and percolate into the soil.

The major problem with the drainage system has been maintenance. Currently the only drainage structures that are regularly maintained are those on public property, such as street rights-of-way or easements. Most drains, pipes and ditches, however, are on private property. Broken or blocked pipes and drains can cause regular flooding, sinkholes, erosion, polluted water and unsafe road conditions. The City requires all new commercial developments that are one acre or larger to incorporate storm water detention. Detention is not required for small commercial developments, single-family residences or streets.

FLOOD CONTROL

Flooding in Gastonia's streams and watercourses has generally not been a critical problem as it has been in some areas, such as cities in mountain valleys. The topography and soils of the Piedmont region provide a relatively flood-resistant environment. Valleys are broad, and water rises slower and spreads further than it does in the mountains. In addition, Gastonia historically developed along natural ridges rather than valleys, following the pattern set by the location of the railroads. More recently, the City has begun to grow into the valleys and flood-prone areas between the ridges.



Drainage pipes were installed to channel Duhart Creek adjacent to the Franklin Corners Development.

Flood control in Gastonia has been accomplished through participation in the National Flood Insurance Program. In exchange for guaranteeing flood insurance to people who have property in the flood plain, the program requires cities to restrict development in the areas where floods cause the most damage. Gastonia restricts development in the flood plain by permitting construction or fill only when it will not increase the base flood elevation.

As the City continues to develop, more impervious surface will be added, more forested areas will be removed, and more development will occur close to the flood plains. Measures that the City can take to lessen these impacts include thorough maintenance of the drainage system, storm water detention for all new development, and maintenance of the streams which receive the storm water.

Some land use and design issues also have an impact on storm water management. Developing greenways around flood plains could give the City easy access to the streams for maintenance, as well as using the flood-prone land for a common purpose. Clustering new developments away from streams and reserving that land as open space helps control flood plain development. Cluster development can also reduce flooding by reducing impervious street surfaces.

SOILS

Soils in the Gastonia vicinity can be grouped into 5 general categories, with varying suitability for land development, roads and septic fields. Soils have different capacities for drainage, load bearing, and fertility. Identifying soil characteristics allows us to evaluate land development with regard to its physical suitability. The following soil types are found in Gaston County:

Cecil-Pacolet: Mostly used for pasture and cropland. Erosion is a concern, particularly on steep slopes. These soils cover 28% of Gaston County and are found mostly in the central and northwestern parts of the county.

Cecil-Urban Land: Similar in characteristics to Cecil-Pacolet, this category also includes areas that are covered with buildings and pavement. This soil type covers 18% of the county and is found mainly in the commercial, industrial and residential areas of Gastonia.

Tatum: This soil presents hazards of erosion and shrinking-swelling. It is covered mainly with woodland, cropland and pasture. The soil covers 16% of the county and is found mostly in the southwestern to west-central parts of the county.

Madison: Found mainly in the central and southwestern parts of the county. This soil is covered with mostly cropland or pasture on gentle slopes and woodland steep slopes. It is relatively unsuitable for urban development, due to erosion on steep slopes. Madison soils cover 7% of the county.

Cewalca-Congaree: This soil group is found along major streams throughout Gaston County. It is poorly drained and prone to flooding; the least suitable of the Gaston County soils for urban development. This soil group covers 7% of the county.

Suitable soils are important to successful urban development. Choosing an area with good soil for a building site can help the owner avoid flooding, erosion, foundation problems and septic tank failure. All of these problems can appear if a site has unsuitable soils. Areas with soils poorly suited for development are shown in Figure 2.

The prevalence of wells and septic tanks in Gaston County is an increasing problem as the County urbanizes. Gaston County already contains the highest number of community wells in North Carolina and it is near the top in the number of septic fields. This can be a disastrous combination, especially at suburban densities. An excess number of septic fields in close proximity to wells can lead to contamination of those wells. Although individual wells and septic tanks are generally regarded as inappropriate for development that is denser than one unit per five acres, much higher density development supported by wells and septic tanks typically occurs.

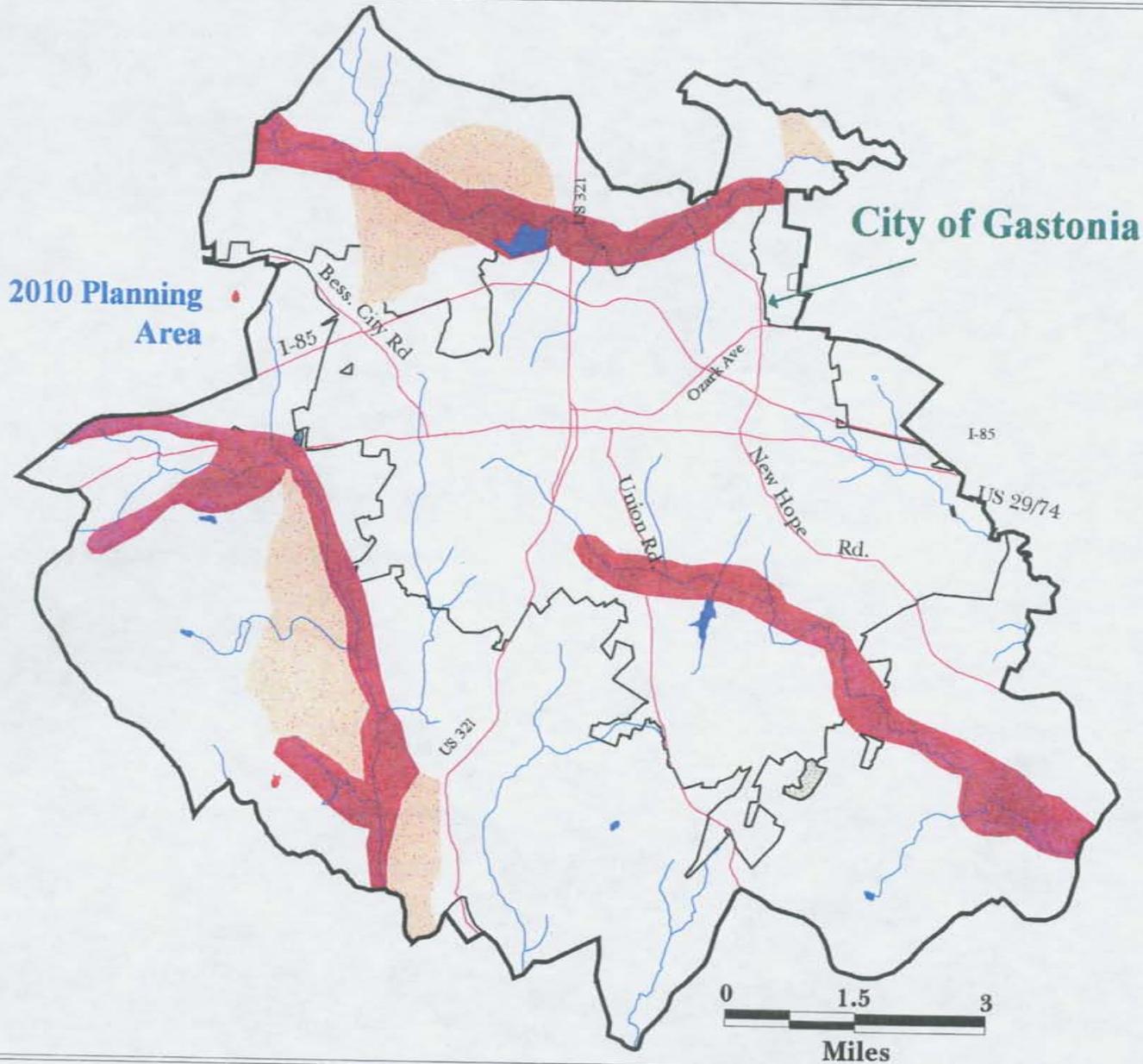
FARMLAND

An important component of the environment in Gaston County is the open land used for agriculture. The Soil Conservation Service estimates that 42% of the soils are highly suitable for farming. Agriculture is on the decline, however, with just 2% of the rural population involved in farming. Many of these remaining farmers are part-time, with 65% working in some other occupation. As the County urbanizes, more and more farmland is converted to urban use. In some jurisdictions tracts of prime farmland are being preserved by purchasing or accepting donations of development rights or easements, or the outright purchase of the land. In some urban areas, local private conservancies have been established to achieve this goal.

CROWDERS MOUNTAIN STATE PARK

This park is of regional importance and it offers the closest mountain environment in the area. As Gastonia grows to the southwest, urban development will begin to occur adjacent to the park. Since vistas are so important to the enjoyment of Crowders Mountain, the visual quality of this development is important to the future of the park. Further, Crowders Mountain offers a unique vista to Gastonia. As we are today, future generations will be grateful to citizens who have had the vision to work for the acquisition and protection of this unique natural feature for public enjoyment and conservation.

Figure 2
Soils Poorly Suited For Development



-  Madison
-  Cowlca-Congaree



MAJOR DRAINAGE BASINS

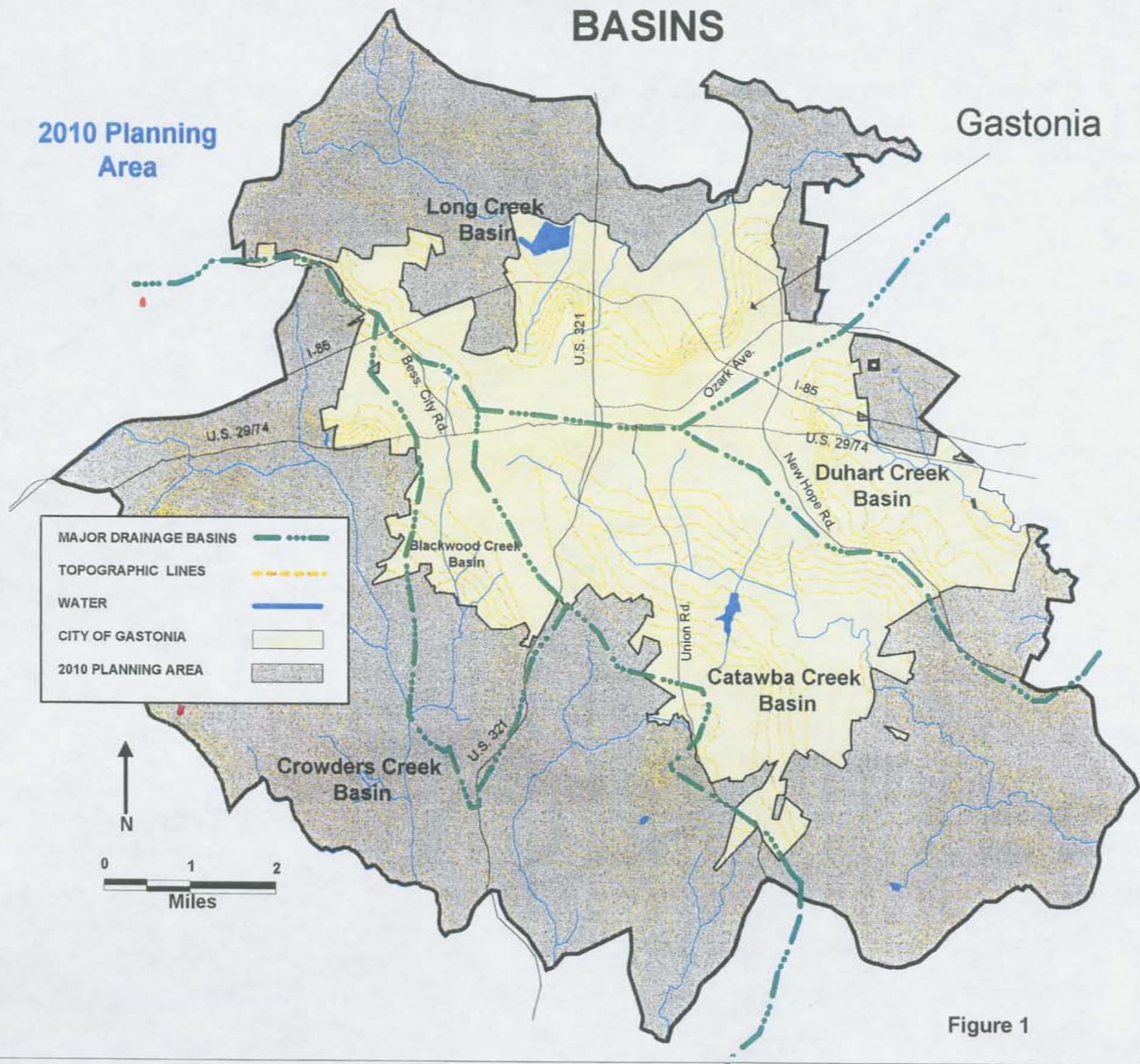


Figure 1

ISSUES

1. Past development patterns, including low-density single-family neighborhoods, jobs located far from the home, and the regionalization of shopping, have caused us to become dependent on our cars. This dependence has contributed to the air pollution problem in the area. Future development will likely need to employ design strategies such as clustering and mixed uses in order to reduce car trips and air pollution.
2. Gaston County has more wells and septic tanks than any other county in North Carolina. Although ground water quality has generally been good, little is known about the long-term viability of the wells. Threats to ground water include landfills, hazardous waste sites, underground storage tanks and failed septic tanks. In the event of contamination, well sources (particularly community wells) may have to be abandoned in favor City water. A regional approach to water supply is favored by the EPA, and it may present the best long-term supply of water for the area.
3. Drainage structures are only maintained by the City if they are in the street right-of-way or an easement. The majority of structures, however, are located on private property and receive no City maintenance.
4. Storm water drainage is a significant source of water pollution. The Environmental Protection Agency is now regulating the quality of storm water discharge for cities with populations of 100,000 or larger. Future federal regulations could extend this requirement to smaller cities such as Gastonia. This may require actual treatment of the storm water before it is released into the creeks and streams.
5. As Gastonia grows, more impervious surfaces will be added, and less water will soak through the soil. The volume and speed of the water reaching streams and rivers will increase, and flood hazards and stream bank erosion will also increase. Increased flooding may affect more people as Gastonia grows from its beginnings on the ridges and begins to reach the valleys in between.
6. Soils in Gastonia are generally well-drained, have good support for buildings, and are suitable for urban development. Soils that present problems for development are generally limited to floodplains and steep slopes. Some soils in our area are also unsuitable for septic tanks.

OBJECTIVES AND TOOLS

Objective 1: *By 1996, reduce the level of air pollution, specifically ozone, by 15%.*

- 1-a)** Petition the State of North Carolina to establish air quality monitoring stations for ozone within Gaston County.
- 1-b)** Implement the Gaston Urban Area Thoroughfare Plan.
- 1-c)** Continue City support of Gastonia Transit system.
- 1-d)** Pursue a regional transit link with Charlotte, either by bus or by rail.
- 1-e)** Develop a safe circulation system for bicycles in Gastonia by designating routes over lightly traveled streets and insuring continuity along those streets, and encourage new commercial developments to provide a safe storage area for bicycles.
- 1-f)** Allow residential lots of 10,000 square feet or less in areas that have water and sewer service.
- 1-g)** Through zoning, allow mixed use developments which reduce unnecessary car trips.
- 1-h)** Promote flexible work schedules with Gastonia area employers. Public agencies should take the lead in the adoption of flexible work schedules, where possible.

Objective 2: *A regional approach to the supply of water and the disposal of wastewater.*

- 2-a)** Establish policies which equitably promote the connection of unserved City residences and business to the City's water and sewer systems.
- 2-b)** Strategically extend City water and sewer service to built-up areas adjacent to the City of Gastonia, based on growth priorities and local need for service.
- 2-c)** Work toward inter-jurisdictional coordination and/or consolidation of water and sewer systems where practical and cost effective.
- 2-d)** Land that will not be served by City water and sewer should be zoned for very low density development.
- 2-e)** Ensure that new community water systems are built to City specifications, which will simplify the conversion to City water service.

Objective 3: *Continue good stewardship of the outstanding natural features in the Gastonia vicinity.*

Policy References

Transportation: 1-d, 1-e, 1-f

Transportation: 2-b, 4-c

Transportation: 3-a, 3-c

Transportation: 2-k, 6-d, 6-e

Housing: 1-a;

Transportation: 2-d;

Natural Environment: 2-d

Housing: 5-b;

Transportation: 2-m;

Land Use: 4-g

Utilities: 4-d;

Natural Environment: 2-e

Economy: 5-b; **Housing:** 5-e;

Transportation: 2-f;

Annexation: 2-c, 3-b;

Land Use: 1-a

Utilities: 9-b

Housing: 1-a;

Transportation: 2-d;

Natural Environment: 1-f

Utilities: 4-d;

Natural Environment: 2-a

3-a) Adopt land use and aesthetic guidelines to insure quality development in the vicinity of Crowders Mountain State Park.

Economy: 8-a;
Recreation: 2-d;
Land Use: 2-e

3-b) Develop a greenway plan.

Transportation: 6-e;
Recreation: 4-a

3-c) Develop a greenway “demonstration project.”

Transportation: 6-e;
Natural Environment: 6-a;
Recreation: 4-b, 4-e

3-d) Begin the acquisition (through donation or purchase) of undevelopable floodplain land in Gastonia in order to bank land for future Greenway development.

Natural Environment: 6-a;
Recreation: 4-b, 4-c

3-e) Land use and other policies should be supportive of the Daniel Stowe Botanical Garden.

Economy: 6-b

3-f) Through zoning, allow a “density credit” if a portion of a building site has an outstanding natural feature. This would permit the owner cluster development and realize the full value of the property while safeguarding the natural feature.

Housing: 6-a; **Recreation:** 2-g

Objective 4: *Control stormwater runoff using economical and environmentally safe methods.*

4-a) Explore measures to control storm runoff for new development not subject to current detention requirements, and employ these measures where determined practical.

4-b) Evaluate the efficacy of using the 10-year storm event as a design criterion for detention basins.

4-c) Employ measures to assure proper functioning of existing runoff controls.

Objective 5: *Reduce the pollution of storm water and protect the quality of streams and rivers.*

5-a) Maintain storm drains and pipes to reduce infiltration.

5-b) Eliminate unauthorized connections to the storm drainage system.

5-c) Initiate a public awareness campaign to reduce pollution from litter, automobile fluids, pesticides and fertilizers.

Objective 6: *Fully maintain the existing storm water drainage system.*

6-a) Link the stream maintenance program with the development of greenways along suitable creeks and streams

Transportation: 6-e;
Natural Environment: 3-c, 3-d

- 6-b)** Investigate the feasibility of beginning a selected maintenance program for storm drains and pipes located on private property.
- 6-c)** Define the City's storm water drainage service area.
- 6-d)** Determine the feasibility and practicality of financing and building control systems which serve an overall drainage area to reduce flooding and pollution.
- 6-e)** Initiate a program of stream maintenance in order to keep Gastonia's natural watercourses clear and prevent flooding.

BUILT ENVIRONMENT

GOAL *A well maintained city that is attractive and economically vibrant, with a high standard of community appearance, and good stewardship of our historic resources.*

BACKGROUND AND TRENDS

The built environment of Gastonia refers to the all of the physical things that humans have built to alter the natural landscape. Our buildings, streets, signs, parking lots, railroads, power lines, retaining walls, sidewalks and bridges are all part of the built environment. Also part of the built environment is the man-made landscape, such as lawns, flower beds, parks and street trees, because these are natural features that we have adapted and arranged to suit our needs and desires. Thus the built environment includes both structures and landscaping.

The key to the quality of the built environment lies in how the many different parts are arranged and fit together. Because we primarily use our eyes (rather than our ears or noses) to make sense of the built environment, it is usually described in visual terms, such as community appearance. The visual quality of Gastonia's built environment leads to an overall impression of the community that can have an effect (either positive or negative) on the quality of life, property values and the City's competitive position in the region.

ENTRANCEWAYS

The first impression of Gastonia comes from our community's entranceways. Our most important entranceway and corridor is Franklin Boulevard, both from the east and west. It is certainly the City's best known physical image. Figure 1 shows Gastonia's major entranceways

The attractiveness of these gateways varies considerably. Major corridors within the city, such as Garrison Boulevard, also have an effect on the overall community appearance. The keys to the visual quality of road corridors include: buildings, signs, overhead wiring, parking lots, trees and landscaping. Attractive and inviting entranceways are clear indicators of a community which takes pride in its appearance.

Several things can be done to maintain and improve the attractiveness of Gastonia's entranceways. Marking the City limits with signs and landscaping helps to provide a sense of entrance and welcome to someone entering the community, giving the visitor a sense of arrival. A good example of this kind of City limit sign is located in the median of West Franklin Boulevard. Similar signs and landscaping could be placed at all of Gastonia's important entrances.

Overlay zoning for the major entrance corridors will also help to give the visitor a positive impression of Gastonia. A corridor overlay district could help to control and eliminate the visual clutter that often accompanies commercial corridors.

SIGNS

Signs play an important role in identifying businesses and guiding people to their chosen destination. They can have a negative impact on

visual quality, however, when they begin to dominate the streetscape. A number of factors in the design and placement of signs influences their visual impact. The size of the sign is the most apparent characteristic, but the height of the sign can have just as great of an impact. The color and spacing of signs are equally important.

Poor community standards for signs lead to visual clutter as businesses seek to obtain a competitive edge by erecting larger, taller and more ostentatious signs in multiple locations. This competition for attention can have a detrimental effect overall as people seek to avoid roads with sign clutter because of the distraction and chaos associated with a typical commercial street. Reasonable standards of sign size, height, and placement will not only help to reduce clutter, they will also provide a level playing field for business, insuring that one establishment's sign does not dominate the landscape. Ultimately, the more readable and pleasing environment fostered by high community expectations will help draw people to the businesses. Thus, community standards for signs not only make aesthetic sense—they also make economic sense.

A particular type of sign that has proliferated in recent years has been the *off-premise* sign, or billboard. The size and height of billboards results in a much greater impact on the quality of the built environment than on-premise signs. Each billboard is typically much higher and at least several times larger than the largest free-standing business identification sign. Particular attention should be paid to evaluating the standards for billboards. Reduction of billboard clutter is one of the most effective methods for improving the quality of the built environment. Over the last twenty years,



Sign Clutter along Franklin Blvd.

Figure 1
Major Entranceways

North	East	South	West
US 321	I-85	New Hope Rd	I-85
New Hope Rd.	Franklin Bl.	Union Rd.	Franklin Bl.
	Ozark/Long Ave.	US 321	Bessemer City Rd.

Gastonia has seen many billboards *added* to its cityscape, while the trend in many communities has been to stop billboard proliferation and even reduce or virtually eliminate billboards.

“UGLIES” AND BLIGHT

A whole category of objects in the built environment hurt the community's appearance and degrade Gastonia's image. These “uglies” are not confined to any one area and thus they have a negative impact on the community as a whole. Uglies include unscreened junkyards and power stations, unmaintained land and buildings, un-landscaped parking lots and poorly maintained signs. These elements of the built environment not only are unpleasant to look at, they also have a negative effect on economic development. The presence of an ugly can discourage high-quality investment and development in its vicinity, depress property values and hurt the city's tax base and growth potential. Uglies have a blighting influence, because their depressing effect discourages maintenance and investment and fosters decay. Dealing with uglies without violating somebody's private property rights is a delicate issue, but it need not be impossible. Usually the impact of such things as junkyards, poor appearance features and large parking lots can be reduced tremendously through good landscaping and screening. Fences, trees and other vegetation serve to reduce the visual impact of uglies and blunt the negative spillover effects of such development.

LANDSCAPING, TREES AND SITE DESIGN

Landscaping is one of the key elements of a quality built environment. Landscaping serves as a visual buffer between the street and adjacent buildings and parking lots. This “buffer” can cut down on glare, screen out uglies, and provide a smooth transition from residential to commercial areas. The difference that good landscaping can make cannot be overstated. A well landscaped street is a pleasing one to drive on or walk beside, and the good visual quality makes that street something that people will seek out rather than just travel on by necessity.

Trees in particular enhance the street environment. They provide shade, reduce the pavement temperature in the summer, reduce glare, provide a buffer between cars and pedestrians and enhance the views from both near and far. Good shade trees also provide a tangible economic benefit, increasing property values by as much as 15%, with a corresponding increase in the City’s tax base.

Businesses and developers have increasingly begun to appreciate the benefits of landscaping and trees. Gastonia has seen some new developments with fine landscaping, but it has been far from consistent. With the adoption of a new landscaping ordinance in 1994, Gastonia is assuring that the quality of the landscaping and the visual impact of new development will at least follow a minimum standard. This standard of expectation for new development will go a long way toward providing continuity in the view from the street.

Another community standard that improves the quality of the built environment is good site design. The size and placement of buildings, the location of parking areas, the planting of trees and the design and placement of signs all have an effect on the perceived impact of new development. Good site design for multi-family and cluster housing can reduce the perceived density of those developments and foster acceptance of higher density and mixed uses within traditional single-family neighborhoods. Thus, land can be used more efficiently, without degrading the quiet residential character that we value in our neighborhoods. As with landscaping, Gastonia cannot achieve this goal in any sort of unified fashion without first having a basic level of expectation for high quality site planning and design.

COMMUNITY IDENTITY AND HERITAGE

Gastonia’s identity, image and reputation have many components. Gastonia is a city that prides itself on hard work and producing excellent goods and services. It is a city of neighborhoods and homeowners. It’s also a city that prizes family values and churchgoing, as evidenced by the prominence of its church buildings.

Gastonia’s built environment is an outward expression of the community’s identity and heritage, and the built environment is perhaps the most important and influential part of the community’s image. The built environment reflects both the positive and negative aspects of Gastonia’s community image.

Gastonia is a growing and changing community,

Good Urban Design

What is good urban design? Is it a nebulous term? Is style synonymous with design? These are a few important elements of good design.

- **Context:** Good designers consider the context in which they are designing. To quote Eliel Saarinen, a Finnish Architect, “*Always design a thing by considering it in its next larger context—a chair in a room, a room in a house, a house in an environment, an environment in a city plan.*”
- **The Built Environment:** New structures should be in visual harmony with the surrounding built environment. Structures should not be out of scale with surrounding structures unless adequate distance and buffering are provided to create a harmonious separation. Structures along a vehicular corridor should not cause visual disharmony.
- **The Human Scale:** All features of a structure to be accessed or experienced by people should be of a scale that is functional and accessible.
- **Function:** Urban design should respond to the surrounding functions and uses.
- **Aesthetics:** The interesting, charming, pleasant, inviting, exciting, stimulating, organized, logical, harmonious, compatible, complementary, beauty, etc., are among some of the expected attributes of an aesthetic design.

increasingly part of an economically integrated modern urban region. In the rush toward this new modern identity, however, Gastonia may be in danger of losing the buildings and landmarks that give the City its unique identity and sense of place.

The commercial and industrial buildings of the textile industry are a nearly irreplaceable resource. These buildings are unmistakably unique and bound up with Gastonia's image.

Gastonia has both historic buildings and neighborhoods, which provide continuity to the past and help remind us of our history. Furthermore, because they have stood the test of time, historic buildings and areas tend to be architecturally pleasing and they add variety to the community's built environment. Another pleasing aspect of our historic neighborhoods is the canopy of mature street trees, an asset that can only be gained over time.

The most prominent historic area is the York-Chester Historic district. It is a protected historic district established by the City. The buildings within the district are protected by the Historic District Commission, which rules on the appropriateness of any exterior changes to the buildings. Trees that are larger than 8 inches in diameter are also protected by the Commission. The guidelines and protections in the York-Chester Historic District have enhanced the stability and attractiveness of the area.

Gastonia's historic resources go well beyond the York-Chester neighborhood. Landmark buildings such as the Firestone mill, the Lawyers Building and the Commercial Building can be seen from miles



The Lutheran Chapel, designed by Louis Asbury, is an irreplaceable landmark on North New Hope Road.

around and are part of Gastonia's identity and individuality. Main Street is the address of most of the historic buildings downtown. Gastonia has already improved the pedestrian environment along Main Street with sidewalk widening, repaving, and the provision of amenities. The age and historic importance of the buildings along Main Street make it a good candidate for historic designation. In addition, several mature neighborhoods within the city will become old enough for historic designation by 2010, and they should be evaluated and considered for preservation and historic status when they reach that stage.

To summarize, Gastonia's built environment has a mix of both strengths and weaknesses. The strengths include good residential neighborhoods, street trees, historic neighborhoods and landmark buildings. The weaknesses include the presence of poorly defined entrances, "uglies" in prominent locations, and a cluttered appearance along major corridors.

ISSUES

1. The visual quality of city entrances, the major thoroughfares leading into Gastonia, provide the visitor with his or her first impression of the community.
2. “Uglies” draw negative attention to themselves, degrade the community’s image, and *discourage quality development* in their vicinity. Uglies include un-screened junkyards and power stations, unmaintained property, large parking lots with no landscaping and billboards.
3. A proliferation of signs has resulted in visual clutter along our major thoroughfares. Problems include the size, height and number of on-premise signs, as well as a large number of off-premise signs and billboards.
4. Good site design for multi-family and cluster housing can reduce the perceived density of those developments and encourage greater community-wide acceptance of innovative developments and mixed uses alongside traditional single family neighborhoods.



Franklin Blvd looking east from downtown Gastonia. The Franklin Craig and Fairmount Park neighborhoods are in the wooded area at the top of the photograph.



This stretch of Franklin Blvd. in the Franklin-Craig neighborhood is a shaded respite from the bustling commercial streetscape to the east and west. (See photo below)

5. The benefits of trees in the urban environment are both intuitive and well documented. Trees improve the natural environment of the city by providing shade, reducing erosion, converting carbon dioxide into oxygen and reducing the runoff that causes flooding. Trees also provide economic benefit by raising property values and visual benefit by screening unwanted views and providing a sense of well being.
6. The under use of downtown buildings leads to depressed rents, low maintenance and decay. This can result in visual blight that depresses property values and discourages investment.
7. The York-Chester historic district is an outstanding central city asset, providing an excellent tree canopy, interesting architecture, and stable property values. Other areas should be considered for historic district status as they mature and qualify for designation.
8. Individual historic buildings are equally important. Landmark buildings such as the Firestone Mill, the Lawyers Building and the Commercial Building may need protection similar to what is offered in the historic district.

OBJECTIVES AND TOOLS

Objective 1: *Improve the appearance of major corridors and the entrances to Gastonia.*

- 1-a)** Develop corridor plans, in cooperation with the property owners, for all of Gastonia’s major corridors.
- 1-b)** Develop public-private partnerships and strategies for the enhancement of each major corridor. Such partnerships would emphasize voluntary efforts toward beautification of the corridor.
- 1-c)** Utilize community resources—tree planting, flower beds, creative signs, garden and civic clubs, and scout projects—to mark the major gateways to Gastonia.
- 1-d)** Use overlay zoning districts on major corridors to protect and enhance their visual quality.
- 1-e)** Petition the State to use “enhancement” funds provided under the Intermodal Surface Transportation Efficiency Act on the Interstate 85 corridor.
- 1-f)** Use zoning to insure high-quality development and a parkway atmosphere on the proposed US 74/321 bypass.
- 1-g)** Where feasible install new electrical lines underground.

Objective 2: *Provide good stewardship of Gastonia’s historic resources.*

- 2-a)** Encourage rehabilitation and reuse of historic buildings, where feasible.
- 2-b)** Evaluate other older neighborhoods for historic designation, upon request of neighborhood residents.
- 2-c)** Coordinate efforts to preserve landmark buildings with the County Historic Preservation Commission, which maintains the Local Register of Historic Places.

Objective 3: *Provide for an effective, orderly and safe setting for business identification through reasonable controls of streetscape signage.*

- 3-a)** Cluster and group road identification and directional signs (those erected by the City and NCDOT).
- 3-b)** Promote the use of signage which is eye-catching but reasonable in size and height, as opposed to the competitive waste of bigger, higher and more garish signs.

Policy References

Built Environment: 5-b

Economy: 1-f, 3-b;
Built Environment: 1-c;
Land Use: 2-c

Economy: 1-f, 3-c;
Built Environment: 1-b, 5-b;
Recreation: 4-d;
Land Use: 2-c

Economy: 2-e, 5-c;
Housing: 5-h;
Transportation: 3-b, 3-d

Built Environment: 5-f, 6-c

Housing: 6-a, 6-b

Housing: 6-c

Land Use: 2-c

Built Environment: 3-c;
Land Use: 2-c

3-c) Examine current signage allowances for new commercial construction. Adopt codes which graduate down in height and size for more restrictive zones; e.g. office zones.

Built Environment: 3-b;
Land Use: 2-c, 3-f

3-d) Require sign plans for unified developments in conjunction with site plan approval.

Land Use: 2-c

3-e) Clarify the requirements for complying with the sign ordinance when a sign face is removed but the sign structure remains.

3-f) Study the requirements and options for flashing and rotating signs.

3-g) Reduce the allowable space for a building-face sign (now at 30% of front facade area).

3-h) Examine existing billboard requirements and determine options for future code measures.

Objective 4: *Strengthen the downtown area as a true center and focus of Gastonia.*

4-a) Continue to concentrate public buildings, such as a new courthouse, city hall and civic center, downtown.

Community Facilities: 2-a;
Land Use: 6-c

4-b) Continue tree planting and landscaping along the Southern Railroad depression. Improve pedestrian access over the railroad to help knit the two sides back together.

4-c) Prepare for a high-density mixed-use center adjacent to a regional light rail station, when this becomes a reality.

Transportation: 2-c;
Land Use: 4-g, 6-e

Objective 5: *Increase tree planting and work to prevent and decrease tree loss throughout Gastonia.*

5-a) Take advantage of opportunities to fund new tree planting, through the North Carolina Department of Transportation, grants, and community organizations.

5-b) Connect tree planting, preservation and stewardship with the City's planning efforts for major corridors and entranceways.

Built Environment: 1-a, 1-c;
Land Use: 2-c

5-c) Employ a city urban forester to coordinate city efforts, provide expertise and educate the public.

5-d) Establish utility pruning standards that take into consideration aesthetics and tree preservation.

Built Environment: 5-e, 5-f

5-e) Through the City's Clean City program, increase public education and

Built Environment: 5-f, 6-c

awareness of the proper methods of tree pruning.

- 5-f) Avoid damage to tree roots when performing street and underground utility work.
- 5-g) Fulfill the requirements of the National Arbor Day Foundation and obtain certification for Gastonia as a “Tree City USA.”

Built Environment: 1-g, 5-d, 6-c

Economy: 8-c

Objective 6: *Use the City’s regulatory ability to enhance the tree canopy.*

- 6-a) Require street trees in conjunction with new and redeveloped commercial, industrial, institutional and multi-family residential development.
- 6-b) Continue to include landscape plan review in developments that have site plan review.
- 6-c) Revise historic district regulations to prohibit damage to tree roots and improper pruning.
- 6-d) Establish protection for “specimen” or “landmark” trees: outstanding examples, trees of great age or trees on historic property.

Land Use: 3-e, 5-d

Built Environment: 1-g, 5-e, 5-f

RECREATION & OPEN SPACE

GOAL *To provide a variety of active and passive recreation opportunities, and to preserve valuable open space for the enjoyment of the residents of Gastonia.*

BACKGROUND AND TRENDS

Recreation has been a part of Gastonia's community life since its beginning. Athletic and recreational programs, especially in baseball, were sponsored by the City's textile mills beginning in the late 1920's. Recreation was also sponsored by Gastonia's churches and service clubs such as the American Legion.

Publicly-provided parks and recreation have long been accepted as necessary to maintain a good quality of life in an urban environment. Although recreation and entertainment are increasingly available through private sources, it is the public parks and recreation areas that enhance Gastonia's civic and community life.

Gastonia's first City park was and is Lineberger Park, built on twenty acres of land at Garrison Blvd. and Chestnut Street. Ten acres of the land were purchased by the City in 1927-28 and that land was matched with another ten acres donated by the Lineberger family. Lineberger Park was improved during the 1930's by the Works Progress Administration. Sims Legion Park is another venerable Gastonia park, built on land donated by Brown Wilson in memory of Lt. Albert H. Sims, a World War II veteran. Sims Park was given originally to the American Legion Post 123, and it has been the home of American Legion, scholastic,

little-league and minor league professional baseball, as well as other sports and activities.

In the early 1960's, Gastonia began to take its recreation programs to the neighborhoods with the construction of Erwin Park and Recreation Center, followed closely by Phillips Recreation Center. Eventually five Recreation Centers would be built, most recently the T. Jeffers Center in 1979. Still to be built is a permanent southeast recreation center, which is now located at the National Guard Armory on Robinwood Road.

The City of Gastonia's recreational facilities include parks, community centers, athletic fields, swimming pools, a baseball stadium and a golf course. Much of the focus on City investment in recreation has been in active recreation and athletics.

RECREATIONAL FACILITIES

A well planned and well maintained park and open space system is not only meets the recreational needs of the residents of Gastonia, but also helps project a strong community image. Gastonia's parks and open spaces are a source of civic pride for a community that cares for its valuable natural areas.

Gastonia's parks and community centers serve overlapping functions, with generally one large park

and/or community center for each sector of the City. Lineberger Park is Gastonia's flagship park, with a central location and a variety of active and passive recreation opportunities. Rankin Lake is another large park that also provides both active and passive recreation.

The following is a list of Gastonia's recreational facilities, with the name and location of each kind. Figure 1 shows the location of the Community Centers, Parks and other recreational opportunities provided by the City of Gastonia.

Community Centers: provide gymnasiums, club rooms and game rooms, and are available for use by the general public. Supervised recreational activities are available at the community centers.

Sector	Rec. Center	Location
Northeast	Bradley Center	N. Modena Street
Central	Erwin Center	N. Morris Street
Southwest	Phillips Center	Echo Lane
Southeast	Armory	Robinwood Road
Northwest	T. Jeffers Center	Whitener Street
Citywide	Adult Rec. Center	W. Franklin Blvd

Parks: provide open space enjoyment and a variety of active and passive recreation activities.

Park	Location
Bradley Park	N. Modena Street
East Park	End of Hemlock
Erwin park	North Pryor Street
Ferguson Park	Golf Course Drive
Lineberger Park	Garrison Blvd.
Linwood Park	Garland Ave
North Park	Rankin Ave
Phillips Park	Echo Lane
T. Jeffers Park	Whitener Street
Vance Street Park	Vance Street
Rankin Lake Park	Rankin Lake Road

Other Recreational Facilities:

Sims Legion Park
 Gastonia Municipal Golf Course
 A listing of some common recreational activities and where they are available is shown in Figure 2.

In addition to the City-owned parks and community centers, the City of Gastonia has a joint-use agreement with Gaston County Schools. This increases the number of walking and jogging tracks and tennis courts that are available to the public.

Further recreational opportunities are available through Gaston County, which has its own parks and recreation programs.

Additional recreation facilities are available in and around Gastonia, including church-sponsored activities such as family life centers, the YMCA, the two boy's clubs, the Optimist Club and school activities. Crowders Mountain State Park is just southwest of Gastonia, and it is an outstanding scenic and recreational asset, attracting people from the entire region.

ORGANIZED YOUTH SPORTS

Gastonia has seen an exponential increase in participation in youth sports activities over the past 15 years, with an total increase of 654% in the City's baseball, softball and soccer leagues. No new fields or parks have been built in that time, and the City's existing facilities are somewhat strained by the increase. Constant use has taken its toll not only in increased wear and tear, but also through delayed maintenance and improvement.



Lineberger Park is Gastonia's flagship park.

Figure 2
Selected Recreational Activities

Park, Center or School	Activity Room	Athletic Fields	Ceramics	Basketball	Gymnasium	Instructional Programs	Jogging Track	Picnic Area	Playground	Swimming Pool	Tennis Courts	Weight Room
Ferguson Park		•							•		•	
Lineberger Park		•		•					•	•	•	
Linwood Park		•							•	•		
Hunter Huss High School												•
Rankin Lake Park						•			•			
Adult Recreation Center	•	•	•	•	•	•	•	•	•	•	•	•
Erwin Center	•	•	•	•	•	•	•	•	•	•	•	•
Phillips Center		•		•	•	•		•	•		•	
Bradley Center	•	•	•	•	•	•		•	•		•	
Southeast Center					•	•		•				
T. Jeffers Center	•	•	•	•	•	•	•	•	•	•	•	•
Arlington School							•					
York Chester School								•	•			
Gardner Park School							•	•				
Hancock School							•	•				
Ashbrook High School												•

A committee of concerned citizens has petitioned the City to construct a comprehensive sports park, which would provide a central location and sufficient space for all of the City’s sports leagues, as well as spectator space, restrooms, adequate parking and concessions. This approach has been successful in a number of other cities, and a comprehensive sports park would provide amenities that would not be cost-effective for multiple neighborhood sites

TRENDS IN RECREATION

Several trends are expected to influence the development and administration of parks, open space and recreation in Gastonia.

- As the baby boom generation ages, the proportion of people in middle age and older will increase. This age group (50 to 65 years old in 2010) will have increasing amounts of leisure time and will probably be more active than the previous generation.
- Increases in single-parent families may signal a need to provide more recreational opportunities through after-school programs, day care and

other means.

- Gastonia’s high population growth to the east and southeast will create a greater demand for parks and recreational facilities in those sectors of the City.
- The amount of State and Federal aid for park projects will shrink if not disappear. Local funds must be considered the only reliable source for meeting Gastonia’s future recreational needs.

These trends point toward increased use of parks and recreation for less organized pursuits, such as walking and cycling, and children’s playground activities. In addition, while the demand for more flexible open space grows, the resources for acquiring that space will probably shrink. The City must search for innovative ways of providing for the changing needs of the residents of Gastonia.

Gastonia needs a comprehensive, scientific survey to determine the recreational needs of City residents and whether those needs are being met. Use of existing parks, recreation centers and fields can be used as an indicator of the growth in established activities, but it is not as good an indicator for emerging recreational activities such as walking and cycling. Conducting a full survey would help the City determine more precisely the recreational needs of Gastonia’s residents.



Playgrounds are some of the most consistently used recreational facilities in Gastonia.

OPEN SPACE AND GREENWAYS

As Gastonia expands and spreads over the landscape, we have an opportunity to preserve and make use of some of our best natural assets even as the areas around them are developed for houses, roads, schools, industries and business. By creating greenways, Gastonia can provide many miles of paths for walking, jogging, bicycling and other forms of recreation. Where greenways are located along creeks, they can also help simplify stream maintenance. In the book *Greenways for America*, Charles Little gives his definition of “greenway:”

Greenways are a linear form of open space along either a natural corridor, such as a riverfront, stream valley or ridge line, or overland along a railroad right-of-way converted to recreational use, a canal, scenic road, or other route. It is any natural or landscaped source for pedestrian or bicycle passage.

The development of greenways for walking, cycling, connecting parks and other areas has been a trend in cities across the country since the 1970’s. The trend emerged both because of a dramatic shift toward the activities that greenways are best suited for, and because of the relative cost-effectiveness of greenway development. Greenways are almost always on land that often goes unused for any other purpose. Some of the North Carolina cities that have active greenway programs include: Raleigh, Charlotte, Greensboro, Morganton, Boone and Cary.

Gastonia has several natural trails and scenic paths already. The popular Crowders Mountain trails are an example of the value of greenways along ridge

lines. Another local greenway is the loop-shaped, mile-long nature trail behind the Schiele Museum

Potential greenway land is not always obvious to the casual observer because it is often obscured by vegetation, buildings or the rise and fall of the land. A careful study of Gastonia’s land use, however, reveals corridors of open land throughout the City, many of them along creeks and streams, but also along other corridors such as the abandoned Piedmont and Northern Railroad. This corridor, now owned by the State of North Carolina, runs from downtown Gastonia east to Mount Holly and Charlotte. Its future is undetermined, but it could be used for a greenway if it is not used for some other transportation purpose.

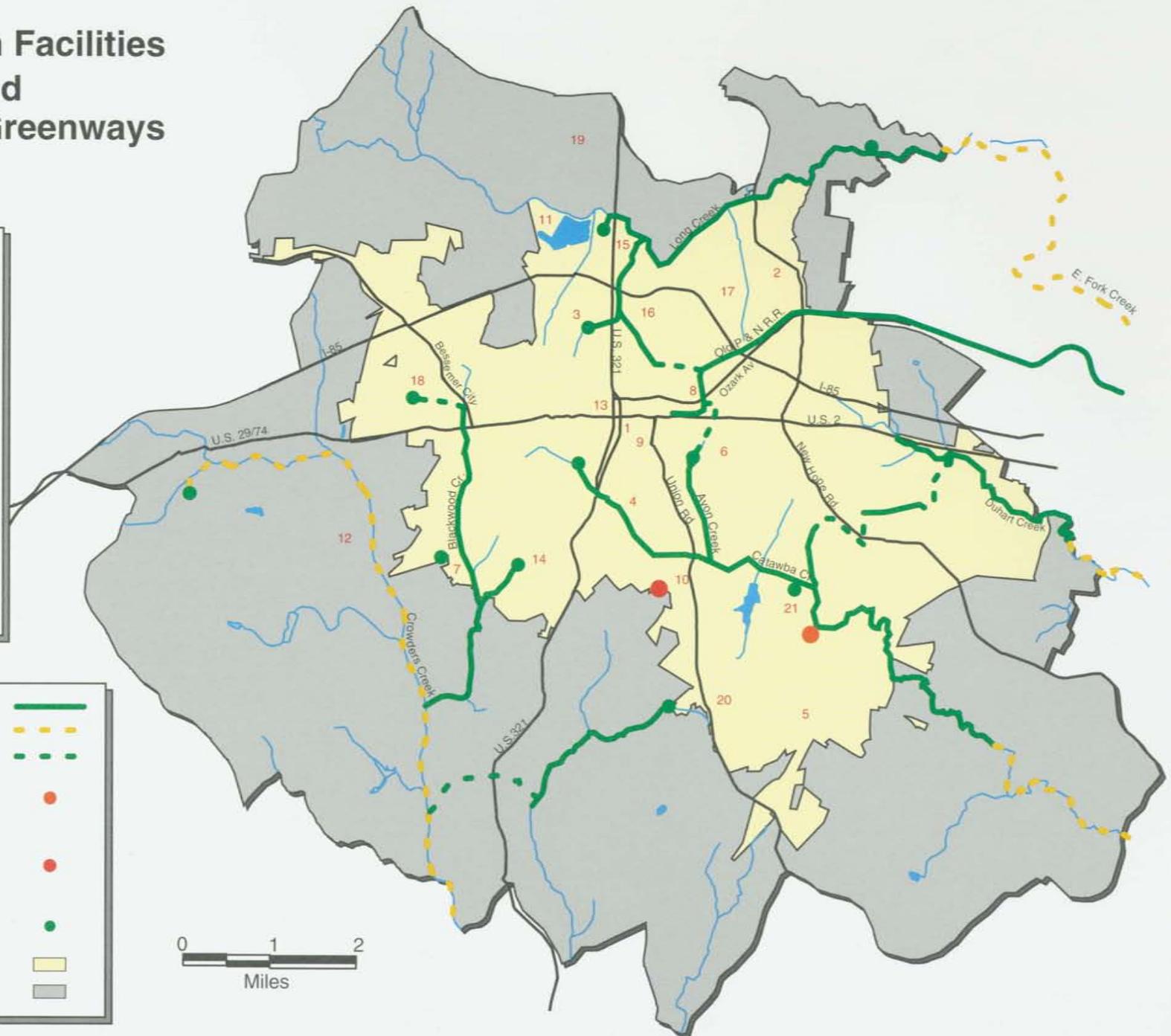
One of the public benefits of greenways is the transportation and connectivity function that they serve. Greenways can potentially connect parks, neighborhoods, schools and other destinations. If a greenway is strategically located, it can function as an alternate transportation system, giving pedestrians and cyclists a safer and more enjoyable route than thoroughfares.

The first step toward the realization of greenways in Gastonia is to develop a greenway plan. Successful efforts in greenway development have relied on extensive citizen participation and initiative. A greenway plan would identify potential greenway corridors, outline strategies for protecting and managing them, and make recommendations on the policies and methods for acquiring the land and developing it for recreational use.

Recreation Facilities And Possible Greenways

1. Adult Recreation Center
2. East Park
3. Erwin Center
4. Ferguson Park
5. Gaston Country Club
6. Lineberger Park
7. Linwood Park
8. Love Park
9. Memorial Hall
10. Municipal Golf Course
11. Municipal Skeet Range
12. Linwood Springs Golf Course
13. North Park
14. Phillips Center
15. Rankin Lake Park
16. Sims Park
17. Roland Bradley Center
18. T. Jeffers Center
19. Biggerstaff Park
20. Martha Rivers Park
21. Gastonia Armory

- Possible City Greenways 
- Possible Regional Facilities 
- Possible Street Connectors 
- Possible Southeast Recreational Center (Location Undetermined) 
- Proposed Youth Sports Athletic Complex (Location Undetermined) 
- Parks Connected By Possible Greenways 
- City of Gastonia 
- 2010 Planning Area 



ISSUES

1. The demand for recreation in Gastonia will be shaped by future demographic forces. Influences include older people living longer, more working mothers and single-parent families, and a population shift in Gastonia toward the southeast.
2. Gastonia's athletic facilities are showing the wear and tear that is a result of the exponential growth in organized youth sports.
3. The City of Gastonia has not built any new parks or community centers since the T. Jeffers Center in 1979.
4. The southeast sector of Gastonia does not have a year-round, full-service recreation center.
5. Many recreational facilities have a regional focus, and the planning and operation of regional facilities should be coordinated with Gaston County, the Schools, and the towns surrounding Gastonia.
6. Schools are an important recreational asset. Joint projects and sharing of facilities are two things that should continue to be encouraged by the City and the Gaston County Schools.
7. Parks, trails and other recreation facilities are sometimes regarded as NIMBY's (Not In My BackYard). Citizen participation at the earliest stage possible in planning new recreational facilities can help build trust and forestall misinformation.
8. Gastonia has many corridors of open land suitable for greenways, but few tools for protecting or acquiring this land.
9. Recreational land, as with any other public land, is easier and less expensive to acquire before an area is in the midst of growth. A land-banking program would save the City money over the long term.

OBJECTIVES AND TOOLS

Objective 1: *Determine the recreational needs of Gastonia residents and the physical facilities needed to meet those needs.*

1-a) Conduct a comprehensive scientific survey of recreational needs for Gastonia's residents.

1-b) Update the recreational facilities inventory to determine which needs are being met and which need to be addressed.

1-c) Develop guidelines for acceptable levels of service for the various recreational facilities and activities.

1-d) Develop a separate recreational facilities plan.

Objective 2: *Provide active and passive recreational opportunities corresponding with the growth and demographic changes in Gastonia through 2010.*

2-a) Upgrade, develop and improve the existing parks which are currently idle or under used.

2-b) Continue the good stewardship of Gastonia's parks and recreation centers with adequate operating funds, management and maintenance.

2-c) Guarantee citizen participation prior to any undertaking of major capital improvements of parks and recreational facilities.

2-d) Use the City's land use regulations to ensure that land surrounding recreational areas has compatible development.

2-e) Continue the joint use of public facilities with Gaston County and Gaston County Schools, and look for new opportunities to use facilities to their maximum.

2-f) Build a permanent year-round community/recreation center in the east or southeast sector of the City, possibly coupled with an adjacent park.

2-g) Use zoning incentives to encourage the provision of open space areas within future developed areas.

2-h) Study the feasibility of redeveloping the land associated with obsolete public facilities for recreational purposes

2-i) Establish a land banking program to acquire needed land in the most cost-effective manner possible.

2-j) Retain the City Golf Course as a public facility, and upgrade the Course so that the fee structure can be adjusted to make it fully self-sustaining.

Policy References

Natural Environment: 3-a

Recreation: 3-b

Natural Environment: 3-f

Objective 3: *Provide safe, adequate and accessible space for the City's growing sports leagues.*

3-a) Build a central, integrated softball-baseball-soccer park.

3-b) Investigate the possibility of joint acquisition of land for a central sports facility with Gaston County Schools, Gaston County or both.

Recreation: 2-e

Objective 4: *Protect, reserve or acquire open land corridors for possible greenway development.*

4-a) Develop a plan for trails and greenways.

Transportation: 6-e;
Natural Environment: 3-b

4-b) Use incentives within the City's land development regulations to encourage the donation of land for greenway corridors.

Natural Environment: 3-c,
3-d; **Recreation:** 4-c

4-c) Use easements or other agreements with willing private property owners to secure greenway corridors on land that has not been purchased.

Natural Environment: 3-d;
Recreation: 3-d

4-d) Leverage public efforts for greenway development with the help of volunteers, service clubs and other interested persons.

Built Environment: 1-c

4-e) Use land that is already owned by the public where possible in developing greenway corridors.

Natural Environment: 3-c

4-f) Study the use of the P & N corridor for a regional trail if that corridor will not be used for other transportation purposes.

Transportation: 3-c

ANNEXATION

GOAL *Extend Gastonia's boundaries in an orderly and fiscally sound manner, provide urban services to growing areas at the City's periphery, and promote sound urban development.*

BACKGROUND AND TRENDS

The City of Gastonia was incorporated on January 26, 1877. Originally it was one square mile in area centered on the junction of the Southern Railroad and the Carolina & Northwestern Railroad. Gastonia doubled in size in 1899 with the addition of two one-half square mile sections at the east and west ends of the City. Further expansion occurred in 1911, with an annexation that roughly doubled again the size of the city, adding territory to the north, west and south. No further annexation took place until 1947. In the period from 1947 to 1958, another 18 areas were annexed to the City, most in large tracts of 25 acres or more.

From 1877 to 1959, the City could only annex by petition, popular referendum or an act of the legislature. Recognizing that cities and towns needed to annex to continue sound urban and economic development, in 1959 the North Carolina legislature passed a progressive annexation law which allows

cities to unilaterally annex contiguous areas that were developed for urban purposes, with or without consent of those being annexed.

Following the change in annexation laws, the City continued to annex land, mostly in smaller parcels, until 1964. On January 1, 1964, Gastonia annexed a large tract of land to the east which increased the area of the City by about 50%. It has been Gastonia's single largest annexation to date. From 1964 to 1981, the City annexed relatively little land, taking in mostly parcels of 25 acres or less. In 1981, the pace of annexation picked back up again, with greater activity throughout the 1980's.

Gastonia has already reached a point where its boundary is adjacent to the town limits of Lowell and Ranlo, and the towns of Cramerton, Dallas and Bessemer City combine to encircle Gastonia on the east, north and northwest. The large number of incorporated places surrounding Gastonia limits the areas that are developed and open to annexation. Agreements have been negotiated with Bessemer City and Cramerton over which city will annex land between Gastonia and each of those cities.

Areas that are expected to be considered for annexation during the time frame of this plan are shown in Figure 1.



Annexation of the huge Loray (Firestone) Mill and village helped spur Gastonia's early growth.

ELECTRIC SERVICE AND ANNEXATION

An issue particular to Gastonia is the City's electric system. Under present State laws, the city electric system cannot be expanded into areas that already have other electric service. Since annexation generally only occurs in areas that are developed for urban purposes, the great majority of land available for annexation already has other electric service. Electricity sales contribute a large portion of the City's revenue base, subsidizing a low property tax rate. Where non-electric areas are annexed, however, only property taxes are available. Under the present revenue structure, further annexation of areas served by other utilities intensifies the revenue imbalance between City electric customers and those who do not contribute this form of revenue.

When the City annexes, it commits itself to the provision of urban services, such as water, sewers, police and fire protection. The cost of these services should generally not exceed the increased revenue

generated by the annexed area. An exception to this policy is when an economically marginal area provides access to a more favorable area. Annexation of the marginal area may not be in the best short-term interest of the City, but it may provide long-term benefits through the annexation of areas that have industrial or commercial potential, for example.

Annexation is a necessary means to provide for orderly urban growth, expansion of services, and a stable source of revenue. The whole community benefits from the improved health and safety of areas that have urban services.

ISSUES

1. The City of Gastonia is surrounded on the east and north by the incorporated towns of Cramerton, Lowell, Ranlo, Dallas and Bessemer City. Although not a short-term issue, the North Carolina-South Carolina border serves as an annexation barrier to the south.
2. The areas with the best opportunities for annexation lie to the northwest, west and southeast of the City.
3. The formation of new municipalities in Gaston County is not in the City of Gastonia's best interest.
4. The City has negotiated sphere-of-influence agreements with Bessemer City and Cramerton. The City does not have agreements with Lowell, Ranlo, or Dallas.
5. Due to declining household sizes, the population of the City is likely to decline if the City does not continue to annex.
6. Opportunities for the expansion of electric service are extremely limited. Electricity sales contribute a large share of the City's revenues. Under the present revenue structure, non-electric areas contribute proportionately less to the revenue base than do electric areas. Annexation of non-electric areas will intensify the revenue imbalance.
7. When the City annexes an area, it commits itself to providing urban services to that area, such as water, sewer, police and fire service. The cost of providing these services should be weighed against the benefits derived from the increased tax base.
8. In taking a long-term approach to annexation, the City should consider annexing economically

marginal areas if doing so will open a more favorable area to annexation in the future.

9. Land that has industrial or commercial potential will provide greater revenues per acre than land that is suitable for residential development.

ANNEXATION STUDY AREA

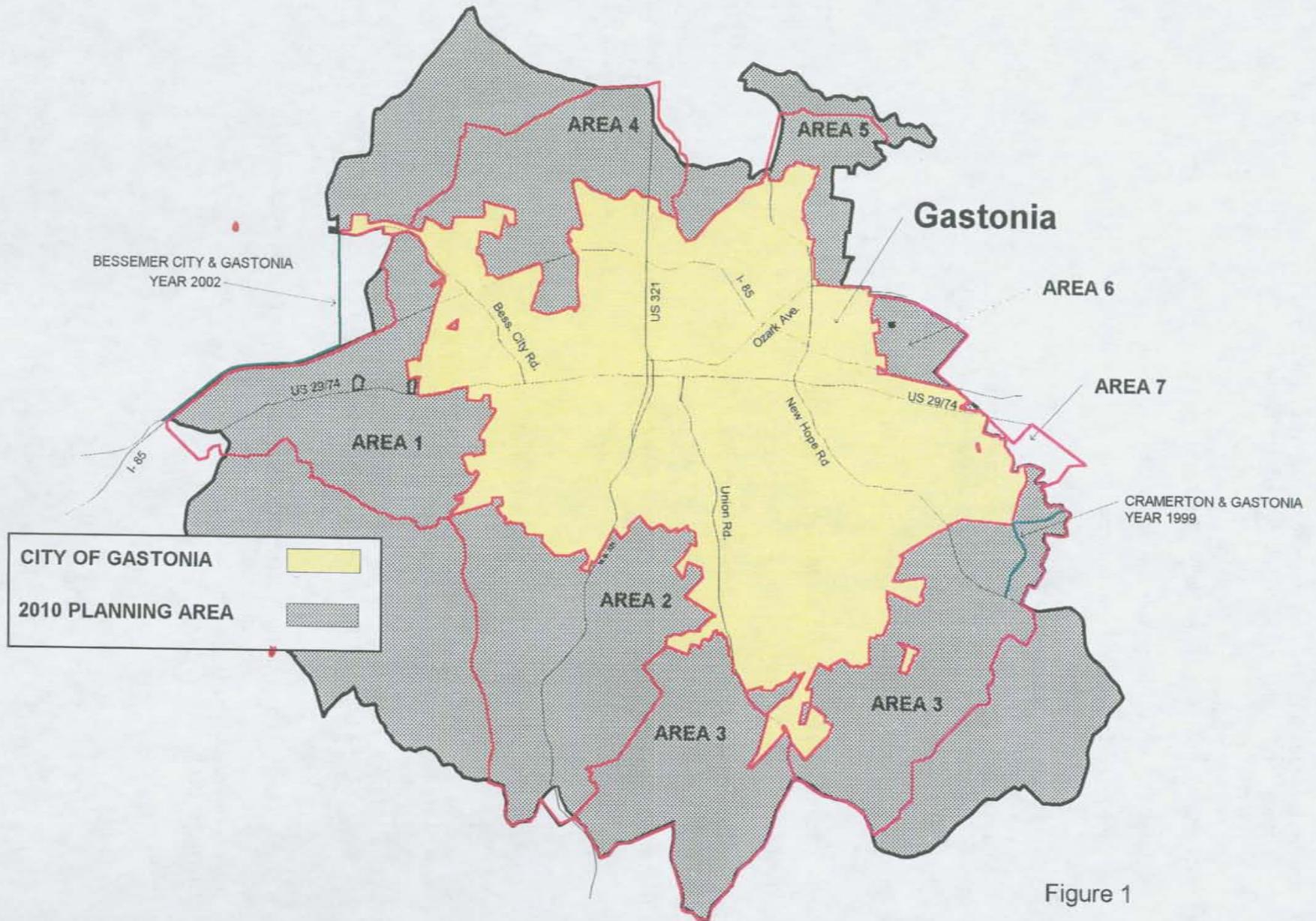


Figure 1

OBJECTIVES AND TOOLS

Objective 1: *Identify land that has potential for annexation to the City.*

Policy References

1-a) Investigate the feasibility of annexation to the northwest (industrial development) and to the southwest and southeast (residential development).

1-b) Study specific areas to determine annexation priority:

Priority I: Areas that are developed for urban purposes.

Priority II: Developing areas projected to meet standards within five years.

Priority III: Long term growth areas.

1-c) Negotiate sphere-of-influence agreements with the towns of Dallas, Ranlo, Kings Mountain and Lowell. Renew the annexation agreements with Cramerton and Bessemer City.

1-d) Oppose the incorporation of new municipalities in Gaston County.

Objective 2: *Establish an ongoing annexation program.*

2-a) Prepare an annexation plan.

2-b) Establish a capital revenues fund to cover the short-run costs of annexation.

2-c) Use utility expansions and land use policies to establish a development pattern that allows economically feasible annexation.

Economy: 5-b; **Housing:** 5-e;
Transportation: 2-f;
Natural Environment: 2-b;
Annexation: 3-b

Objective 3: *Extend urban services in an orderly, efficient and prioritized fashion.*

3-a) Address the revenue imbalance created when the City annexes property that is not served by City electricity.

Utilities: 10-a, 10-c

3-b) Coordinate annexation policy with the extension of water and sewer service in order to minimize the number of non-resident customers.

Economy: 5-b; **Housing:** 5-e;
Transportation: 2-f;
Natural Environment: 2-b;
Annexation: 2-c

3-c) Take advantage of opportunities to extend the City electric system.

Utilities: 10-a

3-d) Annex economically marginal land if doing so will open more valuable land to annexation.

LAND USE AND DEVELOPMENT

GOAL *The continuing development, growth and vitality of Gastonia, with both a geographic and functional balance, sufficient infrastructure, and a harmonious development character that advances business, living opportunities and a high quality of life for all Gastonia residents.*

INTRODUCTION

Gastonia's history, physical and regional setting, growth prospects and functional systems have been previously analyzed in this plan. All of these factors will bear on the future land use in Gastonia. Indeed, in many ways the land use section is the culmination and primary implementation tool of the *CityVision 2010* plan. Land use is truly where planning "hits the ground."

Gastonia is the economic, governmental, and population center of Gaston County. Almost every service and amenity in the County, from department stores to the hospital to the courthouse, are located in Gastonia.

Gastonia has had land use *regulations* for several decades, but over the last twenty years these regulations have been developed, enforced and revised without the guidance of a city-wide, up-to-date land use plan. The lack of such a plan has sometimes allowed short-term impacts and consequences to drive land use decisions.

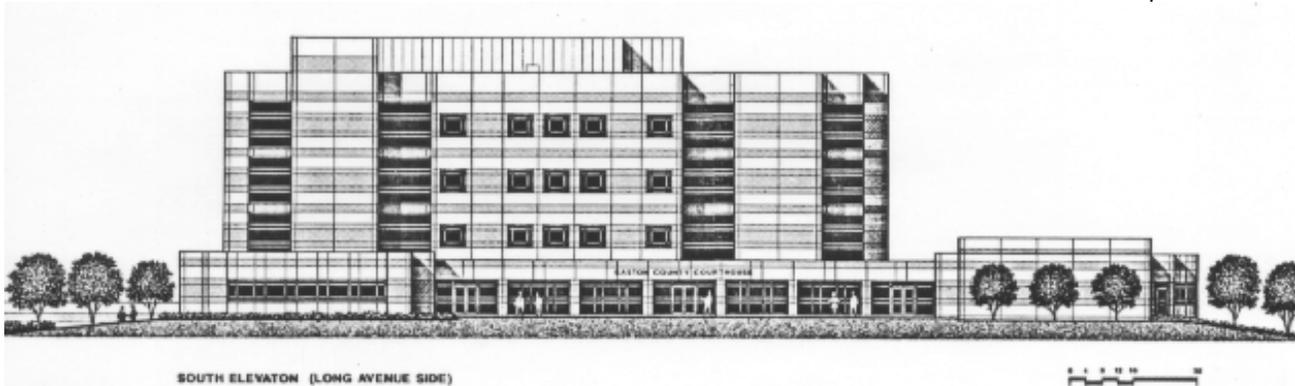
This document will provide an overall vision and plan for the orderly development of Gastonia. The land use section provides both policy statements and a future land use map to guide day-to-day decisions within the context of this long range vision. As with any other plan, it is not written in stone. It will be amended at regular intervals to accommodate unforeseen circumstances and changing trends.

EARLY DEVELOPMENT

Gastonia developed around the railroad junction established when the Charlotte and Atlanta railroad bypassed Dallas and was routed along an east-west ridge line in Gaston County. Downtown Gastonia is located adjacent to this junction. Scattered throughout present-day Gastonia are older textile mills and their adjacent villages, in various states of repair. The pattern of mills and mill housing was heavily influenced by the railroads, resulting in a linear development pattern concentrated on the ridge lines of the City.

Due to this influence of the railroad on Gastonia's development, the oldest parts of the City are generally located on some of the highest elevations, with later infill development occurring between the ridges. The opposite situation was prevalent prior to the advent of the railroad, with settlements concentrated along waterways and the oldest section of a town at the lowest elevation.

Closer to downtown, Gastonia's business leaders and emerging professional class built their housing chiefly south of the central business district, the area now known as the York-Chester neighborhood. York-Chester has many historic homes and other fine examples of early 20th-century housing. East of York-Chester and north of the C.D.A. mill village is a neighborhood consisting of middle-class houses that resemble the mill village form, but were individually built and owned. Further east along



The Proposed Gaston County Courthouse (Long Ave. side).

Franklin are two other older, stable neighborhoods, Fairmount Park and Franklin-Craig.

North of downtown, an African-American community was formed in the Highland neighborhood, between Chester and Oakland Streets. Highland, in addition to the usual churches and schools, has a portion of its neighborhood business and cultural center remaining along North York Street. The Highland neighborhood was largely working class but economically mixed and home to professionals as well. Highland has experienced two diverging trends over the last two decades. The first trend is the overall improvement of housing in the neighborhood, due to slum clearance and the efforts of the City's Community Development Program and non-profit groups such as Habitat for Humanity. Crime and social problems, however, have increased over the last two decades, as they have in some other neighborhoods.

With the beginning of streetcar service in 1911, Franklin (Avenue) began to develop as a commercial strip, stretching beyond downtown to approximately Church Street on the east and Webb Street on the west. Evidence of this early transit-influenced commercial development can still be seen with many of the buildings having a uniform setback (adjacent to the sidewalk now because Franklin has been widened), no side yards and traditional storefront architecture (large display windows, recessed doors).

Later commercial development occurred in both commercial strip and shopping center form. Commerce continued to flow outward along Franklin, past New Hope and Cox Roads on the east and past Myrtle School Road on the west. Additional

commercial areas developed on sections of almost all of Gastonia's major thoroughfares. Franklin Boulevard still has the most commercial land use of any thoroughfare in the City, as significant portions of Gastonia's other thoroughfares remain residential.

TRENDS IN GASTONIA'S LAND USE

The pattern of Land Use in Gastonia is a reflection of millions of individual decisions, some key public-policy decisions, and investment decisions made by business persons in and outside the City. The following local and nationwide trends are guiding land use in Gastonia:

- *Housing Pushing Southeast.* New residential development is concentrated in the southeast of Gastonia. The concentration in the southeast has put pressure on the whole range of services in that quadrant, including schools, roads and utility service.
- *More Multi-family Housing.* This is also a national trend, and it is relatively new in Gastonia, as construction of multi-family housing catches up with the demand. The majority of this new multi-family housing is concentrated on the east side of the City.
- *Regional Shopping Destination.* With approximately 3,000,000 square feet of retail space both in place or under construction in the vicinity of New Hope, Franklin, Cox and I-85, Gastonia's east side has become a shopping destination not only for residents of Gaston County, but also



"Big-Box" retailers are concentrated along East Franklin Blvd. (top of photo) adjacent to I-85 (bottom of photo).

York, Cleveland, Lincoln and west Mecklenburg Counties.

- *"Big-box" Retailers.* This includes home-centers, discount stores and warehouse stores, and their associated shopping centers. Big-box stores are the hot retailing trend of the 90's, and big-box development has been largely responsible for a doubling of Gastonia's retail space. Everything is **BIG** with these stores, however, including their parking lots, the amount of traffic that they generate, and their impact on the streetscape.
- *Government/Law/Services Downtown.* As downtown Gastonia has lost retailing, restaurants and services, some of the slack has been taken up by the business of government, including law offices, a new transit transfer station, and \$61 million* of public investment, including a new courthouse, jail, law enforcement center, social services center and housing authority office, on Long Avenue. Thus the vast majority of recent investment downtown has been undertaken by the public sector.
- *Emerging Regional Medical Center.* Gaston Memorial Hospital is the third largest in the Charlotte region, the only hospital in the region that is



Gaston Memorial Hospital

accredited "with distinction", and it is located on a site that has an excellent potential for growth and expansion. Associated medical services have also been growing at a fast rate.

- *The Movement of Industry to Large-Lot Sites Near Highways.* Industrial development has shifted gradually from the rail corridors to the highways. The City of Gastonia has planned for large-tract industrial development in the northwest part of the City. Most of this land is now in farming or transitional uses. As large-scale industry continues to move to more modern buildings, Gastonia faces a challenge in dealing with its obsolete industrial sites. Many of these sites can be used by smaller industries, such as machine shops, suppliers, and start-up companies. Other sites, surrounded by incompatible development, will be more difficult to market and return to productivity.

* All amounts are approximate. Social Services Center: \$12 million; Courthouse: \$25 million; Jail: \$13 million; Law Enforcement Center: \$10 million; Housing Authority \$900,000.

- *Disinvestment in some of Gastonia's older neighborhoods (including downtown).* Despite the growth in suburban Gastonia, the City has older neighborhoods on both the west and east sides that are threatened, with minimal new investment in housing, commerce or services. These neighborhoods present a challenge entirely different from the fast-growing suburban areas. Downtown Gastonia is suffering from a lack of private investment and a declining retail base.

Detailed discussion of the particular trends, strengths, weaknesses and needs of each of Gastonia's sectors is located in the following chapter covering the Sector Plans.

EXISTING LAND USE MAP

The current land use for Gastonia and the 2010 Planning Area is shown in Figure 1, the Existing Land Use Map. This is a generalized depiction of land use in the following categories:

- Industrial;
- Commercial;
- Office Centers;
- Public and Institutional;
- Single-family Residential;
- Multi-family Residential;
- Mixed-use Areas;
- Open Space, Parks and Recreation Areas;
- Vacant and Undeveloped Land.

A generalized map is one that does not show minute detail, but rather combines or eliminates some elements to increase the readability and clarity of the map. Thus the existing land use map does not show individual lots, except where a single lot and land use would be large enough to be readable at the map scale.

In addition, in some areas which have a single prevailing land use, small exceptions to that land use are ignored. An example of this would be a single-family neighborhood which contains a small church or some vacant lots. Those individual vacant lots (or church) are not shown because first they are too small and/or scattered to contribute to our understanding of Gastonia's land use, and second because they are sized and situated so that it can be reasonably assumed that any future development will be consistent with the surrounding neighborhood.

Using the same reasoning, the office land use category is confined to large office developments only. Individual offices, permitted in all of the City's business zones, are shown as part of either commercial or mixed land use. Public and Institutional uses are grouped together because they share several common characteristics. Mixed Use, a land use largely confined to downtown Gastonia, is a functional category: that is, downtown has several different functions, none of which are confined to a single part of downtown. The uses are mixed, and it is this circumstance that characterizes downtown Gastonia as a mixed-land-use area.

The only roads shown on the Existing Land Use Map are the major and minor thoroughfares, both existing and proposed. These are shown mostly to help the user orient himself or herself. The actual acreage taken up by the roads, although a significant percentage of the total land use, is not shown on this map. Again this has been done in the interest of clarity. Showing all the roads at their actual scale would have created a hopeless muddle.

The purpose of the Existing Land Use map is therefore to show the *patterns* of land use in Gastonia and the 2010 Planning Area. The map is used in this plan to identify land use strategies and as one tool for constructing a future land use map. The Future Land Use map is shown and described in the Objectives and Tools section of this chapter.

ISSUES

1. The locations of Gastonia's employment have shifted and will probably continue to shift from small-scale urban sites to larger-scale highway sites. Much of Gastonia's central-area industrially-zoned land is poorly suited to the needs of modern manufacturing plants.
2. Gastonia's zoning and subdivision regulations must be responsive to changes in the demand for housing. Shifts in the housing market should not be hindered by land use regulations that were devised in an earlier era.
3. Retailing in Gastonia has diminished in downtown, the older corridors and the west side, relocating in ever greater concentration on the east side. The present situation requires travel across the City for many goods and services where no cross-city travel was required previously.
4. An efficient and sustainable transportation system is only achievable by coordinating land use and transportation. Land use patterns can either aid or impede the movement of people and goods as well as mass transportation. Conversely, a healthy, convenient and comprehensive transportation system can improve and sustain the quality-of-life in Gastonia.
5. Gastonia is growing disproportionately to the east and southeast. The unbalanced growth undermines downtown Gastonia and requires additional investments in infrastructure, schools and police protection.
6. The areas undergoing disinvestment in Gastonia also experience increases in blight and crime, threatening the long-term sustainability of the City.
7. School assignment zones influence the housing market in Gastonia. Differences in the perceived desirability of the schools can either inflate or depress the price of housing in a neighborhood, directing investment away from neighborhoods where schools are perceived to be a problem.
8. Gastonia's ability to annex suburban areas is finite. The City is limited by an arc of municipalities stretching from Dallas to Cramerton on the north and east, the State of South Carolina to the south, and Crowders Mountain State Park, the cities of Kings Mountain and Bessemer City to the west. Efficient use of land and revitalization of older areas will increasingly become important to maintaining Gastonia's tax base and viability.
9. Gastonia's growth pattern is increasingly being driven by the regional Charlotte housing, retail and job markets. Growth has become a regional phenomenon, resulting in the need for cooperation and coordination of land use and transportation systems.
10. Gastonia's downtown core and older outlying areas are suffering from disinvestment and blight. Ironically, these are the areas that are key to Gastonia's character and identity. Revitalization and reinvigoration of these areas will keep Gastonia from becoming "just another suburb" of Charlotte.
11. Gastonia's low-density single-family zoning in much of the suburban area is contributing to urban sprawl. Sprawl cost the City because it requires more infrastructure per household than does compact development.
12. Land Use decisions in Gastonia have been made without the guidance of an adopted land use plan.
13. Gastonia's zoning ordinance has not been fully revised since 1972. Thus our land use guidelines, with such measures as pyramid zones, are outdated and not responsive to development and community needs in the 1990's and beyond.

OBJECTIVES AND TOOLS

Objective 1: *Achieve a more balanced residential and retail growth pattern.*

- 1-a)** Continue the investment in new sewer and water infrastructure on the west side of Gastonia.
- 1-b)** Support the redrawing of school attendance zones and other measures to ensure a continued socio-economic and racial balance in the Gaston County public schools in the future.
- 1-c)** Include recruitment of retailers to under-used sites as part of our economic development efforts.
- 1-d)** Include the objective of a balanced growth pattern in the decision-making process when deciding on the location of major public buildings and investments.
- 1-e)** Support neighborhood efforts to reduce crime, litter, juvenile delinquency and other blighting influences.
- 1-f)** Use targeted, concentrated code enforcement to improve and ensure the maintenance of housing.
- 1-g)** Use concentrated investment (such as the CDBG-funded investment on Vance Street) to turn around threatened neighborhoods and to spark private investment.
- 1-h)** Support other catalyst projects, such as the adaptive re-use of the Firestone Mill, to draw attention and investment to West Gastonia.
- 1-i)** Encourage and assist the Economic Development Commission in the recruitment of a discount department store in the West Gastonia vicinity to better serve area residents.
- 1-j)** Develop an investment strategy centered around the proposed US 321/74 bypass in order to spur west side development.
- 1-k)** Secure private sector cooperation, such as banks, Realtors® and developers, in the encouragement of balanced growth in Gastonia.
- 1-l)** Use a targeted, site-specific enhancement strategy to create high-potential nodes of growth on the west side of Gastonia

Policy References

Housing: 5-e;
Natural Environment: 2-b

Housing: 5-g;
Community Facilities: 4-b

Economy: 7-a; **Housing:** 5-c;
Land Use: 1-i

Community Facilities: 3-c,
5-c; **Land Use:** 2-b

Housing: 3-a, 5-a

Housing: 3-d, 3-e, 5-b

Economy: 1-b, 5-d

Economy: 7-a; **Housing:** 5-c;
Land Use: 1-c

Economy: 2-e, 5-c, 7-b

Economy: 1-f

Economy: 7-b; **Land Use:** 1-l

Objective 2: *Encourage new investment in areas that have undergone residential and retail disinvestment.*

- 2-a)** Use development incentives to encourage new single-family residential development on the west side. Targeting of the incentives can be accomplished by providing additional incentives for the west side only. **Housing:** 5-d
- 2-b)** In cooperation with Gaston County, study the feasibility of opening a full-service branch public library on the west side of Gastonia. **Community Facilities:** 3-c;
Land Use: 1-d
- 2-c)** Improve the visual appearance of gateways and corridors through landscaping, more orderly and efficient signage and other streetscape enhancements. **Built Environment:** 1-b, 1-c, 3-a, 3-b, 3-c, 3-d, 5-b
- 2-d)** Use landscaping and buffering to reduce the impact of salvage yards and other low-use development along the US 74 gateway corridor, and explore specific measures to remove them if possible. **Economy:** 8-d
- 2-e)** Use the natural beauty of Crowder’s Mountain and the surrounding area as a marketing tool for the whole west side of Gastonia. **Economy:** 8-a, 8-c, 8-e;
Natural Environment: 3-a
- 2-f)** Use promotional and public relations materials to raise awareness of the assets of areas that need new investment. **Economy:** 8-a
- 2-g)** Encourage the establishment of primary health care services on the west side of Gastonia, such as doctor’s offices in family medicine, internal medicine, pediatrics, OB-GYN, and dentistry.

Objective 3: *Implement new land use guidelines that carry out the objectives of this land use plan.*

- 3-a)** Where possible consolidate zoning district classifications and make them more relevant to development trends.
- 3-b)** Ease the requirements and streamline the approval process for Planned Residential Developments, Planned Unit Developments and business parks. **Housing:** 1-c; **Land Use:** 6-f
- 3-c)** Encourage quality Innovative Residential Developments for infill development where feasible. **Housing:** 1-b, 5-b;
Transportation: 2-m;
Land Use: 6-f
- 3-d)** Allow for higher density development with quality design guidelines. **Transportation:** 2-c, 2-m;
Land Use: 6-e
- 3-e)** Keep the landscaping and buffering guidelines up to date. **Built Environment:** 6-b
- 3-f)** Update Gastonia’s sign regulations. (*Cross-reference with built environment.*) **Built Environment:** 3-c, 3-d, 3-e, 3-f, 3-g, 3-h

Objective 4: *Modify the development ordinances to make them more user-friendly.*

4-a) Use logical and intuitive nomenclature for the zones and chapter headings: subjects should be easy to find and not buried within other provisions.

Transportation: 4-a

4-b) Evaluate and clarify the definitions section of the zoning ordinance, lessening the need for day-to-day interpretation of the ordinance.

4-c) Include “permitted use” tables for the various zones.

4-d) Give further approval authority to the Planning Commission, retaining the right of appeal to the City Council or the courts.

Land Use: 7-b

4-e) Issue a development handbook to guide builders and developers through all the City’s land development ordinances.

Economy: 1-e

4-f) Avoid the use of regulations that unnecessarily waste land and contribute to urban sprawl.

Transportation: 3-e

4-g) Include zoning provisions for developments that allow residents to use walking and transit to meet many of their needs.

Housing: 5-b;
Transportation: 2-a, 2-b, 2-c, 2-m;
Natural Environment: 1-g;
Built Environment: 4-c

4-h) Use the City’s land development regulations to encourage the development of clustered commercial centers instead of strips of commercial land use.

Land Use: 6-a

Objective 5: *Make zoning decisions based upon their long-range impact on adjoining areas and the City as a whole.*

5-a) Zoning decisions should be guided by and consistent with the Future Land Use map. The Future Land Use Map should be amended as appropriate from time to time to reflect changing trends and community objectives.

5-b) Zoning decisions should also be consistent with Sector and Small Area plans.

5-c) Zoning decisions should be consistent with the limitations and trends of the market.

5-d) Evaluation of major developments should include the impact on the transportation system, infrastructure capacity, natural environment and built environment.

Economy: 5-a;
Transportation: 2-g;
Built Environment: 6-b

- 5-e)** The zoning designation in developed and built-out areas should generally reflect the actual use of the land. **Housing:** 3-b; **Land Use:** 5-g
- 5-f)** Zoning decisions should support the City’s reinvestment strategies where applicable. **Land Use:** 1-l
- 5-g)** Apply industrial zoning to land that meets the criteria for industrial use, and rezone the residential land that now has I-1 or I-2 zoning. **Housing:** 3-b; **Land Use:** 5-e

Objective 6: *Develop objective and rational criteria for evaluating rezoning requests.*

- 6-a)** Rezoning to **neighborhood business**: **Land Use:** 4-h
 1. Should be at or near the intersection of two thoroughfares (major or minor);
 2. Should be consistent with the Future Land Use Map;
 3. Be of a neighborhood scale to serve neighborhood needs;
 4. Have safe pedestrian access;
 5. Avoid 24 hour operations;
 6. Have lighting that is directed away from residences.
 7. May be single or multiple tracts but the district should be at least one acre in size.

- 6-b)** Rezoning to **community business** areas should: **Transportation:** 2-c
 1. Serve a sector of the City;
 2. Have entrances on two or more thoroughfares;
 3. Be consistent with the Future Land Use Map.

- 6-c)** Rezoning to **office and institutional** use: **Housing:** 8-a, 8-c, 8-g; **Transportation:** 2-b; **Community Facilities:** 2-a; **Built Environment:** 4-a
 1. May be used as a transitional use between residential and higher intensity business and industrial uses;
 2. Should be avoided as a stepping stone for rezoning land from residential to business use;
 3. Should be located so that traffic to and from the office does not need to cut through a residential area to reach a thoroughfare;
 4. Should be consistent with the Future Land Use Map;
 5. Planned office parks and business parks should be located on thoroughfares;
 6. Governmental offices should remain downtown wherever possible.

6-d) Rezoning to **group care facilities** (e.g. nursing homes and adult congregate living):

Housing: 7-a, 8-c

1. May be used as a transitional use between residential neighborhoods and higher intensity land uses or major roads;
2. May be located near high-traffic streets;
3. May occur as a single-lot rezoning.
4. Should be distributed throughout the City rather than concentrated in a few neighborhoods.

6-e) Rezoning to **high density residential** use should:

Housing: 8-c;
Transportation: 2-c;
Built Environment: 4-c;
Land Use: 3-d

1. Have access to a thoroughfare;
2. Be encouraged in downtown Gastonia or near future mass-transit stations;
3. Be used as a transitional use between single-family and business land uses;
4. Be constant with the Future Land Use Map

6-f) Rezoning to **planned or innovative residential developments:**

Housing: 1-b, 1-c, 5-b, 5-f;
Transportation: 2-m;
Land Use: 3-b, 3-c

1. Should be a minimum of one acre;
2. Should be consistent with the prevailing housing style of the immediate neighborhood;
3. May be used as infill residential development on vacant land within established neighborhoods.

Objective 7: *Update the City's subdivision ordinance with the following major changes:*

7-a) Update sidewalk provisions in the ordinance based on the City sidewalk policy yet to be developed.

Transportation: 6-a

7-b) Allow Technical Review committee approval for all subdivisions to speed up the review process, and provide for an appeal process.

Land Use: 4-d

7-c) Allow for public input when updating the “standards and specs” used by the Engineering Department.

FUTURE LAND USE MAP

The planned land use for Gastonia and the Planning Area in 2010 is shown in Figure 2, the Future Land Use Map. An integral part of the *CityVision 2010* plan, the Future Land Use map is both a physical vision of Gastonia in 2010 and a policy guide for future decision making.

The Future Land Use Map shows the planned land use in the following categories:

- **Residential:** Includes both single- and multi-family housing. The housing suitable to a specific area can be evaluated using the policies in this chapter and the policies and strategies of the specific Sector Plan.
- **Commercial:** Includes retailing, light wholesaling and individual office and institutional uses.
- **Industrial:** Includes manufacturing and heavier trucking, wholesaling and distribution operations. The sector plans will include where heavy or “primary” industrial processes are appropriate.
- **Office:** Includes business and professional offices and “light” services such as medical services.
- **Mixed-use:** Each mixed-use area designated on this map is associated with unique goals and strategies, which are contained in the specific Sector Plan. The mixed use designation does not imply the same strategy for downtown and the hospital area, for example.
- **Public and Institutional:** Includes publicly-owned land and non-government community land uses such as churches, the YMCA, hospitals, service clubs, and others.

- **Parks, Open Space, and Public Recreation:** Includes public parks, public and private golf courses, natural areas, cemeteries and other such uses. Possible greenway corridors are shown on the recreation map in chapter XII.

The Future Land Use Map is not intended to be a static document. It will be updated from time to time, keeping up with changing trends and local needs. It will not prescribe land use, as a zoning ordinance does, but rather serve as a guide to rational planning and decision-making. By necessity, the map is drawn in fairly broad strokes, leaving out some of the fine-grained detail found in some areas of Gastonia. Detailed, parcel by parcel land use is again more a function of zoning than the Future Land Use Map.

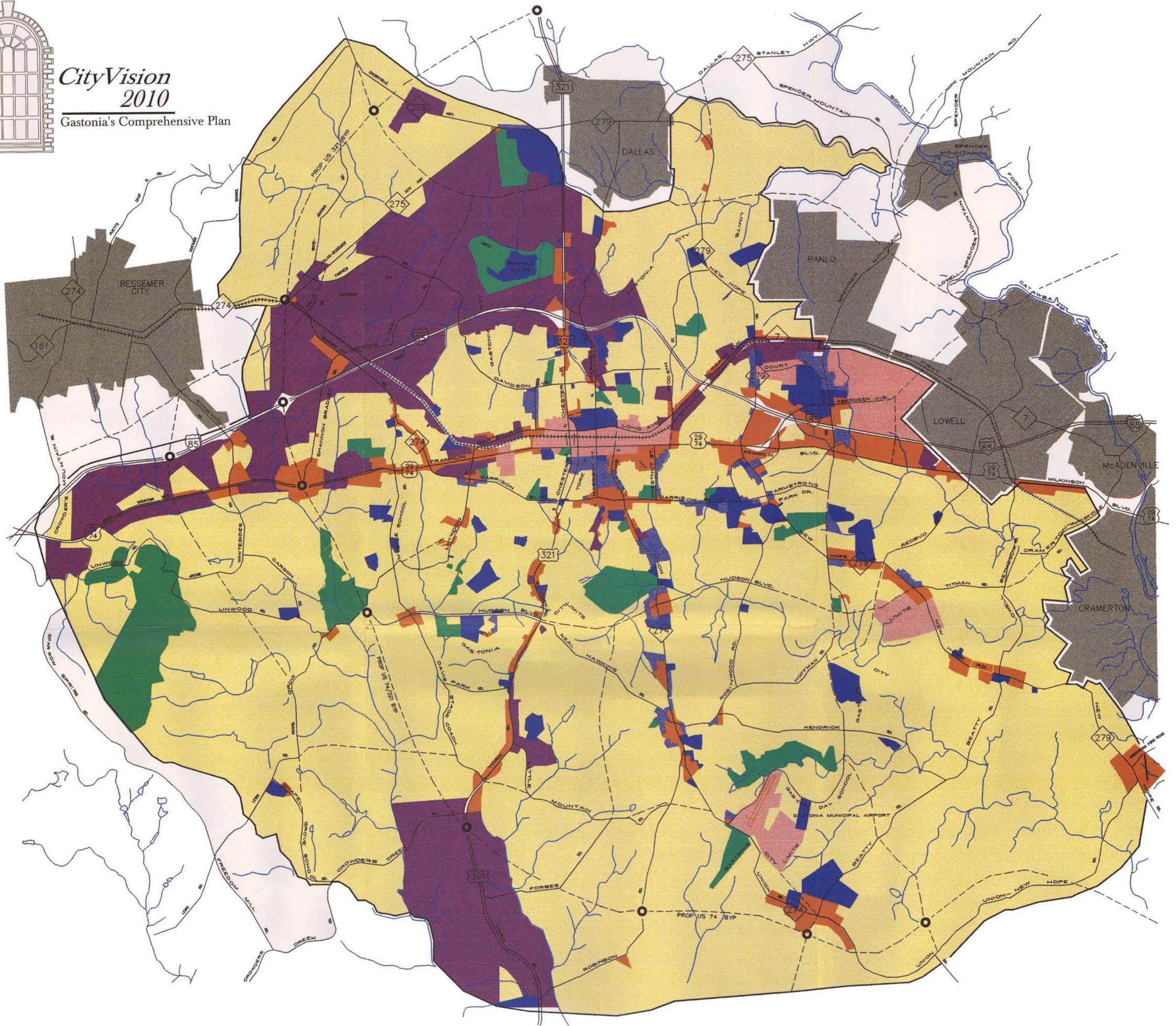
The Future Land Use map and strategies will have their greatest impact on vacant land and undeveloped areas, as this is where the majority of Gastonia’s new development is taking place. For areas that are already developed or built out, the future land use designation in some cases is the same as the existing land use, in other cases different. As a rule, land with contrasting existing and future land use is envisioned for new uses. The strategy maps in the sector plans will also show priority areas for re-use, development and new investment.

The Future Land Use Map is but one of the guidelines provided in this plan for land use. The objectives and tools in this chapter give criteria for evaluating the suitability of an area for various types of development, such as business, office or multi-family development. These criteria should be regarded as equally important to decision-making as the Future Land Use designation.



CityVision 2010

Gastonia's Comprehensive Plan



FUTURE LAND USE
FIGURE 2

- | | |
|--|---|
|  RESIDENTIAL |  INDUSTRIAL |
|  OFFICE CENTERS |  PARKS & OPEN SPACE |
|  COMMERCIAL |  PUBLIC & INSTITUTIONAL |
|  MIXED USE | |

LEGEND

-  EXISTING ROAD
-  2010 PLANNING AREA
-  PROPOSED ROAD
-  CREEK
-  CITY LIMITS



NORTHEAST SECTOR

The Northeast Sector of Gastonia's 2010 Planning Area has emerged over the past twenty years as the City's major retailing district. The Sector is bounded on the west by US 321, I-85 and Modena Street, on the south by Franklin Boulevard and on the north and east by the 2010 Planning Area boundary.

The Northeast Sector's early history and urban development centered around the textile mills and villages built by the Flint Manufacturing Company and the Groves Thread Mill. These mills and villages, built in the vicinity of Ozark Avenue and North New Hope Road between 1906 and 1923, formed the East Gastonia community. Other landmarks of East Gastonia were the Community Hall on Ozark Avenue and Flint-Groves Elementary School (later called Hancock School, now closed) on New Hope Road.

The Northeast Sector has grown steadily in population, but its most dramatic growth has been non-residential. The Sector is now the location of about 2,500,000 square feet of retail space, Gaston Memorial Hospital, medical offices, hotels and restaurants.

LAND USE

The Northeast Sector has the following land use ratios, as shown in Figure 1

Residential land use in the Northeast Sector covers a broad range of housing styles. The mill villages of the Flint and Groves textile mills were the first urbanized housing in the Northeast Sector. This was followed in 1930-1950 by the older neighborhoods in the Franklin Boulevard vicinity: Franklin-Craig, Sunrise Park and Poston Circle. Finally, more recent development in the Northeast Sector has been

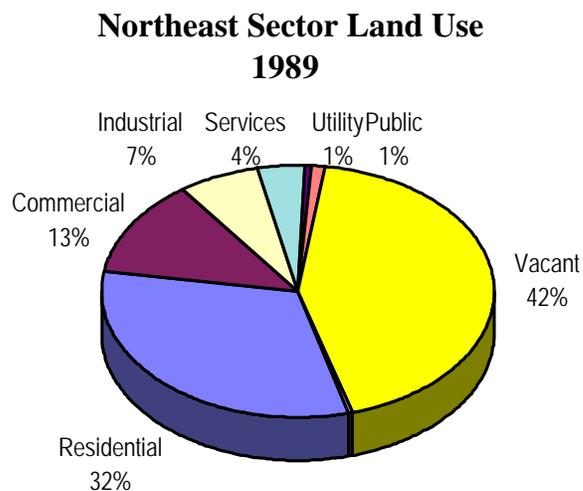


Figure 1

concentrated along New Hope Road and Auten Road, north of Interstate 85.

Commercial land use has been the fastest growing kind of development in the Northeast Sector. The Sector has added over 2,000,000 square feet of retail space since the opening of Gaston Mall in 1970. Good access to transportation and a strategic location convenient to a wide region helped spur retail growth in the Northeast. It was the construction of Eastridge Mall in 1975, however, that fully established the Northeast's primary role in retailing. At the time it was the third regional mall in the entire Charlotte region. Subsequent additions to the retail base of the Northeast Sector include Franklin Square, Franklin Corners and Northridge Mall. The investment and construction in retailing in the Northeast Sector has cemented Gastonia's role as the retailing hub of the western part of the Charlotte region.

Health care is another important component of the Northeast Sector, due to the construction of Gaston Memorial Hospital between New Hope and Cox Roads in 1974. Gaston Memorial is now the third largest hospital in the Charlotte region, and the only one that has been accredited “with distinction.” Related health services, from doctors’ offices to laboratory and diagnostic centers, continue to grow in the vicinity of the Gaston Memorial campus.

Industrial land use in the Northeast Sector has historically been concentrated in textile manufacturing. The Sector has diversified, however, into other industries. An example is Wix Corporation, which makes automotive filter products.

TRANSPORTATION

The Northeast Sector has the following thoroughfares, as shown in Figure 2:

Figure 2
Northeast Sector Thoroughfares

Major		Minor	
North-South	East-West	North-South	East-West
New Hope Road	Franklin Blvd	Hospital Dr.	Remount Rd
Cox Road.	Ozark Ave.	Modena St	Court Dr.
W. Club Cir.	Interstate 85		
	Aberdeen Blvd.		

Also passing through the Northeast sector are the Southern Railroad and the old P & N rail corridor. The Southern Railroad is the main rail line between Charlotte and Atlanta, with both freight and passenger traffic. The Gastonia Amtrak station is located in the Northeast Sector, just off Ozark Ave near I-85. The P & N corridor is no longer used and has been purchased by the State of North Carolina for alternative use, either as some other form of regional transportation, or as a “rails-to-trails” greenway. Rails-to-trails refers to the conversion of abandoned railroad right-of-ways into public trails.

Several new or expanded thoroughfares are proposed for the Northeast Sector. The Gaston Urban Area Thoroughfare Plan, adopted in 1991, calls for two new roads in the Northeast Sector. The first is an extension of Aberdeen Boulevard that will connect with Old Hickory Grove Road in Mount Holly and provide a direct link between the two cities. The second is a minor thoroughfare that will connect Ozark

Avenue to Franklin Boulevard just east of Franklin Square. This road will serve a number of purposes including providing another access point to the shopping hub, an additional crossing over I-85, and access to some of the undeveloped land north of the Franklin Square area. Expanded thoroughfares in the Northeast Sector include a five lane section of New Hope Road between Ozark Avenue and downtown Dallas. Interstate 85 will also be widened to six lanes and updated to modern interstate standards for lanes, ramps and signs.

Traffic in the Northeast Sector has been increasing along with the growth in commerce and services. Figure 3 shows the growth at selected high traffic locations in the Northeast Sector. Using 1978 as a baseline, the chart shows the additions to the traffic load occurring between 1978-1983 and 1983-1993. The most dramatic increases in traffic occurred in the vicinity of Franklin Boulevard and Cox Road, consistent with the increase in nearby retail space.

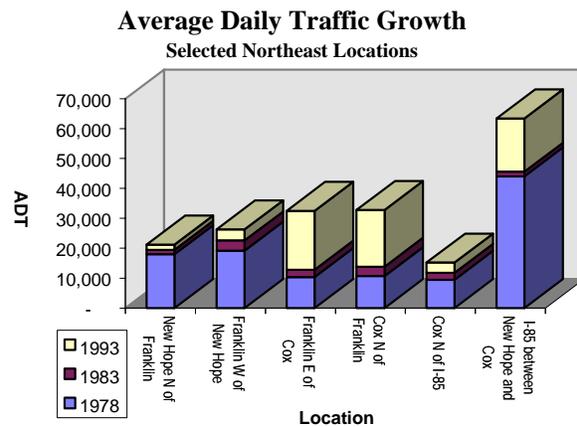


Figure 3

POPULATION AND HOUSING TRENDS

The population of the Northeast Sector was approximately 9,100 in 1990. By 2010, the Sector is projected to have modest population growth and a resident population of about 11,660 a gain of 15% over the next fifteen years, as shown in Figure 4.

Population growth is expected in the Northeast Sector because of good access to jobs, transportation, health care and shopping, which improves the competitive position of the Northeast Sector. Population growth will only be modest, however, because of the large amount of land zoned for non-residential purposes.

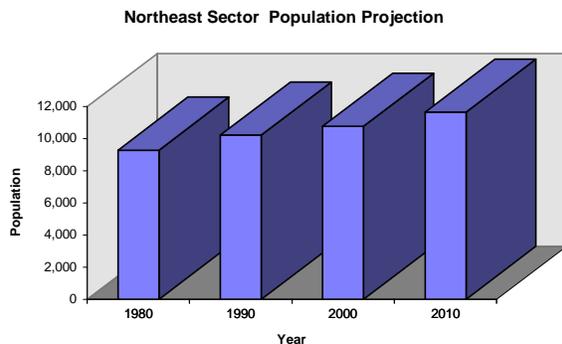


Figure 4

The Northeast Sector accounts for about 12% of the 2010 Planning Area population. It is the second-smallest in population of the Six Planning Sectors.

The Northeast Sector has an estimated 3,615 dwelling units, of which 83% are single-family houses or duplexes, 10% multi-family units and 7% mobile homes. Mobile homes in the Northeast Sector are largely outside the city limits of Gastonia. Multi-family units are located primarily in three locations: the Poston Circle area, Sunrise Park neighborhood and the Bluffs apartments. One apartment complex, located near Modena Street and Bradley Park, was built with public assistance and serves low and moderate income tenants.

The most housing in the Northeast Sector was built during the 1960's, as shown in Figure 5.

Decade Built: Northeast Sector Housing

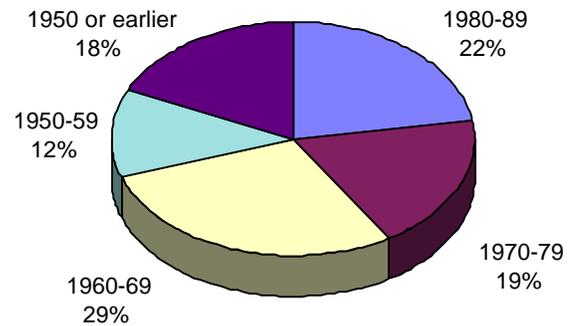


Figure 5

A plurality (29%) of the housing units in the Northeast Sector were built during the 1960's, followed by 22% of the housing units built in the 1980's. The 1950's and 1970's were relatively quiet periods for housing construction in the Northeast Sector, with only 12% and 19% of the housing units, respectively. Approximately 18% of the housing units in the Northeast Sector were built prior to 1950.

EMPLOYMENT

Workplaces in the Northeast Sector employed approximately 11,300 persons (by place of work) in 1989. The number employed in Northeast Sector workplaces is greater than the resident population, reflecting the relative importance of non-residential land use in the Northeast.

As shown in Figure 6 below, the Northeast Sector has nearly equal numbers of retail trade, service and manufacturing employees. Other employment sectors are relatively insignificant, with 4% or less of total employment for any one sector. Retail trade, already the largest employment sector in 1989, has undoubtedly had increases over the past five years, as about 1,000,000 square feet of retail space was added within the Sector.

Northeast Sector Employment, 1989

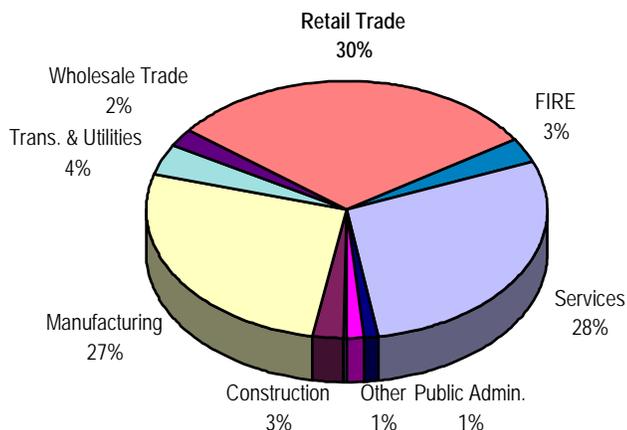


Figure 6

The growth in retail square footage in the Northeast Sector has been accompanied by an increase in retail trade employment. The other assured growth sector in the Northeast is services, due to the growth and locational influence of Gaston Memorial Hospital. Future growth in manufacturing employment will depend on two strategies: the growth of modern industry near US 321 North, and the conservation/re-use of existing industrial land along the Southern Railroad corridor.

Of the minor employment sectors, the one that has the most potential to emerge as a significant employer in the Northeast is Finance-Insurance-Real Estate (FIRE), particularly if development continues in the Court Drive vicinity and the planned mixed use business park north of Franklin Square is realized.

A. MAJOR ISSUES

- A-1.** The Northeast Sector has emerged as a regional retail and medical service core, drawing from not only Gaston County, but also the surrounding counties
- A-2.** Employment has grown rapidly in the Northeast Sector, resulting in a daytime population much higher than the 9,100 residents of the Sector.
- A-3.** As commerce grows within the Northeast Sector, traffic is also increasing, particularly at critical intersections of Cox Road, New Hope Road, Franklin Boulevard and I-85.

A-4. Growing retail development and traffic has begun to encroach on residential neighborhoods, particularly along North New Hope Road.

A-5. The Northeast Sector has a large tract of publicly-owned land that is well-suited to office park development, but the land is not fully developed and it remains only *potentially* suitable for offices.

A-6. The strong commercial and service market in the Northeast has created an opportunity for a mixed-use business development north of I-85.

A-7. Although the major shopping centers of the Northeast Sector are served by limited public transportation, they have few pedestrian linkages among them.

A-8. Older industrial land along the Southern Railroad and US 321 North is somewhat under-used and has gradually evolved into smaller, non-textile industries.

A-9. Housing deterioration and blight has begun to appear in some of the older Northeast Sector neighborhoods.

A-10. The Northeast Sector is ringed by Dallas, Ranlo and Lowell, and annexation opportunities are limited.

A-11. The shopping and health care of the Northeast Sector are increasingly used by people from the surrounding region, yet the entrances to this area (I-85, Franklin Blvd) provide no distinctive sense of arrival to Gastonia.

B. FIVE-YEAR STRATEGIES

- B-1.** Negotiate “sphere-of-influence” agreements for future annexation with Dallas, Ranlo and Lowell.
- B-2.** Develop a zoning corridor overlay district for North New Hope Road in order to implement the New Hope Road Small Area Plan.
- B-3.** Use ISTEA enhancement funds to beautify the Ozark, New Hope, and Cox Interchanges with I-85.

B-4. Focus Community Development housing rehabilitation efforts on the older mill villages of the Northeast Sector.

B-5. Initiate systematic code enforcement, on a rotating basis, for the older neighborhoods of the Northeast Sector, with each neighborhood to be reviewed at least once every five years.

B-6. Widen New Hope Road to five lanes from Ozark Avenue to NC 275.

B-7. Upgrade and expand the Long Creek Wastewater Treatment Plant from 8 to 16 million gallons per day capacity.

B-8. Construct the following sewer outfalls:

- *Long Creek Outfall (I):* 8,000 feet, 54-inch diameter pipe.
- *Long Creek Outfall (II):* 22,000 feet, 48-inch diameter pipe.

B-9. Build the following water supply lines:

<u>Line/Location</u>	<u>Size"</u>	<u>Length</u>
1. 321 N. of I-85	16	5,000
2. Ida St.	8	200
3. Duhart Ave.	8	800

B-10. Support the development of an office and medical park on Court Drive and a mixed use office/business park north of I-85.



Gaston Memorial Hospital anchors the regional medical services center in the Northeast Sector.

C. LONG-RANGE STRATEGIES

C-1. Reserve and/or acquire land for the rights-of-way of the following proposed thoroughfares:

- Lineberger Road
- Aberdeen Blvd./Gastonia-Mt. Holly Connector
- Ranlo North Loop

C-2. Develop public-private partnerships to enhance the entranceways to Gastonia, particularly along Franklin Boulevard, Cox Road and New Hope Road.

C-3. Construct the following sewer outfalls to bring in new flows to the expanded Long Creek Wastewater Treatment Plant.

<u>Outfall</u>	<u>Length</u>	<u>Diameter</u>
Little Long Creek Outfall	21,900'	18"
Little Long Creek Outfall	12,200'	15"
Outer Long Creek Outfall	11,500'	30"
Outer Long Creek Outfall	16,700'	36"
Outer Long Creek Outfall	8,300'	24"
Outer Long Creek Outfall	27,100'	18"
Outer Long Creek Outfall	12,500'	15"

C-4. Develop greenways according to a future adopted greenway plan. Possible greenway locations in the Northeast Sector are shown on the strategy map.

C-5. Develop a plan for the use of the P & N corridor for a regional trail if that corridor will not be used for other transportation purposes.

C-6. Improve pedestrian linkages among the major developments (shopping centers, community facilities, hospital).

C-7. Support stream maintenance in order to better manage stormwater flows. The following streams in the Northeast Sector are proposed for maintenance, and can be linked to a greenway system:

Proposed Streams for Maintenance

Duhart Creek	200' east of Redbud to I-85	12,750'
Long Creek	200' east of New Hope Rd. to Kaylor Branch	13,600'
Julia Allen Branch	Long Creek to fork of creek at Ballard Dr.	4,750'

D. LAND USE STRATEGIES

- D-1.** Cluster major retail and office development between Franklin Boulevard and I-85.
- D-2.** Develop a general office corridor along New Hope Road, between I-85 and Ozark Ave.
- D-3.** Continue medical office development in the vicinity of Gaston Memorial Hospital. The Court Drive mixed-use area, as shown on the Future Land Use Map, should be limited to hospital related uses, including medical offices, medical research and laboratories, and similar uses supportive of the medical center.
- D-4.** Encourage the creation of a mixed-use business park on the land north of I-85 and Franklin Square.
- D-5.** Conserve residential land use in the residential conservation areas along Franklin Blvd and New Hope Road (see Strategy Map). Measures for residential conservation include clustering of neighborhood retailing, tree plantings and maintenance, and transitional land uses between single-family and commercial areas.



Conservation of residential land use is a priority for the Franklin-Craig neighborhood.

- D-6.** Develop a corridor plan for Franklin Boulevard, with emphasis on public-private cooperation.
- D-7.** Develop a corridor plan for the Long Avenue gateway to Uptown Gastonia.
- D-8.** Ensure that existing residential neighborhoods are zoned according to the prevailing land use and the Future Land Use map.
- D-9.** Support the preservation and adaptive re-use of Hancock School for institutional, office and/or residential use.

NORTHEAST SECTOR STRATEGY MAP

The Strategy Map on the next page is a graphical representation of some of the strategies—short-term, long-term, and land use—in this plan. The map is generalized, showing *approximate* locations for the various strategies.



EAST SECTOR

The East Sector of Gastonia’s 2010 Planning Area forms a roughly triangular area with the following boundaries:

- North:* Franklin Blvd. and the Town of Lowell;
- Southwest:* Catawba Creek, Garrison Blvd and Church Street;
- East:* 2010 Planning Area Boundary.

The East sector is predominately residential and was the location of some of the earliest and largest post-war suburban residential developments in Gastonia. The transportation spine of the Sector is South New Hope Road. The Sector currently is the location of Gastonia’s strongest multi-family housing market.

The East Sector was largely rural prior to World War II. Remnants of this rural history in the form of old farmhouses can be seen along main roads such as New Hope Road and Armstrong Park Road. Early developments in the East Sector include the former North Carolina Orthopedic Hospital, founded in 1920, on New Hope Road. Along Hoffman Road is Bradford Heights, an historically African-American, semi-rural community. Also located in the East Sector were the first Gastonia Country Club, now developed for residential and commercial use, and several large, historic residences fronting New Hope Road in the old Country Club vicinity. The East Sector is unique among the Planning Area Sectors in that it does not have any significant textile mill history or development. Indeed, the area has the least amount of industrial employment and land use of the six sectors.

As the East Sector began to urbanize, several large developments both spurred growth and defined the character of the area. These developments include:

- Akers Center, Gastonia’s first major shopping center;

- Rowland Park and Fairmount Park, middle- and upper-middle-class neighborhoods located west of New Hope Road;
- Large single-family subdivisions, such as Gardner Park, Gardner Woods and Sherwood Forest.
- The construction of the Schiele Museum of Natural History and the Gaston County Library opposite one another on Garrison Blvd.
- More recent apartment and condominium development chiefly along or near Robinwood Road.

Suburban developments such as these and many others have shaped the East Sector into a largely residential area with some community-level shopping, employment and offices in the New Hope Road corridor.

LAND USE

The East Sector has the following land use ratios, as shown in Figure 1:

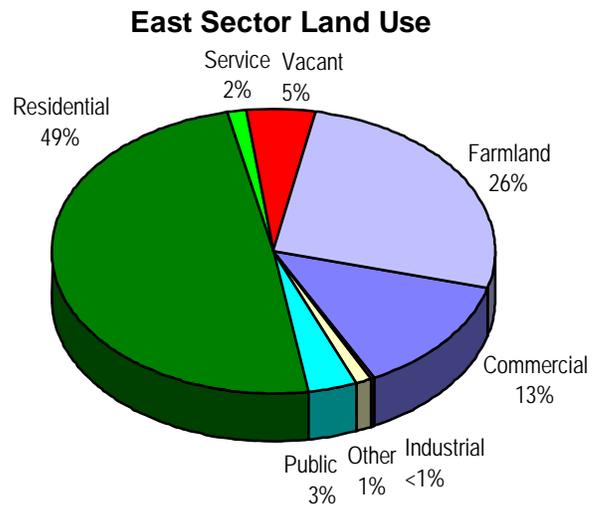


Figure 1



The Main Branch of the Gaston County Public Library is located in the East Sector.

As previously noted, the East Sector is primarily residential, and the land use ratios bear this out. Multi-family land uses, both apartments and condominiums, are a fast emerging land use in the East Sector particularly along Robinwood Road, New Hope Road and near Redbud Road. Single-family neighborhoods still make up the bulk of residential land use in the East Sector.

Commercial land use is clustered at New Hope Road and Franklin Blvd, and it stretches along Franklin to beyond Cox Road. New Hope has several smaller clusters of commercial land use, especially near its intersections with Garrison, Hoffman, Redbud and Beaty Roads. As traffic increases on New Hope Road, the pressure for conversion from residential to commercial land use will also increase.

Large tracts of land in the East Sector are still classified as farmland by the Gaston County Tax Assessor. It is reasonable to assume, however, that as the East Sector urbanizes, this land will be subdivided and converted to urban uses. Thus, the combination of farmland and vacant land adds up to about 31% of the total land in the East Sector.

Public land in the East Sector is primarily the following schools: Sherwood Elementary, Gardner Park Elementary, Grier Jr. High, and Ashbrook High School. Other public land in the East Sector includes the Schiele Museum and the Gaston County Library. Perhaps surprisingly, the East Sector has no City parks or recreation centers. Active and passive recreation is available, however, through the schools (jogging tracks and tennis courts) and the Schiele Museum nature trail. Gaston Memorial Park,

although privately owned, provides publicly-used open space within the East Sector. In addition, land in the Duhart Creek floodplain has already been donated to the City for a possible pilot greenway.

TRANSPORTATION

The East Sector has the following thoroughfares, as shown in Figure 2:

Figure 2
East Sector Thoroughfares

Major		Minor	
North-South	East-West	North-South	East-West
New Hope Rd	Franklin Blvd	Church St (Modena Ext)	Belvedere Ave
Armstrong Park Rd	Garrison/Armstrong Park Dr	Burtonwood Dr	Country Club Rd
Hoffman Blvd	Hudson Blvd		
Robinwood Rd	Redbud Rd		
Hoffman Rd	Titman Rd		
Beaty Rd			

Several new or expanded thoroughfares are planned for the East Sector, including:

- *Hudson Blvd Extension*: From Robinwood Rd. to New Hope Road. This will complete the eastern leg of Hudson Blvd, which will connect with Titman Road at New Hope Road.
- *Hoffman Blvd. Extension*: Two legs of this road are planned within the East Sector. The northern leg will connect with Armstrong Park Road, providing access to Franklin Blvd. and I-85. The southern leg will intersect with Hudson Blvd and connect with a relocated section of Hoffman Road.
- *Redbud-Hoffman Connector*: This is actually a relocated section of Hoffman Road, moved in order to connect with Redbud Road at New Hope Road. This proposed road, the existing Hoffman Road, and the proposed Hoffman Blvd. will form a new four-way intersection where they meet.
- *Modena Street Extension*: This relocated road, following the alignments of Church Street and



The Main Entrance to the Schiele Museum of Natural History and Planetarium.

Chestnut Street, is a City bond project already under construction. It will provide a direct connection between Modena Street and Garrison Blvd.

Although not in the East Sector, Redbud Road (Main Street in Lowell) will have a new interchange with Interstate 85, due to open in mid-1995. This will divert some of the East Sector traffic from New Hope and Armstrong Park Roads.

The actual construction of the new and expanded roads detailed above will result in an overhaul of East Sector traffic circulation and land use. If all the roads are built, the intersections of New Hope Road with Hoffman Blvd, Redbud Rd. and Titman Rd. will all have vast increases in traffic volume. The new roads will also form three major new intersections, all in relatively close proximity (Figure 3). The new roads will have a significant impact upon Bradford Heights, opening up the area to further development. The Future Land Use Map calls for this area to remain largely residential, with a mixed-use area along Hudson Blvd from the new Hoffman Road to New Hope Road.

POPULATION AND HOUSING TRENDS

The population of the East Sector was approximately 17,570 in 1990. By 2010 the Sector is projected to have significant population growth and a resident population of about 22,300, a gain of 27% between 1990 and 2010, as shown in Figure 3. Population growth is expected in the East Sector due to the strong housing market, the availability of land, and the increasing number of multi-family residential developments. This population growth will be tempered by the stability and declining household size of the built-out East Sector neighborhoods, which are primarily located in the northern part of the Sector. These neighborhoods will remain stable in housing units, but the area will likely have a modest population decline.

East Sector Population Projection

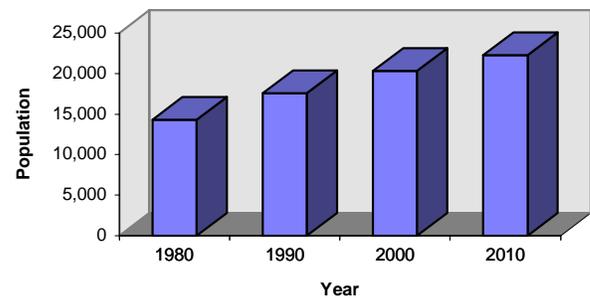


Figure 3

The East Sector has about 21% of the 2010 Planning Area population.

The East Sector has an estimated 6,740 dwelling units, of which 76% are single-family, 21% multi-family and 3% mobile homes. Multi-family units are found in several areas of the East Sector, with the greatest concentration in the Robinwood Road vicinity.

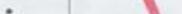
The East Sector has had many recent additions to its housing stock, as shown in Figure 5.

**Figure 5
Thoroughfare Plan
East Sector**

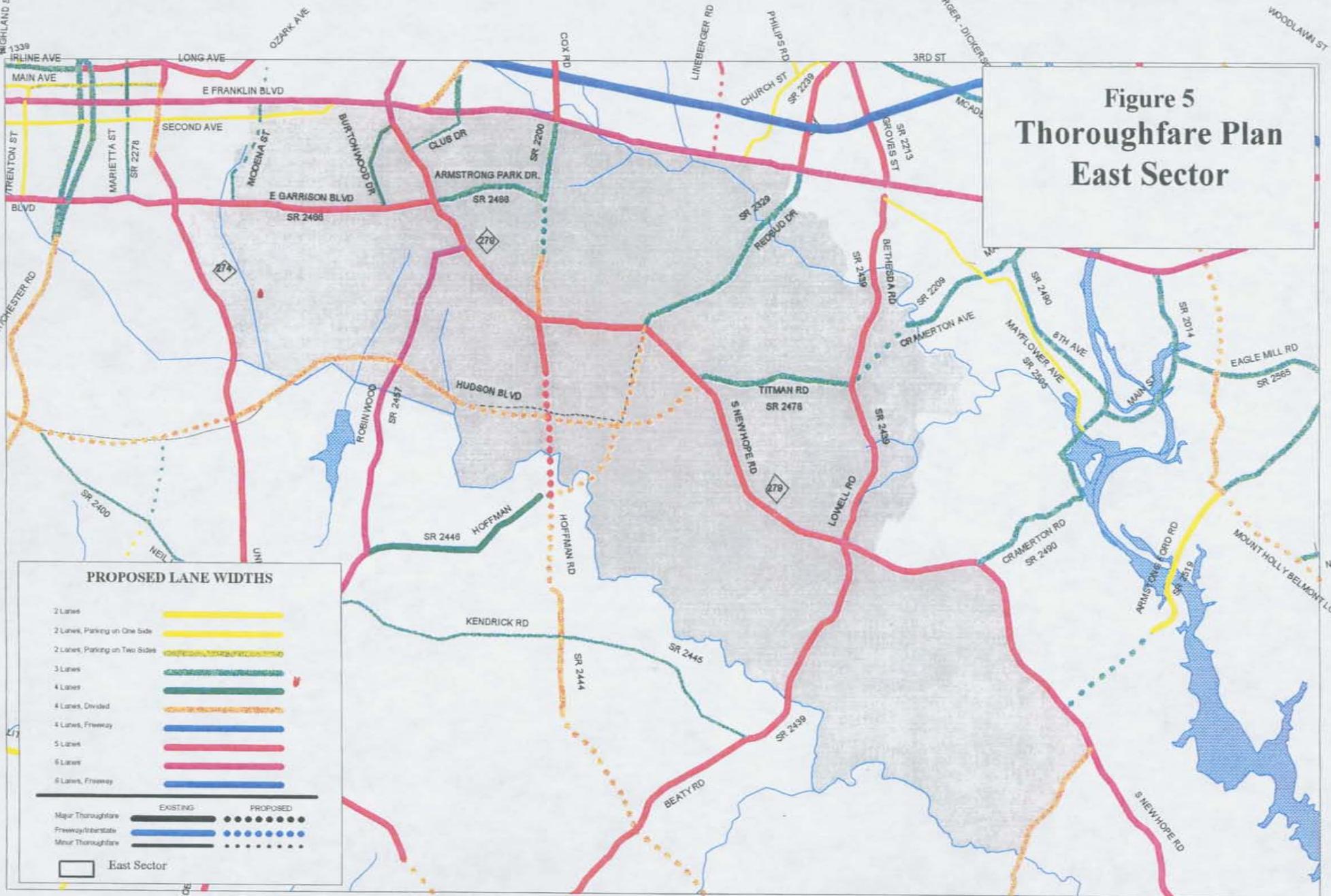
PROPOSED LANE WIDTHS

- 2 Lanes 
- 2 Lanes, Parking on One Side 
- 2 Lanes, Parking on Two Sides 
- 3 Lanes 
- 4 Lanes 
- 4 Lanes, Divided 
- 4 Lanes, Freeway 
- 5 Lanes 
- 6 Lanes 
- 6 Lanes, Freeway 

EXISTING **PROPOSED**

- Major Thoroughfare  
- Freeway/Interstate  
- Minor Thoroughfare  

 East Sector



Decade Built: East Sector Housing

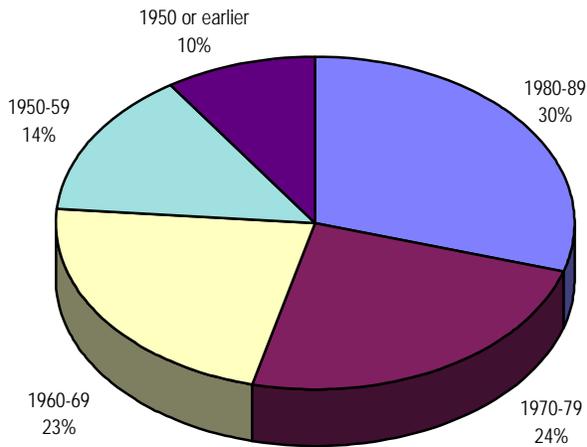


Figure 5

Almost 30% of the housing units were constructed during the 1980's. Housing built in the 1970's and 1960's each accounted for nearly one quarter of the total units in the East Sector, with 24% and 23% of the units, respectively. A relatively small share of the housing units were built in the 1950's, with only 14% of the total units. Finally, the units built prior to 1950 constitute 10% of the housing units in the East Sector. The large share of recently built housing is evidence that the East Sector has become one of Gastonia's primary growth areas, a situation which is expected to continue into the next century.

EMPLOYMENT

Workplaces in the East Sector employed approximately 4,430 persons (by place of work) in 1989. The number employed in East Sector workplaces is about 1/4 of the resident population,

consistent with the "bedroom community" image of the East Sector.

As shown in Figure 6 below, the Northeast Sector has nearly equal amounts of retail trade and service employment. Aside from Finance, Insurance and Real Estate (FIRE) and public administration, no other employment sector has more than 3% of the total.

The concentration of employment in retail trade and services also characterizes the East Sector as a locally-oriented business area, as opposed to an area with lots of manufacturing or wholesale trade, which tends to be externally oriented. Thus the growth in employment, if present trends continue, will depend on growth in Gastonia and the surrounding area.

A possible departure from this pattern would occur if a mixed-use office/residential area were developed in the East Sector. The Future Land Use map shows a planned mixed-use area around Hudson Boulevard and New Hope Road. A development such as this could bring in additional employment in areas such as finance, insurance, real estate (FIRE).

East Sector Employment, 1989

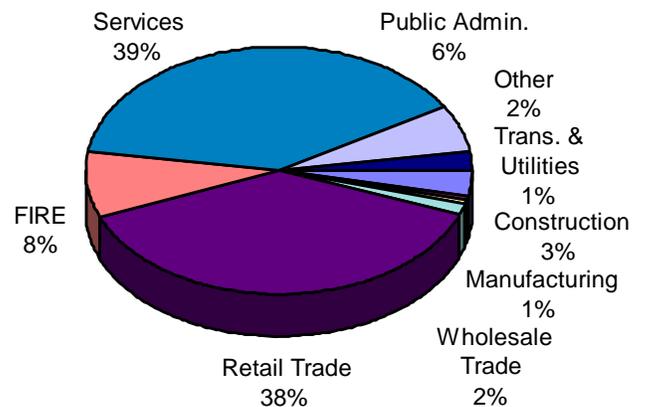


Figure 6

A. ISSUES

- A-1.** A strong housing market, available land and public investments give the East Sector a strong potential for continued population growth.
- A-2.** The established neighborhoods of the East Sector are starting to “age out,” with smaller households, fewer children and a stable or declining population.
- A-3.** Increasing traffic on New Hope Road and other major thoroughfares creates pressure for converting land use from residential to commercial.
- A-4.** Commercial encroachment into established neighborhoods is a concern, especially for neighborhoods adjacent to Franklin Blvd, Garrison Blvd, and New Hope Road.
- A-5.** New Hope Road presents an opportunity for a first-class entrance to Gastonia. In the other direction, the East Sector can be promoted as the gateway to the Stowe Botanical Gardens, a future major tourist attraction.
- A-6.** The East Sector’s older retail areas, although healthy, are undergoing a transition reflecting shifts in overall retail trends.
- A-7.** Major planned road construction presents both a threat and an opportunity to the Bradford Heights community.
- A-8.** Two of Gastonia’s most frequently used public facilities, the Schiele Museum and the Gaston County Library, are located in the East Sector.
- A-9.** The East Sector has no public parks or recreation centers, although recreational opportunities are available through the schools and the Schiele Museum.
- A-10.** A lack of southwest-to-northeast thoroughfares has created a traffic bottleneck on New Hope Road, requiring a compromise road solution.

B. FIVE YEAR STRATEGIES

- B-1.** Complete the construction of Hudson Blvd. from just east of Robinwood Road to New Hope Road.
- B-2.** Complete the realignment of Church/Chestnut Street between Franklin Blvd. and Garrison Blvd.
- B-3.** Construct the new sections of Hoffman *Blvd.*
- B-4.** Widen the following roads:

Road	From/To	Lanes
Redbud Dr.	New Hope to City Limits	3 lanes
Robinwood Rd.	Union to New Hope	4 lanes
- B-5.** Widen and improve the intersection of New Hope and Robinwood Road.
- B-6.** Include a sidewalk on Robinwood Road when it is expanded.
- B-7.** Develop a pocket park on undeveloped publicly-owned land adjacent to Ashbrook High School.
- B-8.** Develop a pilot greenway on land adjacent to Duhart Creek north of the Gardner Park area.
- B-9.** Complete the following water main construction projects:

Line Location	Size"	Length'
Laurel Ln.	8	700
Franklin Blvd, Edgemont to Church	12	2,000
Hudson Blvd., Robinwood to Windyrush	12	2,000
Beaty Rd	16	20,600
- B-10.** Expand the Duhart Creek pumping station from 6.5 to 10 million gallons per day.
- B-11.** Complete the following wastewater construction projects:

Project	Length	Diameter
Duhart Force Main	18,800'	24"
Duhart Creek Outfall	12,500'	24"
- B-12.** Renew the “sphere-of-influence” annexation agreement with Cramerton, due to expire in 1999.

C. LONG-RANGE STRATEGIES

C-1. Reserve and/or acquire rights-of-way for the following proposed or widened thoroughfares:

- Redbud-Hoffman connector.
- New Hope Road widening.
- Beaty Road widening.

C-2. Develop public-private partnerships to enhance the entranceways to Gastonia, particularly Franklin Blvd and New Hope Road.

C-3. Develop greenways according to a future adopted greenway plan. Possible greenway locations in the East Sector are shown on the strategy map.

C-4. Support the proposed US 74 bypass as a long-term aid to the East Sector's transportation problems.

C-5. Build the new Southeast recreation center in a location that is accessible to East Sector residents.

C-6. Promote New Hope Road and the East Sector as the gateway to the Stowe Botanical Garden.

D. LAND USE STRATEGIES

D-1. Conserve residential land use along the



The Stowe Botanical Garden.

The Strategy Map on the next page is a graphical representation of some of the strategies—short-term, long-term, and land use—in this plan. The map is generalized, showing *approximate* locations for the various strategies.

following roads:

- Franklin Blvd in the Fairmount Park neighborhood;
- New Hope Road between Dixon and Hoffman;
- Hoffman Road and Hoffman Blvd;
- Redbud Road;
- Titman Road.

D-2. Maintain residential zoning along Armstrong Park Drive, especially at the intersection of Armstrong Park and Gardner Park.

D-3. Avoid further commercial intrusion into established residential neighborhoods, especially near Franklin, Garrison and New Hope.

D-4. Conserve residential land use in the Owens-Kendrick neighborhood.

D-5. Develop a corridor overlay zoning district for both New Hope Road and Franklin Blvd.

D-6. Use buffering and transportation enhancements to minimize the negative impact of new thoroughfares on the Bradford Heights area.

D-7. Support a mixed-use office/residential development along the eastern part of Hudson Blvd, near New Hope Road.

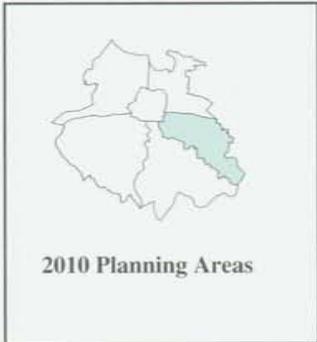
D-8. Continue to cluster neighborhood and community level business development at major intersections along New Hope Road.

D-9. Support innovative residential developments for medium to higher density infill.

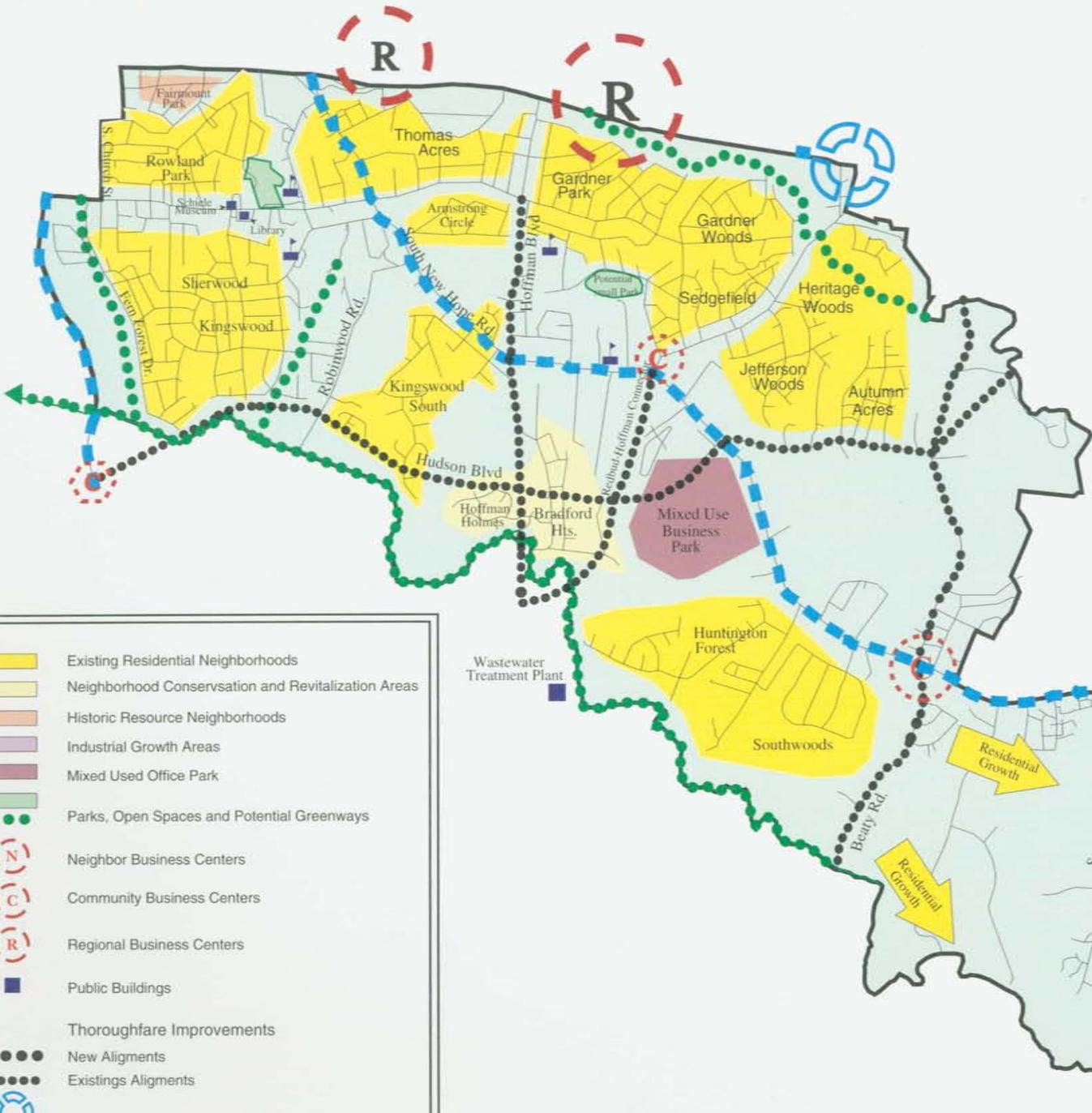
EAST SECTOR STRATEGY MAP

East Sector Strategy

Figure 7



- Existing Residential Neighborhoods
- Neighborhood Conservation and Revitalization Areas
- Historic Resource Neighborhoods
- Industrial Growth Areas
- Mixed Used Office Park
- Parks, Open Spaces and Potential Greenways
- Neighbor Business Centers
- Community Business Centers
- Regional Business Centers
- Public Buildings
- Thoroughfare Improvements
- New Alignments
- Existing Alignments
- Streetscape Improvements and Gateways





SOUTHEAST SECTOR

The Southeast Sector has emerged as one of Gastonia's primary population growth areas, and it is increasingly part of the regional Charlotte housing market.

A nearly triangular area, the Southeast Sector is bounded on the east by Catawba Creek, on the north by Garrison Boulevard, on the west by the C&NW railroad and a branch of Crowders Creek, and on the south by the 2010 Planning Area boundary.

The Southeast Sector still has a large amount of farmland and undeveloped land. Early urban development in the Southeast Sector was concentrated in the northern end of the Sector, in the Union Road and Marietta Street area. Textile mills and villages, such as the Osceola, Seminole and part of the Clara-Dunn-Armstrong mill complex, formed the early businesses and neighborhoods of the Sector. The great bulk of the Southeast Sector, however, was rural or semi-rural until suburban housing growth began in the early to mid 1960's.

Two citywide public facilities are located in the Southeast Sector: Gastonia Municipal Golf Course/Ferguson Park and Gastonia Municipal Airport. The City plans to retain the golf course in its present location, and upgrade it so that the fee structure can be adjusted to make it self sustaining. Ferguson park is adjacent to the golf course, with softball fields, tennis courts and a playground. Together the golf course and park are an important recreational asset. The airport, on the other hand, is constrained by development surrounding the site. A new airport will be necessary if Gastonia is to have modern general aviation facilities. The possibility of redeveloping the present airport site are strong, and it could become a master planned residential community if a new airport is built.

LAND USE

The Southeast Sector has the following land use ratios, as shown in Figure 1:

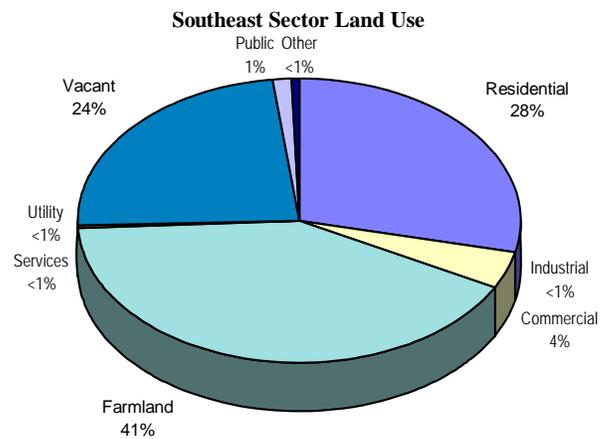


Figure 1

A majority of the acreage, 64%, is either farmland or vacant land. The Southeast Sector, particularly in its western and southern portions, is truly wide open. The farmland category, however, may be a bit misleading, because it is based on the tax status of the property, not actual agricultural output.

Residential land is the next largest category in acreage, and it is the fastest growing kind of land use in the Sector.

Commercial land is the only other category with any significant acreage. This land use is mostly neighborhood and community level shopping centers, primarily along Garrison, Union and Robinwood Roads. The Union-Robinwood area has become the commercial hub of the Sector, with shopping, banking and other businesses.

No other land use in the Southeast has more than 1% of the total acreage.

TRANSPORTATION

The Southeast Sector has the following thoroughfares, as shown in Figure 2:

Figure 2
Southeast Sector Thoroughfares

Major		Minor	
North-South	East-West	North-South	East-West
Union Rd	Garrison Blvd	Forbes Rd	Little Mtn Rd.
Robinson Rd	Hoffman Rd		Kendrick Rd
Beaty Rd	Hudson Blvd		Neal Hawkins Rd
Robinwood Rd	Union-New Hope Rd		

The former C&NW railroad also runs along the western boundary of the Southeast Sector. The C&NW is now a low-traffic branch of the Southern Railroad, serving mostly industrial customers in the US 321 South corridor.

Union Road is the transportation spine of the Southeast Sector. It was recently expanded to five lanes between Niblick Road and Robinwood Road. Several new or expanded thoroughfares are planned for the Southeast Sector. One of the remaining sections of Hudson Blvd, between US 321 and Union Road, is now under construction and will be completed in 1997. This will complete the “missing link,” providing a continuous run of Hudson Blvd. between Myrtle School Road and New Hope Road.

Two other new thoroughfares are planned for the Southeast Sector. Forbes Road Extension will be a minor north-south thoroughfare between Hudson Blvd. and Little Mountain Road. It will serve a large wedge of mostly undeveloped land between Union Road and US 321. Hoffman Blvd will be a major north-south thoroughfare between Hoffman Road and Union-New Hope Road. The new Hoffman Blvd will eventually connect with Cox Road and I-85, providing additional access to the East and Northeast Sectors of Gastonia, as shown in Figure 4.

The proposed US 74 Bypass will cross the southern portion of the Sector. Preliminary plans for the US 74 bypass are for a four lane divided highway, with interchanges at Robinson Road, Beaty Road and the proposed Hoffman Blvd. Other intersections with the US 74 Bypass will be at-grade. The Bypass will provide a third crossing over the Catawba River,

and it is expected to alter traffic patterns throughout Gastonia, as well as spur growth in its vicinity. Reserving land for the road corridor will be a critical strategy for the Southeast Sector.

POPULATION AND HOUSING TRENDS

The population of the Southeast Sector was approximately 13,000 in 1990. By 2010 the Sector is projected to have rapid population growth and a resident population of approximately 21,100, a gain of 63% between 1990 and 2010, as shown in Figure 3. Population growth is expected in the Southeast due to the abundance of land, transportation and utility improvements, and the influence of the Charlotte regional housing market.

Rapid population growth creates a demand for public investments in roads, schools, parks and recreation, and utilities. The Gaston County Schools will be building a new “South” High School to be located on Beaty Road near Bess Elementary. It will be the third high school serving primarily Gastonia and the surrounding unincorporated area.

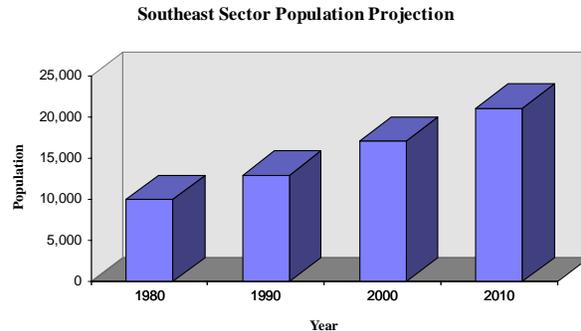
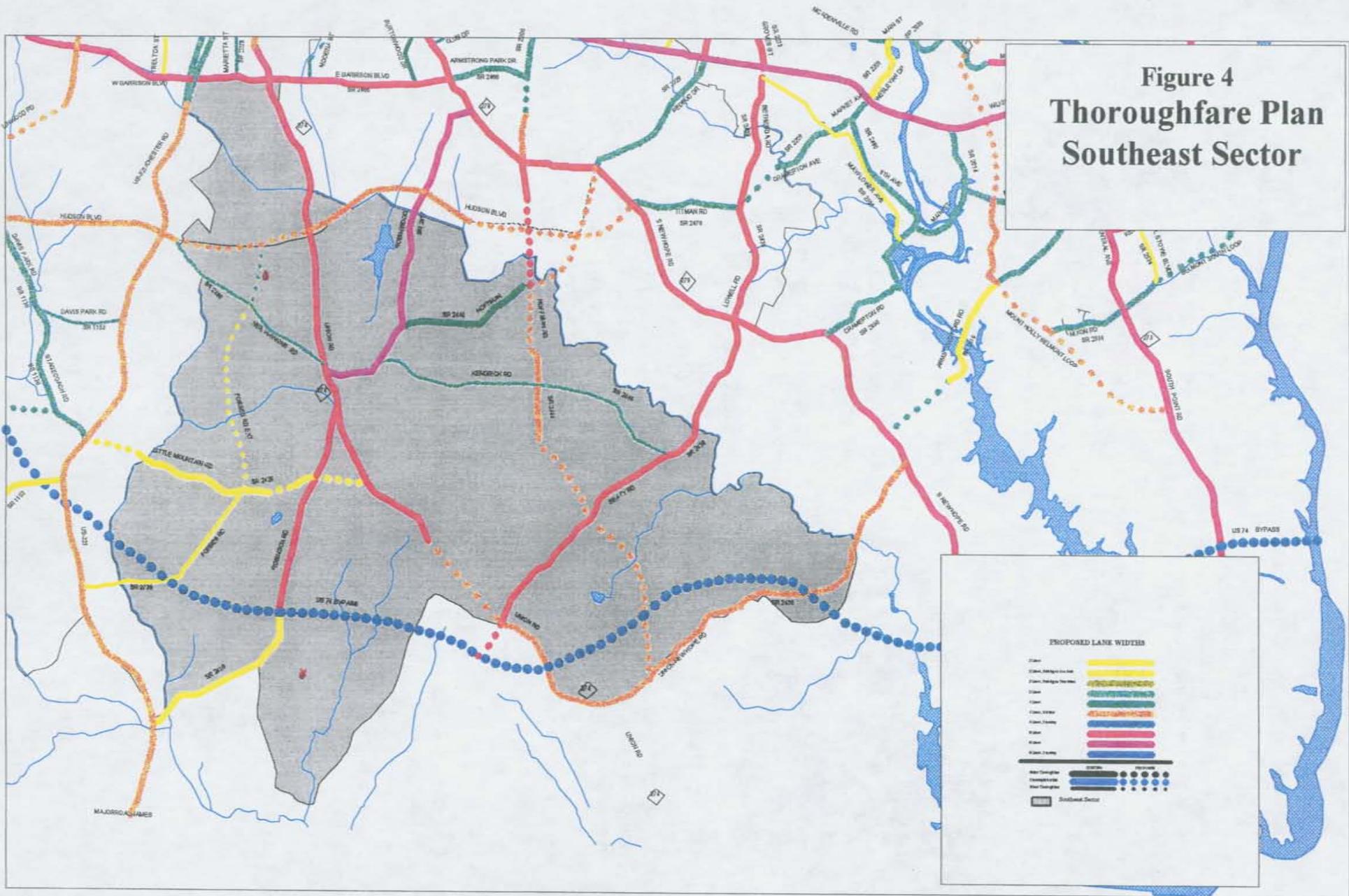


Figure 3

The Southeast Sector is now the third largest of the Planning Sectors, with approximately 16% of the 2010 Planning Area population. By 2010, however, it could have the largest population of the Sectors, depending on the actual growth of the Southwest Sector.

The Southeast Sector had an estimated 6,230 housing units in 1990, of which 82% were single-family, 11% multi-family and 7% mobile homes.

**Figure 4
Thoroughfare Plan
Southeast Sector**



Multi-family housing in the Southeast Sector is concentrated primarily on Union Road and Robinwood Road, with smaller apartment developments in several other locations. The majority of mobile homes in the Sector are located outside the City limits of Gastonia.

The time periods for when housing was built in the Southeast Sector are shown in Figure 5.

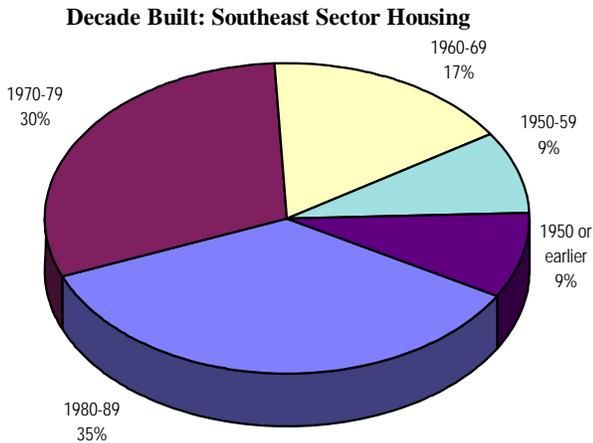


Figure 5

An estimated 70% of the total housing units in the Southeast Sector were constructed during the past 25 years, reflecting how recently growth has occurred in the Southeast. The 17% for the 1960's is an indicator of when housing growth in the Southeast Sector first began to accelerate.

EMPLOYMENT

Workplaces in the Southeast Sector employed approximately 800 persons (by place of work) in 1989. This employment total is by far the lowest of the six sectors, reflecting the “bedroom community” image of the area.

Although only a small number of people, over half the jobs located in the Southeast Sector are in services, as shown in Figure 6.

Southeast Sector Employment, 1989

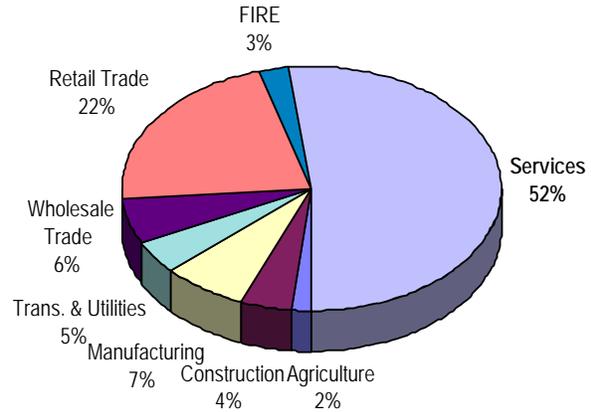


Figure 6

Retail trade in the Southeast is locally-oriented, with mostly community and neighborhood level shopping.

Manufacturing employment is concentrated in the northern, older section of the Southeast Sector. Further growth in this area is unlikely due to site constraints, aging physical plants, and changes in the textile industry.

Future employment growth in the Southeast Sector is likely to remain dependent on population growth in the area, due to the local nature of most businesses in the Sector. The new Wix headquarters, a research and development center, on Union Road will be a departure from this employment pattern. If the City supports the development of business and office parks at interchanges along the proposed US 74 Bypass, further high-tech employment could come to the Southeast Sector of Gastonia.

A. ISSUES

- A-1.** Strong population growth in the Southeast Sector will create a demand for additional roads, utilities, parks and schools.
- A-2.** The current southeast recreation center is only a part-time facility shared with the National Guard.



First Presbyterian Church is one of the Southeast Sector's landmarks.

- A-3.** Gastonia Municipal Airport is nearly obsolete, it cannot be practically expanded in its present location, and some louder aircraft have generated complaints of excessive noise.
- A-4.** An increasing number of Southeast Sector neighborhoods are self-contained units, with little or no connectivity to adjacent neighborhoods.
- A-5.** Traffic is growing at least as fast as population in the Sector.
- A-6.** Population growth, an increase in the number of regional commuters and constraints on existing roads all contribute to a need for the US 74 Bypass.

B. FIVE-YEAR STRATEGIES

- B-1.** Widen Hoffman Road from two to four lanes, from Robinwood Rd to Duke St.
- B-2.** Construct the new section of Hudson Blvd from US 321 to Union Road.
- B-3.** Complete the following water main construction projects:

Line/Location	Size"	Length'
1. Rolling Meadow Ln/Niblick	12	1,600
2. Robinson Rd./Little Mtn. Rd/ Forbes Rd.	16	16,000
3. Kendrick Rd.	16	10,500
4. Easement Line fr. Forest Dr. to Dawnshire Dr.	8	900
5. Beaty Rd	16	20,600

B-4. Develop a youth sports complex at Martha Rivers Park.

B-5. Develop a greenway plan.

B-6. Adopt a curfew (11 p.m. to 6 a.m.) for commercial air traffic and disruptive flight patterns at Gastonia Municipal Airport.

C. LONG-RANGE STRATEGIES

C-1. Upgrade and expand Gastonia's wastewater treatment system, and build the following facilities:

- Beaty Road Pumping Station
- Beaty Road Force Main

C-2. Widen the following roads:

Road	From/To	Lanes
Neal Hawkins	Union to Valleywood	3 lanes
Robinwood Rd.	Union to New Hope	4 lanes

C-3. Widen Beaty Road from two to five lanes, from Union Road to US 29/74.

C-4. Reserve and/or acquire land for the following new thoroughfares:

- Hoffman Blvd.
- Forbes Road Extension

C-5. Once the corridor has been determined, use all available tools to reserve and acquire land for the proposed US 74 Bypass.

C-6. Build a permanent year-round recreation center in a location that is accessible to both East and Southeast Sector residents.

C-7. Study the feasibility of redeveloping the land associated with obsolete public facilities for recreational purposes.

D. LAND USE STRATEGIES

D-1. Develop a corridor plan and an overlay zoning district for Union Road.

D-2. Conserve residential land use along Hoffman Road.

D-3. Use zoning to insure high-quality development and a parkway atmosphere on the Proposed US 74 bypass.

D-4. Support a mixed use residential development for the airport property after the airport is relocated.

D-5. Cluster neighborhood and community level business development at selected intersections of thoroughfares.



A mixed use residential development is planned for the Gastonia Municipal Airport property after the airport is replaced.

D-6. Support innovative residential developments for small-tract infill development.

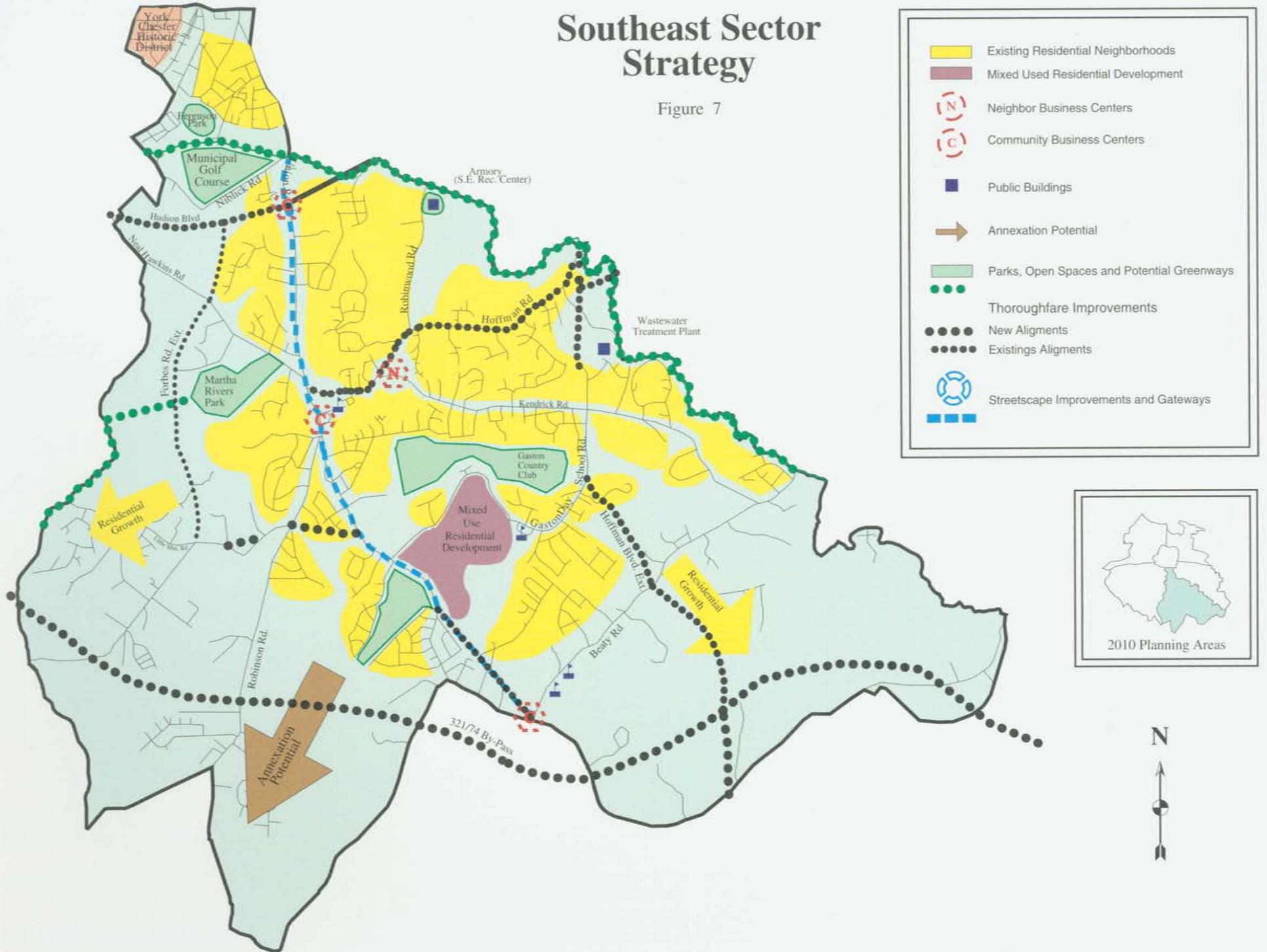
D-7. Protect established neighborhoods from commercial encroachment as the Sector grows.

SOUTHEAST SECTOR STRATEGY MAP

The Strategy Map on the next page is a graphical representation of some of the strategies—short-term, long-term, and land use—in this plan. The map is generalized, showing *approximate* locations for the various strategies.

Southeast Sector Strategy

Figure 7



- Existing Residential Neighborhoods
- Mixed Used Residential Development
- N Neighbor Business Centers
- C Community Business Centers
- Public Buildings
- Annexation Potential
- Parks, Open Spaces and Potential Greenways
- Thoroughfare Improvements
- New Alignments
- Existing Alignments
- + Streetscape Improvements and Gateways





SOUTHWEST SECTOR

The Southwest Sector is the largest and perhaps the most diverse of the six 2010 Sectors. The Sector has the following boundaries:

North: US 29/74 and Garrison Blvd.

East: The C & NW railroad and a branch of Crowders Creek.

South: Crowders Creek.

West: The 2010 Planning Area boundary.

The Southwest has a diverse population and land use mix. The Sector has residential neighborhoods, shopping centers and an industrial corridor, and it also has farms, a state park, and rural general stores. It is generally agreed to have the most attractive *land* and views in the 2010 Planning Area, but it also suffers from jumbled land use and blight in a few of its most naturally attractive areas.

The urbanized portion of the Southwest Sector is a combination of established residential neighborhoods, commercial areas and an industrial corridor. Residential neighborhoods cover a broad range of housing styles, from large historic homes on York Road to modest former mill villages near Garrison Boulevard. A common characteristic of most of the established neighborhoods in the Sector is a population which is “aging in place,” a process in which housing turnover is low and households decline in size as children grow up. This can lead to a declining population, even if housing is stable.

Commercial development in the Sector has undergone a decline in most uses except for

convenience goods and groceries. Apart from a branch of Matthews-Belk, the area has a lack shopping opportunities for apparel and household goods.

Industrial development in the Sector is concentrated in the US 321 South corridor, historically an important industrial area for Gastonia. This area has several of Gastonia’s largest industrial employers. Further development of industry is possible on several infill sites in the 321 South Corridor.

In recent years Gastonia has laid a foundation for growth in the Southwest Sector through improvements in water and sewer service. The Crowders Creek Wastewater Treatment Plant, located just south of the Sector, is a regional facility which could serve much of the Crowders Creek drainage basin. Gastonia has built a sewer trunk line along Crowders Creek, improving the growth prospects in much of the Sector.

Crowders Mountain State Park is located in the Southwest Sector. This park, with its mountain ridges, hiking trails and rock climbing opportunities, has become a regional tourist attraction. It is perhaps Gaston County and Gastonia’s most important natural and scenic feature, and protection of the park and its surroundings will be a critical strategy for the Southwest Sector.

LAND USE

The Southwest Sector has the following land use ratios as shown in Figure 1.

Farmland and vacant land account for a majority of the acreage in the Southwest, about 58%. The farmland category is somewhat misleading, as it is based on the tax status of the property and not agricultural output.

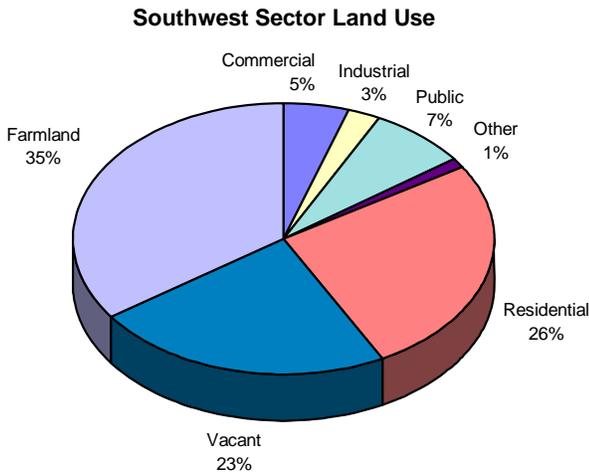


Figure 1

Residential land is the next largest land use category, with about 26% of the acreage. This is not surprising, since the Southwest Sector is the largest of the six sectors not only in area, but also in population. Residential land use is more concentrated, logically, in the northern and eastern portions of the Sector.

Public land use accounts for 7% of the acreage in the Southwest Sector, primarily due to the 700+ acres of Crowders Mountain State Park within it.

Commercial land use, 5% of the total, is concentrated on US 29/74, US 321 and, to a lesser extent, Linwood and Davis Park Roads.

Perhaps surprisingly, industrial land use is only 3% of the acreage in the Southwest Sector. This may be due, however, to the relatively small size of industrial parcels compared to the large area of the Southwest Sector.

TRANSPORTATION

The Southwest Sector has the following thoroughfares, as shown in Figure 2 below:

Figure 2
Southwest Sector Thoroughfares

Major		Minor	
North-South	East-West	North-South	East-West
US 321	US 29/74	Whitesides Rd	Davis Pk Rd.
Myrtle Sch./ Davis Pk Rd	Garrison Blvd		Linwood Rd
Lewis Rd	Hudson Blvd		Carson Rd
Chapel Grove (School) Rd	Linwood Rd		
Sparrow Springs Rd	Crowders Creek Rd		

Part of the old C & NW railroad crosses the sector near its eastern boundary. The C & NW, now a light-traffic branch of the Southern Railroad, serves primarily industrial customers in the 321 South corridor.

Several new or expanded thoroughfares are planned for the Southwest Sector. The US 321/74 bypass will cross the Southwest Sector, parallel to and west of Myrtle School-Davis Park Road. This four lane divided highway, still ten to thirty years in the future, will open up much of the Southwest Sector, providing an easy trip to Charlotte. Two important strategies are associated with the Bypass. The first is to determine the corridor and begin protecting the corridor, in cooperation with Gaston County. The second is a possible first section of the Bypass, from Hudson Blvd to US 29/74, that could be built prior to the rest of the road.

One of the links of Hudson Blvd is planned to run from the current terminus at Davis Park Road to an interchange with the proposed US 321/74 Bypass. Another new thoroughfare is the "Crowders Mountain Parkway," connecting I-85 with Chapel Grove Road. Also planned for the Southwest Sector is the Little Mountain Road Extension, which will link Lewis Road to US 321 at the present Little Mountain Road.

Two other thoroughfare improvements are contained in the Thoroughfare Plan. The first is a relocation of Linwood Road between East Drive and Myrtle School Road. The second is a short relocation of Chapel Grove School Road to connect directly to Chapel Grove Road.

POPULATION AND HOUSING TRENDS

The population of the Southwest Sector was approximately 21,500 in 1990. By 2010 the sector is projected to have modest population growth and a resident population of 23,000, a gain of about 7% between 1990 and 2010, as shown in Figure 3. Although the Sector has abundant vacant land and farmland, population growth is expected to be only moderate due to the following reasons: population loss in some of the older neighborhoods of the Sector, a soft housing market for new development, a lack of urban amenities, and a rural residential pattern of development that has already taken hold on most of the outer thoroughfares in the western part of the Sector. The City of Gastonia, through its Gastonia-West Citizens Committee for Progress, is taking steps to improve the competitive position of the Southwest Sector. Should these steps prove successful, the actual population growth could be higher.

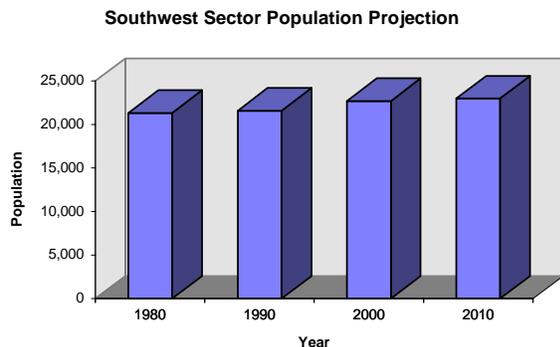


Figure 3

The Southwest Sector is currently has the largest population of the six sectors, with approximately 26% of the 2010 Planning Area population.

The Southwest Sector had an estimated 7,800 housing units in 1990, of which 80% were single-family, 11% multi-family and 9% mobile homes. Multi-family housing in the Sector is largely scattered among many small complexes of 20 units

or less, the majority of which are located east of Myrtle School Road and north of Hudson Blvd. The Sector also has two large publicly-assisted housing complexes, Camelot Apartments and Mountain View Apartments, both located near Hudson Boulevard.

Mobile homes in the Southwest Sector are mostly located outside the city limits of Gastonia.

Housing production has been relatively steady in the Southwest Sector since 1950. The percentage of housing built by decade is shown in Figure 4 below:

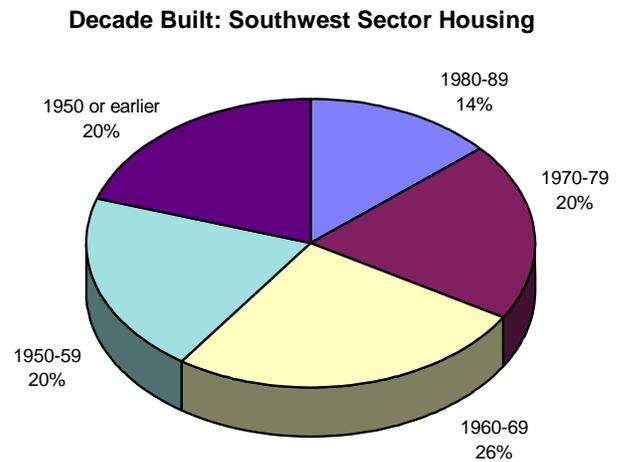


Figure 4

Each time period accounts for about 20% of the total housing, except for the 1980's (14%) and the 1960's (26%).

EMPLOYMENT

Workplaces in the Southwest Sector employed approximately 8,160 people in 1989. Manufacturing employs a majority of people in Southwest Sector workplaces, as shown in Figure 5.

Manufacturing employment in the Southwest Sector is concentrated in the US 321 South corridor, which is home to some of Gastonia's largest manufacturing employers, including Threads USA, A.B. Carter, Rauch Industries and Homelite Textron.

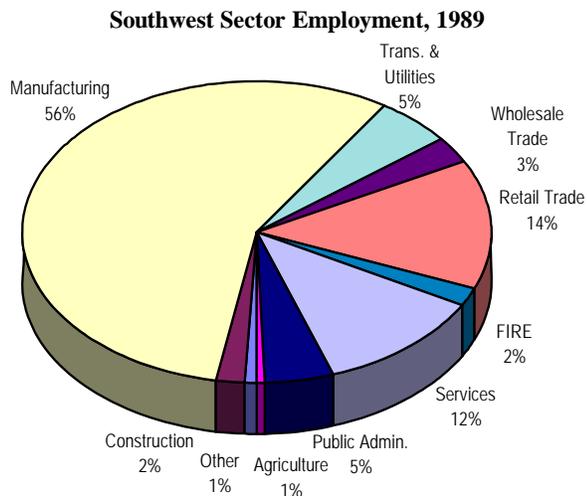


Figure 5

The next largest employment category is retail trade, with approximately 14% of the employment in the Sector. Retailing is located along Franklin Blvd with a concentration at Dixie Village, and along US 321, Linwood Road and Davis Park Road.

Service employment is the only other employment category with more than 10%. Services are located in the commercial corridors of the Sector, such as Franklin Blvd. and US 321.

A. ISSUES

A-1. Despite an abundance of land and the best scenery in the area, the Southwest Sector is lagging in population growth behind the Northeast, East and Southeast Sectors.

A-2. Crowders Mountain State Park is an outstanding natural asset and tourist attraction, and it should have compatible development in its vicinity.

A-3. The Southwest Sector has some attractive and viable neighborhoods, but housing values in these neighborhoods have not kept up with similar neighborhoods in the East and Southeast Sectors.

A-4. Housing deterioration is a concern in the older neighborhoods of the Southwest Sector.

A-5. Four of Gastonia's twenty highest crime areas are located in the Southwest Sector.

A-6. The Franklin Blvd. commercial corridor is suffering from commercial vacancies, under-use of buildings, general urban clutter and a lack of buffering between pedestrians and traffic.

A-7. The Southwest Sector has had a decline in shopping and retail outlets, requiring a trip to the east side for all but groceries and the most basic goods and services.

A-8. The Southwest Sector has a lack of primary care health services, such as family physicians and dentists.

A-9. Many of the older Southwest Sector neighborhoods are "aging out," with fewer families and children, and a stable or declining population.

A-10. The housing stock in the Southwest Sector is aging, but it is also an important source of quality affordable housing, and it should be conserved.

A-11. With public commitment, new investment, and enhancement of the assets of the area, the competitive position of the Southwest Sector can be enhanced.

A-12. Real estate markets apparently reflect a perception of Southwest Sector Schools as less desirable than schools in the East and Southeast Sectors.

B. FIVE-YEAR STRATEGIES

B-1. Include recruitment of retailers to new or under-used sites as part of our economic development efforts.

B-2. Develop a retail/office marketing package, providing information necessary for promoting new retail and office development.

B-3. Study the preservation and adaptive re-use of the historic Firestone Mill.

B-4. Support the redrawing of school attendance zones to adjust the socio-economic balance in Southwest Sector schools and better reflect the overall student population.

B-5. Initiate systematic code enforcement on a rotating basis for endangered neighborhoods, with each neighborhood to be reviewed at least once every five years.

B-6. Establish neighborhood conservation strategies for stable Southwest Sector neighborhoods which may become threatened in the future.

B-7. Evaluate older neighborhoods for historic designation, upon request of neighborhood residents.

B-8. Work with property owners and the NCDOT to screen salvage yards along US 29/74.

B-9. Determine the corridor of the proposed US 321/74 Bypass, and use all available tools, in cooperation with Gaston County, to protect the right-of-way.

B-10. Work with banks, home builders and the Board of Realtors to improve the marketing of Southwest Sector neighborhoods and businesses.

B-11. Pursue an annexation strategy focused on the Southwest Sector to bring City services

to some of the unincorporated parts of the Sector.

B-12. Construct the following road improvements:

Project	Construction
Efird St.	New two-lane road
Linwood & Myrtle Sch. Rd.	Widen all 4 approaches

B-13. Complete the following water main construction projects:

Line/Location	Size"	Length'
1. Edgefield Ave.	12	500
2. Franklin fr. Garrison to Myrtle Sch. Rd/Myrtle Sch. Rd. to Hudson/ Hudson to Lynhaven	12	12,500
3. Vance St.(Garrison-Hooper)	8	1,800
4. Weldon	8	1,400
5. Vance fr. Garrison to W. 2nd/W. 2nd to Firestone/ Firestone St. & Blvd./to easement N. of Rankin	12	4,500
6. Franklin Blvd, Webb-Linwood	12	500

B-14. Develop a plan for trails and greenways.

B-15. Support the establishment of primary health care practices on the west side.



Crowders Mountain as seen from Camp Rotary Road.

C. LONG-RANGE STRATEGIES

- C-1.** Extend Hudson Boulevard to the alignment of the proposed US 321/74 Bypass.
- C-2.** Consider building a portion of the US 321/74 Bypass, from Hudson Blvd. to US 29/74.
- C-3.** Determine and protect the corridors of the proposed roads shown on the Thoroughfare Plan.
- C-4.** As the City annexes land along the western US 29/74 corridor, consider relocating Fire Station #3 if it will improve response time and fire protection in the Sector.
- C-5.** Construct the following wastewater treatment improvements:
- **Phase II:**

Crowders Creek Outfall	17,700'	30"
Crowders Creek Outfall	12,400'	18"
Crowders Creek Outfall	16,700'	15"
 - **Phase III:**

Crowders Creek Outfall	23,900'	18"
Crowders Creek Outfall	18,800'	15"
- C-6.** Support the establishment of a full-service branch library on the west side of Gastonia.
- C-7.** Begin stream maintenance on Blackwood Creek, from Phillips park to 1,300' north of Linwood Road, if a funding source can be identified.
- C-8.** Expand the Crowders Creek wastewater treatment plant from 6 to 9 million gallons per day.
- C-9.** Improve and develop Davis Park as a functional recreational park.

D. LAND USE STRATEGIES

- D-1.** Support the development of a first-quality business/industrial park in the vicinity of the proposed US 321/74 Bypass and West Franklin Blvd.
- D-2.** Evaluate the zoning of established single-family neighborhoods.
- D-3.** Develop a corridor plan and zoning overlay district for Linwood Road.
- D-4.** Develop corridor plans for US 321 and Franklin Blvd, with emphasis on public sector/private business cooperation.
- D-5.** Conserve residential land use on US 321 from Tenth Avenue to Carolina Avenue.
- D-6.** Work toward the eventual removal or conversion to indoor operations of salvage yards along West Franklin Blvd.
- D-7.** Use development incentives to encourage new single-family residential development on the west side. Targeting of the incentives can be accomplished by providing additional incentives for the west side only.
- D-8.** Use a targeted, site-specific enhancement strategy to create high-potential nodes of growth in the Southwest Sector. This “priming of the pump” could spark further residential growth in its vicinity.
- D-9.** Protect established residential neighborhoods from additional commercial encroachment.
- D-10.** Avoid the placement of additional assisted family housing projects in the Southwest Sector.

SOUTHWEST SECTOR STRATEGY MAP

The Strategy Map on the next page is a graphical representation of some of the strategies—short-term, long-term, and land use—in this plan. The map is generalized, showing *approximate* locations for the various strategies.



NORTHWEST SECTOR

The Northwest Sector of Gastonia’s 2010 Planning Area is perhaps the most specialized of the six sectors. The Sector has been identified for a number of years as Gastonia’s primary industrial growth area, and major public investments in roads and utility service have taken place.

The Northwest Sector has the following boundaries:

- *North:* NC 279 (Dallas-Cherryville Hwy.)
- *East:* US 321, Interstate 85, Kaylor Branch Creek, Essex Street and the Southern Railroad.
- *South:* Franklin Blvd.
- *West:* Interstate 85, Oates Road, NC 274 and Costner School Road.

The Northwest Sector is a combination of urbanized areas and rural or semi-rural areas. Urbanized residential and commercial areas are primarily located in the southern and eastern portions of the Sector, near Franklin Blvd. and Bessemer City Road. Urbanized industrial park areas are located north of Interstate 85, an area that has some of Gastonia’s largest employers. Rural and semi-rural areas are located in the northern and western portions of the Sector. These areas will eventually urbanize, and the 2010 Future Land Use Map calls for industrial development there.

Two significant recreational areas are located in the Sector. The T. Jeffers Center is a full-service recreation center, located near Bessemer City Road and Crescent Lane. It is the most recently built of Gastonia’s recreation centers. Rankin Lake Park, on the other hand, is one of Gastonia’s oldest, dating to

the creation of Rankin Lake as a reservoir in the 1920’s. Rankin Lake itself could eventually become a recreational asset if a new water storage reservoir is created along with a new water treatment plant.

The Northwest Sector has a declining population, in part due to the emphasis on industrial development, but also because several of the Sector’s older neighborhoods have aging populations, housing deterioration and commercial encroachment. Revitalization and conservation of these neighborhoods will be important to the long term viability of the area.

LAND USE

The Northwest Sector has the following land use ratios, as shown in Figure 1:

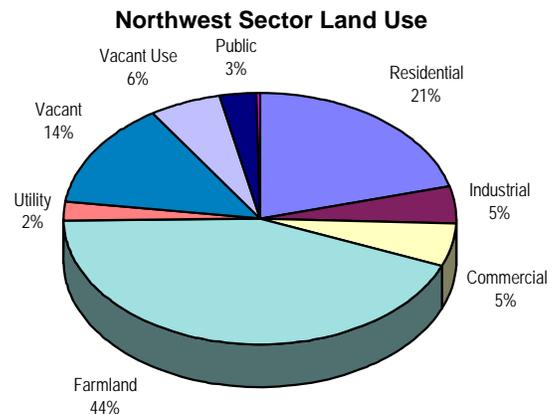


Figure 1

The largest of the land use categories is farmland. Much of this farmland is expected to become industrial land, consistent with the Industrial Growth Triangle land use policy.

Current industrial land accounts for about 5% of the acreage in the Northwest Sector. Most of the industrial land is concentrated in the area immediately north of I-85. Further growth of industry in the Northwest Sector is one of the primary goals of the City.

Residential land use occupies a relatively small percentage of the acreage, compared to the other five sectors. Most residential land is located near Bessemer City Road, Shannon-Bradley Road and Edgewood Road. The remaining residential land is rural or semi-rural, with few subdivisions or neighborhoods.

Commercial Land use is concentrated in two areas, along Franklin Blvd and at the junction of I-85 and Bessemer City Road. Further commercial growth could occur along Franklin Blvd, particularly if a mixed use business park is developed near the proposed US 321 Bypass.

Vacant uses are sites that have been developed but not currently used, and they are more prevalent in the Northwest Sector than in any other sector. Redevelopment and re-use of vacant sites is important to the long-term viability of the Northwest Sector.



TRANSPORTATION

The Northwest Sector has the following thoroughfares, as shown in Figure 2:

Figure 2
Northwest Sector Thoroughfares

Major		Minor	
North-South	East-West	North-South	East-West
US 321	US 29/74	Jenkins Rd	Hargrove Rd.
Myrtle School Rd	Interstate 85	Fairview Rd	
Bessemer City Rd	Jenkins Dairy Rd	White-Jenkins Rd.	
Shannon Bradley Rd	NC 279	Edgewood Rd	
NC 275	Crowders Creek Rd		

The Southern Railroad also crosses the Northwest Sector. Railroad service, although not needed by all industries, is nevertheless important to industrial growth.

Several new or expanded thoroughfares are planned for the Northwest Sector. The proposed US 321 Bypass will cross the Sector in a north-south direction. This four lane divided highway, still ten to thirty years in the future, will further open up the Northwest Sector. An important strategy for the Bypass is to determine the corridor and use all available tools to begin protecting the it, in cooperation with Gaston County.

Two other new roads are proposed for the Northwest Sector. The first is a bypass of NC 279, between US 321 and the proposed US 321 Bypass. The second is an extension of Jenkins Dairy Road, to connect with the proposed NC 279 Bypass. Both roads will provide access to land that is planned for industrial development.

The Northwest Sector has an abundance of open land, with good access to transportation and utilities, that is suitable for industrial development.

POPULATION AND HOUSING TRENDS

The population of the Northwest Sector was approximately 6,600 in 1990, a population decline of about 1,000 since 1980. By 2010 the sector is projected to have a more modest population loss and a resident population of about 6,000, a decline of 10% between 1990 and 2010, as shown in Figure 3.

Population decline is expected in the Northwest Sector due to the emphasis on industrial development within the Sector, the loss of residential land as industry develops and a declining population in the older neighborhoods of the Sector. The Northwest Sector currently has the smallest population of the six sectors, with about 8% of the 2010 Planning Area population.

The Northwest Sector had an estimated 3,500 housing units in 1990, of which 82% were single-family, 8% multi-family and 10% mobile homes. Multi-family housing in the Sector is largely scattered among many small complexes of 20 units or less, the majority of which are located near Crescent Lane and Shannon-Bradley Road. Mobile homes in the Northwest Sector are mostly located outside the City Limits of Gastonia.

Housing production has been relatively steady in the Northwest Sector since 1950. The percentage of housing built by decade is shown in Figure 4.

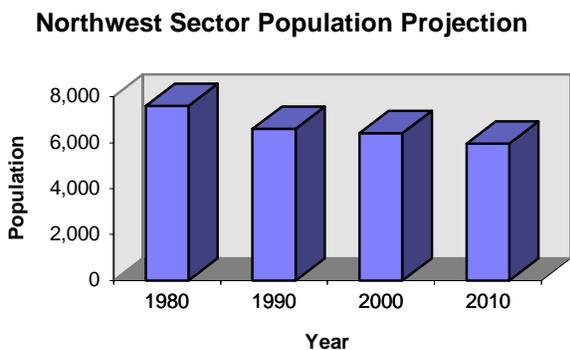


Figure 3

Decade Built: Northwest Sector Housing

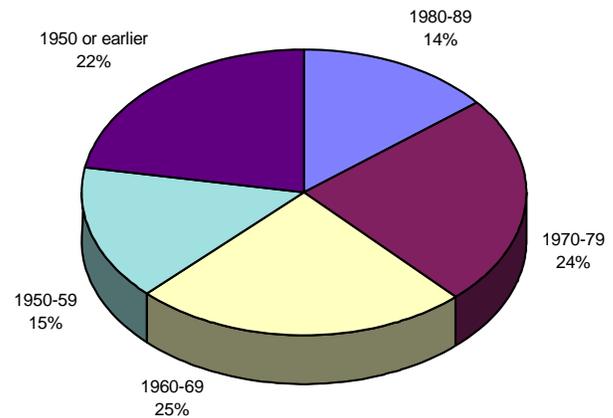


Figure 4

Nearly half of the housing units were built in the 1960's and 1970's. The Northwest Sector had a slowdown in housing built during the 1980's, with only 14% of the total.

EMPLOYMENT

Workplaces in the Northwest Sector employed approximately 11,250 people in 1989. Nearly twice as many people work as live in the Northwest Sector.

Northwest Sector Employment, 1989

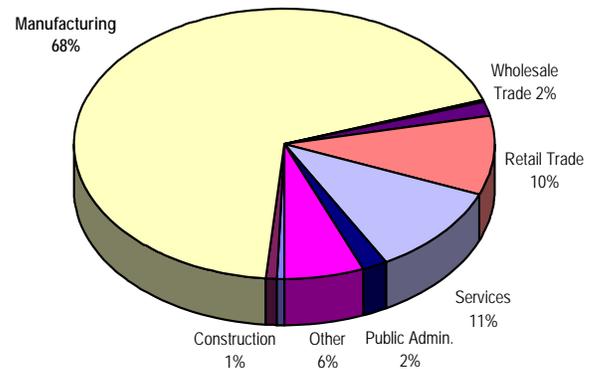


Figure 5

Manufacturing employment has a greater share of total employment in the Northwest Sector than any other Sector. As industry grows in the Sector, manufacturing will become even more dominant. This employment is highly desirable due to the high

wages and high land values created by industrial growth.

Retail trade and services are the next two largest employers in the Northwest Sector. This employment is concentrated in the Franklin Blvd corridor and, to a lesser extent, along Bessemer City Road. Growth in retail trade could occur if steps are taken to improve the aesthetics of Franklin Blvd, and if a mixed use business park is developed near the intersection of Franklin and the proposed US 321 Bypass.

No other employment sector has more than 2% of the total employment, reflecting the specialization of the Northwest Sector.

A. ISSUES

- A-1.** The Northwest Sector is well positioned for industrial growth, with good access to transportation, favorable zoning, and water and sewer service already in place.
- A-2.** Although the Northwest Sector has a very high potential for industrial growth, a lack of fully developed industrial parks could dampen future growth.
- A-3.** Housing deterioration is a concern in the older neighborhoods of the Northwest Sector.
- A-4.** The Franklin Blvd. commercial corridor is suffering from commercial vacancies, under-use of buildings, general urban clutter and a lack of buffering between pedestrians and traffic.
- A-5.** The Northwest Sector has had a decline in shopping and retail outlets, requiring a trip to the east side for all but groceries and the most basic goods and services.
- A-6.** The Northwest Sector has a lack of primary care health services, such as family physicians and dentists.
- A-7.** All of the schools in the Northwest Sector are considered “at-risk” by the Gaston County Schools.
- A-8.** Commercial uses are encroaching residential neighborhoods near Bessemer City Road.

B. FIVE-YEAR STRATEGIES

- B-1.** Include recruitment of retailers to new or under-used sites as part of our economic development efforts.
- B-2.** Develop a retail/office marketing package, providing information necessary for promoting new retail and office development.
- B-3.** Support the preservation and adaptive re-use of the Arlington Elementary School site.
- B-4.** Support the redrawing of school attendance zones to adjust the socio-economic balance in Northwest Sector schools and better reflect the overall student population.
- B-5.** Initiate systematic code enforcement on a rotating basis for endangered neighborhoods, with each neighborhood to be reviewed at least once every five years.
- B-6.** Work with property owners and the NCDOT to screen salvage yards along Franklin Blvd.
- B-7.** Complete the following water main construction projects:

<u>Line/Location</u>	<u>Size"</u>	<u>Length</u>
1. 321 N. of I-85	16	5,000
2. Jenkins Rd.	12	5,200
3. Beaverbrook Ln.	8	300
4. NC 275 fr. Vandenburg to NC 279/NC 279 fr. NC 275 to US 321	16	18,000
5. Vandenburg Rd./White-Jenkins Rd./NC 279	12	23,600
- B-8.** Determine the corridor of the proposed US 321 Bypass, and use all available tools, in cooperation with Gaston County, to protect the right-of-way.
- B-9.** Expand Bessemer City Road to a multi-lane thoroughfare, and work with NCDOT to include a planted median if at all possible.
- B-10.** Widen all approaches to the intersection of Bessemer City Road and Northwest Boulevard.
- B-11.** Support the establishment of primary health care practices on the west side.

C. LONG-RANGE STRATEGIES

- C-1. Determine and protect the corridors of the proposed NC 279 Bypass and Jenkins Dairy Road Extension.
- C-2. The City should organize and initiate a major public-private effort to establish a first-class “high tech” industrial/business park with attractive surroundings in or near our city limits. The city should play active roles, as needed, in development entity organization, land acquisition, installation of infrastructure, and marketing. Such a project could involve the use of the existing non-profit development entity created by the EDC.
- C-3. Strategically extend City utilities as needed to support new industrial development in the Northwest Sector.
- C-4. Begin stream maintenance on the following creeks, if a funding source can be identified:

Proposed Streams for Maintenance

<u>Stream</u>	<u>Location</u>	<u>Length/ft.</u>
Long Cr	200' east of New Hope Rd. to Kaylor Branch	13,600
Highland Branch	Long Creek to Caldwell Street	5,400
Kaylor Branch	Long Creek to 2000' south of I-85	6,250

- C-5. Pursue an annexation strategy focused on the Northwest Sector to bring City services to some of the unincorporated parts of the Sector.
- C-6. Develop a greenway plan.

D. LAND USE STRATEGIES

- D-1. Evaluate the zoning of established single-family neighborhoods.
- D-2. Develop a corridor plans for Franklin Blvd, with emphasis on public-private cooperation.
- D-3. Following completion of advance planning and location studies for the proposed US 321 Bypass, the corridor should be fully evaluated for economic development opportunities by determining the best locations for well-planned business and industrial parks.
- D-4. Work toward the eventual removal of salvage yards along West Franklin Blvd.
- D-5. Use a targeted, site-specific enhancement strategy to create high-potential nodes of growth in the Northwest Sector. This “priming of the pump” could spark further growth in its vicinity.
- D-6. Minimize conflicts between industrial land use and residential/institutional land use. Protection of residential-agricultural and exclusive industrial zoning is a key strategy for minimizing those conflicts.
- D-7. Protect established residential neighborhoods from additional commercial encroachment.
- D-8. Avoid the placement of additional assisted family housing projects in the Northwest Sector.

NORTHWEST SECTOR STRATEGY MAP

The Strategy Map on the next page is a graphical representation of some of the strategies—short-term, long-term, and land use—in this plan. The map is generalized, showing *approximate* locations for the various strategies.

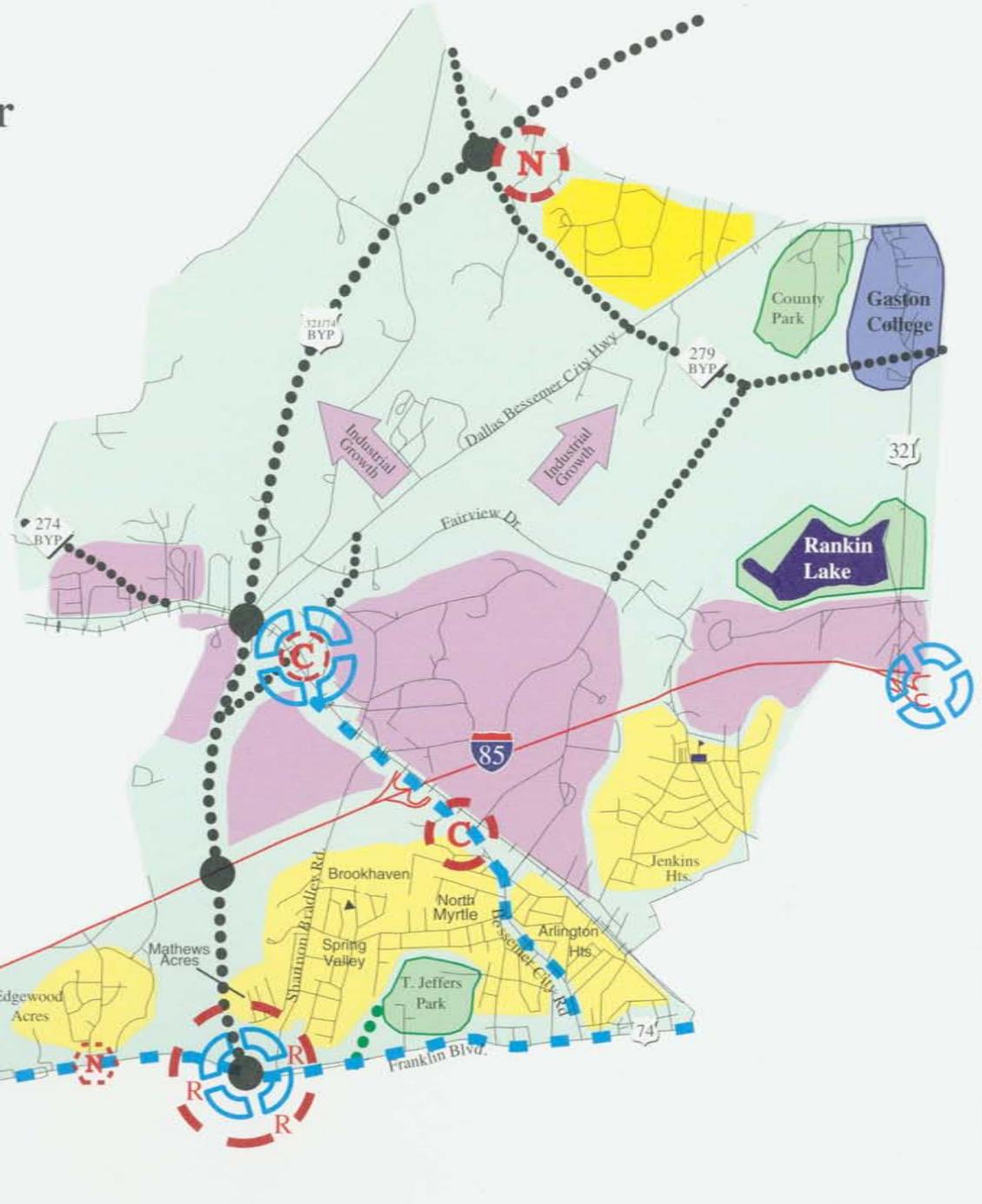


2010 Planning Areas

Northwest Sector Strategy

Figure 6

- Existing Residential Neighborhoods
- Neighborhood Conservation and Revitalization Areas
- Parks, Open Spaces and Potential Greenways
- Industrial Growth Areas
- Neighbor Business Centers
- Community Business Centers
- Regional Business Centers
- Public Buildings
- Annexation Potential
- Norfolk Southern
- Thoroughfare Improvements
- New Aligments
- Existing Aligments
- Streetscape Improvements and Gateways
- Streetscape Improvements and Gateways





The Central Sector, as the name suggests, is the heart of the Gastonia 2010 Planning Area, with a land mass of about 2,491 acres or nearly four square miles. The Central Sector generally conforms to the City limits of Gastonia as they were prior to 1947. Thus, the Central Sector makes up most of pre-World War II Gastonia. The Sector is bound on the north by I-85, on the east by Chestnut Street and Modena Street, on the south by Garrison Boulevard and on the west by Webb Street, the Southern Railroad, Essex Street, and Kaylor Branch creek.

The Central Sector has undergone changes in land use, transportation, building condition and use. The Central Sector has had declines in retailing, industry and population, but it remains the focal point of Gastonia's transportation network and the center of governmental and financial services.

The Central Sector includes the following neighborhoods and districts:

- Uptown Gastonia, the mixed-use central core.
- The York-Chester Historic District;
- The Highland neighborhood, Gastonia's oldest African-American neighborhood.
- The Firestone, Trenton, Mutual, Avon, Modena and CDA mill villages.
- The Franklin Blvd. commercial corridor.
- Parks, including Lineberger Park, Erwin Park and Sims Park.
- Several post-World War II subdivisions.

The early transportation network included Franklin Avenue (US 29/74), Airline Avenue (NC 7), Marietta Street, and the Southern, C & NW and P&N Railroads. In more recent years York and Chester Streets (US 321) replaced Marietta Street as the main north-south thoroughfares and East Airline Avenue was removed in order to relocate the

railroad. Long Avenue has been widened and is now a thoroughfare between Uptown and Old East Gastonia. Also, the C & NW railroad, now part of Norfolk Southern, serves only local freight traffic and is little used. The P&N railroad has been abandoned, its right-of-way purchased by the State of North Carolina. The future use of the P&N corridor is yet to be determined. Interstate 85 was built along the northern edge of the Central Sector during the late 1950's and early 1960's.

The Central Sector has a diverse mix of neighborhoods, ranging from stable to improving to threatened. One of the primary issues for housing in the Central Sector is housing condition as the neighborhoods age. Maintenance and conservation of the housing stock not only help keep the neighborhoods stable, but also sustain an important source of affordable housing.

LAND USE

The Central Sector has the following land use ratios, shown in Figure 1:

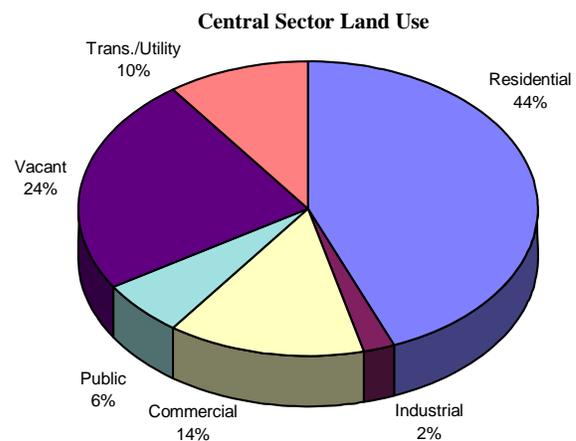


Figure 1

Commercial land use is located both Uptown and as strip commercial development, primarily along

Franklin Blvd., US 321, Airline Avenue and Union Road. Newly developed or redeveloped shopping centers in the Central Sector include York-Chester Square and Water Tower Place. Commercial buildings in the Central Sector have a median construction date of 1948.

The Central Sector has the largest concentration of office and institutional land use within the 2010 Planning Area, most of which is either Uptown or in the Uptown perimeter. The median construction date for offices is 1947.

Industrial and warehouses occupy the smallest amount of land in the Central Sector, although they have a visual impact that exceeds their actual use of land. The median construction date for industrial and warehousing facilities is 1954, with little new industrial/warehouse construction since about 1970.

Residential land use is located throughout the Central Sector, constituting the primary land use on most local streets.

TRANSPORTATION

The Central Sector has the following thoroughfares,

Southeast Sector Thoroughfares

Major		Minor	
North-South	East-West	North-South	East-West
US 321	Franklin Blvd	Marietta St	Second Ave
Broad St	Garrison Blvd	Modena St	Davidson Ave
Union Rd	Interstate 85	Chestnut St	Main Ave
	Long/Airline/ Gaston Ave	Trenton St	
		Highland St	

The Southern Railroad passes through the Sector in a north-south as well as east-west direction. Within Uptown Gastonia, the main tracks have been lowered to create a grade separation, reducing the number of at-grade crossings. The vacated land between Marietta Street and York Street will be developed as a parking lot by the City. The railroad relocation project also provided the city with an opportunity to build a new transit transfer station in Uptown Gastonia. The Bradley transfer station is located on the northwest corner of Main Avenue and Oakland Street. All of the City bus routes radiate from this central transfer point.

POPULATION AND HOUSING TRENDS

The population of the Central Sector was approximately 13,140 in 1990. By 2010, the Sector is projected to have a resident population of 10,700 or an annual decline of about one percent over the next two decades (Figure 3). Loss of population is expected due to declining household sizes, an aging population, and housing losses. Efforts toward neighborhood stabilization, infill housing development and other housing initiatives can help stabilize the expected population loss.



South Street in downtown Gastonia.

as shown in Figure 2:

Figure 2

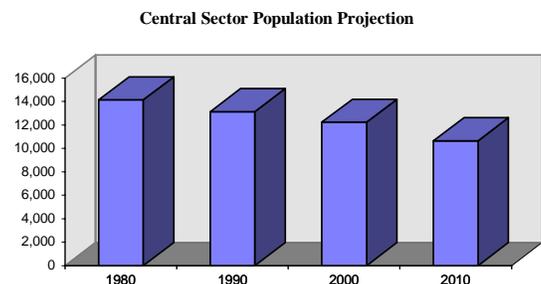


Figure 3

The Central Sector represented about 16.3% of the Planning Area population in 1990. The Sector's percentage is projected to decline to approximately 10.4% of the Planning Area population by 2010.

The Central Sector has an estimated 5,191 dwelling units, about ¼ of the housing units in the City of Gastonia. The Sector's housing units are 78% single-family, 5% duplex and 17% multi-family.

One of the City's largest public housing projects (Highland Hills—370 units) is located in the Sector. This development accounts for approximately 40% of the Sector's multi-family dwelling units. The remaining multi-family units are evenly distributed throughout the Sector and consist primarily of 8-30 unit developments.

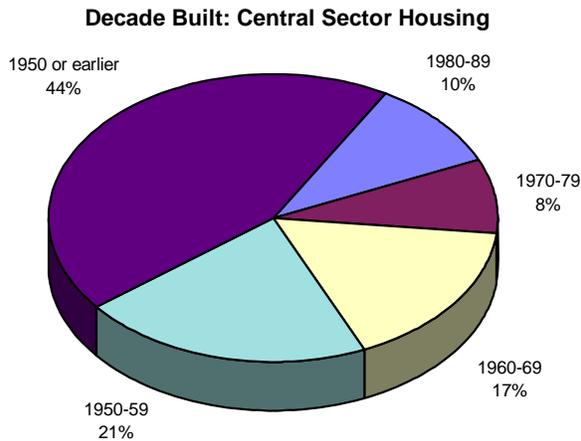


Figure 4

The median construction date for dwelling units in the Sector is 1940. Nearly half (44%) of the housing units were constructed in prior to 1950, as shown in Figure 4.

Housing growth continued into the 1950's, with 21% of the units constructed during that decade. The pace of construction slowed after 1960, with only moderate additions to the housing stock since then.

EMPLOYMENT

Workplaces in the Central Sector employed approximately 9,700 persons (by place of work) in 1989. Approximately 43% were employed in the industrial sector, 22% in the office sector, 18% in retail trade and 17% in service. These percentages are shown in Figure 5 below.

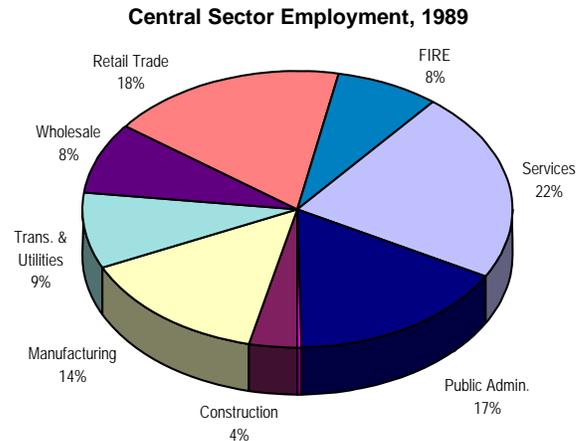


Figure 5

Between 1983 and 2010, employment within the Sector is projected to increase by over 2,000 employees to 11,724, an annual rate of one percent. The services sector is projected to have the largest increase with 51 percent followed by the commercial sector with 22 percent, and the finance, insurance and real estate sector with 7 percent over the next two decades.

A. MAJOR ISSUES

- A-1)** Diminished commercial and pedestrian activity threatens the long-term viability of Uptown Gastonia.
- A-2)** The Franklin Blvd. commercial corridor in the Central Sector is suffering from commercial vacancies, under-use of buildings, general urban clutter and a lack of buffering between pedestrians and traffic.
- A-3)** Thirteen of the Gastonia's twenty highest crime areas (by Police Reporting District) are located within the Central Sector.

- A-4)** The Central Sector has more sidewalks and pedestrian traffic than any other Sector. Some neighborhood streets lack sidewalks, however, and only the Uptown, York-Chester, Firestone and Highland neighborhoods have adequate sidewalks on neighborhood streets.
- A-5)** Vacant land in the Central Sector has the advantage of public infrastructure already in place, but also the disadvantage of being mostly small and scattered parcels that will require imaginative development solutions.
- A-6)** Gastonia needs to develop a shared community vision for Uptown and its future, accompanied by the tools and permanent organization to implement that vision.
- A-7)** The housing stock in the Central Sector is aging, but it is also an important source of quality affordable housing, and it should be conserved.
- A-8)** Although the Central Sector has not been growing in population and housing, it is the logical place for a mixed-use development centered on a regional transit station.
- B-7)** Initiate systematic code enforcement on a rotating basis, with each neighborhood in the Central Sector to be reviewed at least once every five years.
- B-8)** Focus on threatened neighborhoods for City housing rehabilitation assistance to homeowners.
- B-9)** Identify suitable locations within the Sector for a Civic Center, if the community decides to proceed in building it.
- B-10)** Establish neighborhood conservation areas for Central Sector built-out neighborhoods that are either stable or threatened.
- B-11)** Keep Gastonia City Hall Uptown, either in a new or expanded building, or as a joint City-County government center.

B. FIVE-YEAR STRATEGIES

- B-1)** Establish a public transit shuttle loop for Uptown Gastonia once the Courthouse and other public buildings along Long Avenue are in place.
- B-2)** Build a new Law Enforcement Center on Long Avenue.
- B-3)** Under the G.O. Bond program, widen the following roads in the Central Sector:
- B-4)** Airline/Gaston Avenue from Chester to Franklin Blvd. (3 lanes).
- B-5)** Marietta Street from Franklin Blvd. to Sixth Avenue (3 lanes).
- B-6)** Improve and landscape the remaining phases of the existing gravel & paved parking lot located north of the Main Avenue businesses.

C. LONG-RANGE STRATEGIES

- C-1)** Develop pedestrian crossings over the Southern Railroad grade separation that are safe, attractive and inviting.
- C-2)** Establish a non-regulatory appearance commission to advise and make recommendations on development plans for Uptown.
- C-3)** Establish a mechanism to raise revenues and funding for Uptown Gastonia. Funds raised could be used for infrastructure, redevelopment and marketing of Uptown Gastonia.
- C-4)** Develop a shared community vision for Uptown Gastonia through broad-based citizen input and Mayor's Uptown Revitalization Committee. Focus on implementing the vision for Uptown developed by the Committee.
- C-5)** Encourage the development of the Gastonia Inner Loop, north of Long Avenue.
- C-6)** Encourage the use of grass, trees and planned landscaping for Central Sector pedestrian spaces.
- C-7)** Encourage expansion of existing recreation, cultural and religious activity Uptown.
- C-8)** Maintain neighborhood stability through continued housing rehabilitation and code enforcement.
- C-9)** Demolish dilapidated housing, and other structures which are unsafe.

CENTRAL SECTOR STRATEGY MAP

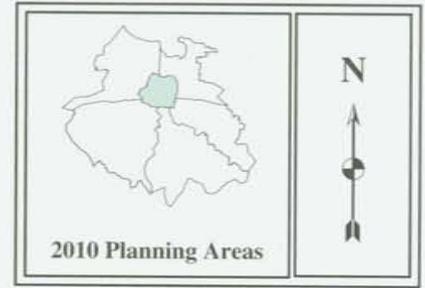
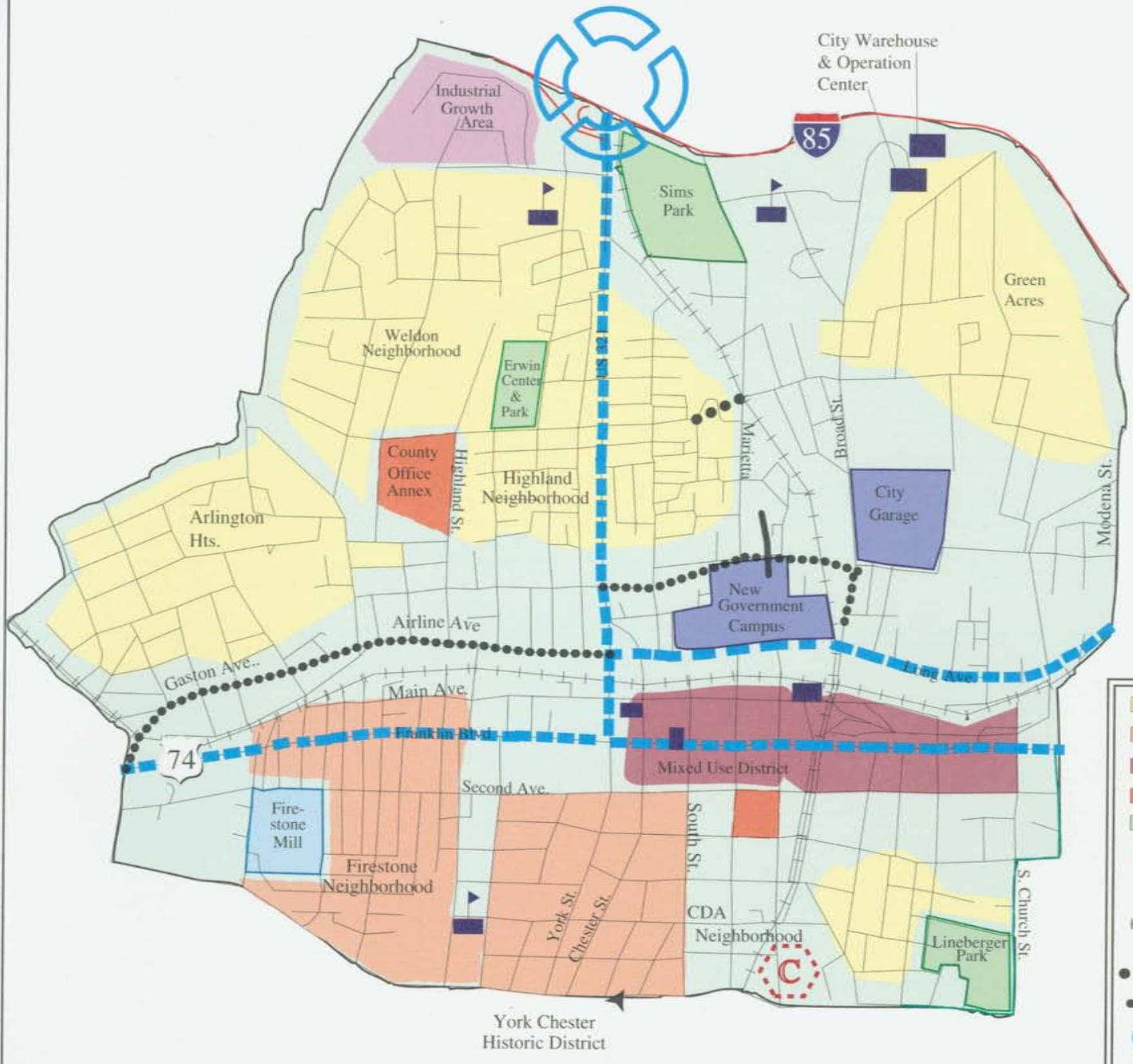
The Strategy Map on the next page is a graphical representation of the some of the strategies—short-term, long-term, and land use—in this plan. The map is generalized, showing *approximate* locations for the various strategies.

D. LAND-USE STRATEGIES

- D-1)** Support government, cultural, finance and office development in Uptown Gastonia.
- D-2)** Develop a Long Avenue Corridor Plan and zoning overlay district.
- D-3)** Land use changes in established Central Sector neighborhoods should be carefully evaluated according to the following criteria:
- Compatibility of new development in scale, land use, site planning and buffering.
 - The importance of new investment to the long-term viability of a residential neighborhood.
 - The social and economic cost of losing affordable housing, if that housing must be torn down to make way for new development.
- D-4)** Land use changes from residential to commercial in the York-Chester Historic District should be confined to the Garrison Boulevard corridor overlay district.
- D-5)** Encourage high density land use and multi-story construction Uptown.
- D-6)** Study the preservation and adaptive reuse of the historic Firestone Mill building.
- D-7)** Develop a corridor plan for Franklin Boulevard, with emphasis on public-private cooperation.
- D-8)** The terminal for any regional (Gastonia-Charlotte) transit system should be located in or near Uptown, as the hub of a major mixed-use activity center.
- D-9)** Avoid the placement of additional assisted family housing projects in the Central Sector.

Central Sector Strategy

Figure 6



- Neighborhood Conservation and Revitalization Areas
- Historic Resource Neighborhoods
- Mixed Use District
- Adaptive Reuse Sites
- Parks, Open Spaces and Potential Greenways
- Community Business Centers
- Public Buildings
- Potential Light Rail Connection to Charlotte
- Thoroughfare Improvements
- New Alignments
- Existing Alignments
- Streetscape Improvements and Gateways