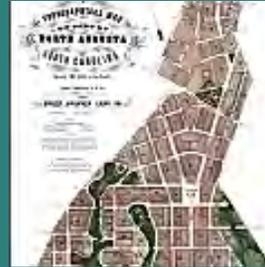




WELCOME TO THE CITY OF NORTH AUGUSTA SOUTH CAROLINA'S RIVERFRONT

DEPARTMENT OF ECONOMIC & COMMUNITY DEVELOPMENT



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2005 Comprehensive Plan

Approved by the Planning Commission August 4, 2005
Approved by the City Council December 19, 2005

On August 4, 2005, after more than two years of research and drafting, the North Augusta Planning Commission approved the 2005 Comprehensive Plan. The Commission forwarded it to the City Council with a recommendation that the Council also approve it. The City Council held a public hearing to discuss the Plan on September 19, 2005 and adopted the Plan on December 19, 2005.

State law requires local governments maintain an up to date comprehensive plan for the growth and development of the community. The plan must be reviewed at least every five years and updated every ten years. The city's current plan was adopted in 1995 and partially updated in late 1999.

The Local Government Comprehensive Planning Enabling Act of



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1994 prescribes a specific process for the preparation and adoption of a comprehensive plan. It provides that the plan be prepared and recommended by the Planning Commission. It also requires that the City Council hold a public hearing prior to adoption of the plan. Notice of the hearing must be advertised for at least 30 days prior to the City Council meeting. The plan must be adopted by ordinance. Additionally, a plan must be adopted before the city is able to enforce zoning or land development regulations.

Printed copies of the document are available for review in the Department of Economic and Community Development located on the second floor of the Municipal Building, 400 East Buena Vista Avenue. Questions about the plan or the upcoming meetings related to the adoption of the plan should be addressed to the Department of Economic Development at 803-441-4221.

City of North Augusta

2005 Comprehensive Plan

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Economic and Community Development Memorandum 05-81	
Results and Evaluation – Comprehensive Plan Citizen Survey-----	July 11, 2005
Survey Response Summary -----	June 29, 2005

Comprehensive Plan Citizen Survey Documents

Notice of Selection Postcard -----	May 20, 2005
Request Letter and Survey-----	May 25, 2005
Follow Up Postcard-----	June 6, 2005
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Chapter 1 – Introduction

1.1 Preface

The City of North Augusta Comprehensive Plan is a long-range plan for guiding and managing the future development of the city over a ten-year period. The plan examines the existing conditions affecting the community, enumerates the needs and goals for the future development of the city, and spells out the strategy for addressing the needs and achieving the goals. The plan serves as the primary tool for local decision making regarding future development and as a general source of information about the present and future conditions of the city. The comprehensive plan provides a guide for making choices by describing long-term goals for the city’s future and policies related to more immediate actions and decisions.

The comprehensive plan contains the city’s official policies on land use, transportation, housing, natural and cultural environment, business and economic development and community services. The plan is used by the City Council and Planning Commission to evaluate land use changes and to make decisions on planned and proposed projects, both public and private. Citizens, developers and investors use it to understand the city’s long-range plans. The comprehensive plan provides the basis for the city’s land development regulations and provides the foundation for periodic capital improvement programs.

1.2 Legal Requirements

The City of North Augusta Comprehensive Plan has been prepared in accordance with the State of South Carolina Code of Laws, Title 6, Chapter 29, known commonly as the South Carolina Local Government Comprehensive Planning Enabling Act of 1994, as amended (The Act). Article 3, Local Planning – The Comprehensive Planning Process, (§ 6-29-510 et. seq.) prescribes the process for the preparation and adoption of the comprehensive plan the city must follow. The statute specifies seven elements that must be included in the plan. Additional, locally determined elements may be included. All planning elements must be an expression of wise and efficient use of public funds, future growth, development and redevelopment of the city. The plan must also consider the fiscal impact on property owners.

The plan must be comprehensive, long-range and internally consistent. Its policies apply to all property within the city limits and to property in the vicinity of the city that may be annexed within the next ten years or may be influenced by significant developments in or near the city, including I-520, the Palmetto Parkway.

A comprehensive plan that complies with The Act must be adopted by a local government if that local government enforces zoning and land development regulations. The zoning and land development regulations must be consistent with the provisions of the comprehensive plan.

The Act provides for a planning horizon of ten years. Section 6-29-510(E) requires that the city review the comprehensive plan, or particular elements of the plan as necessary, at least every five years. The comprehensive plan, including all elements, must be updated at least every ten years. The City of North Augusta's current Comprehensive Land Use and Development Plan was adopted on September 18, 1995. It was reviewed in 1999 and revised with the addition of Cultural Resources and Natural Resources elements on May 17, 1999.

The statutorily required plan update is due in 2005. The City Council and the Planning Commission authorized the staff of the Department of Economic and Community Development to initiate the ten year comprehensive plan update in 2003 to address conditions, trends and needs in the city that have changed over the past several years.

1.3 Quality Development

The way that the city grows and develops over the next ten years will determine the desirability of its neighborhoods, the availability and accessibility of desired shopping and entertainment experiences, the affordability of municipal service delivery and the general quality of life in the community. It will also define, to a large degree, the level of effort and cost required to provide adequate public services to the community. Sprawling, less dense, lower value development will cost more to serve over time than more compact, higher quality development. The city has a responsibility to insure that growth and development is consistent with approved standards of quality and pays for itself to the extent possible. Reasonable growth is necessary to increase the tax base. However, the future cost of maintaining new sprawl development should not fall on taxpayers in older areas of the city. The Planning Commission and City Council have concluded that the city should grow with quality. The approach to growth defined by the Comprehensive Plan can be defined as North Augusta Quality Development.

Quality Development is defined as development that serves the economy, the community and the environment. It provides a framework for communities to make informed decisions about how and where they grow. Quality Development makes it possible for communities to grow in ways that support economic development and jobs; create strong neighborhoods with a range of housing, commercial and transportation options; and achieve healthy communities that provide families with a clean environment. Quality Development provides a solution to the concerns facing many communities about the impacts of the highly dispersed development patterns of the past fifty years, sprawl.

Quality Development recognizes and emphasizes the connections between physical development and quality of life. It leverages new growth to improve the community. The features that distinguish Quality Development can vary from place to place. In general, Quality Development invests time, attention and resources to restore vitality to the center part of the city and older neighborhoods. Quality Development is more community centered than conventional development, is pedestrian oriented, and encourages a greater mix of housing, commercial service and retail uses. It also supports the preservation of

open space and other environmental amenities. There is no one size fits all solution or approach to Quality Development. Successful communities have a vision of where they want to go and of the things they value in their community. Their plans for development reflect those values.

The North Augusta Quality Development Principles are:

1. Mix land uses. Mixing commercial, residential, recreational, educational, and other uses in neighborhoods or places that are accessible by bicycle and foot can create vibrant and diverse communities.
2. Allow compact design and development. More compact development at a higher density will serve to reduce the need for vehicle travel, protect environmentally sensitive land, reduce the cost of providing public services, and reverse the sixty year trend of increasing amounts of land developed to serve a smaller number of people.
3. Create a range of housing opportunities and choices. A wider range of housing choices will enable communities to use existing infrastructure more efficiently, better accommodate the housing needs of all citizens, expand the market for new housing development, and help aging citizens remain in owner occupied units.
4. Encourage walkable communities. Walkable communities reduce reliance on the automobile as the only travel option, enhance mobility, reduce negative environmental effects, strengthen economies and support stronger communities through improved social interaction.
5. Foster distinctive, attractive communities with a strong sense of place at a human scale. Communities developed with unique physical environments create a sense of civic pride and support a cohesive community fabric much more than the conventional development patterns that have created indistinguishable strip shopping centers and residential developments.
6. Encourage the preservation of open space, farmland, natural beauty and critical environmental areas. The preservation of open space areas protects sensitive environments, provides recreational opportunities, guides growth into existing communities, and serves to improve a community's quality of life and economic prosperity.
7. Strengthen and direct development toward existing communities. Suburban sprawl after World War II created new, low density, dispersed developments on the urban fringe that adversely affected the natural environment (open space, farmland, wildlife habitat, air quality, water quality), contributed to disinvestment in and abandonment of established urban areas, reduced the social

and economic viability of existing cities and increased the cost of delivering municipal services (utilities, public safety, recreation, etc.) to spread out subdivisions.

8. Provide a variety of transportation choices. Providing more choices in the type and location housing and shopping and modes of transportation will reduce the demand on road systems dedicated to automobile traffic and reduce congestion. Coordinating land use and transportation decisions, providing infrastructure systems for walking, bicycling and public transit, and providing for a more finely interconnected local road system will reduce congestion on highly traveled arterial roads.
9. Make development decisions predictable, fair and cost effective. Local government investment and regulation shape the types of development that are created. An equitable and speedy regulatory process and consistency in public investment decisions provide private developers and investors with the confidence to invest in quality development projects and to earn a reasonable profit.
10. Encourage community and stakeholder participation and collaboration in development decisions. Ensure early and frequent involvement of developers, planners, engineers, conservation and environmental groups, preservationists, civic associations, business groups, neighborhoods and others in the development of broad community plans and specific project designs in order to provide a wide range of perspectives and obtain wide acceptance.

The City Council has selected Quality Development principles as the general policy to guide the development of the city. The goals, objectives, policies, philosophies and implementation strategies articulated in the comprehensive plan reflect Quality Development principles. Continued ‘leapfrog’ development practices that require expensive and unnecessary extensions of infrastructure facilities and systems, inflate service areas, dilute the efficient delivery of public safety and recreation services, ensure continued reliance on the automobile and increase traffic congestion will ultimately increase the cost of government beyond reasonable levels. More compact development of walkable interconnected neighborhoods with strong connections to commercial areas, public facilities and employment centers will improve the vitality of the city and provide for efficient delivery of public services.

The comprehensive plan does not propose to stop development on the fringes of the city. It does propose that as outlying areas are developed they are better integrated into the existing fabric of the city. All new development, whether infill or in an outlying area, should be designed as a seamless addition to the community rather than a separate subdivision or individual “community”. The plan recognizes that new development will be designed by developers to initially attract buyers, tenants or customers. New development, however, will not always be new. North Augusta will be celebrating its

100th anniversary in 2006. Some of the city's best neighborhoods and structures date to the year of incorporation. Other more recently developed areas of the city, as a result of a lesser quality in design or construction, isolation from neighboring areas, or negligence in maintenance, have not retained value. The plan anticipates that new development proposals be evaluated based on their long term contributions and costs to the city as well as the more immediate benefits to the developers.

1.4 Public Participation

Updates to the comprehensive plan have been discussed by the Planning Commission and City Council since the review and adoption of the Cultural Resources and Natural Resources elements in 1999. Beginning in 2000 the City Council has discussed the principles of Quality Development annually at its planning and policy retreat, North Augusta Forward, in May of each year. The Planning Commission has had similar discussions. Alternative land development policies and practices have been evaluated and staff has been directed to apply Quality Development principles to the extent practicable within the limitations of existing land development regulations and the authority and discretion of the Planning Commission.

The practical application of Quality Development principles to real development project applications has provided the staff, Planning Commission and City Council with a realistic understanding of the advantages and limitations. It has additionally provided the development community and neighborhood group's practical experience with Quality Development practices. Some applications have been successful and a consensus has been reached on a positive change. Other applications have been controversial. The contents of this comprehensive plan and policy directions it contains have been tempered somewhat by that experience.

Since 1995 planning processes for different areas of the city or different public and private activities have been undertaken almost continuously. All included public participation and the results of those processes have been incorporated into the comprehensive plan. In 1996 the city completed and adopted the Master Plan for the North Augusta Redevelopment District prepared by Lane, Frenchman and Associates and CityDesign Collaborative. The Redevelopment District included the downtown and riverfront areas. That plan was supplemented by the Redevelopment Strategy for the Central Riverfront Area (Hunter Plan) in 2000. The charrette conducted by Dover, Kohl and Partners for the Hammond's Ferry project in 2002 produced a detailed physical improvement design for a two hundred acre area that is rapidly becoming the major public-private Quality Development in the region. Additionally, a new Parks and Recreation Master Plan was completed in 2003.

In 2002 and 2003 the city initiated an extensive evaluation and revision of the city's zoning and land development regulations. The firm of Freilich, Leitner and Carlisle convened a number of focus groups and conducted a series of interviews with citizens, developers, builders, realtors, business leaders and elected officials. The results of that

process have been incorporated into the preparation of the plan and have contributed significantly to the development of the updated zoning and development regulations incorporated in the draft North Augusta Development Code.

1.5 Citizen Survey

In March of 2005 the Planning Commission was in the final phase of its review of the draft Comprehensive Plan. As mentioned in the previous section, however, some of the applications of Quality Development principles in recent years to real development project applications were controversial. Accordingly, prior to adopting a ten year plan based on Quality Development principles, the Planning Commission chose to undertake an additional citizen participation process. The intent of the additional process was to measure the attitudes and opinions of the community regarding growth and development. After discussing the scope and approach of the effort the Planning Commission chose to undertake a random sample survey of city residents. Questions were designed to determine if the community approved of the way the city had developed in recent years and to provide a general direction on how the city should grow and develop in the future.

The survey was initiated in May and the results were tabulated in June. The survey form, the tabulated results and the evaluation of the results are contained in Appendix A to this plan. Generally, survey respondents, a statistical sample of community residents, were pleased with the way the community had grown and developed in recent years. More significantly, the responses indicated a support for the application of Quality Development principles to future growth and development. The results of the survey have been incorporated into the goals, objectives, policies and strategies articulated in each element of the 2005 Comprehensive Plan.

1.6 Planning Process

The comprehensive planning process must address each of the required elements of the plan in accordance with a planning process that includes at least three distinct steps. As outlined in the SC Code § 6-29-510(C), the three required steps in the planning process are the inventory of existing conditions, a statement of needs and goals, and a description of implementation strategies with time frames. The North Augusta comprehensive planning process expanded the process into four steps to develop a better understanding of current conditions and realistic trends. The additional step follows the inventory and assessment step and describes conclusions, problems, needs and challenges.

1.6.1 Inventory and Assessment

The first step in the process produces a summary of historic trends and existing conditions. It answers the question, “What are we and what do we have as a community?” A profile of existing conditions is necessary in order to project and plan for the city’s future. Information is assembled on trends and conditions in the areas of population, housing, economic development, transportation, community

facilities and services, natural and historic resources, and land use in order to complete the community profile.

1.6.2 Conclusions, Problems, Needs, Opportunities and Challenges

The second step is an evaluation of the inventory and assessment. It answers the question, “Where do we appear to be going and what will happen if we continue in that direction?” Projections of future conditions based on existing trends are evaluated and described in terms of potential problems, needs, challenges and opportunities.

1.6.3 Goals and Objectives

The third step is designed to answer the question “What do we want the future of the community to be and what, generally, do we need to change or do to make it happen?” Based upon the problems, needs and opportunities that have been concluded from the inventory and assessment, goals and objectives for future growth and development are prepared. The goals and objectives support a vision for the city and a framework for developing more specific strategies and policies to address the needs and opportunities.

1.6.4 Implementation Policies and Strategies

This step is designed to answer the question, “How will we accomplish our goals and objectives and achieve our desired future as a community?” It combines all of the plan’s recommendations and describes how they will be implemented. The implementation policies and strategies also include a description of the methods used to assure coordination of plan implementation. The implementation policies and strategies identify specific projects, including estimated cost and responsible entities, to be undertaken during the next ten years to address the needs and goals identified in the plan. In some cases, most specifically the capital improvements program, implementation policies and strategies provide more detailed cost estimates, logical funding sources and a projected schedule for implementation. The implementation policies and strategies ensure that the plan is a guide for future action and a useful decision making tool.

1.7 Plan Elements

The Act specifies that a comprehensive plan include at least seven elements: population, economic development, natural resources, cultural resources, community facilities, housing and land use. The plan may include more than the seven required elements. The planning process is applied to each of the statutorily required elements and combined to produce a comprehensive plan.

The community facilities element as described in The Act includes the transportation network. However, because transportation infrastructure development has such a significant impact on the development of a community and is critical to several of the Quality Development principles, it has been addressed in a separate element. The eight elements in the comprehensive plan are described below in the order that they are addressed in the plan.

1.7.1 Population

The population element documents historic population trends, current population characteristics and projected population. Specific items addressed include total population, number and type of households, age distribution, racial composition, level of education and income. The inventory and assessment of the population and the conclusions reached there from serve as a foundation for other plan elements and help in determining community facility needs, employment opportunities, housing needs and potential impacts on natural and historic resources.

1.7.2 Housing

The housing element includes an inventory and assessment of the city's housing stock. It begins with an overview of residential development patterns and housing unit trends in the community. Census data is used, supplemented by annual building permits as appropriate, to profile housing unit characteristics including the number of units, age and general condition. Housing needs and opportunities are described and goals are defined.

1.7.3 Economic Development

The economic development element includes an assessment of the city's economic base and labor force. Economic characteristics reviewed include current employment, labor force participation, occupations and commuting patterns. The chapter also includes a summary of the resources and opportunities that are available to address economic development needs. It articulates the city's general economic development goals and strategies.

1.7.4 Transportation

The transportation element describes the inventory and assessment of transportation facilities and services. Transportation facilities evaluated include the street and highway network, railroad rights-of-way, bicycle and pedestrian facilities and public transit. Census data and additional engineering data sources provide information on the travel characteristics of residents and workers and current volumes of traffic. Conclusions from information on travel characteristics help to describe current and future transportation and circulation problems. The

final section summarizes the plan for future additions and improvements to the major transportation facilities and services. The South Carolina Department of Transportation (SCDOT) Functional Classification Plan, the Augusta Regional Transportation Study (ARTS) Long Range Transportation Plan and Transportation Improvement Plan (TIP) are included as they relate to the city and adjacent planning area.

1.7.5 Community Facilities and Services

The community facilities and services element also begins with the inventory and assessment of public facilities and services provided by the city and several other public and private organizations within the city and the adjacent planning area. Existing levels of service and service areas are identified for potable water and sanitary sewerage systems, stormwater systems, public safety, solid waste, recreation, community beautification and, to a lesser extent, schools, libraries and facilities owned and operated by other jurisdictions. Future needs of the various systems and facilities are identified, goals and objectives for future service provision are defined, and the city capital improvements program for the next ten years is defined.

1.7.6 Cultural Resources

The cultural resources element includes a brief overview of the city's history and an inventory and assessment of current historic and cultural resources including historic properties and ongoing cultural activities. Needs, goals and strategies for additional activities and facilities conclude the chapter.

1.7.7 Natural Resources

The natural resources element includes an inventory and assessment of natural and environmentally sensitive resources in the city. Topics addressed include topography, soils, forested lands and water resources. It also identifies the issues, problems and opportunities associated with these resources. The city's Greenway program is also discussed in this element because it provides a major opportunity to acquire and preserve natural drainage ways and environmentally sensitive lands while providing citizens an opportunity to visit and appreciate those areas.

1.7.8 Land Use

The land use element includes an inventory and assessment of existing land use in the city. It begins with an inventory of existing land use, highlighting the factors and trends affecting local land use. Land use patterns have contributed to lack of investment in some parts of the city, increased demands on public facilities, and have impacted the natural environment. The estimated acreage of each of the land use categories is calculated and projections are made of the amount of land

required to meet future demands. A future land use plan is included to reflect existing developed uses and zoning and to provide direction to the zoning of land for future development. The element also offers specific objectives, policies and strategies based on Quality Development principles to take advantage of opportunities for infill and redevelopment.

1.8 Planning Area

The planning area of the North Augusta community for the purposes of the comprehensive plan is an area of approximately 78.2 square miles. It is shown on Map 1.1, Planning Area. It is considerably larger than the 19.5 square miles within the city as of the date of the plan. It is bounded by the Savannah River on the south and west and extends into unincorporated Aiken and Edgefield counties on the east and north. It also includes a portion of the incorporated municipality of Burnetown. The planning area is larger than the city limits because of the potential for growth and expansion of the city and the impact of decisions by other local governments and public service/utility districts on the growth of the city in those areas.

Most of the data utilized in the planning process is specific to the city limits. Additional data, primarily census and transportation information, covers areas larger than the city. Conclusions, goals and objectives relative to areas currently outside the city limits are less specific than those for areas within the current city boundary. To the extent that they are developed, the goals, objectives, policies and implementation strategies for areas outside the city will be used as policies of the city in developing positions for discussions with other governmental jurisdictions and agencies. They will also apply to decisions related to annexation, utility service extensions and proposed developments.

1.9 Review of the 1995 Comprehensive Land Use and Development Plan Goals and Recommendations

The Future Land Use Element of the 1995 Comprehensive Land Use and Development Plan included a list of fifteen goals “as a set of policy statements regarding future development”. The goals were included in the plan in the form of recommended actions to be taken during the ten year term of the plan. Each of the recommendations is reprinted here. A summary of the status of each as of 2004 follows in bold italics.

- 1. Recommends the introduction of the Traditional Neighborhood Development Concept into the land use development alternatives available through the Zoning Code.** This is probably one of the strongest directives of the plan – to provide design flexibility to developers which will allow the potential for a different methodology to develop heretofore virgin land; or reuse existing developed land in or near the urban core of North Augusta. The North Augusta Riverfront Redevelopment District will be particularly benefited from the TND Model because of its inherent similarity to the original North Augusta City Plan established by Charles Boeckh in 1891. However, the TND is not intended to

supplant other development alternatives currently available; but rather, as an alternative response to developmental needs.

A traditional neighborhood development district was included in the 1996 revisions to the Zoning and Development Standards Ordinance as a floating zone. The North Augusta TND zone is very prescriptive. As a result, it has not been utilized. The Riverfront Redevelopment Project, Hammond's Ferry, is a traditional neighborhood development project, however, the TND zoning district did not meet the requirements of the developers. As a result, a very specific planned development that incorporated TND principles specific to the riverfront was drafted and approved by the Planning Commission and City Council.

2. **Recommends a strategic land use approach designed to encourage commercial development within the downtown along Georgia Avenue, while limiting commercial development along West Martintown Road from Bunting Drive to Knobcone.** This recommendation is designed to have two effects: First, limiting strip commercial development along West Martintown Road will enhance the residential areas which border the highway. (The prevention of visual blight by avoiding strip commercial development has a broad aesthetic benefit for the entire community). Second, by limiting strip commercial opportunity along West Martintown Road there will be a stronger commercial stimulus for the development of the downtown area along Georgia Avenue.

The intent of this goal was to prohibit commercial development on West Martintown Road. The theory was that by restricting commercial development on Martintown Road the demand for commercial development would be met downtown. The goal to prevent commercial development on West Martintown Road has been achieved. However, the second desired effect, to encourage commercial development in the downtown, has not been achieved due to several factors. Those factors include limited traffic volumes on Georgia Avenue, accessibility, parcel size, and the recent improvements on Knox Avenue. New commercial investment on Knox Avenue has been significant while minimal commercial development and redevelopment has occurred downtown. The development of large scale commercial uses on Knox Avenue has had the positive effect of concentrating new retail uses in a commercial node, the intersection of Knox Avenue and East Martintown Road, that is close to the center of the established community rather than on the edge of the city near I-20.

3. **Recommends coordinating land use development along the I-20 corridor within the framework of an economic development strategy which promotes the highest and best uses.** Regional economic development studies identify interstate highway corridors as particularly important assets in the process of creating employment centers. The Martintown Road (SC 230) I-20 interchange, in

particular, should not be piece-mealed by a series of small, independent commercial projects which short circuit larger commercial or industrial opportunities. Smaller commercial projects should be planned as a coordinated response to a larger overall development package.

This goal relates to the two I-20 interchanges in the city, Exit 1 at SC 230, West Martintown Road, and Exit 5 at US 25, Edgefield Road. The emphasis of the recommendation is at Exit 1. The intent is to provide for master planned development of job-creating commercial and industrial uses with a limited number of smaller, independent commercial projects. Demand for real estate development at Exit 1 has been very limited for uses other than for video poker. Former video poker facilities are now being converted to other uses on Martintown Road. A medical office occupies a video poker building on the south side of I-20. On the north side of I-20, video poker buildings have been converted to the Edgefield County Charter High School, Fox Creek, and a fireworks retail outlet. Much of the land adjacent to the I-20 Exit 1 interchange is in relatively large parcels and the opportunity for master planning still exists. Some of the land has recently changed hands and additional parcels are on the market. The prospect of I-520 connecting with I-20 at Exit 5 has increased the demand for commercial development on parcels fronting I-20 near Exit 5 and several substantial projects are currently in the planning stages.

4. **Recommends that subdivisions be designed to establish and reinforce the public domain.** North Augusta needs to create neighborhoods rather than subdivisions. The introduction of sidewalks, street trees, bicycle and pedestrian paths into the plans for future housing developments resonates well with planning at the human scale. At the core of this concern is the pedestrian. Although pedestrians will not displace the car anytime soon, their absence from our thinking and planning is a fundamental source of failure in our new developments. To plan as if there were pedestrians will be a self-fulfilling act; it will necessarily lead to the introduction of street trees, sidewalks, and bicycle and pedestrian paths in residential areas. It will also give kids some autonomy and others the choice to walk again.

Parks and recreation areas are also important to consider when laying out neighborhoods. For example, the concept of the Planned Unit Development (PUD) zoning category anticipates this consideration, but it is incumbent upon the city to make it meaningful in terms of useable acreage dedicated for such purposes. The strong preference is to strive to achieve the creation of useable open space for parks or recreation in the PUD residential areas. However, where the 25% provision is not workable, the developer should be encouraged to contribute a commensurate sum of money to the city's recreation fund to allow the construction of recreation facilities or parks where they are needed and make the most sense.

The purpose of this goal was to improve the pedestrian character of neighborhoods with the inclusion of sidewalks, street trees, bicycle and pedestrian paths through subdivision design. The 1996 ZDSO did not adequately require these elements in new subdivisions. However, through flexibility in the approval of subdivision plans and Planned Developments, the Planning Commission has negotiated for the inclusion of smaller front setbacks, sidewalks, street trees and Greenway connections in a number of cases. The addition of parks in larger developments has had marginal success.

5. **Recommends the provision of affordable housing by introducing into the Zoning Code the allowance of accessory units on individual single-family lots in low-density neighborhoods.** The issue of how a community can promote the creation of affordable housing is a growing national concern. One principle learned after 40 years of ineffective federal programs aimed at providing affordable housing is that it should never be provided in great numbers and concentrated in the same physical location. It should be provided at a ratio of about 1 unit of affordable housing to every 10 units of market rate housing. The use and promotion of accessory units (often provided in the form of garage apartments) on single-family lots will help to accomplish this goal. In addition, the concept of single-family lots with accessory units is a self-policing arrangement – the landlords will be sure that the tenant will keep the record player low, will not park in the wrong place, will not throw trash on the ground, etc.

This goal addresses a large problem but suggests a small effort at a solution. The 1996 ZDSO provided for accessory units up to 800 square feet in residential districts. A number of accessory units have been developed. Additional flexibility can be added to the regulations to encourage more. Most new subdivisions prohibit accessory units through covenants. Regulations could prohibit such provisions. Current efforts by developers to produce “affordable” units have resulted in small lot subdivisions with minimal amenities and small housing units of limited quality. Affordability may mean smaller but does not necessarily mean low quality neighborhoods or housing units.

6. **Recommends building affordable neighborhoods without sacrificing housing quality.** Take the standard 90-foot by 100-foot lot typical in many subdivisions in North Augusta and cut it in half. Then add an alley and an accessory unit over the garage in the rear. The density will be higher, but it will still be a single-family neighborhood – providing the privacy and ownership desired by many. The ability to have an accessory unit may be used for a relative, a guest, a home office or a grown child, or it may be used to generate income. Given the rental income, the reduced cost of a lot, or the opportunity to work from home, the cost of the monthly mortgage could be lower in North Augusta thus leveraging a higher share of the regional housing market for the city.

This goal is very similar to the TND and accessory unit goals and adds an economic justification. It discusses reducing lot size by half to provide for smaller units on less land, thereby improving affordability and allowing the second unit to offset mortgage costs. While not going so far as to permit single family lots with a 45-foot width or a 50 foot depth in a contemporarily designed subdivision, the Planning Commission has waived certain requirements in R-3 zones to permit lots with slightly smaller lot sizes and front setbacks while requiring sidewalks and street trees. This has increased density but has not resulted in the development of alleys for rear loaded parking or accessory living units. As mentioned above, many new subdivision covenants prohibit accessory living units. While desirable and permissible in North Augusta, the demand for small lots with accessory living units and a home office, while growing, is not yet substantial to the degree that it would capture any significant share of the regional housing market.

7. **Recommends that the infill and redevelopment of deteriorating portions of the city be a prime objective of the city Government.** Infill and redevelopment should be a part of the city's growth policy because it represents the best utilization of our existing infrastructure and the best opportunity to preserve open space on the periphery of the city. The development of several schematic neighborhood plans utilizing the Geographic Information System (GIS) could be used to solicit and obtain cooperation of owners, bankers and realtors. The city's riverfront redevelopment effort could serve as a catalyst to an infill and redevelopment strategy for areas bordering the riverfront redevelopment area.

Residential and commercial infill and redevelopment are ~~Smart-growth~~ Quality Development principles and have been pursued by the city. Hammond's Ferry, the public-private redevelopment project in the central riverfront area, will be a major success. Other successes include the Village at Riverview, the Summit subdivisions, Leigh Place and the Shoppes at North Augusta. Additional commercial infill development of larger parcels on Knox Avenue is being pursued. However, large parcels that will support large commercial development are not plentiful. Some infill development on smaller parcels by local businesses has occurred in the downtown area on West Avenue. The more development, both residential and commercial, that can be facilitated in the older areas of the city, the less demand there will be for sprawl development on the edges of the community.

8. **Recommends the creation of a Highway Corridor Protection District as an overlay zone in the Zoning Code.** Many areas of Georgia Avenue (excluding the downtown area), East Martintown Road, Buena Vista Avenue, Knox Avenue and Old Edgefield Road were originally planned and laid out as residential land. Only when the traffic patterns and traffic volumes increased on the adjacent arterial roads did the character of the properties change to commercial-oriented uses. However, on average, commercial-oriented uses require more land to

accommodate off-street parking and buffering requirements than many of the properties along these arterial roads are capable of handling. A Highway Corridor Protection District will institute standards which recognize the special needs of highway related commercial activities. In some instances, this will mean the re-combination of lots in order to accommodate the HCP District standards.

The Highway Corridor Overlay District was implemented in the 1996 Zoning and Development Standards Ordinance. The recommendation suggests that the character of the corridors should change from a traditional small lot residential scale to a large parcel, contemporary commercial scale implying the demolition of existing structures and the construction of new. Recommendation 11 and the preference of the Planning Commission has been to preserve the residential scale in the corridors, especially Georgia, Carolina and West Avenues, and sections of Martintown Road. However, the application of the overlay district regulations has not always achieved either the effect stated in the recommendation or the currently desired effect. Regulations alone will not facilitate the assemblage of parcels. The relatively broad and general requirements of the district have created different results in different corridors. More precise policies and regulations applicable to different segments of the corridors will achieve better results. That can occur in the next version of the development regulations.

9. **Recommends the creation of an Urban Core Commercial District.** The downtown area along Georgia Avenue, defined as the area between Jackson Avenue and the Savannah River, predates the highway commercial development form we know today. The downtown area in North Augusta has businesses placed close to the street, little or no set back between buildings on-street parking and signs over-hanging the sidewalks, all of which would be illegal in other locations in the city but are entirely appropriate in the downtown area. In fact, to change this design pattern by using strip commercial development standards would not only work against the original city plan but would destroy the character of the downtown area.

This recommendation related to the preservation of a traditional downtown. The C-4, Core Commercial, District, was implemented in the 1996 ZDSO. The intent was to avoid strip commercial and auto oriented development. A substantial amount of discretion was granted to the Planning Commission in the approval of site plans. However, other than the preclusion of certain auto oriented uses, specific design and development standards, guidelines and regulations were not included in the district. More specific regulations are necessary to achieve the goal.

10. **Recommends the introduction of alternative solutions to parking lot development standards.** Light or intermittent use of parking lots on a daily or weekly basis should trigger a different requirement for parking lot construction

than heavy uses of a parking lot. For example, institutional uses like churches, and/or professional uses like lawyers or doctors offices, should be evaluated as to whether or not concrete curb and asphalt surface makes the best sense. The determining factor should be what good engineering practices and procedures would require on a case-by-case basis. If aesthetics is the main determining factor, then the allowance of other methods of parking lot construction should be given similar weight. Sometimes a parking lot can function as a public square or private lawn and still serve as a parking lot, if built correctly. Lookaway Hall is a prime example of this possibility. In this case, a second parking lot was built on the property using an underground support structure and a grass surface.

This recommendation relates to the large impervious areas and the lack of landscaping in commercial parking lots. A provision in the 1996 ZDSO allowed the Planning Commission to approve alternate pavement treatments other than gravel. The amount of landscaping required in parking lots was increased in 1996. However, specific regulations related to the amount of land devoted to landscaping were not included. In several church cases the Planning Commission approved a grass surface for overflow parking. New regulations will provide for a minimum and a maximum parking ratio. Commercial parking behind a building and not visible from a street can require less landscaping than parking that is visible.

11. **Recommends the protection of transitional neighborhoods which are zoned commercial by controlling the introduction of commercial uses by building type rather than land use category.** A transitional neighborhood is defined as a neighborhood which faces pressures to change the predominant land use to another land use which is more in tune with real estate market demands. This is a particularly difficult problem to solve when there is a countervailing force for re-investment within the residential housing stock - this is known as “*gentrification*”. The solution to the problem is to accept the real estate market forces as a given fact and to make sure that when commercial uses are introduced into a transitional neighborhood, the commercial uses look like the residential uses or blend in with the neighborhood in an appropriate manner. This will require the development of architectural standards which describe the residential character of transitional neighborhoods. These standards would be used to judge the appropriateness of building plans.

The residential character of corridors, due to market forces, are being converted to commercial and other non-residential uses. (Refer to #8) Georgia Avenue and Martintown Road are the most significant examples. Little was done in 1996 to protect those corridors other than to zone them C-1, Office Commercial. In 2002 the text of the C-1 District was modified to allow neighborhood business personal service uses. The new provisions addressed several design and preservation issues including parcel size, structure size,

space allocation and vertical mix of uses, the character of existing and new structures, and the location and screening of parking.

12. **Recommends the introduction of street trees and landscaped medians in the public rights-of-way on major arterial roads in North Augusta.** The single most important and lasting impact on the visual image of a city can be made by planting trees. In similar manner, the landscape beautification of traffic medians, or the introduction of landscaped traffic medians (where none exists), can have a huge visual benefit for the city. Again, an emphasis on the beautification of the public realm sells the city and can play an important role in the marketing of North Augusta. On West Martintown Road it would be desirable to pull the sidewalk back from the curb and plant street trees in the space provided. Also, the introduction of landscaped islands on West Martintown Road, in strategic locations, can greatly benefit the appearance of the roadway.

This goal addresses the improvement of the public realm in arterial corridors and specifically addresses West Martintown Road as an example. The improvements described, the installation of landscaped medians, the separation of the sidewalk from the curb and planting of street trees would also serve to calm traffic. However, medians could interfere with turning movements from some of the many existing driveways. No improvements have been planned for West Martintown Road. However, with the cooperation of the (SCDOT), landscaped medians and a separated sidewalk (a multi-purpose path) were installed on Knox Avenue. The city participated in the cost of the landscaping and many of the elements addressed in this goal were achieved.

13. **Recommends the allowance of home based offices outside of the principle dwelling unit.** Many more people in the future will be starting their own businesses at home or telecommuting to the office from home via their personal computers. The work space dedicated to this endeavor should not be limited necessarily to a bedroom or a corner of a living room. If a person wishes to construct a specifically designed office with room for computer hardware in a protected environment, then it is perfectly reasonable to allow an out-building to be placed on their property designed for this purpose. As long as the appropriate side yard and/or rear yard setbacks are observed, this type of use of residential property should not be harmful to neighborhoods.

The specific language in this recommendation provides for the construction of an accessory building in a residential zone that can be used for a home occupation. In 1996 the ZDSO specifically provided for home occupations with certain limitations, both within a primary structure and in an accessory building. Certificates of zoning compliance and business licenses are approved for home occupations on a regular basis. Negative feedback about home occupations from neighbors has been minimal. The range of home occupations

permitted in the future could be expanded and in some areas live-work units could be appropriate.

14. **Recommends creating a North Augusta Downtown Partnership Program.** A successful Downtown Partnership Program will have a common theme running throughout the program. The theme is team work between the city, the downtown business community and the banks. The objective of a Downtown Partnership Program is to collectively contribute resources in order to effectuate improvements to the downtown. The emphasis of the program should be on improvements to existing structures and properties, although new construction and additions should be eligible too. The program must be limited to projects that are visible from the street right of way. If a project by necessity must include interior and exterior renovation, the Downtown Partnership Program only should be involved in the cost associated with the exterior renovations.

Here is how a Downtown Partnership Program could be structured. **Step 1:** Create a low interest loan incentive program intended to enhance the physical environment of downtown North Augusta. The incentive is created on the savings to the borrower on a monthly basis and over the term of the loan. **Step 2:** Commercial projects, or residential projects located within the downtown, would be eligible for up to a set dollar amount established by the City Council at an interest rate set by City Council (in consultation with the banks) below the prime rate. **Step 3:** The City Council would budget a set amount equal to the ad valorem tax effort generated from the downtown area to adjust down the interest rate charged by the local banks. Projects would be approved on a first come, first serve basis until all of the budgeted low interest funds are expended. It is anticipated that the budgeted amount established by the City Council will result in a multiplier effect in terms of the dollar value of enhancements in the downtown area. **Step 4:** The banks would establish standard financial eligibility requirements while the city would establish qualifying urban design standards to judge the appropriateness of each project.

This recommendation is based on the National Main Street Center approach to downtown revitalization. Efforts were made with the Chamber of Commerce and the Downtown Business Association in 1999 to form a downtown partnership. The partnership did not coalesce. The city offered a rehabilitation grant program for storefront renovations on Georgia Avenue. The program completed one renovation. A downtown partnership will not be successful until businesses and property owners recognize the benefits of cooperative proactive efforts.

15. **Recommends creating a working partnership with the Chamber of Commerce to promote elderly housing market strategies.** The city and the Chamber of Commerce have a mutual need in promoting the growth and development of North Augusta. The demand for elderly housing is evidently

strong in North Augusta; but supply seems to be lagging behind demand. The city and the chamber can help relieve the demand by educating developers of the potential for this market in North Augusta. However, the role of the city and chamber should be limited to facilitation and education – not its provision or financing.

No specific effort was initiated. However, since the adoption of the 1995 Comprehensive Land Use and Development Plan, two senior citizen assisted living facilities were developed. Additionally, a church affiliated senior housing project of detached and attached units was approved and a HUD supported senior citizen townhome development is being planned. The market has responded to the demand for smaller, low cost homes through the development of several patio home and townhome subdivisions. The market includes young singles and couples for starter homes, divorcees for transition homes and “empty nesters” for step-down homes. However, the quality of the smaller units has not been as high as might have been desired.

1.10 Vision of the 2005 Comprehensive Plan

The vision for the city of North Augusta has been crafted over a period of years by a number of individuals, elected officials, civic leaders and community organizations. The vision is for a city that, above all, retains its traditional character and “small town” sense of closeness and friendliness. The community places a significant value on working together to achieve common goals. North Augusta will continue to grow and will provide expanding choices and opportunities to its citizens. However, it will grow in a way that respects its unique history and personality. Older areas of the community, especially the downtown and riverfront, will be maintained and restored. New areas will grow with a quality that is consistent with community traditions. Sensitive environments, both natural and built, will be respected and reinforced by new development. The Savannah River will become an even greater commercial and recreational activity center of the city. Any adverse impacts or conditions resulting from growth and new development will be anticipated to the extent possible and mitigated in conjunction with the development to maintain the quality of life in the community as defined by mobility, accessibility, choice and the cost of public services.

The 2005 North Augusta Comprehensive Plan provides an extensive set of goals, objectives, policies, and projects that will guide the growth and development of the city over the next ten years. Most are interrelated and mutually dependent. All will facilitate managed quality growth. Many of the objectives and projects relate to program specific or site specific planning efforts. A regional open space plan and a downtown area redevelopment plan are two examples. The more precise planning processes and specific projects can provide a more detailed articulation of the vision. If pursued and implemented consistently, the plan can help to achieve the shared vision of the future for the city of North Augusta.

Chapter 2 – Population

2.1 Introduction

This chapter includes basic information about North Augusta’s residents and households including current characteristics and forecasts of the future. The data in this chapter provides a basis for the remaining chapter elements of the plan. Population, household and employment forecasts help to determine the demand for housing, jobs, infrastructure improvements and land development consistent with the goals and policies of the plan. The 2000 Census is the most recent data source used for much of this chapter.

2.2 Regional Context

The City of North Augusta is located along on the Savannah River in the west central area of South Carolina. North Augusta’s nearest neighbor, Augusta-Richmond County, Georgia, lies just across the river to the south.

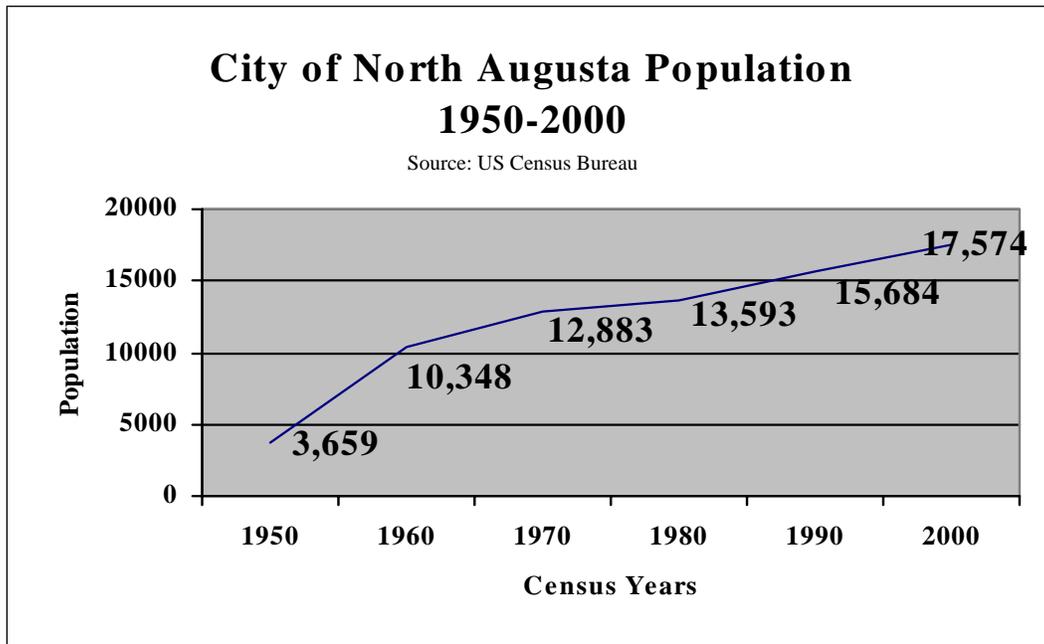
The City of North Augusta currently encompasses 19.5 square miles, most of which is located in Aiken County (97%). The city limits also include a small portion of southeastern Edgefield County (3%). The city is centrally located in the Augusta-Aiken, GA-SC Metropolitan Statistical Area (MSA), which is comprised of Columbia, McDuffie and Richmond counties in Georgia, and Aiken and Edgefield counties in South Carolina. The city limits of North Augusta virtually surround the unincorporated neighborhood known as Belvedere in Aiken County. Belvedere contains approximately 4.1 square miles and 5,631 residents.

Because of its unique location and the rippling effect of changes in nearby communities, this comprehensive plan provides data, wherever possible, to allow for comparisons to the City of North Augusta. North Augusta’s population and household characteristics reflect an expanding suburban city that has a strong influx of new single-family residential developments. Overall, the changes reflect the decentralization trend toward more suburbanization evident throughout the United States in the past several decades.

2.3 Population Trends

Population growth rates can help track population activity by graphically showing surges and declines in the number of residents (Chart 2-1). For example, the percentage of population growth in the City of North Augusta over the past 50 years has been 380%, but much of that growth occurred during the decade of the 1950’s (182%). The primary reason for the influx of people at that time was the development of the Savannah River Site. More recently, over the past twenty years, the city’s population growth rate has been relatively steady at between 1.2% and 1.5%. The population of the City of North Augusta was 17,574 in 2000, a 12.1% increase from 1990 and a 29.3% increase over the twenty-year period between 1980 and 2000.

Chart 2-1



Aiken County has seen a strong surge in population growth (168%), mainly as result of the explosive population growths of the City of North Augusta (263%) and the City of Aiken (257%), during the past 50 years. Aiken’s population growth has been more pronounced in recent census counts with an annual average increase in population of 3.5% over the past twenty years.

The population growth of Augusta-Richmond County, North Augusta’s nearest Georgia neighbor, has declined steadily over the past 50 years, from a growth rate of 24.5% between 1950 and 1960, to a growth rate of about 5% per decade over the past 20 years. This is not an uncommon trend in central cities. As decentralization of city centers occurred, many “suburban” communities saw population increases. Columbia County, Georgia, just north and west of Augusta-Richmond County, experienced significant growth between 1950 and 2000, growing from a population of 9,525 in 1950 to almost 90,000 in 2000. This growth period peaked between 1970 and 1980 at almost 80%. In the 20 years between 1980 and 2000, Columbia County’s population increased 122.6%.

South Carolina’s growth has remained steady with 15.1% growth between 1990 and 2000 and 11.7% growth from 1980 to 1990, consistent with the growth rates of both Aiken County and North Augusta. (Table 2-1 and Chart 2-2)

2.4 Population Characteristics

The general characteristics of a population include age, gender and race. North Augusta is a first tier suburb of Augusta, Georgia. Unlike the center city characteristics of Augusta, North Augusta’s population mix generally reflects typical suburban characteristics.

2.4.1 Age

The City of North Augusta has a common distribution of ages among its population with a few exceptions. The population under the age of 25, (33.7%), is approximately two percentage points below the populations of the state, US and newer jurisdictions in the region. Only the City of Aiken has a smaller percentage of young people (32.7%).

The City of North Augusta and the State of South Carolina are similar in overall age distribution with North Augusta being slightly older. Compared to the communities on the Georgia side of the Savannah River, North Augusta is older. North Augusta's population over the age of 65 is higher than all of our neighbors except Aiken. This very likely reflects the retirement community characteristics of the two cities.

Table 2-1

Population Trends 1950-2000						
Community	1950	1960	1970	1980	1990	2000
North Augusta	3,659	10,348	12,883	13,593	15,684	17,574
% Change		182.8	24.5	5.5	15.4	12.1
Belvedere (CDP*)	NA	NA	NA	NA	6,133	5,631
% Change		NA	NA	NA	NA	-8.1
Aiken City	7,083	11,243	13,436	14,978	20,386	25,337
% Change		58.7	19.5	11.5	36.1	24.3
Aiken County	53,137	81,038	91,023	105,625	120,940	142,552
% Change		52.5	12.3	16.0	14.5	17.9
Edgefield County	16,591	15,435	15,692	17,528	18,375	24,595
% Change		7.0	1.2	11.7	4.8	33.9
Augusta-Richmond County	108,876	135,601	162,437	181,629	189,719	199,775
% Change		24.6	19.8	11.8	4.5	5.3
Columbia County	9,525	13,423	22,327	40,118	66,031	89,288
% Change		40.9	66.3	79.7	64.6	35.2
Augusta-Aiken MSA	NA	NA	306,550	346,130	417,803	477,441
% Change		NA	NA	12.9	20.7	14.3
South Carolina	2,117,027	2,382,594	2,590,516	3,121,820	3,486,703	4,012,012
% Change		12.5	8.7	20.5	11.7	15.1
Georgia	3,444,578	3,943,116	4,587,930	5,462,982	6,478,216	8,186,453
% Change		14.5	16.4	19.1	18.6	26.4
United States	151,325,798	179,323,175	203,302,031	266,542,199	248,709,873	281,421,906
% Change		18.5	13.4	31.1	6.7	13.2

Source: US Census; *Belvedere was classified as a Census Designated Place by the US Census Bureau in 1990.

Chart 2-2

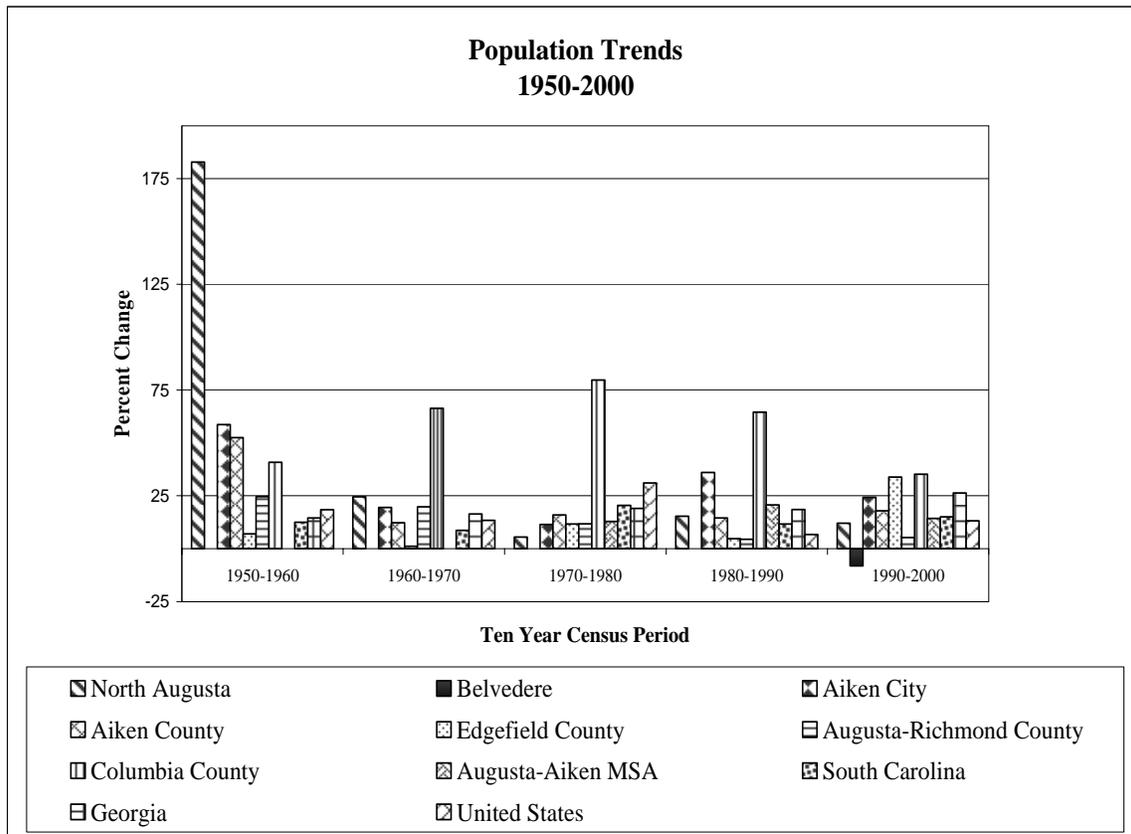


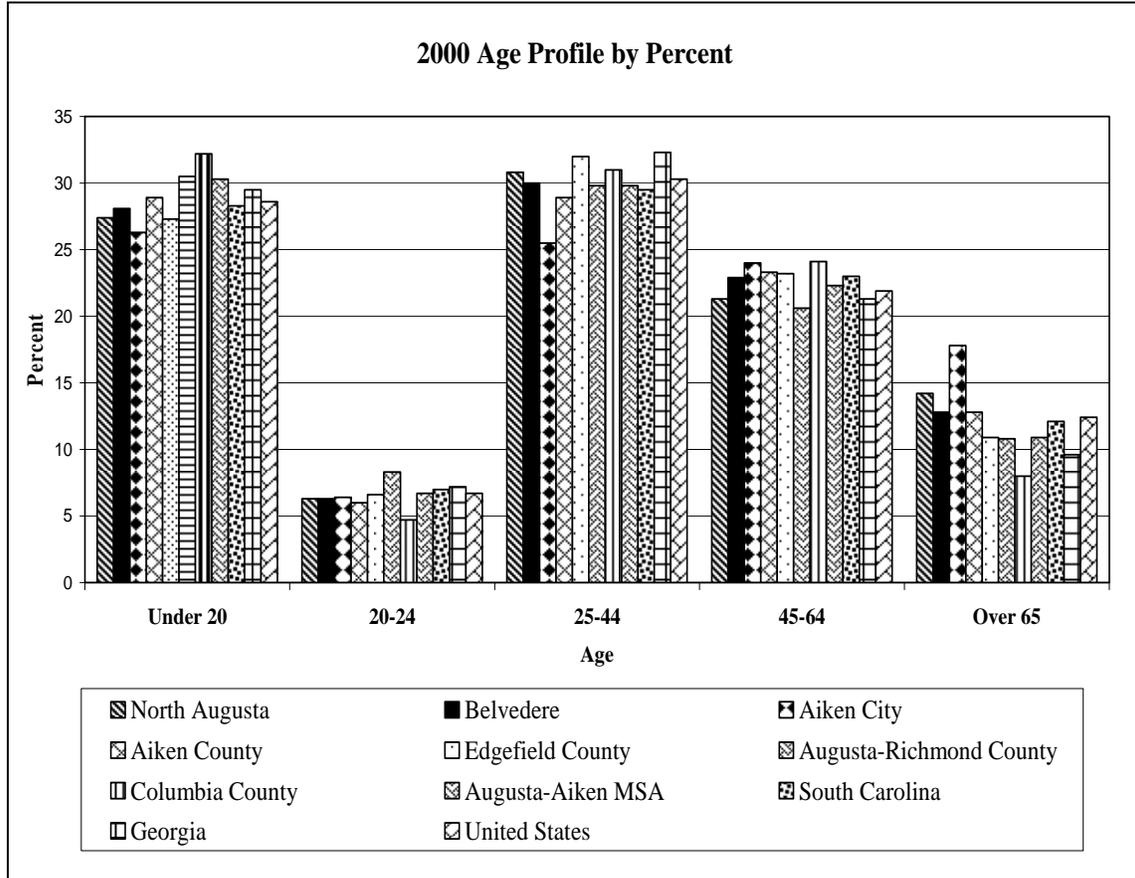
Table 2-2

2000 Age Profile by Percent

Community	Under 20	20-24	25-44	45-64	Over 65
North Augusta	27.4	6.3	30.8	21.3	14.2
Belvedere	28.1	6.3	30.0	22.9	12.8
Aiken City	26.3	6.4	25.5	24.0	17.8
Aiken County	28.9	6.0	28.9	23.3	12.8
Edgefield County	27.3	6.6	32.0	23.2	10.9
Augusta-Richmond County	30.5	8.3	29.8	20.6	10.8
Columbia County	32.2	4.7	31.0	24.1	8.0
Augusta-Aiken MSA	30.3	6.7	29.8	22.3	10.9
South Carolina	28.3	7.0	29.5	23.0	12.1
Georgia	29.5	7.2	32.3	21.3	9.6
United States	28.6	6.7	30.3	21.9	12.4

Source: US Census

Chart 2-3



The US Census Bureau predicts the 65 and older population will grow from one in eight Americans today to one in six by 2020. The mature adult population may total 53.7 million, representing a 53.8% increase over today’s 34.9 million mature adult population. The city has a mature adult population (14.2%), higher than Aiken County (12.8%), the State of South Carolina (12.1%) and the United States (12.4%). This population is especially high compared to neighboring Georgia municipalities. An increasing mature adult population will require continual review of city policies to meet the needs of this demographic group. (Table 2-2 and Chart 2-3)

The City of North Augusta median age (35.9) is slightly older than South Carolina (35.4) as a whole but slightly younger than Aiken County (36.4). The city’s median age is also higher than the jurisdictions on the Georgia side of the Savannah River. As the baby boom generation reaches retirement age the percentage of older individuals in the population will increase substantially. (Table 2-3)

2.4.2 Race

North Augusta's racial makeup is predominantly white, 77% in 2000. The figure in 2000 is a decrease of 6.5% from the 1990 census. The trend toward less homogeneity in the population is consistent with other jurisdictions in the metropolitan area. North Augusta's percentage of white population is higher than all of the neighboring jurisdictions except Columbia County, Georgia. Also consistent throughout the area is the increasing African American percentage of the population. In North Augusta, 13% of the population was black in 1980 and 15.6 % in 1990. There was a 20% increase between 1990 and 2000 to 18.8 %.

Table 2-3

2000 Median Age	
Community	Age
North Augusta	35.9
Belvedere	35.8
Aiken City	39.5
Aiken County	36.4
Edgefield County	35.6
Augusta-Richmond County	32.3
Columbia County	35.4
Augusta-Aiken MSA	34.5
South Carolina	35.4
Georgia	33.4
United States	35.3

Source: US Census

The Hispanic population has shown the most significant growth. Between 1990 and 2000 there was a population increase of more than 3,000%, from 0.07% to 2.4%. While the percentage increase is large, the number represents a little more than 400 individuals. The Hispanic population in North Augusta will continue to grow at a faster rate than other ethnic groups as it is across the state and around the country.

These numbers represent an increasing diversity of the population base in North Augusta and this trend is likely to increase during the next ten years. The city should consider the differing needs of the continually diversifying population to keep the residents involved and informed to the city's activities and government. (Table 2-4)

2.4.3 Gender

In 2000, North Augusta was 53% female and 47% male. The breakdown is consistent with other jurisdictions in the area. Generally, there is a correlation between the percentage of women in the population and the percentage of the population over the age of 65. Additionally, older women outnumber older men. There does not appear to be any easy indicators that point to certain factors related to the disparity. Generally, there are approximately ten percent more women than men past the age of 30 in the City of North Augusta. Past the age of 85, the difference is tripled reflecting the fact that women generally outlive men. As the baby boom generation reaches retirement age the percentage of older individuals will increase and the age group over 65 will be comprised of an increasing number of women. (Table 2-5)

2.5 Household Characteristics

A household is defined as all persons who occupy a given housing unit such as a house, apartment, group of rooms, or single room occupied as separate living quarters. Characteristics of households including size, type, income, and education define the population of a community.

2.5.1 Household Size

Since the 1980's, there has been a national trend of increasingly smaller family households, more non-family households and single-parent households. These changes have resulted in a greater numbers of households for the same population. Statistics for the City of North Augusta and the Metropolitan Statistical Area (MSA) reflect this national trend.

An average household in North Augusta in 2000 contained 2.35 persons, one of the lowest household sizes in the MSA. Columbia County, Georgia recorded the highest number of persons per household. Factors that contribute to this smaller household size number include a larger population of women, an increase in the number of single-parent households and a larger population of retirement age individuals and couples, often referred to as empty nesters. (Table 2-6)

2.5.2 Household Type

Although the average household size has been decreasing, the growth in household formation has kept pace with the growth in the total population. The traditional family of a husband, wife, and one or more children is less common today. Single-parent households (headed by either men or women), unmarried couples, and single individuals living alone make up more of the households in North Augusta than in previous census counts and result in the smaller average household size. The larger household size in Columbia County, Georgia is the result of a larger percentage of traditional family households. The demographic

shift toward smaller households nationally is the result of an increased divorce rate, more singles living alone, and a longer life expectancy. (Table 2-7)

2.5.3 Income

Median Household Income refers to the average of all household incomes within the community. The median household income for the City of North Augusta was \$41,083 in 2000, an increase of 25% over the decade. The city's median household income has grown at a slower rate than in most of the jurisdictions in the area, yet continues to be one of the higher median income values. Higher household incomes generally reflect a higher number of wage earners per household. The higher the percentage of traditional family households generally reflects more than one wage earner per household. Higher median household incomes also generally reflect a higher level of education and a lower percentage of the population in poverty.

Although the median income for North Augusta is higher than the state median and comparable to the national median, it is higher than the regional median by almost 8%. Income levels in the metropolitan area will likely remain lower than state and national averages. (Table 2-8)

2.5.4 Education

North Augusta's population is well educated. Over 86% of North Augusta residents aged 25 and over are high school graduates comparing favorably with the City of Aiken at 84.6% and Columbia County at 87.9%. Aiken County's and South Carolina, at 77.7% and 76.3% respectively, have not attained the same level of education. A little more than 28% of North Augusta's population over the age of 25 has obtained a bachelor's degree or higher. Aiken County and South Carolina lag behind in this figure with 19.9% and 20.4% respectively.

While North Augusta's graduate percentages are generally higher than other jurisdictions, the percentage of high school graduates or higher grew at a substantially lower rate between 1990 and 2000 than in neighboring jurisdictions. The percentage of the population with a college degree also grew at a slower rate than in other jurisdictions. However, North Augusta's education level continues to be very high and higher than the national average. Other jurisdictions in the area are beginning to catch up. (Table 2-9)

Table 2-4

Population by Race or Ethnicity									
Community	Census Year	White		Black or African American		Other		Total Hispanic or Latino and Race	
		Percent	Percent Change	Percent	Percent Change	Percent	Percent Change	Percent	Percent Change
North Augusta	1990	83.1		15.6		1.3		0.07	
	2000	77.7	-6.5	18.8	20.5	3.6	176.9	2.4	3328.6
Belvedere	1990	80.1		18.7		1.2		0.01	
	2000	74.4	-7.1	23.6	26.2	2.0	66.7	1.8	17900
Aiken City	1990	68.0		30.9		1.1		0.09	
	2000	66.6	-2.1	30.3	-1.9	3.1	181.8	1.5	1566.7
Aiken County	1990	75.0		24.2		0.08		0.07	
	2000	71.4	-4.8	25.6	5.8	3.1	3775.0	2.1	2900.0
Edgefield County	1990	53.3		46.3		0.03		0.04	
	2000	56.8	6.6	41.5	-10.4	1.7	5566.7	2.0	4900.0
Augusta-Richmond County	1990	55.1		42.0		2.9		2.0	
	2000	45.6	-17.2	49.8	18.6	4.6	58.6	2.8	40.0
Columbia County	1990	86.0		11.0		0.03		1.5	
	2000	82.7	-3.8	11.2	1.8	6.1	20233.3	2.6	73.3
Augusta-Aiken MSA	1990	66.7		31.1		2.1		1.4	
	2000	61.5	-7.8	34.4	10.6	4.2	100.0	2.6	85.7
South Carolina	1990	69.0		30.0		0.01		0.09	
	2000	67.2	-2.6	29.5	-1.7	3.3	32900.0	2.4	2566.7
Georgia	1990	71.0		27.0		2.0		1.7	
	2000	65.1	-8.3	28.7	6.3	6.2	210.0	5.3	211.8
United States	1990	80.3		12.1		7.7		9.0	
	2000	75.1	-6.5	12.3	1.7	12.5	62.3	12.5	38.9

Source: US Census

Table 2-5

2000 Gender Breakdown by Percent		
Community	Male	Female
North Augusta	47.0	53.0
Belvedere	47.9	52.1
Aiken City	46.6	53.4
Aiken County	48.2	51.8
Edgefield County	53.0	47.0
Augusta-Richmond County	48.2	51.8
Columbia County	48.9	51.1
Augusta-Aiken MSA	48.6	51.4
South Carolina	48.6	51.4
Georgia	49.2	50.8
United States	49.1	50.9

Source: US Census

Table 2-6

Household Size		
Community	1990	2000
North Augusta	2.43	2.35
Belvedere	2.73	2.51
Aiken City	2.48	2.34
Aiken County	2.66	2.53
Edgefield County	2.82	2.66
Augusta-Richmond County	2.61	2.55
Columbia County	2.97	2.85
Augusta-Aiken MSA	2.69	2.64
South Carolina	2.68	2.53
Georgia	2.66	2.65
United States	2.63	2.59

Source: US Census

2.5.5 Poverty

The average poverty threshold for a family of four persons in 1989 was \$12,674. In 1999 it was \$17,029. The percentage of households in the city living at or below the poverty level increased dramatically between 1990 and 2000. The percentage of poverty in North Augusta and Belvedere grew faster than in Augusta-Richmond County, the only other jurisdiction that experienced an increase in the percentage of families in poverty.

Table 2-7

2000 Household Type by Percent						
Community	Owner-Occupied Households			Renter-Occupied Households		
	Married Couple	Male Householder	Female Householder	Married Couple	Male Householder	Female Householder
North Augusta	62.0	12.3	25.7	23.8	28.9	47.3
Belvedere	58.8	16.5	24.7	42.9	24.5	32.6
Aiken City	62.8	11.4	25.8	21.8	29.4	48.8
Aiken County	62.0	13.4	24.6	26.4	29.3	44.3
Edgefield County	62.9	12.7	24.5	25.4	25.6	49.0
Augusta-Richmond County	54.4	14.1	31.4	24.4	26.3	49.3
Columbia County	72.8	9.4	17.8	43.2	22.2	34.6
Augusta-Aiken MSA	61.6	12.7	25.6	27.8	24.8	47.4
South Carolina	60.6	13.6	25.8	26.4	0.3	44.5
Georgia	63.0	12.9	24.1	27.6	29.0	43.4
United States	63.4	13.5	23.1	28.7	29.5	41.8

Source: US Census

Table 2-8

Median Household Income			
Community	1990	2000	Percent Change
North Augusta	32,877	41,083	25.0
Belvedere	33,878	36,045	6.4
Aiken City	33,273	44,172	32.8
Aiken County	29,994	37,889	26.3
Edgefield County	23,021	35,146	52.7
Augusta-Richmond County	25,265	33,086	31.0
Columbia County	40,122	55,682	38.8
Augusta-Aiken MSA	28,490	38,080	33.7
South Carolina	26,256	37,082	41.2
Georgia	29,021	42,433	46.2
United States	30,056	41,994	39.7

Source: US Census

The percentage of increase in poverty in North Augusta and Belvedere is small in terms of real numbers but reflects a trend that is different than in other jurisdictions in the area. It could become an issue in the future. The percentage of

North Augusta families living in poverty (less than 80% of median income) increased from 7.1% to 9.7% between 1990 and 2000, reflecting a 42.6% increase; the largest percentage increase of all the jurisdictions within the metropolitan area. (Tables 2-10 and 2-11)

Table 2-9

Educational Attainment by Percent						
Community	1990		2000		Percent Change	
	HS Graduate or Higher	Bachelor's or Higher	HS Graduate or Higher	Bachelor's or Higher	HS Graduate or Higher	Bachelor's or Higher
North Augusta	81.9	25.5	86.3	28.3	5.4	11.0
Belvedere	74.2	11.0	82.2	12.5	10.8	13.6
Aiken City	79.4	33.1	84.6	38.1	6.5	15.1
Aiken County	70.7	17.2	77.7	19.9	9.9	15.7
Edgefield County	62.6	12.2	71.4	12.5	14.1	2.5
Augusta-Richmond County	70.9	17.3	78.0	18.7	10.0	8.1
Columbia County	81.1	23.9	87.9	32.0	8.4	33.9
Augusta-Aiken MSA	71.8	18.0	78.9	20.9	9.9	16.1
South Carolina	68.3	16.6	76.3	20.4	11.7	22.9
Georgia	70.9	19.3	78.6	24.3	10.9	25.9
United States	75.2	20.3	80.4	24.4	5.2	4.1

Source: US Census

2.6 Population by Census Tract

Census tracts are small, relatively permanent statistical subdivisions of a county or city delineated for the purpose of presenting census data. Census tracts are designed to be relatively homogeneous units with regard to population characteristics, economic status, and to contain between 2,500 and 8,000 residents. For the 2000 census, North Augusta and Belvedere were divided into eleven census tracts. (Table 2-12)

Census tracts and block group boundaries vary substantially in size based upon population density. Additionally, census tract boundaries and most block group boundaries are not coterminous with city limit boundaries. As a result, comparison of data between areas of the city for the purposes of targeting policies and programs is difficult. However, general characteristics of areas that overlap the city boundaries can be made when appropriate. The following data is provided for that purpose. (Table 2-13)

Table 2-10

Percent of Families Living In Poverty			
Community	1990	2000	Percent Change
North Augusta	7.1	9.7	2.5
Belvedere	7.0	11.1	4.1
Aiken City	11.1	10.1	-1.0
Aiken County	11.0	10.6	-0.4
Edgefield County	13.7	13.0	-0.8
Augusta-Richmond County	14.8	16.3	1.5
Columbia County	5.5	4.2	-1.3
Augusta-Aiken MSA	12.1	11.7	-0.4
South Carolina	11.9	10.8	-1.1
Georgia	14.6	9.9	-4.7
United States	9.9	9.2	-0.7

Source: US Census

2.7 Population Projections

The variables used in estimating future population growth include recent and potential future annexations, recent growth activity, natural increases in local population, net immigration, the local and regional economy; and capital facilities plans. Some variables are dependent variables meaning that local policy decisions will directly influence growth. Annexation and public expenditures are two examples. Other variables are independent and largely beyond local control. The regional economy and national security and energy policies are examples of independent variables. If the Savannah River Site is assigned new missions or, conversely, experience additional lay-offs, as a result of adjustments in national defense and energy policies, growth will be affected. The information in Table 2-20 projects population growth in five year increments through 2020. Population is currently projected to increase at a rate consistent with rates over the past twenty-five years, approximately 1.44% per year. That projection is independent of the continued annexation of undeveloped land. However, any significant annexation of existing populations in previously developed neighborhoods or a significant increase in the amount of infill development in the city could result in a higher rate of population increase.

2.7.1 Recent Growth Activity

Since 1980, the population of North Augusta grew by 36.9%. Population growth in North Augusta was relatively steady at approximately 1.4% to 1.5% per year between 1990 and 2000; however, indications are that it has been increasing steadily over the last ten years, most significantly since 2000. However, based on the 2000 census, North Augusta's population is not increasing as rapidly as in other parts of the metropolitan area, most notably the City of Aiken and Columbia County, Georgia.

Table 2-11

Poverty									
Community	1990	2000	Percent Change	1990	2000	Percent Change	1990	2000	Percent Change
	Female Householder, No Husband Present			Below Poverty Level			Female Householder as Percentage of Families		
North Augusta	697	1,054	47.1	209	298	42.6	16.4	21.8	5.4
Belvedere	290	300	3.4	85	108	27.1	16.2	19.3	3.1
Aiken City	1021	1,411	38.2	393	507	29.0	19.0	20.9	1.9
Aiken County	5,255	7,658	45.7	1,921	2,493	29.8	15.6	19.4	3.7
Edgefield County	848	1,285	51.5	365	394	7.9	17.2	20.6	3.4
Augusta-Richmond County	12,365	15,356	24.2	4,981	5,453	9.5	25.6	31.0	5.5
Columbia County	1,994	3,311	66.0	432	576	33.3	10.9	13.1	2.2
Augusta-Aiken MSA	20,923	29,139	39.3	7,917	9,492	19.7	19.8	22.9	3.1
South Carolina	171,778	226,958	32.1	61,878	67,249	8.7	18.4	21.2	2.8
Georgia	322,845	422,429	30.8	110,893	120,3003	8.5	18.7	28.5	9.8
United States	10,381,654	37,422,000	20.4	3,230,201	3,315,916	2.7	16.0	17.3	1.3

Source: US Census

Table 2-12

Population by Census Tract						
	1990 Census Tracts	1990 Study Area Tracts	2000 Census Tracts	2000 Study Area Tracts	Tracts Percent Change	Study Area Percent Change
Census Tract 204	3867	371	4015	1532	3.8	312.9
Census Tract 205	2910	2910	4523	4523	55.4	55.4
Census Tract 206	7166	7166	8623	8623	20.3	20.3
Census Tract 207.01	5407	5407	5727	5727	5.9	5.9
Census Tract 207.02	5054	5054	4853	4853	-4.0	-4.0
Census Tract 208	6970	6970	7096	7096	1.8	1.8
Census Tract 209	6146	3357	7895	4843	28.5	44.3
Census Tract 210.01	4165	4165	4147	2887	-0.4	-30.7
Census Tract 210.02	5395	5395	5333	5333	-1.1	-1.1
Census Tract 211	6992	488	7151	614	2.3	25.8
Census Tract 9705	4579	1478	8062	1955	76.1	32.3

Source: US Census

Table 2-13

Population by Census Tract and Block Group		
	1990 Study Area	2000 Study Area
Census Tract 204	3867	4015
Block Group 1	759	1394
Block Group 2	476	1089
Block Group 3	371	1532
Block Group 4	1354	NA
Block Group 5	566	NA
Block Group 9	341	NA
Census Tract 205	2910	4523
Block Group 1	1783	3224
Block Group 2	1127	1299
Census Tract 206	7166	8623
Block Group 1	1974	2244
Block Group 2	469	3077
Block Group 3	695	722
Block Group 4	1548	2580
Block Group 5	1080	NA
Block Group 9	1400	NA
Census Tract 207.01	5407	5727
Block Group 1	NA	1836

Table 2-13, cont.

Population by Census Tract and Block Group		
	1990 Study Area	2000 Study Area
Block Group 2	485	729
Block Group 3	NA	1312
Block Group 4	1061	1850
Block Group 5	1566	NA
Block Group 6	1730	NA
Block Group 9	565	NA
Census Tract 207.02	5054	4853
Block Group 1	2739	986
Block Group 2	1280	1854
Block Group 3	624	713
Block Group 4	144	1300
Block Group 8	113	NA
Block Group 9	154	NA
Census Tract 208	6970	7096
Block Group 1	1083	1172
Block Group 2	1131	1115
Block Group 3	1160	1311
Block Group 4	644	564
Block Group 5	497	1894
Block Group 6	1507	1040
Block Group 9	948	NA
Census Tract 209	3357	4843
Block Group 1	3357	4843
Census Tract 210.01	4165	2887
Block Group 1	571	1150
Block Group 2	573	678
Block Group 3	681	1059
Block Group 4	752	1260
Block Group 6	926	NA
Block Group 9	662	NA
Census Tract 210.02	5395	5333
Block Group 1	NA	1877
Block Group 2	NA	1357
Block Group 3	675	622
Block Group 4	62	1477
Block Group 5	515	NA
Block Group 6	1122	NA
Block Group 7	1311	NA
Block Group 8	1466	NA

Table 2-13, cont.

Population by Census Tract and Block Group		
	1990 Study Area	2000 Study Area
Block Group 9	244	NA
Census Tract 211	6992	7151
Block Group 1	978	1160
Block Group 2	219	1758
Block Group 3	587	1060
Block Group 4	1352	1703
Block Group 5	994	856
Block Group 6	488	614
Census Tract 9705	1478	1955
Block Group 2	1478	1955

Source: US Census

Since 1980 the land area of the city grew by 138.5% due to annexations (Tables 2-14, 2-15 and 2-16). The geographic growth of the city has fluctuated over time based on the demand of utilities and annexation opportunities. Annexations of undeveloped land that is now being developed and a steady increase in the number of residential building permits issued are the most significant indicators of an increasing growth rate. Residential real estate development activity varied between 90 and 100 units lots per year through 2000 (Table 2-17). Residential real estate development activity is now averaging approximately 150 to 160 lots per year (Tables 2-18 and 2-19).

Table 2-14

Population and Land Area			
	Population	Square Miles	Acres
1980	13,593	8.17	5,229
2004	18,608	19.487	12,475
Change	36.9%	138.5%	

Source: US Census; City of North Augusta

Table 2-15

Change in Population and Land Area				
	Population	Change	Square Miles	Change
1980	13,593		8.17	
2000	17,574	29.3%	18.485	126.3%
2004	18,608	5.9%	19.487	5.4%

Source: US Census; City of North Augusta

Table 2-16

Recent Growth		
	Population	Square Miles
2000	17,574	18.485
2001	17,827	18.491
2002	18,084	18.555
2003	18,344	19.475
2004	18,608	19.487

Source: US Census; City of North Augusta

Table 2-17

Real Estate Developed 1980-1999	
Subdivisions	27
Lots Developed	1,770
Acres Developed	866

Source: North Augusta Department of Economic and Community Development

2.7.2 Growth Projections

The City contains several large tracts of vacant land with the potential for extended residential development. Many of the tracts may be developed as mixed-use projects with a combination of residential, commercial and open space uses. Additional annexation of undeveloped property will not necessarily increase the rate of population growth. Annexation will, however, postpone the ultimate build-out of the city by providing land for development.

It is unlikely that any significant increase in population will result from an annexation given the current annexation laws in South Carolina. However, although unlikely at this time, the annexation of all or portions of the unincorporated Belvedere (Aiken County) or Merriwether (Edgefield County) areas would add substantial numbers to the population of the city.

The growth rate in North Augusta, as evidenced by building permit activity, has increased in recent years. That may be due to the improved quality of life image the city enjoys as a result of a number of public investments including the Greenway, Riverview Park Activities Center, streetscape projects, riverfront development, and others. However, a number of much larger variables will continue to influence the growth rate in the city. New housing demand generally in the region and home starts in North Augusta could decrease as interest rates rise. Housing prices are not likely to increase significantly because of weak

income growth in the area and because developers will likely attempt to compensate for the increased interest cost to buyers

Table 2-18

Real Estate Developed 2000-2004			
	Subdivisions	Lots	Acres
2000	4	116	46.29
2001	6	162	69.09
2002	2	85	29.96
2003	9	245	137.54
2004	7	195	68.26
Total	28	803	351.14

Source: North Augusta Department of Economic and Community Development

Table 2-19

Building Activity		
	Units	Value
2000	128	\$16,258,840
2001	190	\$22,153,768
2002	197	\$23,583,644
2003	239	\$29,942,380
2004	200	\$28,538,588
Total	954	\$120,477,220

Source: North Augusta Department of Building Standards

Other trends that could affect the growth of the city are regional and national in scope. The median age in the city and the metropolitan area is increasing and household size is continuing to decrease, reflecting the influence of the baby boom generation. The percentage of the population in the labor force is decreasing and the number of retirees in the area is growing. Therefore because of recent trends and possible future influences the population of North Augusta is projected to increase at an annual rate of 1.4% to 1.5% (Table 2-20).

Table 2-20

Population Estimates					
Community	2000	2001	2002	2003	2004
North Augusta	17,635	17,758	18,117	18,494	19,095
% Change		0.70	2.02	2.08	3.25
Aiken City	25,519	25,714	26,151	26,611	27,299
% Change		0.76	1.70	1.76	2.59
Aiken County	142,816	143,727	145,326	146,903	148,960
% Change		0.64	1.11	1.09	1.40
Edgefield County	24,571	24,574	24,734	24,783	24,794
% Change		0.01	0.65	0.20	0.04
Augusta-Richmond County	199,548	199,008	198,173	197,137	196,265
% Change		-0.27	-0.42	-0.52	-0.44
Columbia County	89,829	91,836	94,681	97,227	100,589
% Change		2.23	3.10	2.69	3.46
South Carolina	4,023,548	4,061,209	4,105,848	4,148,744	4,198,068
% Change		0.94	1.10	1.04	1.19
Georgia	8,230,087	8,391,282	8,539,735	8,676,460	8,829,383
% Change		1.96	1.77	1.60	1.76
United States	282,192,162	285,102,075	287,941,220	290,788,976	293,655,404
% Change		1.03	1.00	0.99	0.99

Source: US Census; Estimates are for July 1 of the dates shown.

Table 2-21

Population Projections						
Community	2005	2010	2015	2020	2025	2030
North Augusta	18,790	20,080	21,470	22,950	24,530	26,220
% Change		6.87	6.92	6.89	6.88	6.89
Aiken County	150,340	159,540	169,180	179,130	189,460	200,490
% Change		6.12	6.04	5.88	5.77	5.82
Edgefield County	24,960	25,660	26,440	27,280	28,150	29,140
% Change		2.80	3.04	3.18	3.19	3.52
Augusta Richmond County	199,300	202,410	206,150	210,250	214,820	220,070
% Change		1.56	1.85	1.99	2.17	2.44
Columbia County	101,380	111,170	121,250	131,530	142,140	153,280
% Change		9.66	9.07	8.48	8.07	7.84
Aiken Augusta MSA	520,700	544,440	569,750	596,100	623,720	653,560
% Change		4.56	4.65	4.62	4.63	4.78
South Carolina	4,241,120	4,482,260	4,735,890	4,998,110	5,271,830	5,564,460
% Change		5.69	5.66	5.54	5.48	5.55
Georgia	8,919,410	9,517,760	10,143,730	10,788,860	11,459,620	12,172,150
% Change		6.71	6.58	6.36	6.22	6.22
United States	295,507,134	308,935,581	322,365,787	335,804,546	349,439,199	363,584,435
% Change		4.54	4.35	4.17	4.06	4.05

Source: North Augusta Projections, Lower Savannah Council of Governments; United States Projections, US Census; All other projections, Woods & Poole, 2005

2.8 Goals, Objectives, Policies and Strategies

Goals and objectives generally support a vision for the city and a framework for developing more specific strategies and policies to address the needs and opportunities. Goals related to population projections are sometimes difficult to articulate. Specific objectives, policies and strategies are also difficult because the city has little control over the larger economic and resource factors that influence significant changes in population. The comprehensive plan in its entirety is a plan for the growth and development of the city and deals with strategies and policies that the city can control. However, demographic information and population projections will influence goals, objectives, policies and strategies in all of the other elements in the plan.

2.8.1 Monitor demographic changes in the city to understand the continually changing trends related to the growth and increasing needs and demands of the minority Hispanic population and other changing demographic trends in the city.

2.8.2 Monitor demographic changes in the city to understand the increasing percentage of the population that is at the poverty level and develop growth related policies and programs to reverse the trend.

- 2.8.3 Expand the city's marketing programs to promote North Augusta as a community with a high quality of life and a unique place to relocate or retire.
- 2.8.4 Encourage infill residential development in undeveloped areas of the city, especially those areas that are near the original city limits.

Chapter 3 – Housing

3.1 Introduction

The housing characteristics in North Augusta reflect the city's development patterns. Each phase of growth produced a slightly different pattern. Development patterns today differ substantially from those in the initial phases of development in the early part of the 20th century. The city's recent development policies and economic conditions have produced new development trends and patterns. The same policies and conditions will likely produce a development pattern that is similar to what is being developed today and where it will be developed.

The housing products being produced today are also substantially different from produced during the city's phases of growth over the last century. Trends today include larger lots, a single story, large garages, and more bathrooms, among others. Technological advances change housing style and demand also. Examples include more efficient appliances, central heat and air conditioning, new construction materials including vinyl siding, plastic pipe, synthetic stucco, and others. New technology has also produced new construction techniques. Mass produced housing units on mass produced lots are the norm.

This element of the plan assesses the current housing stock in the city, identifies housing problems and projects future housing needs.

3.2 Residential Development Patterns

The initial development in what is North Augusta today was primarily rural and agricultural in nature with the exception of developments along the river. Fallmouth, Campbelltown Landing and Hamburg were established to take advantage of trade routes existing at the time. Some of the antebellum homes associated with large farms remain. Nothing substantial is left of Fallmouth, Campbelltown Landing or Hamburg. The City of North Augusta was created in 1891 by James U. Jackson and the recording of the Boeckh Plat. It was incorporated in 1906. The city plan for North Augusta is consistent with the first ring suburbs planned in the City Beautiful Movement during the Progressive era of American History. It includes a traditional downtown, formal public park areas, undeveloped open space areas, and a traditional lot, block and street layout. The street network was planned for future expansion to the east and west on the same type of street grid.

The city grew at a modest rate through its first twenty-five years. It was essentially stagnant through the depression years of the 1930's. After World War II the city was subjected to the considerable impact of the federal government investment in the Savannah River Site (SRS). Population, and related housing demand, increased dramatically in the 1950's and 1960's. The early SRS demand related housing development was similar in pattern to the traditional housing development patterns that

existed in the city. However, the trend toward suburbanization and mass produced housing developments across the country also influenced development in North Augusta. Lots became larger and new housing styles, single story and split level ranches, became prevalent. Initially street patterns grew from and retained the interconnected network created in the Boeckh Plat. As the city grew further out the streets became less and less connected with other neighborhoods. Land ownership patterns created a checkerboard or leap-frog pattern of new subdivision development. Street patterns became more curvilinear and, primarily due to terrain, cul-de-sacs became more prevalent. However, through the 1960's and into the 1970's, streets were still designed to interconnect with neighboring developments when they occurred. In more recent years the subdivision design evolved into internally focused layouts of isolated cul-de-sacs. Subdivisions of a hundred or more lots are served by one or perhaps two entrances. Newer subdivisions developed adjacent to older neighborhoods ignored the opportunities for interconnection through previously established street stubs. The result is a clear segregation of neighborhoods and housing units by age and style, and in some cases by quality, in different subdivisions.

Recent patterns have included larger developments that continue the separated, large lot, mass produced, isolated cul-de-sac designs with limited access and no interconnections. Recent developments have also been located farther away from the center of the original city. However, some smaller infill subdivisions have occurred closer to the center of the community. They include Woodlawn Place, Eastowne Village, the Summit subdivisions, the Village at Riverview, and Leigh Place. These neighborhoods reflect some elements of the original building and neighborhood design but are primarily of contemporary suburban design. Front loaded garages and driveways and cul-de-sac street systems dominate. Some of the housing units are built of traditional materials in traditional styles but most are constructed of contemporary materials in contemporary styles.

The majority of units constructed in recent years have been detached single-family residential and some attached townhomes. Sizes and prices vary. The majority have been at the lower end of the scale. The balance has been at the upper end. Most are located near the edges of the city. The result is that North Augusta lacks a range and choice in housing type, size, style, location and price. A continuation of the current housing development trend will be further sprawl with a limited choice in housing.

In the 1995 Comprehensive Land Use and Development Plan the city approved a policy of permitting accessory living units and home occupations to facilitate a greater variety of housing choice, increase density and mix uses to a small degree. Those policies were subsequently incorporated into the 1996 Zoning and Development Standards Ordinance. However, the size and type of home occupations were limited and the size of accessory units was limited to 800 square feet. Additionally, no residential uses are permitted in the Neighborhood commercial, General Commercial and Thoroughfare Commercial zoning districts, most of the commercial areas of the city. As a result, true mixed use developments are not permissible in the city except in the downtown (Core Commercial District) and in Planned Development District projects.

3.3 Total Housing Stock

The 2000 Census reported a total of 7,923 housing units in the City of North Augusta. This number represents an increase of 16.3% from 6,810 housing units in 1990. The housing stock in North Augusta is not increasing as rapidly as in other jurisdictions. Housing units in the City of Aiken are increasing at twice the rate of North Augusta. Columbia County, Georgia is developing housing at almost three times the North Augusta rate. Aiken and Edgefield counties, primarily rural areas, are adding units at more than one and half times the North Augusta rate. Only Belvedere (an area virtually surrounded by North Augusta) and Augusta-Richmond County are constructing new housing units at a slower rate than North Augusta. The age of the jurisdictions is a factor. Development in Columbia County and developing areas in Aiken and Edgefield counties are much newer and in many cases provide more choice. Additionally, most of the newer developing areas and the city of Aiken, an older community, offer newer schools and more extensive commercial amenities. The commercial amenities include a broad range of national retailers, restaurants and entertainment. (Table 3-1)

Table 3-1

Housing Units					
Community	1970	1980	1990	2000	Percent Change 1990-2000
North Augusta	4,342	5,470	6,810	7,923	16.34
Belvedere	NA	2,328	2,393	2,430	1.55
Aiken City	4,759	6,173	8,543	11,373	33.13
Aiken County	29,400	39,793	49,266	61,987	25.82
Edgefield County	4,552	6,207	7,290	9,223	26.52
Augusta-Richmond County	47,754	64,846	77,288	82,312	6.50
Columbia County	6,740	14,099	23,745	33,321	40.33
Augusta Aiken MSA	88,818	125,637	158,342	195,759	23.63
South Carolina	815,123	1,154,118	1,424,155	1,753,670	23.14
Georgia	1,470,754	2,028,305	2,638,418	3,281,737	24.38
United States	68,679,030	88,411,263	102,263,678	115,904,641	13.34

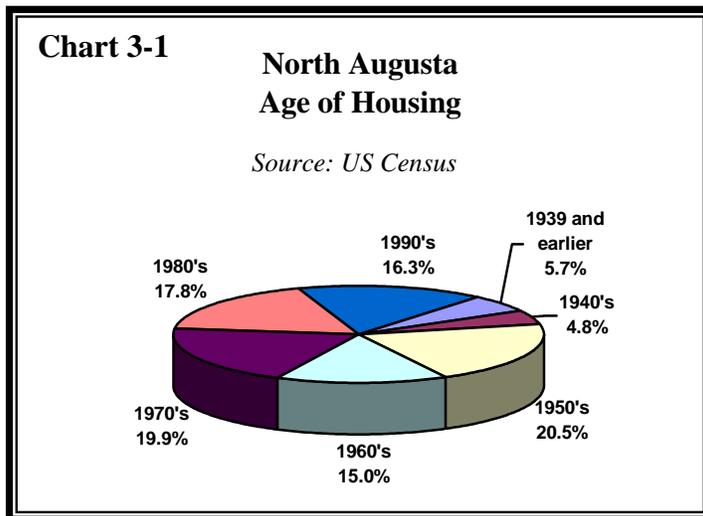
Source: US Census

A majority of the housing stock in the city (69%) is single-family detached which is comparable to other jurisdiction in the CSRA, the state and the nation. The mix of other types of housing (attached units and multi-family structures), generally reflect the degree of urbanization in a jurisdiction. More rural areas will contain a relatively smaller percentage of townhome, rowhouse and multi-family units. A significant difference, however, is the percentage of manufactured housing units, mobile homes, or “trailers”.

In North Augusta the percentage of mobile homes in 2000 was 1.13%. That figure is substantially lower than other jurisdictions in the CSRA, the state and the nation. (Table 3-5)

3.4 Age and Condition of Housing

The age of North Augusta's housing stock clearly represents the growth during the thirty years after World War II related to the development of SRS and the baby boom. Sixty percent of the city's housing stock was constructed between 1940 and 1980. Since that time the rate of housing construction has slowed. The condition of the housing in North Augusta, as measured by the US Census Bureau against national standards, is generally very good when compared to other CSRA jurisdictions, the states of South Carolina and Georgia and the nation. Housing condition correlates fairly closely to the age of the housing stock in a jurisdiction. A substantial percentage of the city's housing stock (40%) was developed between 1940 and 1970. Older housing in North Augusta is not being replaced as quickly as it is in other parts of the metropolitan area. (Chart 3-1 and Table 3-7)



The age and distribution by age of a city's housing stock generally reflect historic growth periods and the areas of development. Older homes and neighborhoods are not necessarily the mostly likely to decline first or to the greatest degree. Areas of housing that developed at a single point in time and age roughly at the same rate may create concentrated areas of decline if properties in a neighborhood or portion of a neighborhood are

not regularly and properly maintained. Additionally, the style and the quality of the housing in a neighborhood may influence the rate at which it declines. To maintain a competitive stock of housing, older, inefficient housing units should be substantially renovated or replaced with new units.

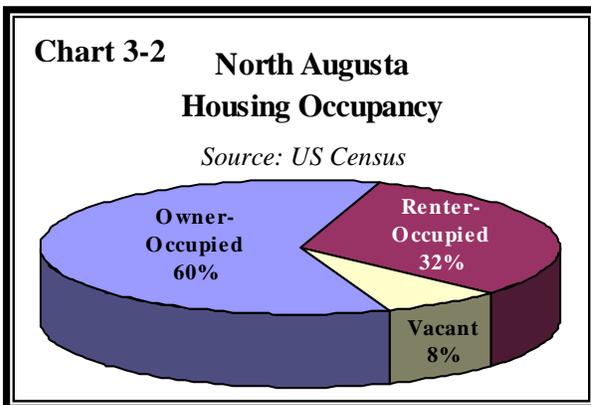
Neighborhoods that developed over a longer period of time with a variety of housing sizes, types and construction materials generally maintain their vitality. The original residential core of the city, i.e. the residential lots on East Avenue, West Avenue, Lake Avenue, Carolina Avenue, Georgia Avenue, etc., has witnessed a number of unit replacements, a substantial amount of rehabilitation and some infill of apartments and townhomes in relatively small developments. The resulting mix of unit sizes, types, ages and construction materials maintains the vitality and interest of the neighborhoods. There

may be individual units from time to time that are not well maintained and become isolated targets of code enforcement effort. Because of the diversity and value of the neighborhood, however, the declining units become opportunities for revitalization. For the most part, and notwithstanding traffic volumes, the original neighborhoods remain vital and well maintained. Portions of the Hammond Hills and adjacent subdivisions and the Martintown subdivisions exhibit similar characteristics.

Larger housing developments where all or a substantial majority of the units of the same size are constructed on the similar sized lots, of the same material and the same quality age and appreciate at the same rate. The original design of the subdivision establishes the relative value, size and quality of the housing units. Demand for reinvestment or reconstruction beyond the established value, size and quality does not develop. In those situations a few poorly maintained units can, rather than create opportunity for reinvestment and increased value, precipitate further decline. In many cases, and contrary to the intent, subdivision covenants contribute to the decline because alternatives to the original design are not permitted.

3.5 Occupancy and Vacancy Rates

The number of owner occupied units in North Augusta increased by 20.6% from 1990 to 2000. Approximately 60% of the housing units in North Augusta are owner occupied. That amount is less than in comparable jurisdictions in the metropolitan area. The percentage of owner occupants also generally reflects the degree of urbanization in a jurisdiction. More urbanized areas generally reflect a greater percentage of rental occupancy. The percentage of renter occupied units, approximately 32% in North Augusta, is lower than the 33.8 % in 1990 but is still generally consistent with regional, state and national ratios. (Chart 3-2)



The housing vacancy rate of 7.5 % is lower than in most of the jurisdictions in the CSRA, the states of South Carolina and Georgia and in the US. A lower vacancy rate can reflect a higher general condition of housing in the jurisdiction. A lower vacancy rate also corresponds to a higher demand for housing. In the CSRA only Columbia County has a lower vacancy rate. The relatively low vacancy rate in North Augusta can mean that there is an unmet demand for housing.

Combined with the previous conclusion that there is a lack of choice in housing type, style and price range indicates that the North Augusta area can be capturing a much larger segment of the regional housing market.

Table 3-2

	1990 Census Tracts	1990 Study Area Tracts	2000 Census Tracts	2000 Study Area Tracts	Tracts Percent Change	Study Area Percent Change
Census Tract 204	1571	162	1818	645	15.7	298.1
Census Tract 205	1045	1045	1567	1567	50.0	50.0
Census Tract 206	2760	2760	3500	3500	26.8	26.8
Census Tract 207.01	2039	2039	2358	2358	15.6	15.6
Census Tract 207.02	2271	2271	2224	2224	-2.1	-2.1
Census Tract 208	3325	3325	3495	3495	5.1	5.1
Census Tract 209	2430	1234	3246	1904	33.6	54.3
Census Tract 210.01	1777	1777	1886	1886	6.1	6.1
Census Tract 210.02	2131	2131	2383	2383	11.8	11.8
Census Tract 211	2976	186	3375	251	13.4	34.9
Census Tract 9705	1907	547	3156	816	65.5	49.2

Source: US Census

Table 3-3

**Housing Units by Study Area
Census Tract and Block Group**

	1990 Study Area	2000 Study Area
Census Tract 204	1571	1818
Block Group 1	311	654
Block Group 2	211	519
Block Group 3	162	645
Block Group 4	497	NA
Block Group 5	244	NA
Block Group 9	146	NA
Census Tract 205	1045	1567
Block Group 1	615	1094
Block Group 2	430	473
Census Tract 206	2760	3500
Block Group 1	720	980
Block Group 2	221	1247
Block Group 3	307	333
Block Group 4	587	940
Block Group 5	373	NA
Block Group 9	552	NA
Census Tract 207.01	2039	2358
Block Group 1	NA	702
Block Group 2	190	320
Block Group 3	NA	508
Block Group 4	426	828
Block Group 5	636	NA
Block Group 6	588	NA
Block Group 9	199	NA
Census Tract 207.02	2271	2224
Block Group 1	1144	490
Block Group 2	585	704
Block Group 3	333	361
Block Group 4	75	669
Block Group 8	48	NA
Block Group 9	86	NA
Census Tract 208	3325	3495
Block Group 1	452	520
Block Group 2	559	536
Block Group 3	643	680
Block Group 4	384	393

Table 3-3, cont.

**Housing Units by Study Area
Census Tract and Block Group**

	1990 Study Area	2000 Study Area
Block Group 5	236	959
Block Group 6	709	407
Block Group 9	342	NA
Census Tract 209	1234	1904
Block Group 1	1234	1904
Census Tract 210.01	1777	1886
Block Group 1	243	557
Block Group 2	291	317
Block Group 3	303	483
Block Group 4	313	529
Block Group 6	353	NA
Block Group 9	274	NA
Census Tract 210.02	2131	2383
Block Group 1	NA	796
Block Group 2	NA	651
Block Group 3	229	253
Block Group 4	30	683
Block Group 5	223	NA
Block Group 6	466	NA
Block Group 7	557	NA
Block Group 8	527	NA
Block Group 9	99	NA
Census Tract 211	2976	3375
Block Group 1	436	608
Block Group 2	111	809
Block Group 3	255	452
Block Group 4	547	808
Block Group 5	453	447
Block Group 6	186	251
Census Tract 9705	547	816
Block Group 2	547	816

Source: US Census

Table 3-4

1990 Housing Units in Structure

Community		1-detached	1-attached	2-4 units	5-9 units	10 or more units	Mobile Home, Trailer, Other	Total
North Augusta		4,636	244	902	560	377	91	6,810
	Percent	68.1	3.6	13.2	8.2	5.5	1.3	
Belvedere		1,960	0	68	0	0	365	2,393
	Percent	81.9	0	2.8	0	0	15.3	
Aiken City		6,264	242	843	591	392	211	8,543
	Percent	73.3	2.8	9.9	6.9	4.6	2.5	
Aiken County		33,341	700	2,623	1,627	892	10,083	49,266
	Percent	67.7	1.4	5.3	3.3	1.8	20.5	
Edgefield County		5,071	57	261	90	88	1,723	7,290
	Percent	69.6	0.8	3.6	1.2	1.2	23.6	
Augusta-Richmond County		46,022	2,387	8,716	7,305	5,629	7,229	77,288
	Percent	59.5	3.1	11.3	9.5	7.3	9.3	
Columbia County		18,203	438	1,109	255	203	3,537	23,745
	Percent	76.7	1.8	4.7	1.1	0.8	14.9	
Augusta Aiken MSA		102,814	3,583	13,081	9,296	6,886	22,682	158,342
	Percent	64.9	2.3	8.3	5.9	4.3	14.3	
South Carolina		901,910	34,261	92,799	66,909	79,886	248,390	1,424,155
	Percent	63.3	2.4	6.5	4.7	5.6	17.5	
Georgia		1,643,130	72,520	201,708	167,685	234,089	319,286	2,638,418
	Percent	62.3	2.7	7.6	6.4	8.9	12.1	
United States		60,295,750	5,420,726	9,953,996	4,946,639	13,250,912	8,401,655	102,263,678
	Percent	59.0	5.3	9.7	4.8	13.0	8.2	

Source: US Census

Table 3-5

2000 Housing Units in Structure

Community		1-detached	1-attached	2-4 units	5-9 units	10 or more units	Mobile Home, Trailer, Other	Total
North Augusta		5,462	356	885	635	417	89	7,844
	Percent	69.63	4.53	11.28	8.09	5.31	1.13	
Belvedere		1,948	6	76	0	0	397	2,427
	Percent	80.3	0.2	3.1	0	0	16.4	
Aiken City		8,157	323	1,292	759	503	268	11,302
	Percent	72.2	2.9	11.4	6.7	8.4	2.4	
Aiken County		39,956	922	3,002	1,780	1,020	15,307	61,987
	Percent	64.5	1.5	4.8	2.9	1.6	24.7	
Edgefield County		5,860	47	340	204	164	2,608	9,223
	Percent	63.5	0.5	3.7	2.2	1.8	28.3	
Augusta-Richmond County		50,586	3,088	8,005	7,428	5,625	7,580	82,312
	Percent	61.5	3.8	9.7	9.0	6.8	9.2	
Columbia County		25,762	845	1,174	278	728	4,534	33,321
	Percent	77.3	2.5	3.5	0.8	2.2	13.6	
Augusta Aiken MSA		127,692	4,986	12,980	9,835	7,735	32,531	195,759
	Percent	65.2	2.6	6.6	5.0	4.0	16.6	
South Carolina		1,078,678	40,185	101,588	77,598	97,566	358,055	1,753,670
	Percent	61.5	2.3	5.8	4.4	5.6	20.4	
Georgia		2,107,317	94,150	222,905	173,385	284,729	399,251	3,281,737
	Percent	64.2	2.9	6.8	5.3	8.7	12.1	
United States		69,865,957	6,447,453	10,489,630	5,414,988	14,644,775	9,041,838	115,904,641
	Percent	60.3	5.6	9.0	4.7	12.6	7.8	

Source: US Census

Table 3-6

Community	1 unit - detached	1 unit - attached	2-4 units	5-9 units	10 or more units	Mobile Home, Trailer, Other
North Augusta	17.9	45.9	-1.9	13.4	10.6	-2.2
Belvedere	-0.6	600.0	11.7	0	0	8.8
Aiken City	-1.1	0.1	1.5	-0.2	3.8	-0.1
Aiken County	-3.2	0.1	-0.5	-0.4	-0.2	4.2
Edgefield County	15.5	-17.5	30.3	126.7	86.4	51.3
Augusta-Richmond County	9.9	2.9	-8.2	1.7	0.1	4.8
Columbia County	41.5	92.9	5.9	9.0	258.6	288.2
Augusta Aiken MSA	24.2	39.2	-0.8	5.8	12.3	43.4
South Carolina	19.6	17.3	9.5	16.0	22.1	44.2
Georgia	28.3	29.8	10.5	3.4	21.6	25.0
United States	15.9	18.9	5.4	9.5	10.5	7.6

Source: US Census

Table 3-7

Year Structure Built by Percent									
Community	1939 or Earlier	1940-59	1960's	1970's	1980's	1990-94	1995-98	1999-March 2000	1990's
North Augusta	5.7	25.3	15.0	19.9	17.8	7.6	6.4	2.3	16.3
Belvedere	0.9	19.7	3.1	28.6	11.8	5.2	3.0	0.0	8.2
Aiken City	6.6	24.4	10.6	13.9	21.5	13.4	7.0	2.7	23.1
Aiken County	5.6	18.8	13.3	18.6	19.8	12.0	9.1	2.8	23.9
Edgefield County	9.9	14.4	10.9	16.3	21.9	11.5	12.2	2.8	26.5
Augusta-Richmond County	7.6	20.5	16.7	20.8	19.0	7.8	6.0	1.5	15.3
Columbia County	1.1	3.7	7.9	19.3	30.7	17.1	14.8	5.4	37.3
Augusta-Aiken MSA	5.9	16.5	12.3	19.8	21.4	11.0	9.0	2.7	22.7
South Carolina	6.1	14.5	13.0	19.9	20.6	10.5	11.7	3.6	25.8
Georgia	5.9	13.0	12.7	18.6	22.0	11.3	12.6	4.0	27.9
United States	15.0	20.0	13.7	18.5	15.8	7.3	7.3	2.4	17.0

Source: US Census

Table 3-8

2000 Housing Condition by Percent				
Community	Lacking Complete Kitchen Facilities	Lacking Complete Plumbing Facilities	No Phone Available	No Vehicle Available
North Augusta	0.3	0.3	1.9	6.3
Belvedere	0.0	0.0	4.0	5.5
Aiken City	0.8	0.0	3.9	8.5
Aiken County	0.6	0.4	5.1	7.3
Edgefield County	0.8	0.8	4.0	8.8
Augusta-Richmond County	0.4	0.6	3.3	12.1
Columbia County	0.5	0.4	1.1	3.2
Aiken-Augusta MSA	0.5	0.5	3.7	9.0
South Carolina	0.5	0.6	4.2	9.0
Georgia	0.5	0.6	3.2	8.3
United States	1.3	1.2	2.4	7.6

Source: US Census

3.6 Housing Values and Rental Rates

The median housing value in the city increased 34% between 1990 and 2000 from \$67,700 to \$90,700. However, the median value of an owner occupied unit in North Augusta is 95.6% of the South Carolina median of \$94,900 and 75.8% the national median value of \$119,600. The average value of an owner occupied unit in the region was \$80,800 in 2000, 67.6% of the national median. The median cost of housing in both the city and the region grew by approximately a third in the decade between 1990 and 2000. The median cost of housing in the states of South Carolina, Georgia and the United States, however increased by more than half in the same period. Housing remains very affordable in both the CSRA and in North Augusta. The affordability reflects a number of influencing factors that include land values, labor costs, relative material costs and relative demand. Additionally, weak income growth in the Augusta metropolitan area will keep new housing prices low. However, the demand for new housing will decrease in respond to increasing interest rates and their effect on both the cost of new construction and mortgages. (Table 3-12)

Table 3-9

Housing Occupancy – Owner Occupied							
Community	Housing Units	1990		Housing Units	2000		Percent Change 1990-2000
		Owner Occupied Number	Percent		Owner Occupied Number	Percent	
North Augusta	6,810	3,974	58.4	7,923	4,794	60.5	20.6
Belvedere	2,393	1,525	63.7	2,430	1,663	68.4	9.0
Aiken City	8,543	5,128	60.0	11,373	6,804	59.8	32.7
Aiken County	49,266	33,491	68.0	61,987	42,036	67.8	25.5
Edgefield County	7,290	4,904	67.3	9,223	6,659	72.2	35.8
Augusta-Richmond County	77,288	38,762	50.2	82,312	42,840	52.0	10.5
Columbia County	23,745	17,322	73.0	33,321	25,557	76.7	47.5
Aiken-Augusta MSA	158,342	73,084	46.2	195,759	122,777	62.7	68.0
South Carolina	1,424,155	878,704	61.7	1,753,670	1,107,617	63.2	26.1
Georgia	2,638,418	1,536,759	58.2	3,281,737	2,029,154	61.8	32.0
United States	102,263,678	59,024,911	57.7	115,904,641	69,815,753	60.2	18.3

Source: US Census

Table 3-10**Housing Occupancy – Renter Occupied**

Community	Housing Units	1990		Housing Units	2000		Percent Change 1990-2000
		Renter Occupied Number	Percent		Renter Occupied Number	Percent	
North Augusta	6,810	2,300	33.8	7,923	2,536	32.0	10.3
Belvedere	2,393	500	20.9	2,430	582	24.0	16.4
Aiken City	8,543	2,621	30.7	11,373	3,483	30.6	32.9
Aiken County	49,266	11,392	23.1	61,987	13,551	21.9	19.0
Edgefield County	7,290	1,520	20.9	9,223	1,611	17.5	6.0
Augusta-Richmond County	77,288	29,913	38.7	82,312	31,080	37.8	3.9
Columbia County	23,745	4,519	19.0	33,321	5,563	16.7	23.1
Aiken-Augusta MSA	158,342	46,969	29.7	195,759	54,090	27.6	15.2
South Carolina	1,424,155	379,340	26.6	1,753,670	426,237	24.3	12.4
Georgia	2,638,418	829,856	31.5	3,281,737	977,215	29.8	17.8
United States	102,263,678	32,922,599	32.2	115,904,641	35,664,348	30.8	8.3

Source: US Census

Table 3-11

Community	Vacant Housing Units						
	Housing Units	1990		Housing Units	2000		Percent Change
		Number	Percent		Number	Percent	
North Augusta	6,810	536	7.9	7,923	593	7.5	10.6
Belvedere	2,393	148	6.2	2,430	185	7.6	25.0
Aiken City	8,543	794	9.3	11,373	1,086	9.5	36.8
Aiken County	49,266	4,383	8.9	61,987	6,400	10.3	46.0
Edgefield County	7,290	866	11.9	9,223	953	10.3	10.0
Augusta-Richmond County	77,288	8,613	11.1	82,312	8,392	10.2	-2.6
Columbia County	23,745	1,904	8.0	33,321	2,201	6.6	15.6
Aiken-Augusta MSA	158,342	15,673	9.9	195,759	18,892	9.7	20.5
South Carolina	1,424,155	166,111	11.7	1,753,670	219,816	12.5	32.3
Georgia	2,638,418	271,803	10.3	3,281,737	275,368	11.4	1.3
United States	102,263,678	10,316,268	10.1	115,904,641	10,424,540	9.0	1.0

Source: US Census

Table 3-12

Median Value of Owner Occupied Housing			
Community	1990	2000	Percent Change 1990-2000
North Augusta	\$67,700	\$90,700	34.0
Belvedere	\$55,900	\$68,500	22.5
Aiken City	\$82,900	\$110,600	33.4
Aiken County	\$61,700	\$87,600	42.0
Edgefield County	\$52,100	\$83,400	60.1
Augusta Richmond County	\$58,500	\$76,800	31.3
Columbia County	\$83,700	\$118,000	41.0
Aiken-Augusta MSA	\$63,600	\$80,800	27.0
South Carolina	\$61,100	\$94,900	55.3
Georgia	\$71,300	\$111,200	56.0
United States	\$79,100	\$119,600	51.2

Source: US Census

The median rent for a single family unit in North Augusta is \$525, the third highest in the region after the City of Aiken and Columbia County. The relationship between jurisdictions is essentially the same as the relative value of an owner occupied unit. However, the median rent for a housing unit in North Augusta is 102.9% of the South Carolina median. That figure reflects the greater percentage of renter occupied single-family detached units in North Augusta and the much smaller percentage of mobile homes. The median rent for a housing unit in North Augusta is 87.2 % of the national median, a figure that is closer to the median housing value relationship. (Table 3-13)

3.7 Long-term Implications

From 1988 through 1995 new housing production in the city was primarily single-family detached units. Since 1996 single-family attached duplex and townhome units were also added to the inventory. The absorption rate of new housing units through 1995 was approximately 90 units per year as shown in Table 2-21. At that time new subdivisions were adding approximately an additional 175 lots per year to the city's lot inventory as summarized in Table 2-20. A net gain of approximately 85 lots per year was added to the citywide inventory creating an excess inventory. The excess inventory lots were not developed for a variety of reasons. Some were priced at the very high end of the range in exclusive subdivisions. Others were located on very steep terrain, partially located on wetlands or flood plains or were perceived undesirable due to proximity to high traffic roads, commercial property or higher density housing. Since 1996, however, most of the excess inventory of lots has been absorbed. Between 2000 and 2004 the number of units developed exceeded the number of lots subdivided by a third.

Table 3-13

Median Gross Rent			
Community	1990	2000	Percent Change 1990-2000
North Augusta	\$422	\$525	24.4
Belvedere	\$394	\$511	29.7
Aiken City	\$418	\$546	30.6
Aiken County	\$375	\$475	26.7
Edgefield County	\$268	\$361	34.7
Augusta Richmond County	\$390	\$505	29.5
Columbia County	\$442	\$620	40.3
Aiken-Augusta MSA	\$387	\$500	29.2
South Carolina	\$376	\$510	35.6
Georgia	\$433	\$613	41.6
United States	\$447	\$602	34.7

Source: US Census

Large residential projects including the 200 acre Hammond's Ferry development on the Riverfront, the 1,500 acre Blanchard Park project and the 300 acre Sweetwater Junction project, both in the northeast portion of the city, and others could add several thousand new housing units. These projects will provide a variety of housing options including the typical contemporary sprawl subdivisions developed in recent years. Additionally, however, it is anticipated that a greater variety in housing types, styles, sizes and price ranges will be developed to further diversify the city's housing stock to satisfy the pent up demand reflected in the vacancy rate and to meet the increasingly diverse demands of home buyers.

Table 3-14

Real Estate Developed 2000-2004			
	Subdivisions	Lots	Acres
2000	4	116	46.29
2001	6	162	69.09
2002	2	85	29.96
2003	9	245	137.54
2004	7	195	68.26
Total	28	803	351.14

Source: North Augusta Department of Economic and Community Development

The cost effective and efficient management of local government services necessitates that the location of new housing development be coordinated with both capital and

operational expenditures. The City of North Augusta has clearly articulated a Growth Policy Statement (Code of Ordinances, Sections 2.15 through 2.16) and a Sewer Tap and Extension Fees Policy (Code of Ordinances, Section 14.44). Additionally, however, cost effective growth requires coordination between the provision of public safety services and facilities, parks and recreation services, and transportation services and roads. Coordinated investment in all of the different components is necessary to provide adequate public facilities to achieve the expected "quality of life" for community residents.

3.8 Potential Growth Locations

Several areas in and adjacent to the city are potentially suitable for additional residential development and are further detailed in the Land Use element, Chapter 9. Areas where infrastructure currently exists should be encouraged to develop first to fully capture a return on past public investments. Infill development, both on greenfield and redevelopment sites, should also be encouraged to fully utilize existing infrastructure. However, infill housing, whether on individual, previously platted lots or in new subdivisions, should be compatible with existing housing design and existing neighborhoods. Opportunities for mixed use development exist throughout the city and should also be encouraged.

Table 3-15

North Augusta Building Activity		
	Units	Value
1980	28	\$1,279,604
1981	76	\$1,806,776
1982	35	\$2,346,219
1983	196	\$5,373,854
1984	244	\$9,990,429
1985	199	\$6,915,342
1986	257	\$8,994,212
1987	71	\$4,235,893
1988	79	\$6,331,991
1989	76	\$7,082,121
1990	80	\$7,533,791
1991	78	\$8,541,335
1992	111	\$15,155,345
1993	104	\$9,454,987
1994	83	\$9,568,514
1995	74	\$6,565,562
1996	94	\$8,816,444
1997	117	\$10,593,241
1998	111	\$12,419,036
1999	150	\$18,616,576

Table 3-15, cont.

North Augusta Building Activity		
	Units	Value
2000	128	\$16,258,840
2001	190	\$22,153,768
2002	197	\$23,583,644
2003	239	\$29,942,380
2004	200	\$28,538,588
Total	3217	\$282,098,492

Source: North Augusta Department of Building Standards

3.9 Goals, Objectives, Policies and Strategies

- 3.9.1 Encourage residential infill and redevelopment in older and established neighborhoods.
- 3.9.2 Permit and encourage the development of higher density infill housing in established areas of the city in most future land use classifications and zoning districts.
- 3.9.3 Prepare and adopt infill housing design and development standards to require the compatibility of infill development with existing neighborhoods and address both the construction of new units on individual lots and new neighborhood projects adjacent to established neighborhoods. The standards should specifically deal with building size, relationship to the street, relationship to immediate neighbors, privacy and potential traffic conflicts. Standards for infill neighborhoods should provide for flexibility in lot sizes and street standards.
- 3.9.4 Encourage and require more compact development patterns and higher quality design and building materials to increase and maintain property values.
- 3.9.5 Permit and encourage a wider range of housing types, sizes and styles to provide increased housing choices and to increase home ownership.
- 3.9.6 Expand the definition and permissible size of accessory living units in residential areas of the city.
- 3.9.7 Encourage live-work units in both residential and commercial areas.

- 3.9.8 Permit and encourage neighborhood commercial uses to be located within and adjacent to residential neighborhoods to provide more options to residents, encourage pedestrian and bicycle travel and increase neighborhood vitality.
- 3.9.9 Support community based organizations, including Habitat for Humanity and similar organizations, to construct new and revitalize older housing units for home ownership.
- 3.9.10 Enhance code enforcement efforts related to property maintenance to prevent neighborhood deterioration.
- 3.9.11 Design and implement an effective and efficient program to eliminate vacant and unsafe structures in accordance with the requirements of the International Building Code and state law to reduce blighting influences and prepare land for new housing development.
- 3.9.12 Consider requirements for the inclusion of high density housing within and adjacent to large scale commercial shopping centers developments in conjunction with new development and center renovations.
- 3.9.13 Prepare and adopt flexible minimum housing design standards for new residential construction. Minimum standards will be designed to provide a variety of housing sizes, styles and price ranges and will be intended to maintain the quality of design and construction, add value to neighborhoods, define distinctive places, provide safe neighborhoods, enhance the public realm, and create sustainable neighborhoods that age well.
- 3.9.14 Adopt zoning regulations applicable to single family detached subdivisions that provide for a minimum building envelope in addition to minimum lot size and minimum setbacks.
- 3.9.15 Design and implement a community education program to inform home builders, developers and the home buying public of the city's housing choice and quality goals.

Chapter 4 – Economic Development

4.1 Introduction

Economic development in the future is critical to the continued prosperity and quality growth of the City of North Augusta. Job creation and investment in current and future industrial facilities will generate the income needed to maintain public and private services and provide for increased levels of service. Industrial investment will also generate additional development interest needed to provide a diversity of commercial and retail uses in North Augusta.

This chapter includes an inventory and assessment of the city's economic base, labor force characteristics and economic development opportunities and resources. The resulting profile can be used to identify economic strengths and weaknesses. It also allows the city to identify economic development needs and goals which can be translated into economic development initiatives, policies and implementation strategies.

4.2 Job Sectors

North Augusta is part of the Augusta-Aiken MSA that has approximately 200,000 non-farm people employed (Georgia Department of Labor, 2001 Annual Average). The metropolitan area (spanning five counties in the two states) had over 477,000 residents at the time of the 2000 Census. Major industries in the region include manufacturing, retail trade, professional and business services, educational and health services, and leisure and hospitality services. Government employment is approximately 19.5 % of the total with state and local government jobs averaging a total of 31,700. North Augusta has representation in all of the major categories of the job sectors. An overall MSA level perspective is provided to show the various employment opportunities available to North Augusta residents.

Principal components of the manufacturing sector include textiles and apparel, paper and allied products, chemicals, transportation equipment and services, stone, clay and glass products, food products, and furniture, lumber and wood products. The majority of North Augusta's manufacturing facilities are located in the North Augusta Industrial Park located at Revco Road and U.S. 1.

Retail trade establishments employ 24,000 MSA residents and tend to be concentrated in the numerous strip commercial centers, shopping malls and downtowns throughout the MSA. Grocery stores, drug stores, department stores, and general merchandise stores are examples of retail trade establishments. In 1997, the Census of Retail Trade reported that the MSA's 1,800 retail establishments exceeded \$3.8 billion in combined sales.

Professional and business service companies employ approximately 29,700 residents and are concentrated in the urbanized area of the MSA. Healthcare and social services employ approximately 18,900 residents and include area hospitals, clinics, nursing homes, social

service agencies, and the offices of doctors, dentists, and other health care professionals. Several practitioners are located in North Augusta along the major commercial corridors, Martintown Road, Knox Avenue and Georgia Avenue.

Leisure and hospitality establishments in the metropolitan area include such uses as restaurants, hotels, nightclubs, movie theaters and museums. With over 17,000 residents employed in this job sector, mainly concentrated in the downtowns and suburban shopping areas, the high level of employment indicates a strong tourist and convention business. A year-round cultural and special event calendar keeps a continual supply of outside income filtering into North Augusta and its neighboring communities.

Government is the final major employment sector in the metropolitan area, including North Augusta. Major employers of government-related in the area include Fort Gordon, the Savannah River Site, state universities and technical colleges, the Medical College of Georgia, local school systems, and the various levels of government. The City of North Augusta employs over 180 full-time and twenty part-time employees. (Table 4-1)

4.2.1 Military and Defense Installations

Fort Gordon is located in the southwest portion of Richmond County, Georgia and is home of the U.S. Army Signal Center, the world's largest training facility in communications and electronics. The military installation employs about 17,000 area residents, more than 10,000 of which live off the base. Counting the various indicators, the annual economic impact estimates exceed \$1 billion being on the regional economy. In addition to the Signal Center, the Dwight D. Eisenhower Army Medical Center provides primary health care to over 90,000 active and retired military personnel and their families. Although the facility is not as close to North Augusta as to other jurisdictions, a portion of the total employment at Fort Gordon resides in North Augusta. Fort Gordon will be evaluated in the fifth round of the Base Realignment and Closure process in 2005. The City of North Augusta is participating in a regional effort, the CSRA Alliance for Fort Gordon, to develop a strategic plan to retain and expand the military missions at the fort and to protect it from closure.

A second key federal government facility important to the MSA is the Savannah River Site (SRS). SRS is a key Department of Energy (DOE) nuclear installation. The nuclear facility was developed in the early 1950's to produce components used in nuclear weapons, primarily tritium and plutonium-239. The site is currently operated under contract by Westinghouse Savannah River Company. The site covers approximately 198,344 acres (310 square miles) encompassing parts of Aiken, Barnwell and Allendale counties in South Carolina.

Table 4-1

2000 Employment by Industry by Percent

	North Augusta	Belvedere	Aiken City	Aiken County	Edgefield County	Augusta- Richmond County	Columbia County	Augusta- Aiken MSA	South Carolina	Georgia	United States
Total employed civilian population 16 and over	8,390	2,563	11,083	63,756	9,596	78,906	43,090	204,279	1,824,700	3,839,756	129,721,512
Agriculture, forestry, fishing and hunting, and mining	0.679	2.145	0.748	1.64	2.667	0.38	0.77	1.092	1.139	1.385	1.87
Construction	4.672	10.339	5.314	8.29	7.357	6.037	7.029	7.254	8.253	7.935	6.78
Manufacturing	11.001	15.879	13.344	17.526	22.57	12.346	12.92	14.835	19.421	14.814	14.09
Wholesale Trade	2.491	2.731	1.398	2.19	2.699	2.718	2.71	2.551	3.315	3.855	3.59
Retail Trade	12.610	11.470	10.737	11.208	10.785	12.63	11.39	11.885	11.925	11.968	11.73
Transportation, warehousing and utilities	11.775	7.569	12.424	11.50	9.858	5.45	7.588	7.951	5.025	6.023	5.19
Information	1.907	0.780	1.515	1.276	0.729	2.37	2.79	1.999	2.112	3.528	3.08
Finance, insurance, real estate, rental and leasing	4.946	3.316	3.84	3.519	2.80	4.205	5.39	4.194	5.631	6.543	6.88
Professional, scientific, management, administrative and waste management services	8.379	5.657	10.592	7.927	5.33	7.251	8.97	7.630	6.878	9.438	9.29
Educational, health and social services	27.413	19.703	23.387	19.635	17.13	26.811	25.58	23.483	18.617	17.594	19.92
Arts, entertainment, recreation, accommodation and food services	6.686	7.569	8.589	7.03	6.659	9.427	5.66	7.622	8.280	7.147	7.87
Other services	4.636	7.101	3.00	4.134	6.02	4.525	4.24	4.435	4.701	4.735	4.87
Public Administration	2.80	5.735	5.097	4.103	5.377	5.839	4.926	5.063	4.695	5.029	4.78

Source: US Census

SRS no longer operates the site's five nuclear reactors and the site's primary mission today has shifted to waste management and environmental monitoring. Budget reductions over the years since the end of the Cold War in 1990 have resulted in downsizing at SRS that have affected the regional economy. Downsizing the workforce at SRS from a high of 25,180 employees in 1991 to 11,800 employees in 2002 has impacted not only the population of the area, but also the amount of income being distributed throughout the MSA.

In spite of the downsizing, SRS remains a significant employer and income generator. Annual expenditures remain in the range of \$1.4 billion to \$2.0 billion (1987-1999).

4.3 Employment

The labor force in the City of North Augusta during the past twenty years has increased slightly in terms of number of workers, even though the percentage of the population in the workforce has diminished. All of the metropolitan area showed a net decrease in the population remaining in the labor force. The percentage of the city population in the labor force decreased between 1990 and 2000 by 2.5%. The rate of increase in the labor force in the city between 1990 and 2000 was 12.6%, less than in all other jurisdictions in the metropolitan area except Richmond County. The Belvedere census tract showed a net decrease in labor force of 6.4%. The impacts of SRS downsizing and textile manufacturing moving out of the region have left segments of the population without readily available comparable jobs. Another potential factor is the age of the population. The baby boom generation, rapidly becoming empty-nesters, will soon reach retirement age. Both conditions have affected the number of employed individuals per household. What had been two income families are now living on a single income. All of the metropolitan area showed a net decrease in the population remaining in the labor force. The trend to a smaller percentage of the population in the labor force is consistent throughout the metropolitan area, in South Carolina, Georgia and in the country. The percent of the population of the City of North Augusta in the labor force, however, is not declining as quickly as most other jurisdictions in the CSRA and is still larger than most other jurisdictions in the area, the states of Georgia and South Carolina and the U.S. (Table 4-2)

4.4 Unemployment

The unemployment rate in the city remains lower than in other jurisdictions in the area with the exception of Columbia County. It is also lower than the rates in South Carolina and Georgia and the national rate. The low unemployment rate could indicate that the high levels of education in the city make the population more employable, even during economic downturns. (Table 4-3)

Table 4-2

Labor Force						
Community	Population 16 and Over		Percent Change	Percent In Labor Force		Percent Change
	1990	2000	1990-2000	1990	2000	1990-2000
North Augusta	11,808	13,295	12.6	68.2	66.5	-2.5
Belvedere	4,626	4,328	-6.4	69.3	63.2	-8.8
Aiken City	15,300	20,262	32.4	59.8	58.8	-1.7
Aiken County	91,237	109,551	20.1	64.3	62.0	-3.6
Edgefield County	13,657	19,342	41.6	64.8	53.0	-18.2
Augusta-Richmond County	143,643	152,037	5.8	65.7	62.3	-5.2
Columbia County	48,093	65,831	36.9	72.3	69.6	-3.7
Augusta-Aiken MSA	297,891	362,660	21.7	66.2	63.0	-3.2
South Carolina	2,669,383	3,114,016	16.7	66.0	63.4	-3.9
Georgia	4,938,381	6,250,687	26.6	67.9	66.1	-2.7
United States	191,829,271	217,168,077	13.2	65.3	63.9	-2.1

Source: US Census

Table 4-3

Unemployment						
Community	Population 16 and Over			Unemployed by Percent		
	1990	2000	Percent Change	1990	2000	Percent Change
North Augusta	11,808	13,295	12.6	2.5	2.8	12.0
Belvedere	4,626	4,328	-6.4	3.2	3.8	18.8
Aiken City	15,300	20,262	32.4	3.0	3.9	30.0
Aiken County	91,237	109,551	20.1	3.5	3.6	2.9
Edgefield County	13,657	19,342	41.6	3.7	3.4	-8.1
Augusta-Richmond County	143,643	152,037	5.8	3.9	5.3	35.9
Columbia County	48,093	65,831	36.9	2.5	2.5	0.0
Augusta-Aiken MSA	297,891	362,660	21.7	3.5	4.1	40.6
South Carolina	2,669,383	3,114,016	16.7	3.5	3.6	2.9
Georgia	4,938,381	6,250,687	26.6	3.8	3.6	-5.3
United States	191,829,271	217,168,077	13.2	4.1	3.7	-9.8

Source: US Census

4.5 Major Employers

Residents of North Augusta are employed throughout the region. The CSRA enjoys a relatively diversified economy with job opportunities in a wide range of job sectors. Regionally, employment is highest in the service, retail trade and manufacturing sectors. Manufacturing facilities in the city and within commuting distance produce chemicals, textiles, paper products, transportation equipment and food. Retail outlets are located

throughout the region. Until recently North Augusta did not offer a wide range of retail goods and services to community residents. Major service sector employers in the city and within commuting distance include health care and related facilities, educational institutions and personal and business service establishments. (Tables 4-4 through 4-7)

Table 4-4

Largest Non Manufacturers in Metropolitan Augusta (GA)		
Company	Product or Service	Employees
U. S. Army Signal Center & Ft. Gordon	Military	15,358
Medical College of Georgia	Health Care/Education	5,994
Richmond County School System	Education	4,418
University Hospital	Health Care	2,868
Augusta-Richmond County	Municipal Services	2,600
Columbia County, GA School System	Education	2,265
V.A. Medical Center	Health Care	2,226
Gracewood State School & Hospital	Health Care	1,600
FutureCall Telemarketing	Call Center	1,200
Sitel	Call Center	1,100
St. Joseph Hospital	Health Care	1,025
Plant Vogtle	Electricity	1,000
Doctors Hospital	Health Care	875
Morris Communications Corp.	Media	800
Burke County, GA School System	Education	650
Bell South	Telecommunications	525
Georgia Regional Hospital	Health Care	539
U.S. Postal Service	Post Office	494
Augusta State University	Education	490
Wal-Mart Supercenter	Department Store	459
AT & T Information Service	Call Center	455
Johnson Control Service	Military Contract Services	450
Electrolux Home Products	Headquarters	325
Walton Rehabilitation Hospital	Hospital	325
Wackenhut Services Inc.	Security	302

Source: Augusta Metro Chamber of Commerce, 2003; The above data includes major non-manufacturing employers in Richmond, Columbia and Burke counties in Georgia. Data on major non-manufacturing employers in Aiken and Edgefield counties in South Carolina is not currently available.

Table 4-5

Major Manufacturers in North Augusta		
Company	Product or Service	Employees
TTX—Hamburg Division	Rebuilt Railway Cars	512
Cytec Surface Specialties	Specialty Chemicals	131
Halocarbon Products Corporation	Specialty Fluoro Chemicals	120

Source: Economic Development Partnership, Economic Profile 2002-2003

Table 4-6

Major Manufacturers in Aiken County (SC)

Company	Product or Service	Employees
Westinghouse Savannah River Company	Nuclear Defense Materials	12,180
Avondale Mills Inc. - Graniteville Division	Textiles	2,920
Kimberly-Clark Corporation	Consumer Paper Products	1,200
Advanced Glass Fiber Yarn	Glass Fiber	1,125
Bridgestone-Firestone	Car and Truck Tires	879
Beaulieu of America, Inc.	Carpet Yarns	565
Mount Vernon Mills, Inc. - Riegel	Infant Blankets, Crib Items, Diapers	543

Source: Economic Development Partnership, Economic Profile 2002-2003

Table 4-7

Major Manufacturers in Richmond, Columbia and Burke Counties (GA)

Company	Product or Service	Employees
E-Z GO/Textron	Golf Cars/Utility Vehicles	1,430
Club Car	Golf Cars/Utility Vehicles	1,110
International Paper Company	Bleached Paperboard	935
Thermal Ceramics	Ceramic Fiber	664
Carole Fabrics, Inc.	Custom Draperies	650
Murray Biscuit	Cookies & Crackers	624
Kendall Company	Disposable Medical Supplies	569
Quebecor World	Catalogs	520
Kennametal IPG	Metal Cutting Tools	510
Shapiro Packing Company, Inc.	Beef Products	500

Source: Metro Augusta Chamber of Commerce, 2003

Table 4-8

Per Capita Income			
Community	1990*	2000*	Percent Change
North Augusta	\$16,134	\$21,391	32.6
Belvedere	\$12,993	\$16,336	25.7
Aiken City	\$15,619	\$23,172	48.4
Aiken County	\$13,127	\$18,772	43.0
Edgefield County	\$10,651	\$15,415	44.7
Augusta-Richmond County	\$11,799	\$17,088	44.8
Columbia County	\$15,372	\$23,496	52.8
Augusta-Aiken MSA	\$12,721	\$18,744	47.3
South Carolina	\$11,897	\$18,795	58.0
Georgia	\$13,631	\$21,154	55.2
United States	\$14,420	\$21,587	49.7

Source: US Census; * In 1989 and 1999 dollars.

Table 4-9

Median Household Income			
Community	1990*	2000*	Percent Change
North Augusta	\$32,877	\$41,083	25.0
Belvedere	\$33,878	\$36,045	6.4
Aiken City	\$33,273	\$44,172	32.8
Aiken County	\$29,994	\$37,889	26.3
Edgefield County	\$23,021	\$35,146	52.7
Augusta-Richmond County	\$25,265	\$33,086	31.0
Columbia County	\$40,122	\$55,682	38.8
Augusta-Aiken MSA	\$28,490	\$38,080	33.7
South Carolina	\$26,256	\$37,082	41.2
Georgia	\$29,021	\$42,433	46.2
United States	\$30,056	\$41,994	39.7

Source: US Census; * In 1989 and 1999 dollars.

Table 4-10

Median Family Income			
Community	1990*	2000*	Percent Change
North Augusta	\$38,190	\$53,172	39.2
Belvedere	\$36,889	\$40,264	9.1
Aiken City	\$40,370	\$56,033	38.8
Aiken County	\$35,307	\$45,769	29.6
Edgefield County	\$28,613	\$41,810	46.1
Augusta-Richmond County	\$29,607	\$38,509	30.1
Columbia County	\$42,924	\$61,232	42.7
Augusta-Aiken MSA	\$33,323	\$45,081	35.3
South Carolina	\$30,797	\$44,227	43.6
Georgia	\$33,529	\$49,280	47.0
United States	\$35,225	\$50,046	42.1

Source: US Census; * In 1989 and 1999 dollars.

The following tables present market area data for 1, 5, 10 and 20 mile radii from the signalized intersection of West Avenue and Martintown Road near the geographic center of the city.

Table 4-11

1 Mile Ring			
	2000 Census	2002 Estimate	2007 Projection
Population	7,298	7,336	7,479
Median Age	37.7	38.3	39.2
Total Households	3,164	3,213	3,361
Average Household Size	2.29	2.27	2.21
Housing Units	3,387	3,440	3,599
Per Capita Income*	\$15,883	\$24,557	\$28,394
Average Household Income*	\$38,317	\$53,264	\$59,108
Median Household Income*	\$33,295	\$45,093	\$49,250
Aggregate Income (\$mil)*	\$112	\$171	\$198

Source: Claritas Inc.; *Based on 1999 figures

Table 4-12

5 Mile Ring			
	2000 Census	2002 Estimate	2007 Projection
Population	99,663	99,742	100,313
Median Age	35.2	35.4	36.1
Total Households	41,644	41,940	42,892
Average Household Size	2.32	2.31	2.27
Housing Units	46,684	46,992	48,011
Per Capita Income*	\$12,822	\$20,942	\$24,870
Average Household Income*	\$31,379	\$48,378	\$56,367
Median Household Income*	\$23,296	\$35,530	\$40,364
Aggregate Income (\$mil)*	\$1,274	\$2,028	\$2,417

*Source: Claritas Inc.; *Based on 1999 figures*

Table 4-13

10 Mile Ring			
	2000 Census	2002 Estimate	2007 Projection
Population	252,061	254,454	261,297
Median Age	34.9	35.2	35.9
Total Households	97,478	99,015	103,337
Average Household Size	2.52	2.50	2.47
Housing Units	107,646	109,295	113,949
Per Capita Income*	\$13,136	\$21,031	\$24,825
Average Household Income*	\$34,695	\$52,015	\$60,011
Median Household Income*	\$27,480	\$40,471	\$45,204
Aggregate Income (\$mil)*	\$3,082	\$5,150	\$6,201

*Source: Claritas Inc.; *Based on 1999 figures*

Table 4-14

20 Mile Ring			
	2000 Census	2002 Estimate	2007 Projection
Population	422,763	430,318	450,571
Median Age	34.4	34.7	35.3
Total Households	156,415	160,108	170,096
Average Household Size	2.60	2.59	2.55
Housing Units	172,647	176,660	187,567
Per Capita Income*	\$12,929	\$20,264	\$23,683
Average Household Income*	\$35,298	\$52,028	\$59,673
Median Household Income*	\$28,975	\$41,686	\$46,447
Aggregate Income (\$mil)*	\$4,674	\$8,330	\$10,150

*Source: Claritas Inc.; *Based on 1999 figures*

4.6 Recent Investment

Since 1990 business investment in North Augusta has been greatest in the retail and personal service sectors. A majority of new job generating development in recent years has occurred in the Knox Avenue/Edgefield Road corridor and at the Business and Technology Center on East Martintown Road. The forty-five acre Shoppes at North Augusta on Knox Avenue is the most significant single example. Other new developments on Martintown Road, Knox Avenue, US 1, and US 25 have also contributed. The road improvements to Knox Avenue completed in 2001 have facilitated a surge of new retail development in the corridor between Martintown Road and the Georgia Avenue intersection. A second forty-five acre retail development on Knox Avenue, to be anchored by a Lowe's Home Improvement outlet, will be developed in 2005 directly across the street from the Shoppes at North Augusta. However, the city remains underserved in the areas of retail and entertainment when compared to other jurisdictions in the metropolitan area. Additionally, the city's potential for tourism is underdeveloped. City recreation events, golf courses, the South Carolina Heritage Corridor, existing bed and breakfast facilities and other tourism generating assets are not promoted as effectively as they could be.

Since the adoption of the Master Plan for the North Augusta Riverfront Redevelopment District in 1996 the city has worked consistently to support redevelopment in the downtown area and on the riverfront. A tax increment district was created based on the adopted redevelopment plan. The financing of projects pursuant to the creation of the district has been slow but future TIF revenue has been earmarked for a conference center in conjunction with a riverfront or downtown hotel. The construction of Riverside Boulevard by the city in 1997 and 1998 made the River Golf Club and RiverClub housing development possible. The streetscape of Georgia Avenue in 1999 and 2000 substantially improved the character of the downtown area. A storefront renovation incentive grant program for structures in the Georgia Avenue retail core was created and offered in 2003. However, due to either the lack of renovation investment demand or the limited nature of the program, or both, only one grant was made and only one storefront was renovated using the program.

In 2000 the city commissioned a financial feasibility study to determine if and how the 200 acre 'Central Riverfront Area' upstream of the Georgia Avenue/13th Street Bridge could be developed. The conclusion of the 'Hunter Study' was that a relatively dense traditional neighborhood development with some commercial and civic uses could be feasibly developed. The city acquired the 12 parcels comprising the 200 acres and entered into a development agreement with the North Augusta Riverfront Company for the development of the project. Federal and state funding was secured to extend the established downtown road system to provide access to the property. The first phase of housing development was initiated in early 2005. The road construction will commence in late 2005 or early 2006. Upon completion it is estimated that the project will result in a \$500 million total investment resulting in a substantial increase in the city's tax base.

Since 1997 the city has attempted to attract a national hotel brand and operator to develop a mid-range, limited service property in the city. Ideally, a hotel of approximately 100 rooms would be constructed in the downtown area or on the riverfront. The city has been prepared to enter into a limited public-private partnership. The city's role would be the development of a conference facility. In early 2004 the Department of Economic and Community Development commissioned a hotel market study by Cushman Wakefield. The results of the study indicated that the lodging market was overdeveloped in the CSRA and that it would very difficult in the near future to attract a national brand hotel to the city in a location other than adjacent to I-20. The market in the metropolitan area for a lodging and conference/convention facility will remain soft in the near future. However, the city plans to continue to work with interested hotel developers and North Augusta 2000 to determine if a financially feasible project can be structured in the town center area.

Table 4-15

**North Augusta Commercial Construction Activity
\$200,000 and Higher**

Date	Project	Description	Value
2/12/97	Pump-N-Shop	Convenience/Fuel Store	\$ 496,000
4/11/97	Rowland Funeral Home	Funeral Home	\$ 428,900
10/10/97	Rhodes Center	3-Unit Shopping Center	\$ 222,000
12/23/97	American Bingo	Remodel Existing Commercial	\$ 250,000
2/18/98	Hammond House	Assisted Living Facility	\$ 2,000,000
2/17/98	Sterling House of North Augusta	Assisted Living Facility	\$ 1,600,000
2/19/98	City of North Augusta	Recycling Center	\$ 2,204,026
4/15/98	Office Depot	Remodel Existing Commercial	\$ 500,000
7/1/98	Victory Baptist Church	Addition to Church	\$ 300,000
9/15/98	Bi-Lo Inc.	Interior Renovations	\$ 2,061,000
11/24/98	Deborah A. Ashcraft, DMD	Pediatric Dentistry Office	\$ 310,000
11/23/98	Hippodrome Horse Complex	Arena Addition	\$ 706,999
11/5/98	Old America Store	Remodel Existing Commercial	\$ 200,000
2/22/99	Dollar General	Department Store	\$ 363,000
5/24/99	Family Physicians of North Augusta	Physician's Office	\$ 360,000
5/20/99	North Augusta Bible Chapel	Church	\$ 325,000
10/1/99	McDonald's	Restaurant	\$ 616,000
1/25/00	City of North Augusta	Lion's Field Renovations	\$ 250,129
2/21/00	River Golf Club	Clubhouse	\$ 530,000
6/22/00	BellSouth	Interior Renovations	\$ 220,000
7/31/00	Matt Nieman Insurance Agency	Office Building	\$ 200,000
7/31/00	Martintown Professional Office Park	Office Building	\$ 200,000
7/5/00	Burger King	Interior Renovations	\$ 250,000
10/19/00	Goodwill Industries	Remodel Existing Commercial	\$ 204,000
2/6/01	Fresenius Medical Care	Dialysis Center	\$ 389,000

Table 4-15, cont.

**North Augusta Commercial Construction Activity
\$200,000 and Higher**

Date	Project	Description	Value
3/8/01	Sonic Drive-In	Fast Food Restaurant	\$ 300,000
3/19/01	Ruby Tuesday	Restaurant	\$ 504,000
5/1/01	First Baptist Church of North Augusta	Renovation to Administrative Offices	\$ 270,000
4/30/02	Brantley Chiropractic	Chiropractic Office	\$ 259,209
6/5/02	Pump N Shop	Convenience/Fuel Store	\$ 774,082
7/17/02	Wal-Mart Super Center	Department/Grocery Store	\$ 5,600,000
10/24/02	Shoppes at North Augusta	15 Unit Shopping Center	\$ 1,400,000
11/5/02	Market Plaza	3 Unit Addition to Shopping Center	\$ 245,000
12/6/02	Owings-Sam Dentists	Dentistry Office	\$ 700,000
1/22/03	Murphy Oil	Gas Station	\$ 224,695
1/27/03	CVS Pharmacy	Pharmacy/Department Store	\$ 947,054
1/31/03	Knox Plaza	8 Unit Shopping Center	\$ 700,000
2/12/03	Zaxby's	Restaurant	\$ 579,000
4/3/03	T. M. Capital	Real Estate Investment Office	\$ 249,000
4/21/03	Chick-fil-A	Restaurant	\$ 686,888
5/27/03	SRP Credit Union	Drive Thru Banking Center	\$ 320,000
6/6/03	Fire Mountain Grill	Restaurant	\$ 950,000
8/26/03	Tire Kingdom	Tire Store/Automotive Garage	\$ 585,827
9/26/03	Grace Fellowship	Church	\$ 925,000
10/6/03	North Augusta Health Center	Medical Office	\$ 1,070,000
11/13/03	First Citizen's Bank	Bank	\$ 858,711
2/3/04	North Augusta Bible Chapel	Church Addition	\$ 290,000
2/6/04	Spring Grove Baptist Church	Church	\$ 226,000
3/18/04	Victory Baptist Church	Church	\$ 4,498,082
6/29/04	Jiffy Lube	Automotive Garage	\$ 227,767
7/23/04	Ash Centre	8 Unit Shopping Center	\$ 325,000
9/13/04	Grace United Methodist Church	Fellowship Hall	\$ 5,158,000

Source: North Augusta Building Standards

Industrial investment has been limited. The North Augusta Industrial Park has a considerable amount of vacant land remaining. Most of the vacant land, however, is owned by existing businesses and is being held in reserve for future expansion. Therefore, no land in the industrial park is currently available. If additional industrial investment at any significant scale is to occur within the city, additional industrial land or a second industrial park will be necessary. Additional industrial land is necessary to attract new industries and provide additional jobs within the city limits.

Industrial investment, primarily for the upgrade or expansion of existing facilities, has occurred within the city on a limited basis. Industrial investment and expansion has occurred to a greater degree outside the city on both sides of the Savannah River resulting

in improved employment opportunities for North Augusta residents. The Economic Development Partnership for Aiken and Edgefield counties has done a commendable job in supporting industry expansion and attracting new industries to the area. Aiken County has repeatedly been one of the largest new job producing counties in South Carolina for several years. The area economy will gradually improve paralleling the national economy but growth will be modest.

A significant public investment in economic development in the area since 2001 has been associated with I-520, the Palmetto Parkway. Phase 1 from Laney Walker Boulevard in Augusta to US 1 in North Augusta, 2.5 miles, was completed and opened in June 2004. The final phase from US 1 to I-20, 5.5 miles, is partially funded and is expected to be completed between 2008 and 2011. The completion of the Palmetto Parkway will generate land development pressures and opportunities adjacent to the three South Carolina interchanges. An interchange on the Blanchard Tract south of Ascauga Lake Road will serve a planned commercial and business park of approximately 300 acres. The interchange location will facilitate the rapid build out of the park when the Palmetto Parkway is complete.

Table 4-16

**North Augusta Industrial Construction Activity
\$200,000 and Higher**

Date	Project	Description	Value
2/19/98	City of North Augusta	Recycling Center	\$ 2,204,026
6/24/98	Surface Specialties	New Office/Locker Room	\$ 340,000
8/13/98	Surface Specialties	Storage Tank Farm	\$ 415,497
8/7/98	Surface Specialties	Process Building	\$ 2,408,000
9/3/98	Surface Specialties	Powders Unit Extension	\$ 4,858,685
2/12/99	Halocarbon Products Corporation	Office Space Addition	\$ 500,875
8/5/99	City of North Augusta	Water Treatment Plant Expansion	\$ 6,920,000
1/17/00	CVS/Pharmacy Distribution Center	Renovations	\$ 290,125
1/10/01	Surface Specialties	Administrative Building - Office	\$ 270,000
1/10/01	Surface Specialties	PEA Facility Addition	\$ 300,000
3/15/01	Halocarbon Products Corporation	Process Waste Facility	\$ 266,000
11/19/01	City of North Augusta	Booster Pump Station	\$ 425,000
11/26/01	Halocarbon Products Corporation	Semi Works Plant	\$ 1,518,000
2/7/02	CVS Pharmacy Distribution Center	Conveyor Belt System	\$ 5,198,443
3/20/02	Surface Specialties	Bio Products Plant	\$ 3,198,000
1/6/04	Shealy Electrical Wholesalers	Electrical Supply	\$ 618,835

Source: North Augusta Building Standards

The City of North Augusta should continue to enhance and expand its economic development programs. Through public-private partnership such as North Augusta 2000, the city should continually evaluate the various economic programs and incentives to recruit new-targeted businesses and industry, attract new high skilled residents and high

potential retirees to the area. High quality development along the riverfront, prudent expansion of the city's corporate limits and establishing strategic alliances with governmental agencies where there is a common interest can help attract additional development to the city.

4.7 Goals, Objectives, Policies and Strategies

The city's economic development program is designed to create a full service community that provides high quality opportunities and choices to the citizens of North Augusta in the areas of jobs, housing, professional services, entertainment and retail goods. Historically, the economy of the North Augusta area was dependent upon the Savannah River, primarily for transportation. The future of the city will also be significantly affected by the river as a cultural and recreational amenity. Opportunities and choices include:

1. Quality jobs to improve family incomes and reduce the need to commute.
2. High quality retail goods, personal and business services and entertainment activities to serve the needs of residents and retain consumer spending and business activity in the community.
3. More choices in quality housing types, styles, sizes and price range to serve the needs of a wider range of residents.
4. Expanded utilization of the Savannah River for low impact and environmentally sensitive recreational, commercial and cultural uses.
 - 4.7.1 Encourage and attract new retail uses to serve existing and new residents of the city. Desirable new retail uses include a home improvement outlet, sit down restaurants, a major bookstore, an electronic and appliance outlet, and a movie theater complex.
 - 4.7.2 Research and develop programs to prevent or avoid the 'big box vacancy' problem in current occupied locations and to create adaptive reuses of vacant big boxes when they occur.
 - 4.7.3 Continue to work with Aiken County, the South Carolina Department of Transportation, and the South Carolina Transportation Infrastructure Bank to complete the Palmetto Parkway (I-520) in Aiken County.
 - 4.7.4 To increase employment levels in the city, expand the scope, size and uses of permissible home occupations and provide for acceptable live-work units in appropriate areas of the community.
 - 4.7.5 Facilitate the development of a small-scale conference center in conjunction with a privately owned and operated hotel in the downtown area or on the riverfront.

- 4.7.6 Cooperate with the North Augusta Chamber of Commerce, North Augusta 2000 and other area organizations to develop programs to increase the awareness of North Augusta opportunities and generally improve both the internal and external image of the community.
- 4.7.7 Cooperate with the North Augusta Chamber of Commerce, North Augusta 2000 and other area organizations to develop programs to improve tourism in the city.
- 4.7.8 Cooperate with the North Augusta Chamber of Commerce, North Augusta 2000 and other area organizations to develop programs to improve the downtown area for businesses and residents.
- 4.7.9 Cooperate with prospective industrial developers and facilitate the development of a business/industrial park of approximately 300 acres on the Blanchard Park property or another appropriate location near I-20 or I-520.
- 4.7.10 Encourage and assist property owners and prospective developers in the appropriate redevelopment of the downtown area and riverfront in accordance with the Master Plan for the North Augusta Riverfront Redevelopment District. Such redevelopment should be designed at a pedestrian scale, optimize pedestrian connectivity, maintain a high level of design quality, support a high level of quality in the public realm, and minimize reliance on the automobile for transportation within the downtown.
- 4.7.11 Develop a program to encourage and assist private reinvestment and redevelopment in the downtown area.
- 4.7.12 Encourage regional commercial development (those uses and services with a market area substantially larger than the city limits) to locate adjacent to interstate interchanges.
- 4.7.13 Encourage and assist the owners and managers of older shopping centers to renovate, improve and expand the retail mix, provide a mix or both residential and commercial uses where appropriate, increase intensity, create outparcels for additional tenants, establish pedestrian and vehicular connectivity with neighboring commercial and residential areas, and add landscaping and pedestrian amenities.
- 4.7.14 Encourage and support the increased utilization of the Savannah River for commercial and recreational transportation uses including but not limited to canoeing and kayaking, boat rentals, water taxi services, tourist cruises and others.

Chapter 5 – Transportation

5.1 Introduction

Transportation facilities historically have had a substantial effect on the development of North Augusta and the surrounding area. From periods prior to the European settlement of this country to the present, the availability of roads, railroads, waterways and air service have all influenced the timing, location and extent of development. This chapter includes an inventory and assessment of transportation facilities and services in North Augusta. Transportation facilities include roads, sidewalks, bikeways and railroad lines. Transportation services include public transit.

5.2 Roadway Network

A street network that includes two interstate highways, two federal highways, several state primary routes, numerous state secondary roads and a substantial mileage of city streets serve North Augusta. Streets have varying functions and the street network is generally divided into four categories: freeways, arterials, collectors and local streets. Traditional design standards vary from one functional class to another. For example, an arterial road has more travel lanes, a higher operating speed and fewer curb cuts than a local street.

There are approximately 120 miles of roads within the City of North Augusta. Approximately 75 percent of those miles are designated as state maintained roadways. The remaining 25 percent of the roads are split between roads deeded to the city (20%), public streets not formally deeded to the city (3%), and private streets (2%). In the future most new roads built within the city will be city owned and maintained.

5.3 Functional Classification System

Transportation engineers and the Federal Highway Administration (FHWA) classify roads based on the role they play in the roadway network, including the type and volume of traffic they carry. The functional classification of a road segment may change over time as the role it plays changes. Roles change as traffic generating land development in an area occurs and as roads are widened or otherwise improved. The functional classification of a road can determine the type and level of federal funding that is available to fund improvements. The basic characteristics of the functional classification system are:

5.3.1 Freeways

Freeways are limited-access multi-lane divided roadways carrying high-speed traffic. Two freeways, Interstate 20 and Interstate 520, the Palmetto Parkway, serve North Augusta.

5.3.2 Arterials

Arterial roads are designed to move large volumes of traffic through and across urban areas and collect and distribute traffic to and from smaller streets. Arterials in North Augusta include Georgia Avenue, Knox Avenue, Martintown Road, Atomic Road and Five Notch Road.

The FHWA highway functional classification system splits arterial roads into two sub-groups, major and minor. Major arterials, also known as principal arterials, move larger volumes of traffic over long distances at high speeds. Major arterials in North Augusta include Georgia Avenue, Knox Avenue and Martintown Road.

Minor arterials serve trips of moderate length and slower speeds than major arterials. Traffic volumes are lower and cross streets and driveways are spaced closer together than on major arterials. Minor arterials include Five Notch Road and Edgefield Road.

5.3.3 Collectors

The primary function of collector roads is to move traffic from local streets to arterials and freeways. Collectors also provide access to some traffic generators including shopping centers, schools and recreation facilities. Traffic volumes and speeds tend to be lower than on arterials under the FHWA functional classification system. Collectors in North Augusta include Buena Vista Avenue, West Avenue, Carolina Avenue, Bolin and Pisgah Roads, Knobcone Avenue, Bergen and Austin Graybill Roads, Gregory Lake Road, Walnut Lane and others.

5.3.4 Local Roads

The primary function of local roads is to provide access to adjoining property for both vehicles and pedestrians. Generally local roads are two lane facilities on a narrower right of way to carry low traffic volumes and have frequent curb cuts. All roads not classified as collectors, arterials or freeways are considered local roads. Many of North Augusta's local roads are the South Carolina state secondary road system. Some of the state secondary roads are also identified on the FHWA functional classification system and are therefore eligible for federal funding.

5.4 Functional Classification Plan

The South Carolina Department of Transportation (SCDOT) updates the functional classification plan for urbanized areas in the state every 10 years, generally in the third year following the census. The functional classification plan for roads in North Augusta was updated in 2003 and is shown on Map 5-1. Generally, roads classified as freeways, arterials and collectors whether on the state system or the local system are eligible for

federal funding under the Surface Transportation Program, the major source of revenues for highway construction.

5.5 Rail Transportation

Passenger rail service is not available in the vicinity of North Augusta at this time. Freight service is provided to the area by two railroads, Norfolk Southern and CSX Transportation, Inc. The Norfolk Southern main line tracks enter the city from the north across SC 125, Atomic Road east of US 1 and the North Augusta Industrial Park. The line turns west below the industrial park, passes under US 1 and then crosses the Savannah River into Augusta at 6th Street. The CSX main line traverses Augusta, Georgia, in an east west direction and connects to Spartanburg, Savannah and Atlanta.

5.6 Air Transportation

Two airports serve the Augusta metropolitan area, Augusta Regional Airport at Bush Field and Daniel Field, both in Augusta. Commercial carriers including US Airways Express and Atlantic Southeast Airlines operate from Augusta Regional Airport, approximately 8 miles from downtown North Augusta. Service is provided to Atlanta's Hartsfield International and Charlotte International Airports. Daniel Field is a general aviation facility located in the center of the City of Augusta. The Columbia Airport, located approximately 65 miles east of North Augusta, is served by more carriers on a more frequent schedule than Augusta Regional and airfares are often less expensive from Columbia than from Augusta. As a result, the Columbia Airport is utilized by a substantial number of North Augusta air travelers.

5.7 Bicycle and Pedestrian Facilities

Bicycle and pedestrian facilities are important alternative modes of transportation in a community. Bicyclists use the road network on a regular basis and currently there are a number but an inadequate amount of designated bike lanes, routes or bikeways to provide an adequate bicycle circulation system in the city. Off-road facilities used by cyclists include the North Augusta Greenway and various extensions and connectors to the Greenway. A relatively extensive network of sidewalks is present within the older areas of the city, but there are very few in newer neighborhoods and commercial centers. Sidewalks are located along some sections of arterial and collector roads, but do not complete a network that pedestrians can utilize. Sidewalks are noticeably absent in the vicinity of public schools. Where sidewalks are not present, especially on local and neighborhood streets, pedestrians generally walk in the roadway.

In 1988, the city purchased the abandoned Norfolk Southern Railroad right of way to create the city's first linear park of approximately 64 acres. The North Augusta Greenway Park, known to most citizens as the Greenway, was named after former Mayor Thomas W. Greene (1985-1997). It is recognized regionally as a major amenity for both the city and the region and is a positive example of an alternative mode of

transportation. The Greenway is a paved recreational trail that follows the railroad right of way. Phase 1 of the Greenway, 3.3 miles, runs from Georgia Avenue to Martintown Road. Phase 2, another 1.5 miles, extends the Greenway to its Pisgah Road. In 1999, with grants from the South Carolina Department of Parks, Recreation and Tourism and SCDOT, the city constructed Phase 3, a pedestrian bridge over Martintown Road connecting Phases 1 and 2. Phase 4 of the Greenway was completed in 2001 adding approximately 0.5 miles from Georgia Avenue to the clubhouse at The River Golf Club. Future phases will extend the trail another 2.7 miles across US 1 and I-520 to Horse Creek. A major addition to the Greenway system is being designed in conjunction with phase 2 of the Palmetto Parkway. A multi-purpose trail of approximately 5 miles in length will be constructed within the I-520 right of way on the west side of the alignment. The trail will extend from Atomic road (SC 125) on the south to Ascauga Lake Road on the north. It will provide opportunities for connections to the planned Greenway system at Ascauga Lake Road, Belvedere-Clearwater Road, US 25, Bradleyville Road, Old Aiken Highway and Atomic Road.

Greenway extensions are major tributaries to the main Greenway trail. Extensions will be developed to tie substantial pedestrian and bicycle traffic generators to the Greenway. Many of the Greenway extensions will tie existing neighborhoods and parks that include their own internal pedestrian circulation systems to the citywide system. Greenway connectors are shorter and generally narrower segments of trail that tie existing neighborhoods to the Greenway trail. Both Greenway extensions and Greenway connectors will utilize drainage ways (including the Boeckh ravine system) and open space either unsuitable for unavailable for development. The Georgia Power and South Carolina Electric & Gas power line easements that extend through the city parallel to the river are appropriate locations for Greenway extensions. Open space and detention areas within neighborhoods are appropriate for the development of Greenway connectors.

Over the last several years the Planning Commission and City Council have emphasized the need for sidewalk and Greenway connector construction in all new developments, both residential and commercial. Sidewalks and Greenway connections are being required in those projects. Significant examples include The Village at Riverview and Bergen Village townhouse developments and the Shoppes at North Augusta and River Commons commercial developments.

The city has prepared a master bicycle and pedestrian development plan. It is shown on Map 5-2. The plan identifies locations for future extensions of the Greenway Corridor, Greenway extensions and connectors, multi-purpose trails adjacent to state highways, share the road bicycle lanes and sidewalks. The city's master plan has been incorporated into the ARTS Regional Bicycle and Pedestrian Plan adopted by the ARTS Policy Committee in 2004.

5.8 Public Transit

Aiken County's "Best Friend Express" provides daily bus service between and within Aiken and North Augusta. Service is provided by a fleet of relatively small, 20-passenger buses. Patrons of the service are primarily elderly, handicapped and lower income riders that do not have other or personal means of transportation. Ridership on the Best Friend Express is increasing annually at a modest rate.

In 2002 for the first time the Aiken Transit system and the Augusta Public Transit system implemented an interconnection in North Augusta. A transfer location at the intersection of Bluff and Georgia Avenues provides a means for Aiken Transit riders to travel into Augusta without the need to walk across the Savannah River Bridge to 13th Street. Augusta Public Transit riders from the downtown area of Augusta now have access to expanded retail facilities and service providers in North Augusta. The Augusta Public Transit and the Aiken Transit systems have plans to improve the interconnectivity between the two systems.

The Aiken Transit system was administered by Aiken County until 2004. In that year the responsibility for the system was assumed by the Lower Savannah Council of Governments.

5.9 Street and Highway Capacity

Existing conditions on the city street and highway system are measured based upon a level of service (LOS). LOS standards for a road segment or intersection are based on the ratio of the daily traffic volume to the segment's or intersection's daily capacity. This volume-to-capacity ratio is an indication of the amount of delay a driver would encounter moving along the road segment or through the intersection. LOS is based upon travel delays and is expressed in a rating system as the letters A through F, with A being the highest or best travel condition and F being the lowest or worst condition. Currently the city enjoys relatively high levels of service (C or better) on road segments and most intersections in the community.

However, increased development in the planning area will add trips to the road network. Additional commercial development along arterials including Knox Avenue, Georgia Avenue and Martintown Road, and new residential development in the northern part of the city and outside the city limits to the north, northwest and east are anticipated. Without new collector roads and improved east-west circulation, existing arterials and collectors will become increasingly more congested. As arterial and collector road segments become more congested, the current levels of service will be reduced.

There are a number of ways to maintain good levels of service with increased traffic from new development. One method is to better control access to collectors and arterials to maintain traffic flow. Frequent curb cuts and high turning movements, often from a center turn (suicide) lane characterize arterials like Gordon Highway and Washington

Road in Augusta. Congestion increases when access and turning movements are uncontrolled, especially in commercial corridors. A second method is to provide interconnectivity wherever possible to and between arterials and collectors to distribute traffic in as many directions as possible. A third method is to improve intersection operation and synchronize traffic signals to facilitate traffic flow. Providing connectivity between commercial parcels to avoid the need to utilize collectors and arterials for short trips between commercial sites and shopping centers is another proven method of reducing traffic congestion on major roads. Additionally, and probably the most expensive method, is to provide new collector roads to serve developing areas. Developing areas in North Augusta and the planning area will be north of I-20 between Martintown Road, Five Notch Road and US 25, adjacent to I-20 on the south, between Five Notch Road and US 25 in Belvedere, and between US 25 and Old Sudlow Lake Road.

5.10 Recent Highway Improvements

5.10.1 Georgia Avenue

In 2001 the city completed a major enhancement project on Georgia Avenue (US 25 Business) between the James U. Jackson Memorial Bridge that crosses the Savannah River and Jackson Avenue on the north side of the traditional downtown area. The Georgia Avenue “Streetscape” project included the construction of new sidewalks, repaving, landscaping and the installation of special pavement treatment. The progressive project made a statement about the quality of improvements expected and supported by the city.

5.10.2 Knox Avenue, US 25 Bypass

Knox Avenue is an arterial approximately 1.7 miles in length that connects Martintown Road (SC 130) and Georgia Avenue/Edgefield Road (US 25 Business). Knox Avenue, East Martintown Road and US 1 comprise the US 25 Bypass through East Augusta and North Augusta. Knox Avenue carries a considerable amount of north-south heavy vehicle/truck traffic.

Prior to 2001 Knox Avenue was a two lane road. In 2003 the SCDOT completed construction on major improvements in the corridor including the addition of two travel lanes, turning lanes at intersections, curb and gutter, and lighting. The improvements to Knox Avenue included the installation of a multi-purpose trail within the right of way on the east side of the road. The trail has been included in the city’s master pedestrian and bicycle circulation plan. Connections to the trail from other areas of the city will be completed in the future. The city and SCDOT cooperated in the addition of a substantial amount of landscaping enhancements to the project, primarily in the form of landscaped medians, black steel light standards and special light fixtures. Traffic signal standards were also upgraded.

Commercial development on Knox Avenue has increased since the project was initiated. A shopping center development, the Shoppes at North Augusta anchored by a Super Wal-Mart, opened in 2003. A second shopping center, River Commons, has been approved and is scheduled to open in 2005. Several other commercial sites have been developed for small strip centers, a CVS drugstore and a Zaxby's restaurant.

5.10.3 The Palmetto Parkway, I-520

The construction of I-520 (Bobby Jones Expressway in Georgia and the Palmetto Parkway in South Carolina) around the Augusta metropolitan area has been planned for decades. The project in Georgia was completed in phases from I-20 in West Augusta to Laney Walker Boulevard in East Augusta in 1998. Completion of the circumferential freeway in South Carolina has been a priority of local officials since 1979. Funding through the South Carolina Transportation Infrastructure Bank was made available in 2001 and the 2.5 mile segment from Laney Walker Boulevard in Georgia to US 1 in North Augusta, including a bridge across the Savannah River, was completed in 2004. The final phase, approximately 6 miles from US 1 to I-20 near Exit 5, US 25, has been initiated. Funds are being expended to complete the design and acquire necessary right of way. Additional funding will be necessary for construction. Completion of the I-520 beltway will reduce the current "infrastructure deficit" in the area and enhance economic development in the region. It will also help to reduce traffic and the numbers of accidents at four of the eight intersections experiencing the most serious accidents in Aiken County and will substantially reduce truck traffic on arterials through the city, most notably Martintown Road, Knox Avenue and Edgefield Road. It will also improve access to I-20 and contribute to the safe transportation of nuclear material associated with current and future missions at the Savannah River Site. However, the Palmetto Parkway will increase traffic on US 1/Aiken-Augusta Highway, Belvedere-Clearwater Road, Ascauga Lake Road and US 25 north of I-20.

5.11 Augusta Regional Transportation Study

Since the mid-1960s projects involving state and federal funds have been planned and programmed through the Augusta Regional Transportation Study (ARTS). The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and its successor legislation, the 1998 Transportation Equity Act for the 21st Century, (TEA 21), refined the process for integrating state and local transportation planning for federal programs. The responsibility for transportation planning was delegated to the states and regional metropolitan planning organizations (MPOs) consisting of cities and counties within the urbanized areas of metropolitan regions. The MPO planning process is mandatory if local and state governments utilize the transportation program funds allocated by the federal government.

The MPO for the urbanized areas within the Augusta metropolitan area is the ARTS staffed primarily by the Augusta-Richmond County Planning Commission staff. The MPO is made up of staff and elected officials from Richmond, Columbia and Aiken counties and the municipalities within them. Representatives of the Georgia and SCDOT also participate directly. The MPO plans and coordinates regional transportation system improvements and priorities. Because North Augusta is centrally located in the metropolitan area transportation network, the city is an active partner in the regional transportation planning process.

The transportation planning process utilized by ARTS produces several elements. The most significant is the Long Range Plan, a twenty year plan that includes a list of projects necessary to meet future transportation needs. A second element is the Transportation Improvement Program (TIP), a document that prioritizes and schedules specific transportation projects. Another significant element is the Unified Planning Work Program, an annual staff work program and budget.

The Transportation Element of the North Augusta Comprehensive Plan will contribute local transportation projects to the ARTS Long Range Plan which is being updated in 2005. The projects will eventually be included in the TIP. The timing of projects is a function of regional priorities and funding levels. The two program areas providing the most funding for regional needs are the Surface Transportation Program (STP), and the Transportation Enhancement Program. The STP provides funding for the construction and improvement of roads on the federal aid system. The Knox Avenue project was funded through the STP. The Transportation Enhancement Program funds a variety of beautification and alternate surface transportation mode projects. Enhancement funds have been utilized for streetscape projects and for portions of the Greenway. Additionally, North Augusta has benefited from direct congressional appropriations of federal funds for the I-520 project and for the Riverfront Road Extension project.

The TEA 21 legislation expired in 2004. It has been extended twice, each time for a year. Its successor authorization legislation (either SAFE TEA or TEA LU) has been stalled in Congress. It is anticipated that a substantial increase in federal funding will be allocated to the state and MPOs under the new law. North Augusta will continue to participate in the ARTS planning process and assist in prioritizing regional transportation projects.

5.12 Transportation Plans and Projects

Planning, programming and implementing transportation system improvements are vital activities for the continued growth and quality development of North Augusta. Such improvements must be sensitive to environmental conditions, potential impacts on the human environment, and should increase mode choice for residents and visitors.

Major projects are prioritized by the city and processed through the South Carolina Subcommittee of ARTS, approved by the full ARTS Policy Committee and programmed

through the SCDOT. State and federal funding (guideshares) is made available for priority projects.

5.12.1 Road Projects

North Augusta road projects recommended for inclusion in the ARTS long-range plan include those listed in Table 5-1. They are not necessarily listed in order of priority.

Table 5-1

ARTS Long-Range Plan North Augusta Road Projects		
Road	Project Description	
1.	I-520	Complete construction of the Palmetto Parkway from US 1 to I-20 including the full interchange on the Blanchard tract and the multi-purpose trail that will serve as a Greenway extension.
2.	Atomic Road (SC 125)	Widen from Buena Vista Avenue to US 1 including adequate turn lanes, sidewalks, landscaping and Greenway extensions and connectors.
3.	US 1 (Aiken- Augusta Highway)	Widen and improve from the Savannah River to the I-520 interchange including appropriate improvements to the Fifth Street/Gordon Highway interchange, reconstruction of the Martintown Road interchange, addition of turn lanes, landscaping, and providing for a Greenway crossing in the vicinity of the Norfolk Southern Railroad tracks.
4.	Riverfront Roads	Complete the extensions of Railroad Avenue, West Avenue and Georgia Avenue/Center Street into the central riverfront area.
5.	Buena Vista Avenue	Improve from West Avenue to Brookside Avenue and widen and improve from Brookside Avenue to Martintown Road including adequate turn lanes, sidewalks, landscaping and Greenway connections as appropriate.
6.	Belvedere/Clearwater Road	Widen and improve from the project limits of the I-520 interchange near Old Sudlow Lake Road to US 1.
7.	Celeste Avenue	Widen and improve between Five Notch Road and Georgia Avenue/US 25.
8.	Five Notch Road	Widen and improve from Georgia Avenue to Walnut Lane including Greenway extensions and connectors.
9.	I-20 Frontage Road collector	Construct a collector frontage road on the south side of I-20 between Five Notch Road and US 25 including turn lanes and Greenway extensions and connectors.
10.	Bergen-Five Notch collector	Construct a collector between Bergen Road east of Bergen Place to Five Notch Road near the Gregory Lake Road intersection including adequate turn lanes and Greenway Extensions and Connectors.

Table 5-1, cont.

**ARTS Long-Range Plan
North Augusta Road Projects**

	Road	Project Description
11.	Downtown Area Streetscape	Improve, overlay and landscape segments of West, Jackson, Spring Grove, Pine Grove, Buena Vista, Clifton and Bluff Avenues in the downtown area.
12.	I-20	Widen from the Savannah River to US 25, Exit 5.
13.	Martintown Road (SC 230)	Widen to four lanes and provide turn lanes between I-20 and Murrah Road.

5.12.2 Intersection Projects

There are currently a number of intersections in the city and the planning area that are inadequately designed or under-improved and operate at a lower than desirable level of service. Improperly designed and poorly operating intersections are often the locations of most serious traffic accidents, especially those involving pedestrians. As traffic volumes increase, poorly operating intersections will contribute to congestion, decreased level of service and increased accident rates unless upgraded to accommodate existing and anticipated turning movements. Improvements to intersections can include widening and realignment of intersecting segments, installation of turn lanes and the installation or upgrading of traffic signals. The intersections currently in the most need of improvement are listed in Table 5-2. As development continues in the community and traffic volumes increase, the deficiencies of more intersections will become evident. The city should regularly, at least every three years, evaluate the operational deficiencies and improvement needs of intersections.

5.12.3 Traffic Signal Coordination Improvements

The coordination and synchronization of traffic signals can facilitate traffic flow and substantially improve level of service. The following roadway segments should be evaluated to determine if signal coordination will improve level service. Priority traffic signal coordination projects are listed in Table 5-3.

5.13 Connectivity

Connectivity when used in the context of traffic circulation is measured by the number of routes a driver can utilize to reach a destination. The more possible routes, or connections, that are available, the greater the connectivity. Increased connectivity will reduce congestion, especially on collectors and arterials that are used for longer trips and trips between jurisdictions. The concept of connectivity can also be applied to bicycle and

pedestrian circulation systems. With these modes, however, connectivity is improved when additional links reduce travel distances.

Table 5-2

Intersections Needing Improvement		
	Intersection	Project Description
1.	Martintown Road (SC 230) at Knox Avenue (US 25 Business)	Realign the Knox Avenue leg to intersect with Martintown Road at 90 degrees and reduce or eliminate unsafe merging conditions.
2.	Georgia Avenue (US 25 Business) at Five Notch Road	Widen Five Notch Road and improve the intersecting grades, upgrade the signal and provide turn lanes.
3.	Knox Avenue at Five Notch Road	Provide turn lanes as necessary and install traffic signals.
4.	Pisgah Road at Five Notch Road	Realign the intersection to provide for 90 degree turning movements, install turn lanes and add a traffic signal if warranted.
5.	Five Notch Road at Celeste Avenue	Widen the intersecting roadways and provide turn lanes.
6.	Five Notch Road at Heil Avenue	Widen the intersecting roadways and provide turn lanes.
7.	Walnut Lane at US 25 (Edgefield Road)	Realign Walnut Lane to intersect US 25 at 90 degrees, provide for turn lanes and install traffic signals.
8.	US 25 (Edgefield Road) at Edgewood Drive	Realign the legs of the intersection or relocate the intersection, provide turn lanes and improve the signal.
9.	Knox Avenue (US 25 Bypass) at LeCompte Avenue	Provide turn lanes as necessary and install traffic signals.
10.	Georgia Avenue (US 25 Business) at Bluff Avenue	Realign Bluff Avenue and install traffic signals in conjunction with the riverfront road extension project.
11.	Martintown Road (SC 230) at Knobcone Avenue	Provide turn lanes as necessary and install traffic signals.

Table 5-3

Priority Traffic Signal Coordination Projects			
	Road	From - To	Intersection Signals
1.	Martintown Road (SC 130)	Atomic Road to West Avenue	Atomic Road, Crossroads Plaza, Knox Avenue, Jersey Avenue (planned), Georgia Avenue, Carolina Avenue, West Avenue
2.	Knox Avenue (US 25 Bypass)	Martintown Road to Edgewood Drive (Edgewood Square)	Martintown Road, LeCompte Avenue, Five Notch Road, Georgia Avenue

Table 5-3, cont.

Priority Traffic Signal Coordination Projects		
Road	From - To	Intersection Signals
3. Georgia Avenue (US 25 Business)	Bluff Avenue to Spring Grove Avenue	Bluff Avenue (planned), Buena Vista Avenue, Spring Grove Avenue
4. Edgefield Road (US 25)	Ascauga Lake Road to Walnut Lane	Ascauga Lake Road, I-20 access ramps, Laurel Lakes Drive, Walnut Lane

The development of the city has resulted in a lack of properly distributed (or designed) roads that provide adequate connections to and between arterials. Specifically, there are very few east-west arterial and collector roads. Local streets, including Pisgah and Bolin Roads primarily, are utilized for cut-through traffic and function as collectors. Adequately designed connections between Martintown and Five Notch Roads and between Five Notch Road and Georgia Avenue are severely deficient. The Bolin Road-Pisgah Road corridor is in a road network that was designed for local residential traffic. However, it has evolved into and has been designated as a collector because of the traffic it carries between Martintown and Five Notch roads. The Bolin Road-Pisgah Road situation is exacerbated by the location of major origin and destination facilities, Paul Knox Middle School and North Augusta High School. The problem will increase when the Mossy Creek Elementary School opens on Five Notch Road.

The solution, which may not be entirely achievable today, is to construct a more extensive network of controlled access collector roads between arterials or allow for the connection of a substantially greater number of local roads to provide a greater number of choices.

Much of the recent residential development of the city was based on contemporary subdivision design which relies on very long block lengths and cul-de-sacs. Most subdivisions did not include sidewalks. Additionally, until recently, SCDOT did not concern itself with the spacing of intersecting streets unless they were too close to each other or did not intersect at a right angle. SCDOT also did not include sidewalks in its road improvement projects. The result in North Augusta is limited opportunities for pedestrian and bicycle travel. More importantly, the result is hazardous pedestrian and bicycle travel.

In contrast, traditional street networks were developed with shorter block lengths and more numerous through streets with adequate sidewalks and bicycle routes. The residents of North Augusta and the region that utilize the Greenway speak very highly of the city's trail system. The reality, however, is that while the Greenway provides excellent recreation opportunities, it does not provide direct access to many desirable destinations. Therefore, it is not functioning near its potential capacity. Pedestrian and bicycle connectivity that creates a more walkable community will provide for alternative means

of transportation and reduce dependency on automobiles. Improved connectivity will provide a circulation system that is more functional and safer.

5.14 Goals, Objectives, Policies and Strategies

- 5.14.1** Review and update the various transportation plans and project lists at least every three years. Plans to be reviewed and updated include but are not limited to: the long range project plan, the intersection improvement plan, traffic signal improvement plan, Greenway, bicycle and pedestrian master plan, and sidewalk installation and improvement plan.
- 5.14.2** Increase vehicular, pedestrian and bicycle connectivity between existing subdivisions and commercial hubs to reduce the level of traffic on existing arterials and collectors.
- 5.14.3** Provide for adequate vehicular connectivity in new subdivisions to reduce the amount of additional traffic on both existing and new arterials and collectors.
- 5.14.4** Adopt development regulations that require new development projects that create traffic impacts to mitigate those impacts through on-site and off-site roadway improvements as necessary.
- 5.14.5** Adopt development regulations that require new developments to provide transportation improvements, including future controlled access collectors, to city standards where necessary to implement the planned transportation network.
- 5.14.6** Adopt development regulations (access management standards) that require an acceptable LOS be maintained on arterials and collectors within the city. Access management standards would control curb cuts and high turning movements on arterials and collectors and will apply to both new development and major renovations.
- 5.14.7** Adopt development regulations that require the installation and maintenance of urban design enhancements including increased landscaping, reduced signage, masonry building materials, pavement treatments, street lights and poles, traffic signals and poles and other street furniture in commercial and higher density residential developments on collector and arterial roads.

- 5.14.8** Adopt development regulations that require all new residential and commercial developments to install sidewalks and Greenway extensions and connectors and to provide for adequate internal vehicular and pedestrian circulation, and external vehicular and pedestrian connectivity to adjacent developments, subdivisions and the Greenway.
- 5.14.9** Implement the citywide Greenway, bicycle and pedestrian master circulation plan that includes the primary Greenway system, Greenway extensions and connectors, multi-purpose trails adjacent to arterial highways, sidewalks and share the road bicycle lanes. The plan will emphasize and prioritize connections to parks, schools, commercial areas, churches and other public facilities and is designed to ultimately connect every neighborhood and commercial area in the city.
- 5.14.10** Adopt standards and procedures for the design and installation of traffic calming improvements where vehicular speed within and through residential neighborhoods is or may become excessive.
- 5.14.11** Continue the program of retrofitting existing streets to provide a citywide sidewalk network.
- 5.14.12** Adopt updated road and street design standards to provide for neighborhood scaled streets to calm traffic and provide for on-street parking.
- 5.14.13** Adopt local road and street standards that provide for shorter block lengths and provide high levels of connectivity.
- 5.14.14** Support the improvement of the Aiken County Transit System in the North Augusta planning area to provide adequate transit services for those that utilize it.
- 5.14.15** Assist the Aiken County Transit System to locate Best Friend Express transit stops at appropriate locations to facilitate transit travel including commercial centers, large parking and employment locations, schools and the Greenway System.
- 5.14.16** Assist the Aiken County Transit System to plan for new routes and connections to new developments in growing areas of the city including the Palmetto Parkway corridor.
- 5.14.17** Cooperate with the Aiken County School District to facilitate the development of sidewalks that permit students to walk and bicycle to school.

- 5.14.18** Continue to implement the city’s comprehensive way-finding signage system citywide.
- 5.14.19** Adopt development regulations that provide incentives to locate parking for commercial and multi-family developments where it can be screened from public view by buildings and landscaping.
- 5.14.20** Evaluate “downsizing” or narrowing existing streets, including some collectors and arterials, to calm traffic and make them more pedestrian friendly where road and lane width is not necessary to carry current and projected traffic volumes.
- 5.14.21** Develop and implement a plan to install landscaped medians on appropriate segments of arterial roads to beautify the corridors and to assist in controlling vehicular turning movements and maintaining an adequate LOS. Arterials to be considered initially include East and West Martintown Road, Knox Avenue, Georgia Avenue/US 25, and Five Notch Road.
- 5.14.22** Cooperate with Augusta-Richmond County, Columbia County, Aiken County and the Augusta Canal Authority to provide interstate connections between the North Augusta Greenway system, Augusta Riverwalk, the Augusta Canal Bikeway system and the Columbia County Bikeway system.
- 5.14.23** Adopt standards and procedures that specify the use of trees and other plantings to provide shelter, beauty, urban heat reduction and separation from automobile traffic on sidewalks, multipurpose paths and Greenway connectors, especially when they are located adjacent to or within an arterial or collector right of way.
- 5.14.24** To the extent practicable, design and improve the Greenway and pedestrian circulation system providing access to public facilities, parks and commercial developments for aging populations and the disabled in accordance with the Americans with Disabilities Act.
- 5.14.25** In cooperation with the SCDOT, FHWA and Aiken County, incorporate land conservation into transportation project planning.
- 5.14.26** Facilitate the funding and improvement of poorly operating intersections in the city to improve traffic safety and maintain an acceptable LOS.
- 5.14.27** Facilitate the coordination and synchronization of traffic signals to reduce congestion and maintain level of service.

- 5.14.28** Where appropriate, assist land developers with the funding and construction of new collectors where necessary and identified in the Long Range Transportation System plan.
- 5.14.29** Assist Aiken County and SCDOT to complete I-520, the Palmetto Parkway, as expeditiously as possible.

Chapter 6 – Community Facilities and Services

6.1 Introduction

Community facilities and services represent the basic business of the city. They contribute to the health, safety, and welfare of residents, improve the quality of life, and foster new housing and commercial development. The timing and location of the construction of new community facilities and the development of new services influence private investment to a substantial degree. It is important that community facilities and services be adequate to meet expected demands. Community facilities and services are critically important to the future of the city and should be used to guide growth in an orderly and logical manner.

This element includes an inventory and assessment of public facilities and services provided by the city and other community organizations, both public and private. Existing conditions are summarized and needs are identified for capital facilities including water and sewer systems, parks and general government facilities. Needs for the delivery of services are also summarized.

6.2 General Government Facilities

The city owns and maintains a number of municipal government buildings:

6.2.1 Municipal Building

The North Augusta Municipal Building is located at 400 E. Buena Vista Avenue in downtown North Augusta. Constructed in 1984, the building is 10,000 square feet and was originally designed to house 17 people. Currently, the building houses 20 full-time employees and provides offices for the Mayor, City Administrator and City Clerk. The building also houses the Departments of Finance, Economic and Community Development and Engineering, and the Council Chambers which are used for City Council, Planning Commission and Board of Zoning Appeals meetings and for jury trials in municipal court. Although several renovations and reorganizations have occurred since it opened, there is inadequate space for additional personnel.

In early 2004 the City Council authorized the evaluation of alternative sites for a new municipal administrative complex and retained an architectural firm to begin the design. It is anticipated that the new municipal complex will be complete and occupied in 2006. A location within or near the downtown will be selected. After the completion of the new municipal complex the Public Safety Department will expand into the 1984 municipal building structure.

6.2.2 Building Standards Office

The Building Standards office is located at 403 E. Buena Vista Avenue. The 1,300 square foot building was built in 1960 to house the South Carolina Highway Drivers License office. It currently houses six full-time employees including the Building Standards Superintendent, three building inspectors and administrative support personnel.

6.2.3 Operations Facility

The Operations Facility located at 61 Clay Pit Road houses the city's Public Works and Public Utilities departments. The 9,600 square foot facility was completed in 1999 and includes office and meeting space. The site also includes vehicle and equipment storage, warehouse space and a maintenance garage.

6.2.4 Public Safety Headquarters

The Department of Public Safety Headquarters is located at 400 E. Buena Vista Avenue in the city's former Municipal Building, (1955–1984). The 12,000 square foot facility includes the municipal court, public safety and court records, a temporary prisoner holding facility, patrol operations and investigations. A 6,000 square foot annex contains a weight room, storage and living quarters for several firefighters.

6.2.5 Public Safety Station 2

Public Safety Station 2 was constructed at 501 West Five Notch Road in 1989 to improve fire protection coverage in the northern part of the city. The 7,200 square foot facility serves as a police and fire substation. It includes living quarters for several firefighters, a 2,500 square foot training room and an indoor shooting range.

6.2.6 Water Treatment Plant

The city's Water Treatment Plant is located at 130 Hammond's Ferry Road. The first facility was built in 1953 and was expanded in 1960, 1968, 1986 and 2000 to its current size, 16,540 square feet. It has a treatment capacity of 14 million gallons per day (MGD).

6.2.7 Municipal Recycling Facility

The Municipal Recycling Facility (Material Recovery Facility or MRF) is a 28,700 square foot warehouse. It was completed in 1992 and is used for the processing of recyclable materials from city residents and neighboring businesses and communities. It was upgraded in 2003 with a second conveyor system to increase capacity.

6.2.8 Activities Center

The 94,000 square foot Activities Center, located at 100 Riverview Park Drive, was built in 1993. The facility is located within the city's only regional park, Riverview Park, and serves as headquarters for the city's Department of Parks, Recreation and Leisure Services. It also contains gymnasiums, a jogging track and other recreation facilities described in more detail in Section 6.5 below.

6.2.9 Community Center

The North Augusta Community Center, located at 495 Brookside Drive, was built in 1986. The 14,000 square foot facility is staffed by three full-time employees. It features numerous meeting rooms, a large banquet room, a complete caterers' kitchen. The center may be rented and used for various community and private gatherings and special occasions.

6.3 General Government

The City of North Augusta is governed by a mayor and six City Council members, all elected at large. The term of office is four years with City Council members serving overlapping terms. The mayor is the chief executive officer of the city and presides over all meetings of the council.

The City Council is the legally constituted lawmaking and policy-making body for the City of North Augusta. Major duties of the City Council include: adopting an annual budget; establishing the annual property tax rate; enacting policies concerning the operation of the city; enacting local ordinances; and appointing municipal judges, city administrator, city attorney, city clerk and members of the various municipal boards. The City Council also has the authority to call bond referendums in the city and enter into contracts.

6.4 Administration

North Augusta's Administration Department is comprised of the city administrator and city clerk. The city administrator coordinates the day-to-day activities of the government. The administrator is appointed by the mayor as authorized by the City Council for an indefinite term. The major duties of the city administrator include: supervising and coordinating the activities of the city departments; attending Council meetings and making recommendations on appropriate matters of business; ascertaining that all orders and policies of the City Council are implemented; recommending the annual budget; keeping the City Council advised on the financial condition of the city; and representing the city in business with other agencies.

Table 6-1

Municipal Government Buildings

	Building	Address	Year Built	Square Footage	Function
1.	Municipal Building	400 E. Buena Vista Avenue	1984	10,000	Administration, Finance, Information Services, City Clerk, Human Resources, Economic and Community Development, Planning, Code Enforcement, Engineering, Council Chambers
2.	Building Standards Office	403 E. Buena Vista Avenue	1960	1,300	Permits, Inspections
3.	Operations Facility	61 Clay Pit Road	1999	9,600	Streets and Drains, Water Distribution, Stormwater Management, Solid Waste Collection, Animal Control, Garage
4.	Public Safety Headquarters	400 E. Buena Vista Avenue	1955	12,000 Annex – 6,000	Patrol Operations, Fire and Training, Investigation, Municipal Court
5.	Public Safety Station 2	501 W. Five Notch Road	1989	7,200	Police and Fire Substation, Training Room
6.	Water Treatment Plant	130 Hammond's Ferry Road	1958 + additions in 1960, 1968 and 1986; Additional facility expansion completed in 2000.	16,500	Potable Water Treatment and Storage, Capacity 14 million GPD
7.	Municipal Recycling Facility	61 Clay Pit Road	1992	28,700	Recyclables Processing
8.	Activities Center	100 Riverview Park Drive	1994	94,000	Parks, Recreation and Leisure Services Offices and Recreation Program Delivery
9.	Community Center	495 Brookside Drive	1986	14,000	Special Meetings and Functions

Additionally, the city maintains a number of specialized facilities including streets, stormwater management facilities, potable water storage tanks, and parks and recreation facilities.

The city currently employs 193 full-time and 18 part-time people in seven general department areas under all funds. The departments are:

Table 6-1

City of North Augusta by Department and Division	
1. Administration	
City Administrator	City Clerk
2. Economic and Community Development	
Planning	Development Services and Regulation
Economic Development	Public Communications
Codes Enforcement	Geographic Information Services
3. General Services	
Finance and Securities	Utility Billing
Tax Collections	Information Systems
Business Licensing	Human Resources
4. Parks, Recreation and Leisure Services	
Park Management	Property Maintenance
Recreation Programs	
5. Public Safety	
Patrol Operations	Investigations
Fire and Training	Municipal Court
6. Public Utilities	
Water Treatment and Storage	Wastewater Operations and Maintenance
Water Distribution	
7. Public Works and Engineering	
Streets and Drains	Animal Control
Sanitation Services	Engineering
Recycling	Stormwater Management
Building Standards	

The city clerk serves as clerk of the Council and is appointed by the Council, upon the recommendation of the city administrator, for an indefinite term. The major duties of the city clerk include keeping all records of City Council; preparing, authenticating and recording ordinances and resolutions; keeping elections records; notifying Council of impending expiration of the term of office of board and commission members and keeping the official seal of the city.

6.5 Economic and Community Development

The Department of Economic and Community Development is responsible for a variety of activities associated with the growth and development of the city. The city's comprehensive planning, mapping, zoning administration and development regulation procedures are managed by the department. Economic development, including riverfront and downtown redevelopment and business development, is also a major element of the department's mission. Additionally, the department manages the municipal code enforcement program of the city. Code provisions enforced include nuisance violations, private property maintenance, nonconforming uses, structures and signs, business licensing and hospitality tax compliance.

Department staff also coordinate the publication of the city's newsletter, *North Augusta Forward*, the periodic updating and production of a community *Economic Profile* and *Business Startup Guide*, the development and maintenance of the city website, www.northaugusta.net, and a variety of special projects. The department is staffed by six full-time employees including the director, a planner, a project coordinator, a code compliance inspector, a planning technician and an administrative assistant.

6.6 General Services

The Department of General Services is responsible for budget administration, information systems and data management, tax collection, business licensing, utility billing and human resources. The department is comprised of ten employees including the department director, who serves as the finance director, accounting manager, manager of human resources, manager of information technology, network technician, utility billing coordinator, business license clerk, tax clerk and two customer service representatives.

The department bills and collects taxes for real and personal property and the municipal hospitality and accommodations tax. The department issues business licenses which are required of any business located or performing work within the city limits. The department also coordinates billing of residential and commercial utility customers. The utility bill includes charges for water, sewer, sanitation, recycling, stormwater, and outside city fire protection, if applicable.

The Information Technology division maintains the city's computer system, a wide range of network and internet services and the city's voice and data network. The Human Resources manager maintains systems to attract, motivate, develop and retain employees. Human Resources also provides salary administration and employee benefits administration to attract and retain qualified employees, posts and advertises departmental position openings and provides orientation to new employees.

6.6.1 General Government Improvements

In 2004 the city undertook an extensive evaluation of its information technology systems and operations. A budget of \$33,000 was set aside for an extended evaluation by an information technology consultant. The consultant submitted a series of recommendations. Over the next several years the city will implement many of the recommendations to upgrade its information and communications systems with a goal of becoming a paperless workplace.

In 2004 the city also undertook a reevaluation of its employee classification and compensation systems. An \$18,000 study by a human resource management consultant recommended several changes to the classification plan and the compensation scale. The recommendations were implemented in 2005. The classification and compensation plans will be monitored to insure that the city maintains a current and competitive status.

6.7 Parks, Recreation and Leisure Services

The Department of Parks, Recreation and Leisure Services is comprised of 27 full-time and four part-time employees in five program areas. The program areas are Recreation Programs and Services, Parks, the Riverview Park Activities Center, the North Augusta Community Center and Municipal Property Maintenance.

6.7.1 Recreation Programs and Services

Recreation programs and services personnel manage seasonal athletic programs and activities, local, state and regional tournaments and a variety of community festivals held throughout the year.

6.7.1.1 Recreation Programs

Each year several thousand area youth and adults participate in North Augusta Recreation program offerings in athletics including youth football and cheerleading, youth baseball, youth and adult softball, youth basketball, youth soccer, and youth and adult volleyball.

Adult program participation has declined in recent years. Adult soccer and softball participation declined 44% between 1990 and 2000. In 1990, 1,285 adults participated. In 1995 the figure was 1,033. In 2000 the number decreased to 719 adult recreation participants. The commitment of playing fields for youth programs is the primary reason for the decline in adult athletic programs.

Table 6-2

Year	All Participants
1997	4,146
1998	4,157
1999	3,814
2000	3,748
2001	4,083
2002	3,863
2003	3,906
2004	3,779

Source: North Augusta Department of Parks, Recreation & Leisure Services

6.7.1.2 Tournaments

Sporting tournaments are held at the city’s Riverview Park Activities Center and include the Nike PeachJam and Nike Women’s Basketball Tournaments. The Nike tournaments showcase the best high school basketball players from around the country. Several regional and state level basketball tournaments are also coordinated by the department.

6.7.1.3 Events

The department sponsors, co-sponsors or provides support for a number of community events and activities. Annual city-sponsored events include Rest Fest, a Labor Day celebration, Jack-O-Lantern Jubilee in October and an annual Tree Lighting and Caroling event to celebrate the holiday season. Co-sponsorship and support is also provided for other community events including the annual Easter Egg Hunt, Mayor’s Prayer Breakfast, Kids Earth Day, Christmas Parade and others.

6.7.2 Parks and Recreation Facilities

The Department of Parks, Recreation & Leisure Services maintains 16 parks, the Riverview Park Activities Center and the North Augusta Community Center. Parks have been developed over the years in North Augusta according to standards established by the National Recreation and Parks Association in the 1970s. The standards address the needs and population ratios for mini, neighborhood, district and regional parks.

Neighborhood Parks developed on parcels of less than acres in size and within walking distance of one or more neighborhoods and are easily accessed by bicycles. Neighborhood parks provide a playground area with picnic tables, tennis courts or basketball courts, open green space for play, a water fountain, and a small shelter.

Neighborhood parks in the city system include Calhoun, Creighton, Bunting and Colonel Leroy Hammond Parks.

Community Parks are less than 5 to 15 acres in size and include a playground, tennis and/or basketball courts, picnic tables and shelter, and open green space. Parks in the city system categorized as community parks include Summerfield, Walnut Lane, and Maude Edenfield Parks.

District Parks are 15 to 70 acres in size and provide a softball or baseball field, basketball courts, tennis courts, playground, water fountain, picnic shelter with seating for 50 people, a walking trail and paved parking. There are no district parks in the system at this time.

Regional Parks are 100 to 200 acres in size and include major amenities including three or more softball fields, four or more baseball fields, two or more soccer fields, four or more lighted tennis courts, a picnic shelter capable of seating 80 or more people, four or more horseshoe pits, two or more restrooms, two or more campsites, trails, and paved parking. The only regional park in the city currently is Riverview Park.

There are also several parks that have been improved for beautification and memorials. They include Butler Park, Wade Hampton Veterans Park, Davenport Park, Calhoun Park and Riverview Park. The city also provides several specialized parks including the Greenway and Lions Field. They are described below.

6.7.2.1 North Augusta Greenway

Named for former Mayor Thomas W. Greene, the North Augusta Greenway currently provides over six miles of paved recreational trail. The majority of the Greenway is located on an abandoned railroad right of way purchased by the city in 1988.

Development of the Greenway continues steadily. The first phase, a 3.3-mile section from Georgia Avenue to Martintown Road, was completed in 1995. Phase 2, 1.5 miles from Martintown Road to Pisgah Road, was completed in early 1999. Later that year, the Greenway Bridge, Phase 3, a 180-foot arch-truss pedestrian bridge across Martintown Road, closed the gap between the two sections. Phase IV of the Greenway, another half mile, extended the Greenway east from the Georgia Avenue Bridge to the clubhouse at the River Club Golf Course in 2000.

Public parking and access to the Greenway is provided at four locations along the trail. The current parking locations are on Pisgah Road near Five Notch Road, on Riverside Boulevard adjacent to Georgia Avenue, at the Activities Center in Riverview Park, and off Martintown Road near the Greenway Bridge. Access to the Greenway is also provided through a

number of connections to adjacent neighborhoods, streets and parks. The Greenway is open to the public year-round from dawn until dusk and is ADA accessible.

Construction is currently underway on a 1.5-mile extension of the Greenway along the Savannah River. The riverfront extension is being constructed in conjunction with a planned 200-acre traditional neighborhood development, Hammond's Ferry. The public private partnership development will include 55 acres of public park lands including a riverfront park and promenade that will connect with this section of the Greenway trail and a 20+ acre lake.

A second major extension of the Greenway was initiated in 2004. It will extend the trail from its current terminus at Pisgah Road approximately 1 mile to the north under I-20. Property acquisition for the new section has been initiated. Further extensions to the north are planned in conjunction with residential land development activities.

A master plan for the future development of the Greenway has been developed and is included in the Augusta Regional Transportation Study Bicycle and Pedestrian Facilities long range plan. The master plan includes additional connections with neighborhoods, parks and schools throughout the community and extension to the southeast another 2.7 miles to Horse Creek. The master plan also anticipates Savannah River crossings in up to five locations to provide connections between the Greenway and the Richmond County, Columbia County, and the Augusta Canal National Heritage Area systems.

Construction of the Greenway has been funded by grants from the South Carolina Department of Parks, Recreation and Tourism, South Carolina Department of Transportation and the South Carolina Department of Health and Environmental Control. Other funding sources include the Aiken County Capital Projects Sales Tax and North Augusta Capital Projects funds.

6.7.2.2 Hammond Hill Skate Park

Hammond Hill Skate Park, completed in 2004, is one of North Augusta's newest park amenities. The new park is located adjacent to the Hammond Hill swimming pool on Cypress Drive near the Greenway. The park was constructed on an unused tennis court that was leased to the city by a local neighborhood association. The park is supervised and is open to skateboarders and rollerbladers of all ages. Admission to the park requires an annual membership fee or a session fee as well as a signed release of liability.

Table 6-3

Parks and Recreation Facilities												
Park	Location	Acreage	Basketball Courts	Children's Play Area	Picnic Tables or Shelters	Restrooms	Soccer Field	Baseball/Softball Fields	Tennis Courts	Walking/Jogging Trail	Drinking Fountains	ADA Accessible
Boat Ramp/Fishing Piers	Hammond's Ferry Road	3			✓	✓						✓
Bunting Park	Bunting Drive	4		✓	✓						✓	✓
Col. Leroy Hammond Park	Knobcone Avenue	3		✓	✓							
Creighton Park and Creighton Living History Park	Lake Avenue	10		✓	✓				✓		✓	✓
Curtis Drive Park	Curtis Drive	1		✓	✓							✓
Davenport Park	Georgia @ Summerhill Road	2			✓							✓
Greenway	Throughout North Augusta	70								✓	✓	✓
John C. Calhoun Park	Georgia @ Carolina Avenue	5		✓	✓						✓	✓
Maude Edenfield Park	East Buena Vista Avenue	8	✓	✓	✓				✓		✓	✓
Riverview Park	100 Riverview Park Drive	149	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Summerfield Park	Old Edgefield Road	15	✓	✓	✓	✓	✓	✓		✓	✓	✓
Wade Hampton Veterans Park	300 Georgia Avenue	4										✓
Walnut Lane Community Park	St. Julian Place & Walnut Lane	14		✓	✓					✓	✓	✓
Waterworks Park	Riverside Boulevard	20			✓							✓

6.7.2.3 Lions Memorial Field

Lions Memorial Field is one of North Augusta's oldest recreational facilities. It was named for the North Augusta Lions Club who leased the property from the city for \$1.00 per year. The Lions Club developed and operated the field for almost 30 years. Primarily used for football and community events, Lions Field was recently returned to the city and in 1999 received a \$1.4 million dollar renovation that included new grandstands, a new concessions pavilion, new restroom facilities, new playground equipment and new practice fields.

6.7.2.4 Riverview Park Activities Center

The 94,000 square foot Riverview Park Activities Center opened in 1993. The center serves as headquarters for the Department of Parks, Recreation & Leisure Services. It includes four basketball courts, a 1/6 mile walking/jogging track, game and arts and crafts rooms, locker rooms, meeting rooms, a concession area, two racquetball courts and a weight room. It operates at various times during the week and is generally open 15 hours per day. Memberships are offered at varying rates to city residents, out of city and out of state members, both for individuals and families.

Total membership in the Activities Center has fluctuated over the years since it opened. Membership levels vary with changes in the fee schedule and ratio of single to family memberships, both of which are counted as a single membership. Memberships are available on an annual, semi-annual, quarterly and monthly basis.

Table 6-4

Activities Center Membership	
Year	Membership
1997	4,776
1998	5,209
1999	5,076
2000	6,228
2001	5,448
2002	4,661
2003	5,050
2004	3,821

Source: North Augusta Department of Parks, Recreation & Leisure Services

6.7.2.5 North Augusta Community Center

The 14,000 square foot North Augusta Community Center is located on Brookside Drive, approximately a half block from the municipal building, and was opened in 1985. The meeting, reception and banquet facility includes 3 meeting rooms, 2 banquet rooms and a commercial kitchen. The capacity of the largest room is 500. Rentals at the Community Center vary from a one hour meeting of several participants to all day sessions including meals for up to 500 people.

Table 6-5

Community Center Rentals	
Year	Rentals
1997	842
1998	698
1999	885
2000	849
2001	834
2002	721
2003	706
2004	795

Source: North Augusta Department of Parks, Recreation & Leisure Services

6.7.3 Property Maintenance

The property maintenance division is responsible for maintaining the grounds of all city-owned property including parks, public buildings and landscaped rights of way. Until 2005 property maintenance functions were contracted to a variety of private landscaping firms. In 2005 all of the property maintenance activities were consolidated within the Department of Parks, Recreation and Leisure Services and brought in-house. City employees now perform all property maintenance.

6.7.4 Park, Recreation and Leisure Services Needs

The city’s needs in the area of parks and recreation are extensive. In 2003 the city completed a Parks and Recreation Facilities Master Plan for the community. Prepared by Woolpert LLP, the plan includes a detailed inventory of existing facilities and projections of needs over a multi-year period. The plan articulates the needs in this area and is adopted by reference as a supplement to this Comprehensive Plan.

6.8 Public Safety

The North Augusta Department of Public Safety provides police and fire services to residents within the North Augusta city limits and fire services to an expanded 29 square mile service area. The department operates out of two stations. Public Safety headquarters are located adjacent to the municipal building in the southern portion of the city. Station 2 is located on Five Notch Road on the north side of I-20 and primarily serves the northern and eastern areas of the city. A third station is planned for a location in the east central area of the city.

The department employs 65 full-time employees, 48 of whom are sworn officers. The balance of personnel provide support services and include dispatchers, a victim's advocate, records clerks, school crossing guards and other civilians. The department also includes 20 volunteer firefighters.

The department operates three divisions, each managed by a captain under the supervision of the director of Public Safety. The divisions are Patrol Operations, Fire Suppression and Training, and Criminal Investigations.

6.8.1 Patrol Operations Division

The Patrol Operations division is responsible for day-to-day patrol, response to crimes in progress, investigation of suspicious activities, initial investigation of crime, investigation of traffic accidents, security for municipal court and detention facility operations.

The patrol division includes four shifts. Each shift is comprised of a shift lieutenant, shift sergeant, five Public Safety Officers (PSOs) and a dispatcher. There is also a traffic division comprised of a lieutenant and four PSOs.

Calls for police services have fluctuated in recent years but the trend has been upward as the city has grown.

Table 6-6

Calls for Police Service	
Year	Police Service Calls
1997	43,895
1998	45,502
1999	41,098
2000	45,017
2001	49,153
2002	46,781
2003	48,740
2004	50,716

Source: North Augusta Department of Public Safety

6.8.2 Fire Suppression and Training Division

All PSOs in the department are certified in both law enforcement and firefighting. They are also certified as emergency first responders. As a result, continuing training in all three areas is necessary. PSOs complete more than 300 hours of training each year. Volunteer firefighters complete a minimum of 240 hours of fire training each year.

The division includes two station sergeants, six full-time firefighters, a sergeant of crime prevention, a D.A.R.E. officer, a resource officer and four part-time school crossing guards. The division also manages the volunteer firefighters and S.A.L.T. (*Seniors and Law Enforcement Together*), a senior volunteer program.

Calls for fire service have also fluctuated in recent years but have trended upward like the calls for police services as the city has grown.

Table 6-7

Calls for Fire Service	
Year	Fire Service Calls
1997	277
1998	350
1999	326
2000	295
2001	365
2002	409
2003	348
2004	404

Source: North Augusta Department of Public Safety

6.8.3 Criminal Investigations Division

The Criminal Investigations division is responsible for criminal investigations of all major felonious crimes including murder, armed robbery, rape, burglary and others. The division is also responsible for the management of all cases adjudicated through the courts of General Session and Family Court. The division is comprised of a captain, a sergeant, two general investigators, two narcotics investigators and a juvenile crime investigator.

6.8.4 Equipment

The Department of Public Safety operates and maintains 30 police vehicles, four all-terrain vehicles and a boat. Firefighting equipment includes three frontline pumpers with 1,250 gallon per minute (GPM) pumping capacity, one reserve pumper at 1000 GPM, one 75-foot aerial ladder truck, a service truck and two brush trucks. The department also has 10 automated external defibrillators used to respond to heart attacks and sudden cardiac arrests. Defibrillators are located at

both Public Safety stations, in all on-duty patrol vehicles and at the Riverview Park Activities Center.

6.8.5 Public Safety Needs

The needs of the department over the next ten years include increasing manpower to provide patrol coverage for an additional patrol zone within the city. Equipment needs include a replacement aerial fire fighting vehicle and a replacement fire/pumper truck. Increasing development in the northern and eastern areas of the city will require the need for the development of a third Public Safety station in the vicinity of Clearwater Road and the I-520 interchange. The cost of the development of Public Safety Station 3 and the associated equipment has been anticipated in planning for the department.

6.8.6 Emergency Medical Services

The Department of Public Safety and the Aiken County Emergency Medical Services (EMS) cooperatively respond to 911 medical emergencies in the city limits. Upon receipt of a 911 medical emergency call, a North Augusta PSO, trained as a first responder and equipped with emergency medical equipment and an automated external defibrillator, is dispatched to the scene by a North Augusta dispatcher. The dispatch officer links the caller to the Aiken County Sheriff's Office dispatch who issues the call for an ambulance. Aiken County EMS operates a fleet of ambulances and rescue stations located throughout the county. One of the stations is located near the city limits on US 25/Edgefield Road. The Belvedere/North Augusta Rescue Squad also provides volunteer emergency medical services to the Belvedere/North Augusta area.

6.9 Public Utilities

The Department of Public Utilities is comprised of four divisions: Water Treatment, Water Operations, Wastewater Operations and Utilities Administration, and is staffed by a total of 37 full-time employees.

6.9.1 Water Treatment

The city operates a 14 million gallon per day (MGD) surface water treatment plant on the Savannah River adjacent to Riverview Park. The Water Treatment Plant utilizes conventional treatment methods. Pre-chlorination, coagulation, flocculation, sedimentation, filtration, fluoridation and post-chlorination are the specific unit processes involved in the treatment. The city provides potable water service to residential, commercial and industrial customers in an area of approximately 23.5 square miles in and immediately around the city including Belvedere. The city also provides potable water on a wholesale basis to the Breezy Hill Water and Sewer District, a water provider adjacent to the city's

service area. The average day demand experienced by the water system in 2004 was 3.927 MGD. The peak demand in 2004 was 7.549 MGD.

Peak daily demands during the summer will approach the capacity of the treatment plant in the future. Additionally, increased wholesale water sales will add to the daily demand. The city has initiated the steps to review the effectiveness and efficiency of the current water treatment facility and the potential need for an expanded facility.

Growth in and around the city has resulted in a steady increase in the number of customers served.

Table 6-8

Water Customers	
Year	Total Customers (Year End)
1997	10,297
1998	10,458
1999	10,513
2000	10,719
2001	10,781
2002	10,829
2003	10,900
2004	11,036

Source: North Augusta Department of Public Utilities

The city is also considering the development of an alternative raw water supply in the event of a substantial shortage or contamination of the city's source water, the Savannah River. A shortage or contamination could include a major reduction in river flow due to a drought or a chemical spill in the river. An alternative source should provide sufficient quantity of water to provide 30% to 100% of daily demand, more than 4 MGD. Possible alternative sources include Clearwater Lake. A cooperative effort to identify and develop an alternative source with the Breezy Hill Water and Sewer District or the Aiken County Public Service Authority or both may be appropriate.

6.9.2 Water Storage and Distribution Operations

The water distribution system consists of 155 miles of water mains ranging from two to 24 inches in diameter. There are five elevated tanks with a total capacity of 1.675 million gallons and four ground storage tanks with a total capacity of 1.3 million gallons. Water is distributed throughout the system and pressure is maintained by four pump stations.

The water distribution system expansion plan calls for the construction of one additional ground storage tank of 2 to 4 million gallons to provide for increased demand and for fire suppression supply. A site adjacent to Belvedere-Clearwater Road and the future I-520 alignment was recently purchased by the city as the site for the new ground storage tank. A tank in that location will also serve increased demand by the city's wholesale customer, Breezy Hill.

The maintenance of water quality after it enters the distribution system is a continuing effort of the Water Operations division. Water quality is often described in references to color, taste and odor. Quality problems are often caused by dead-end water mains that prohibit a continual circulation of water through the system. Mineral deposit build-up in water lines often reduces the flow which is further complicated by long runs of dead end lines. The Water Operations division administers a continuing program to improve water quality when it can be determined that the improvements are cost effective. Improvements include:

- Periodic flushing of the system where water quality concerns are the greatest;
- Replacing 2-inch galvanized water lines;
- Replacing smaller unlined cast iron water mains;
- Cleaning and lining 6-inch and larger unlined water mains;
- Looping dead-end 6-inch and larger water mains;
- Eliminating backfeeds and flow reversals between the high and low systems.

6.9.3 Wastewater Service and Demand

The Wastewater Operations Division currently conveys wastewater for more than 9,500 residential and commercial customers. Normal wastewater flows range from 2.5 to 3.1 million gallons of wastewater per day. The service system area is approximately 215.5 square miles in size and includes approximately 143 miles of sewer collection lines and 3,246 manhole junctions. The system covers 12 drainage basins and includes 17 lift stations with pumping capacities ranging from 134 to 2,900 gallons per minute. Pipe sizes range from 4 to 36 inches. The City of North Augusta accepts wastewater from Edgefield County Water and Sewer Authority and discharges into the Aiken County Public Service Authority's Little Horse Creek Regional Wastewater Treatment Plant.

Growth in and around the city has resulted in a steady increase in the number of customers served at a rate similar to the increase in water customers.

Table 6-9

Sewer Customers	
Year	Total Customers (Year End)
1997	8,445
1998	8,631
1999	8,698
2000	8,892
2001	9,020
2002	9,149
2003	9,370
2004	9,614

Source: North Augusta Department of Public Utilities

6.10 Public Works and Engineering

The Department of Engineering and Public Works is comprised of 52 full-time employees in five program areas. The program areas are Engineering, Sanitation Services and Recycling, Streets and Drains, Stormwater Management and Building Standards.

6.10.1 Engineering

The Engineering division employs a South Carolina licensed Professional Engineer who is also the director of the Department of Engineering and Public Works, an Engineer-in-Training and an Engineering Technician. The department provides technical support to citizens and other city departments in areas involving land development, public works and public utilities. Daily functions include reviewing site and subdivision development applications in conjunction with the Department of Economic and Community Development, construction inspection, preparation of plans and technical specifications for city construction projects, and preparation and maintenance of infrastructure maps including utilities, streets and storm drainage.

The Engineering Division performs annual pavement evaluations on all roads within the city and recommends street resurfacing projects and other roadway improvements to the SCDOT. The department is also responsible for coordinating and overseeing several of the Aiken County Capital Projects Sales Tax projects including road reconstruction, resurfacing and sidewalk installation.

6.10.2 Sanitation Services

6.10.2.1 Solid Waste Collection and Disposal

The City of North Augusta provides once weekly removal of residential garbage, yard debris and recyclables to approximately 8,300 customers. The Division of Sanitation Services currently maintains a workforce of 25 employees who operate three automated side-loading garbage trucks, three front-loading garbage trucks, three knuckle-boom loaders, three shuttle trucks, three rear-loading garbage trucks and one flatbed truck. Commercial waste collection is provided to approximately 450 commercial customers. Residential sanitation customers have steadily increased in number over the last eight years.

Table 6-10

Residential Sanitation Customers	
Year	Customers (Year End)
1997	7,283
1998	7,471
1999	7,566
2000	7,978
2001	7,828
2002	7,936
2003	8,128
2004	8,351

Source: North Augusta Department of Public Works

Table 6-11

Commercial Sanitation Customers	
Year	Customers (Year End)
1997	414
1998	411
1999	406
2000	413
2001	430
2002	415
2003	444
2004	450

Source: North Augusta Department of Public Works

6.10.2.2 Recycling

North Augusta initiated its recycling program in 1990 with a single drop-off location at the Crossroads Market Shopping Center. In 1993, the city opened the Material Recovery Facility (MRF) and commenced the automated co-collection recycling program. City sanitation customers, both residential and commercial, co-mingle all recyclables in a city provided heavy duty blue bag. Blue bags are collected weekly with the regular solid waste collection. The recyclables (aluminum, glass, plastic, paper) are removed from the waste stream at the MRF, sorted and sold to reprocessing companies. The balance of the waste is taken to the landfill. The MRF also processes recyclables from the City of Aiken, the Savannah River Site and several private waste disposal companies. There are currently seven full-time recycling employees at the MRF. The full-time employees are aided in the sorting and processing of recyclables by inmates participating in a work-release program through the Aiken County Detention Center.

Since 1997, the MRF has processed over 46,000 tons of recyclables. In 2004, 5,852 tons of recyclables were processed. The amount of recyclable material varies from year to year based on the solid waste collectors participating in the city's program. Additionally, the amount of revenue generated by the sale of recyclable material varies by the demand for the material.

Table 6-12

Recyclables Processed (Tons)	
Year	Recyclables Processed
1997	5,743
1998	7,822
1999	4,351
2000	4,740
2001	5,218
2002	6,765
2003	6,333
2004	5,852

Source: North Augusta Department of Public Works

6.10.3 Streets and Drains

The South Carolina Department of Transportation (SCDOT) owns approximately 78 of the 108 miles of roadway within the city limits. The remaining 30 miles are owned by the city. Major repairs on state-owned roads in the city are the responsibility of SCDOT. The North Augusta Streets and Drains division is

responsible for minor repairs to state roads and all maintenance activities for the 30 miles of city-owned streets. Maintenance activities include pothole repair, concrete curb, gutter and sidewalk replacement, storm drainage pipe and catch basin cleaning and street sweeping. The Streets and Drains division also installs and maintains traffic signals and street signs, constructs new storm drainage facilities and implements other special construction projects. The Streets and Drains division is comprised of nine full-time employees.

6.10.4 Stormwater Management

The North Augusta Stormwater Management Program was initiated in 2001 in response to regulations established by the U.S. Environmental Protection Agency pursuant to the Clean Water Act. Components of the program include: constructing and maintaining stormwater drainage systems to alleviate local flooding problems; inspecting, cleaning and maintaining city's stormwater drainage system; providing stream bank protection; permitting and monitoring construction sites to enforce erosion control maintenance; and implementing public awareness programs related to the protection and improvement of water quality. The Stormwater Management division is staffed by a full-time stormwater manager and a full-time inspector. The Stormwater Management division has identified "Best Management Practices" (BMPs) and developed a Stormwater Management Manual that describes the aspects of the Stormwater Management Program.

The Stormwater Management division is organized and funded as a municipal utility. Funding is through a monthly stormwater utility fee. An Equivalent Residential Unit (ERU) per structure is used to set the stormwater management fee for private residential and commercial properties. A flat rate is charged to residential property owners and a variable rate (a multiple of the ERU) is charged to commercial property owners. The commercial ERU is based on specifics of the commercial property including size, impervious surface area and on-site stormwater management installations.

Phase II of the Clean Water Act requires that the city obtain and comply with a National Pollutant Discharge Elimination System (NPDES) permit from the South Carolina Department of Health and Environmental Control (SCDHEC) for stormwater discharges. Pursuant to the NPDES requirements the division is responsible for designing and implementing programs to reduce pollutant discharge into the city stormwater drainage system and the environment to the "maximum extent practicable" to protect water quality. In 2003, the city adopted an Illicit Discharge Ordinance to establish the regulatory mechanism for prohibiting the discharge of pollutants into the storm drainage system. Other components of the Stormwater Management Program include system mapping, construction site plan review and compliance inspections, storm drain labeling,

complaint response, outfall water quality monitoring, and the publication of a quarterly newsletter entitled *The Resource*.

6.10.5 Building Standards

The Building Standards Department is the building code enforcement agency of the city. It is responsible for completing code compliance reviews on plans for all new building construction and for additions and renovations to existing structures. Inspections and testing are performed at various stages throughout construction to ensure compliance with the building, plumbing, mechanical and electrical codes adopted by City Council.

The department is staffed by a Certified Building Official (CBO) as required by section 6-9-30 of the Code of Laws of South Carolina. The CBO oversees the issuance of building permits and the building inspection program. There are three building inspectors, two secretaries and a custodial maintenance position under the supervision of the CBO.

In 2004 the Building Standards Department issued 200 permits for new single family detached residential units and 16 permits for new commercial construction. In total, 2,340 permits were issued and 808 inspections were conducted for building, mechanical, electrical and plumbing work in 2004.

6.11 Capital Projects

The city maintains a capital improvements program broken down by source (fund) and updates it on an annual basis. The City Council reviews the established program and evaluates new projects at its annual planning retreat, North Augusta Forward, in May of each year. The following tables list the approved capital projects as of January 2005.

6.11.1 Capital Projects Fund

The Capital Projects Fund is financed by a separate property tax mill levy of 8.95 mills and transfers from the General Fund on an annual basis. The Capital Projects Fund supports capital improvements associated with operations that are supported by the General Fund: administration and general government services, public safety, parks and recreation, and streets.

Table 6-13

Capital Projects Fund Projects			
	Project	Budget	Year Complete
1.	Parks & Recreation Master Plan (Part)	\$50,000	2004
2.	Greenway Parking (Pisgah/Rapids)	55,000	2005
3.	Skate Park	28,500	2004
4.	City/School Partnership (NAMS Practice Field)	50,000	2004
5.	Riverview Park Improvement (Part)	440,000	2005
6.	Walnut Lane Park (Phase III)	260,000	2006
7.	Water Works Park	250,000	2006
8.	Bolin Road Entry to Greenway	55,000	2005
9.	Bunting Park Renovation	140,000	2005
10.	Municipal Complex Design	212,500	2005
11.	COPs (Debt on RVP Activities Center)	962,612	2005
	Total	\$2,503,612	

6.11.2 Riverfront Central Core Fund

The Riverfront Central Core Fund is financed primarily by Hospitality and Accommodations Sales Tax receipts and by the tax increment revenues associated with the Riverfront Redevelopment District. Projects funded are located within the Riverfront Redevelopment District. Pursuant to the state statute, projects funded with the Hospitality and Accommodations Sales Tax must provide tourist related amenities or generate increased tourism.

Table 6-14

Riverfront/Central Core Fund Projects			
	Project	Budget	Year Complete
1.	Greenway: Riverfront Extension/Park (Part)	\$500,000	2005
2.	Downtown Streetscape/Phase II (Part)	1,200,000	2005
3.	Riverfront Road Extensions (City Share)	485,000	2005
4.	SCE&G Riverfront Power Line Relocation	175,000	2006
5.	Fountains (Georgia Avenue/Riverside Boulevard)	250,000	2006
	Total	\$2,610,000	

6.11.3 Utility Construction Fund

The Utility Construction Fund is financed by transfers from the water and sewer revenues for the improvement of the water and sewer systems.

Table 6-15

Utility Construction Fund Capital Projects 2004-2007			
	Project	Budget	Year Complete
1.	Mims Branch/Little Horse Creek Sewer (part)	\$3,000,000	2006
2.	24" Water Line – Ascauga Lake Road to North of I-20	450,000	2006
3.	Clearwater Road Water Line	300,000	2006
4.	Ground Storage/3 MG	1,700,000	2006
5.	Existing Water Plant Expansion & Upgrade	3,600,000	2007
6.	Elevated Storage Tank – I-20/US 25	1,500,000	2007
7.	Sewer I & I Rehab.	50,000/yr.	Continuous
	Total	\$10,750,000	

6.11.4 Stormwater Capital Projects

Stormwater management and drainage projects have been implemented over a number of years utilizing a variety of funding sources. Frequently drainage improvements are included in street improvement projects, utility installations and other capital projects. Funding sources utilized include the General Fund, Capital Projects Fund, Street Improvement Fund and intergovernmental transfers. The Stormwater Management Fund will be utilized to implement major stormwater drainage projects in the future. Table 6-16 summarizes the outstanding projects remaining from a stormwater management program originally developed in 1989. Cost estimates have been updated from 1989 at a rate of 3% per year.

Table 6-16

	Stormwater Capital Projects	Estimate
1.	W. Buena Vista Pipe: West of Cumberland Avenue	\$ 42,000
2.	Pipe on Bunting from Master Detention Pond at Towhee to Ditch behind	325,000
3.	Master Detention Pond at Womrath Court	150,000
4.	Paved Ditch behind Womrath Court	242,000
5.	Paved Ditch from Martintown Road to Socastee Drive.	387,000
6.	Pipe Crossing Martintown Road at Metz Drive	355,000
7.	Summerhill Catch Basin and Pipe	86,000
8.	Pipe Crossing Womrath Road at Womrath Court	26,000
9.	Pipe Crossing East Buena Vista at Boylan Street	865,000
10.	Paved Ditch at East Buena Vista and Boylan Street	42,000
11.	Paved Ditch Between Stanton and Fairfield from Martintown to Woodlawn	100,000
12.	Pipe Crossing at Five Notch and Pisgah	137,000
13.	Paved Ditch off of Euclid	153,000
14.	Pipe between Tennis Courts at E. Buena Vista	322,000
15.	Paved Ditch behind Community Center	57,000

Table 6-16, cont.

Stormwater Capital Projects		Estimate
16.	Pipe Paralleling Yardley Drive	112,000
17.	Pipe Crossing at Woodlawn and Stanton	34,000
18.	Pipe Crossing at San Salvador at Acklin Drive	116,000
19.	Storm Branch Master Detention Pond	427,000
20.	Pipe Crossing Bunting at Tanager	97,000
21.	Pipe Crossing Back Entrance to Riverview Park	44,000
22.	Pipe Crossing Jackson Avenue at Theolu	23,000
23.	Pipe Crossing at Buena Vista at Crystal Lake	44,000
24.	60" Pipe Crossing Martintown Road at Knox	339,000
25.	Paved Ditch from Plaza Place Apartments entrance to Spring Grove Avenue	70,000
26.	Pipe Crossing Georgia Avenue near Five Notch Road	44,000
27.	Paved Ditch from 1000 Block of Lake Avenue to 1000 Block of Crestview	18,000
28.	Pipe at the GA/FL RR Embankment Behind Riverview Park	115,000
29.	Pipe at Stanton Avenue - 900 Block	29,000
30.	Pipe at Brooks Drive - 800 Block	26,000
31.	Pipe at Jackson Avenue - 800 Block	29,000
32.	Pipe at Merriweather Drive - 700 Block	20,000
33.	Pipe at Hammond Drive - 700 Block	20,000
34.	Pipe at Brooks Drive - 700 Block	21,000
35.	Pipe at Stanton Avenue - 700 Block	21,000
36.	Paved Ditch from Woodlawn Avenue to Jackson Avenue	42,000
37.	Pipe at West Avenue and Arlington Heights	26,000
38.	Pipe for Brookside Road Improvements	73,000
39.	Paved Ditches in Hammond Hills (6 Locations)	116,000
Total		\$5,195,000

6.11.5 Capital Projects Sales Tax Fund, Round I

Round I of the Aiken County Capital Projects Sales Tax was passed in November 2000. The North Augusta share of the proceeds was used for the projects listed below in Table 6-17, most of which have been implemented or are under construction.

Table 6-17

Capital Projects Sales Tax I 2001-2006			
	Project	Budget	Status
1.	Greenway: Riverfront Extension/Park (Part)	\$1,500,000	Under Construction
2.	Walnut Lane Park Development/Phase I	80,000	Complete
3.	Summerfield Park Completion	130,000	Complete

Table 6-17, cont.

Capital Projects Sales Tax I 2001-2006			
	Project	Budget	Status
4.	Riverview Park Improvements (Part)	760,000	Initiated
5.	Recycling Center Expansion	150,000	Complete
6.	Downtown Streetscape/Phase II (Part)	600,000	To Be Complete in 2005
7.	Street Resurfacing Program	850,000	Under Construction
8.	Street Reconstruction Program – City Streets	240,000	Complete
9.	Street Reconstruction Program – State Streets	960,000	To Be Complete in 2005
10.	Street Reconstruction Program – E. Buena	400,000	To Be Initiated in 2005
11.	Drainage System Improvements – E. Buena	1,100,000	To Be Initiated in 2005
12.	Sidewalk Construction Program	752,905	Under Construction
	Total	\$7,522,905	

6.11.6 Capital Projects Sales Tax Fund, Round II

Round II of the Aiken County Capital Projects Sales Tax will generate considerably more revenue than the first round. Proceeds to be distributed to North Augusta between 2006 and 2013 will be expended on the projects listed in Table 6-18.

Table 6-18

Capital Projects Sales Tax II 2006-2013	
	Budget
1. Public Safety Fire Truck and Equipment	\$925,000
2. Public Safety Communications System Upgrade	550,000
3. Street Resurfacing Program (estimate - 2 miles/year)	1,120,000
4. Riverview Park Additions – Spraypool, Playground with Canopy, Scoring Tower 2, Restrooms, Meeting Rooms, Dressing Rooms and Main Concession Stand	2,570,000
5. Riverview Park Renovations – Upgrade Baseball and Softball Fields, Towers 1 & 3	1,550,000
6. Riverview Park Improvements – Circulation, Maintenance Facilities and Entrance Ways	690,000
7. Parks, Greenways and Open Space Land Purchase/Development	3,140,000
8. Public Safety Fire/Police Substation 3	750,000
9. Municipal Office Complex	5,000,000
10. Road Intersection Improvements – Five Notch at Pisgah, Celeste, Heil and Georgia	1,500,000
11. Cultural Arts and Historical Display Facility	500,000
12. Community Center Renovations	500,000
13. Road Intersection Improvement – Walnut Lane at US 25	75,000
14. Sidewalk Construction Program (estimate - 2 miles)	480,000
Total	\$19,350,000

6.11.7 Long Range Capital Projects

Long Range Capital Projects, listed in Table 6-19, are those that have been identified as needed in one or more municipal service or improvement plans but for which funding is not immediately available. Projects on the long range list are not listed in priority order. As funds become available projects may be moved into a specific list for funding. Conversely, if the need for a project diminishes or is eliminated it may be removed from the list.

Table 6-19

Proposed Long Range Capital Projects		
Project	Budget	Possible Funding Source
1. Stormwater Projects/Watershed Preservation (ongoing)	200,000	Stormwater Management Fund
2. Street Resurfacing Projects (State Roads) (ongoing)	217,000	SCDOT (“C” Funds)
3. Street Resurfacing Projects (Local Streets) (ongoing)	100,000	Street Improvement Fund
4. Beautification Projects (US 1, Knox Avenue, W. Martintown Road) (ongoing)	150,000	Street Improvement Fund and CPF
5. Greenway Connectors	300,000	Federal/State Transportation and Trails Grants
6. Watershed Parks (development)	500,000	Federal/State Transportation and Trails Grants
7. Greenway Park Extension (Pisgah to North of I-20)	350,000	Federal/State Transportation and Trails Grants
8. Greenway Park Extension (River Club to US 1)	200,000	Federal/State Transportation and Trails Grants
9. Greenway Park Extension (US 1 to Palmetto Parkway)	500,000	Federal/State Transportation and Trails Grants
10. Greenway Park Extension (Palmetto Parkway to River)	100,000	Federal/State Transportation and Trails Grants
11. Savannah River Pedestrian bridges (Locations to be determined)	3,500,000	Federal/State Transportation Grants
12. Conference Center and Parking	4,000,000	TIF Bonds
13. Cultural Arts and Historic Display	1,000,000	Sales Tax (3 rd or 4 th Round)
14. Performing Arts Facility	6,000,000	Sales Tax (3 rd or 4 th Round)
15. Aquatic Center	8,500,000	Sales Tax (3 rd or 4 th Round)
16. Senior Adult Facility	1,500,000	Sales Tax (3 rd or 4 th Round)
17. Riverview Park Gyms (four)	4,200,000	Sales Tax (3 rd or 4 th Round)
18. Riverview Park Completion of Upgrade (Parking, Picnic Area)	2,500,000	Sales Tax (3 rd or 4 th Round)

Table 6-19, cont.

Proposed Long Range Capital Projects		
Project	Budget	Possible Funding Source
19. Tennis Complex	2,000,000	Sales Tax (3 rd or 4 th Round)
20. Soccer Complex (8-10 Fields)	3,000,000	Sales Tax (3 rd or 4 th Round)
21. Softball Complex (5 300' Fields)	3,000,000	Sales Tax (3 rd or 4 th Round)
22. Regional Park (Acquisition and Development)	10,000,000	Sales Tax (3 rd or 4 th Round)
23. District Parks	3,600,000	Sales Tax (3 rd or 4 th Round)
24. Community Parks (4 new and upgrade of existing)	3,000,000	Sales Tax (3 rd or 4 th Round)
25. Neighborhood Parks (6 new and upgrade of existing)	1,800,000	Sales Tax (3 rd or 4 th Round)
26. Special Joint Use Facilities (city/school)	500,000	Capital Projects Fund
27. Christmas at Riverview Park	500,000	Capital Projects Fund
28. Lions Field Parking	250,000	Capital Projects Fund
29. 24 Hour Club Relocation	100,000	Capital Projects Fund
30. Solid Waste Transfer Station	1,000,000	Three Rivers WSA
Total	\$62,567,000	

6.12 Other Public Facilities

6.12.1 Educational Facilities

The Consolidated School District of Aiken County is the administrative unit serving the City of North Augusta. The district is the sixth largest in the state and is made up of five administrative areas. The district is governed by the Aiken County Board of Education, which is comprised of seven members elected to four-year terms.

Students in North Augusta (Administrative Area Two) are served by three elementary schools, two middle schools and one high school. A fourth elementary school, Mossy Creek, is currently under construction on Five Notch Road and Scott Drive.

Table 6-20

Aiken County Area II School Enrollment				
School	2000-2001	2001-2002	2002-2003	2003-2004
Belvedere Elementary (K-5) 201 Rhomboid Place	758	793	845	776
Hammond Hill Elementary (K-5) 901 W. Woodlawn Avenue	683	714	703	689
North Augusta Elementary (Pre K-5) 400 E. Spring Grove Avenue	933	931	889	855
North Augusta Middle (6-8) 725 Old Edgefield Road	685	672	566	584
Paul Knox Middle (6-8) 1804 Wells Road	513	511	608	649
North Augusta High (9-12) 2000 Knobcone Avenue	1,446	1,474	1,497	1,504

Source: Aiken County Public Schools

6.12.2 Libraries

The Nancy Carson Library, located at 135 Edgefield Road in North Augusta, is the North Augusta branch of the Aiken-Bamberg-Barnwell-Edgefield Regional Library System (ABBE) and is one of 14 libraries within the four county region. The Nancy Carson Library is a 16,000 square foot facility with 20 public access computers. In 2003, there were 164,205 pieces checked out, second only to the Aiken County branch of the system. The ABBE System also offers a Bookmobile service with regular stops throughout the region including several sites in North Augusta.

6.12.3 Cultural Facilities - North Augusta High School Auditorium

In 2003 extensive renovations were completed on the North Augusta High School Auditorium. The \$80,000 in improvements were funded by the North Augusta 2000 Community Foundation and included new stage dressings and professional light and sound equipment. The improvements were implemented through the efforts of the North Augusta Cultural Arts Council, a local not-for-profit organization, with the approval of the Aiken County Board of Education. The renovation project was undertaken to provide the community with an indoor facility for the performing arts. Several productions are performed in the auditorium each year. Additional improvements to the auditorium are planned.

6.12.4 Medical Facilities

North Augusta residents enjoy a large group of healthcare providers and facilities from which to choose. The Aiken-Augusta metropolitan area is one of the largest medical centers in the southeast with eleven hospitals, over 4,000 hospital beds and more than 25,000 employed in the health care industry.

The North Augusta Health Center, a division of the SCDHEC Edisto Savannah Public Health District, offers local non-emergency medical services in its offices at 802 E. Martintown Road. Primary care and mental health services are available through the Aiken County Health Department in Aiken. There are numerous private practitioners in the city offering a variety of healthcare services including family medicine, dentistry, orthodontics and chiropractic care. There are also two assisted living facilities and a nursing home in the city.

6.13 Goals, Objectives, Policies and Strategies

- 6.13.1 In cooperation with Edgefield County, Aiken County and the affected utility service districts, identify a logical and rational urban service area boundary or “preferred urban growth area” for the city.
- 6.13.2 Initiate annexation procedures to expand the city limits to include the established urban growth area.
- 6.13.3 Establish standards and regulations to require developers to reserve or provide land for and to develop appropriately sized neighborhood and community parks based on the size of the ultimate development.
- 6.13.4 Design and develop a municipal complex that will facilitate private reinvestment in the community, provide a landmark for North Augusta residents and visitors, and serve the city’s needs for up to fifty years.

- 6.13.5 Design and implement a state of the art management information system that improves municipal efficiency and the quality of services to citizens.
- 6.13.6 Cooperate with North Augusta 2000 in the utilization of its Land Bank in the acquisition of sites for future community facilities.
- 6.13.7 Modify the land development (subdivision) regulations and construction standards as necessary to improve the quality of road, curb and gutter and sidewalk construction to improve the quality and extend the life of public improvements deeded to the city.
- 6.13.8 Modify the development regulations as necessary to provide for an adequate maintenance guarantee period for infrastructure accepted by the city.
- 6.13.9 Modify the subdivision and construction standards to include specific designs for sidewalks (a minimum of 5 feet wide) and driveways.
- 6.13.10 Modify the development regulations to provide for private “parking lots” as opposed to public or private streets in higher density residential developments (multi-family, townhouse, etc.). Such private parking lots would be treated similar to commercial parking lots and could be developed to parking lot standards. Parking lots would not be accepted for ownership or maintenance by the city.
- 6.13.11 Monitor and update the federally required incident management plan (emergency operations plan) as necessary.
- 6.13.12 Cooperate with the Aiken County Public School District to insure that school improvements and new school siting and construction developments are designed and integrated into existing developments with similar requirements expected of other development types.
- 6.13.13 Expand the cooperative effort with the Aiken County Public School District.
- 6.13.14 Adopt land development regulations that require that public facilities and services are adequate and available at the time the demand for such services and facilities generated by the development occurs.
- 6.13.15 Evaluate the application of impact fees or other development related fees when appropriate to assist in financing new or improved facilities and increased services when the demand for facilities and services is generated by the development.

- 6.13.16 Locate new municipal facilities on sites that will support infill development in older areas of the city, will reduce traffic congestion and will connect with established (or will serve to implement planned) pedestrian and bicycle corridors.
- 6.13.17 Utilize the Parks and Recreation Facilities Master Plan in the determination and prioritization of capital expenditures for parks and recreation facilities.
- 6.13.18 Continue the implementation of the sidewalk construction program throughout the city to eventually provide public sidewalks in every neighborhood.
- 6.13.19 Coordinate with the City of Augusta and the Augusta Canal Authority to develop a pedestrian and bicycle connection across the Savannah River to provide links between the North Augusta Greenway, the Augusta Riverwalk and Georgia Golf Hall of Fame and the Augusta Canal bikeway system.
- 6.13.20 Complete the acquisition of the Boeckh Ravine Parks system.
- 6.13.21 Implement the capital projects identified in the Master Plan for the North Augusta Riverfront Redevelopment District and not already listed in a capital improvement program.
- 6.13.22 Stormwater drainage acquisition plan.

Chapter 7 – Cultural Resources

7.1 Introduction

The cultural resources element of the plan provides a selected overview of the city's history. It also lists historic and cultural resources including historic properties, historic tourism assets, religious institutions and ongoing cultural activities. Needs, goals, objectives and implementation strategies for preserving and enhancing existing resources and for providing additional activities and facilities conclude the chapter.

7.2 Early History

The Savannah River, first commercial transportation corridor, was the reason that human settlement and occupation occurred in the area of what is now North Augusta. Three early communities located in the general area of North Augusta preceded the development of North Augusta. The first town was Savannah Town settled by the English in the early 1700's. Savannah Town was located below the Fifth Street Bridge and was one of the most important Indian trading centers in South Carolina. At the time, it was considered the end of the civilized world and the gateway to the relatively unknown lands of the Indian Nations as far west as the Mississippi River. Fur traders shipped their goods from Savannah Town to Charles Town where they were shipped to England. The town failed when enterprising merchants set up trading posts on the Georgia side of the river to intercept the goods from the west before they reached Savannah Town. The town died after only 50 years due to this intense competition from its neighbor and rival across the river.

Campbell Town, founded by John Hammond in the mid 1700's, was the second town settled in the area. It was situated on the Savannah River just below the rapids. It was also established as a trading center for furs, other goods, and tobacco. Campbell Town prospered for about 60 years before the lucrative tobacco market started to slip to the Georgia side of the river due to increasing competition between tobacco warehouse owners. In fact, the General Assembly of Georgia, seated in Augusta, took legal steps to establish Augusta as a tobacco center. Competition between tobacco growers and warehouse owners grew so intense that riverboat ferries were destroyed, John Hammond was killed, and his house was burned. With the tobacco and fur trade bypassing Campbell Town, the town did not survive.

The third town, Hamburg, was founded by George Schultz in 1821 and incorporated in 1827. It was the home dock of a thriving steamboat business between Hamburg and Charleston and in only five years grew into a flourishing town. The downriver tobacco and cotton trade was so good that Charleston merchants financed and built a railroad from Charleston to Hamburg. The 136-mile Charleston-Hamburg Railroad, when completed in 1833, was the longest passenger steam railroad in the world. Soon Augusta businessmen started devising ways to take business away from Hamburg. The Augusta Canal was built to allow up-country planters to use the river and pass above the rapids

into Augusta. The final death to Hamburg came when the State of Georgia granted permission for the railroad to extend across the Savannah River into Georgia, changing Hamburg from a terminal point to just a stop along the way to Augusta. After about 50 years, Hamburg, like its predecessors, perished.

7.3 Founding of the City

As a boy, Augusta native James Urquhart Jackson envisioned a town overlooking Augusta in the rolling bluffs across the Savannah. Jackson pursued that dream and in 1889 formed the North Augusta Land Company. In 1890, the company purchased 5,600 acres of land for \$100,000 from the plantation acreage of Mrs. Mattie Butler Mealing. Jackson then hired the best designers from New York to design the new town. The original plat of North Augusta, the Boeckh Plat, was drawn in 1891. The plat includes a traditional downtown, formal public park areas, undeveloped open space areas, and a traditional lot, block and street layout.

The same year, Jackson built a steel bridge across the Savannah River. The bridge connected Augusta's 13th Street with North Augusta's Georgia Avenue and provided direct access from Augusta to North Augusta. The bridge was later dedicated the James U. Jackson Memorial Bridge. In 1897, to further facilitate transportation across the river, the North Augusta Land Company constructed a trolley line across the bridge. The trolley initially extended to the former North Augusta Natatorium, an elaborate and popular swimming pool located between Crystal Lake Drive and Bluff Avenue. Progress followed the trolley as it extended up West Avenue to Jackson Avenue. The trolley was eventually extended to Aiken and the Augusta-Aiken Railway Company was formed. The trolley ceased operation in 1929.

Following the success of the bridge and the trolley line, Jackson formed the North Augusta Hotel Company. In 1902 the company broke ground on the Hampton Terrace Hotel, located high on the hilltop overlooking Augusta. Completed in 1903 at a cost of \$536,000, the Hampton Terrace boasted five floors and 300 guest rooms fitted with every convenience available at the time. A golf course, tennis courts and a riding stable were located on the grounds. The Hampton Terrace soon established North Augusta as a popular winter resort destination and attracted such prominent northerners as Harvey Firestone, John D. Rockefeller and then Vice-President Howard Taft.

As the town grew, so did the need for law and order. In 1903 with a population estimated at several hundred, a petition requesting a charter was sent to the governor of South Carolina. On April 11, 1906, the town of North Augusta was incorporated. The first meeting of the Town Council was held April 16, 1906. The meeting was presided over by the town's first Intendant (Mayor), L.L. Arrington, and four Wardens (Councilmen).

By 1913 the population had grown to 1500. On December 31, 1916, the Hampton Terrace Hotel burned to the ground. It was a total and devastating loss and served to end North Augusta's prominence as a winter tourist destination.

The first City Directory for North Augusta, published in 1918, described the area as: “A growing and progressive town on the high hills of South Carolina, opposite Augusta, GA. Noted for its healthful climate, and unsurpassed view for beauty. Connected with Augusta, GA. By steel bridge, automobile turnpike, electric railway, telephone, etc....North Augusta is largely a residence and school town, yet it has a bank, cotton ginnery, cotton warehouse, lumber plant, box and crate works, veneer plant, cotton refining company, post office, pottery, grist mill, automobile repair shops, blacksmith and wheelwright shops, several grocery and supply stores, hotel, floral gardens and bathing pond.”

The original land area of the city was approximately 722 acres. In 1951, the city held a referendum and extended its boundaries to an area of 5,139 acres. Since 1951, the city has annexed over 6,000 additional acres, bringing the total land area to approximately 12,475 acres or 19.49 square miles.

7.4 Historic Resources

There is a substantial history of the North Augusta area dating to the earliest days of Augusta. Evidence of that history remains in archaeological sites associated with Campbelltown Landing, Hamburg, the industrial areas on the riverfront and Fort Moore. There are a number of historic buildings remaining in the city, many of which are eligible for the National Register of Historic Places and should be preserved. Those buildings are within corridors that have been identified for neighborhood preservation.

The Georgia Avenue-Butler Avenue Historic District is a National Register Historic District in North Augusta. The district encompasses part of the property, which was the site of the former Hampton Terrace Hotel and contains several buildings which were associated with it, as well as other large residences. Several of the structures along Georgia Avenue remain substantially intact and may be eligible for historic designation. An additional and potentially important resource is the former site of the town of Hamburg, which was located in the vicinity of the Fifth Street Bridge, connecting North Augusta and Augusta.

7.4.1 Historic Buildings

The City of North Augusta is home to many buildings of historic significance. The majority are located within the original area of the city encompassed by the 1891 Boeckh Plat. The most significant concentrations are located on the wide avenues that were the primary streets in the early community and smaller intersecting side streets. The wide corridors include Georgia Avenue, Carolina Avenue, West Avenue and Martintown Road. Narrower intersecting streets include Butler Avenue, Jackson Avenue, Lake Avenue and others. The structures that remain consist of a combination of relatively large and stately homes in a

Victorian style, more modest homes in the North Augusta vernacular style and small cottages of the early 20th century.

The wider streets, Georgia, Carolina and West Avenues and especially Martintown Road, now carry significant volumes of traffic and are not suitable for single-family residential uses. As a result, portions of the wide avenue corridors have been zoned for office commercial and neighborhood retail uses. In a few cases, older homes have been demolished and replaced with new commercial buildings. In other cases, the older homes remain but have been renovated for office use and the sites have been drastically altered to provide commercial parking. Zoning regulations could be developed to permit office and other commercial uses while preserving the original buildings. Where original buildings cannot be saved new buildings could be constructed that would reflect the original architectural and site design and thereby maintain and reinforce the original character and scale of the corridors.

7.4.2 National Register of Historic Places - Butler Avenue Historic District

Listed on the National Register in 1984, the Butler Avenue Historic District is located along portions of Georgia Avenue, Observatory Avenue and Butler Avenue. The district contains four buildings of particular historical or architectural importance plus 12 supporting properties. Most of the buildings in the district were constructed between 1900 and 1930 and illustrate the growth of the area from the time it was part of an antebellum plantation through its development as a winter resort.

One of the key properties, Star of Edgefield, (c.1859), is one of the oldest houses in North Augusta. It was once part of an extensive plantation owned by Robert J. Butler. Butler's daughter, Mattie, inherited the house and land. She married North Augusta's first doctor, William E. Mealing, who maintained an office in the house. It was Mrs. Mealing who sold 5,600 acres of land to North Augusta founder James U. Jackson's North Augusta Land Company in 1890.

Several houses were constructed on lots which had been part of the Butler plantation including Palmetto Lodge (c.1903), a hunting lodge and Pine Heights (c.1899), a sanitarium, both built for guests of the Hampton Terrace.

The district also contains an unusually fine collection of intact early twentieth century residential styles including Queen Anne, Classical Revival and Tudor Revival.

7.4.2.1 Notable buildings in the Butler Avenue Historic District:

- 1. Star of Edgefield/Butler House - (c. 1860) 111 Butler Avenue**
This 2-story house built by J. Robert Butler was constructed (exterior and interior walls) of solid hand-made brick, some as much as 24" thick. A famous foundry in England was said to have cast the elaborate ironwork on the porches which feature prominently as the façade of the house. A Union gunboat sank a "blockade runner" that had a matching fence en-route from Europe during the Civil War.
- 2. Palmetto Lodge/Seven Gables - (c. 1903) 1724 Georgia Avenue**
This 2 ½ story Tutor Revival style structure, located in the Butler Avenue Historic District, was built as a men's lodge for Hampton Terrace Hotel patrons, and later bought as a residence by Mr. & Mrs. John Herbert. The property later became a restaurant and hotel. It is currently for sale.
- 3. Pine Heights - (c. 1899) 1117 Georgia Avenue**
The 2 ½ story weatherboarded structure is the sight of the former Pine Heights Sanitarium, which operated as a hospital from 1900 to 1916 and served, among others, patrons of the Hampton Terrace Hotel. In the 1920s, the building served as the headquarters for spring training for the Detroit Tigers, then under the management of Ty Cobb. The front elevation is a monumental pedimented portico with four Ionic columns that support a second story porch that runs the length of the façade.
- 4. Mary Ann Garrett House (c. 1905) 1141 Georgia Avenue**
A 1 ½ story weatherboarded residence influenced by the Queen Anne style, with multi-gabled roof, five brick chimneys and a raised brick basement.

7.4.3 Other North Augusta National Register Listings:

- 1. B.C. Wall House/Sesame Lodge (c. 1902) 1008 West Avenue**
This home was built in 1902 by Civil War veteran and courier of General Wade Hampton, Budd C. Wall. Sesame Lodge took overflow from the Hampton Terrace Hotel, offering a place where "less formal folk can feel more comfortable." It was listed on the National Register in 1992.

- 2. Charles Hammond House (c. 1775-80) 908 West Martintown Road**
Built in 1790, the rear portion of this two-story pine clapboard house, influenced by the Greek Revival style, is probably the oldest existing structure in North Augusta.

Charles Goodwin Hammond, a grandson of the original builder, built the front portion in 1840. Mr. Hammond was a prominent planter and Hamburg merchant. A family cemetery alongside the house contains the remains of Revolutionary War soldiers and a monument to Hammond family members of Revolutionary fame. It was listed on the National Register in 1973.

- 3. Look-A-Way Hall/Mealing House (c.1895) 103 West Forest Avenue**
Built in the Greek Revival style by Walter Jackson, brother of North Augusta's founder James U. Jackson, Lookaway Hall is probably North Augusta's most familiar landmark. It is now a Bed & Breakfast Inn. It was listed on the National Register in 1992.

- 4. Rosemary Hall/Jackson House (c. 1902) 804 Carolina Avenue**
Another example of Greek Revival architecture, Rosemary Hall was built by the founder of North Augusta, James Urquhart Jackson. The structure is now a Bed & Breakfast Inn. It was listed on the National Register in 1975.

- 5. Belvedere Farms/Selwood (c. 1830) 229 Edgefield Road**
This two-story Greek Revival style house was built by farmer Britten Mims of Edgefield. It was listed on the National Register in 1997.

7.4.4 Additional Buildings with Historical Significance

- 1. Rose Hill 855 Old Edgefield Road**
This house is a beautiful example of the "Sandhills Cottage" design popular in the area during the early Nineteenth century. The home is believed to be pre-Revolutionary and to have been the temporary headquarters of General Francis Marion. It is said to have been used as an inn for travelers from Augusta to Edgefield during its early history.
- 2. H. Ruland Tea Room (c. before 1918) 124 W. Arlington Heights**
This 1 ½ story weatherboarded house features diamond-paned single-sash windows and was operated as a tearoom by Mrs. Emory Platt Ruland for guests of the Hampton Terrace Hotel.
- 3. The Berry Benson Home - (c. 1898) 326 Georgia Avenue**
Former home of Confederate Sergeant Berry Benson, who served under Stonewall Jackson and Robert E. Lee and was captured by the Union,

escaped and took part in the evacuation of Petersburg. He is memorialized atop a Confederate monument on Broad Street in Augusta. Two local physicians recently moved the structure to West Avenue and restored it to serve as a medical facility.

4. Knox House (c. 1918) 819 Georgia Avenue

1 ½ story weatherboarded bungalow style house was purchased in the 1920s or 1930s by Mr. and Mrs. Paul Knox. Mr. Knox was a Superintendent of Schools in North Augusta for many years. The low, multi-gabled roof has exposed rafters and decorative woodwork.

5. First Schoolhouse of North Augusta (c. 1898) 415 West Avenue

In 1898, a meeting was held to discuss education. Three hundred dollars was raised and a school built here. Thirteen students were taught by Miss Nina Verdery. By 1900 there were twenty students with Professor Shecut as principal and Miss Verdery as his assistant. A lot on Georgia Avenue was purchased and the foundation of a new school building was laid in 1901. The building is now a beautifully restored home and antique shop.

(Source: National Register of Historic Places, National Park Service, 1984; History of North Augusta, South Carolina, North Augusta Historical Society, 1980)

A 2002 cultural resources study conducted by the Chicora Foundation Inc. identified eight structures that were evaluated as potentially eligible for inclusion in the National Register. The State Historic Preservation Office concurred with this assessment. A subsequent study, conducted by Chicora in 2004, reevaluated these sites and determined that they were still eligible for inclusion. They are:

6. Southern Railroad Bridge (c. 1915)

This five span steel bridge with stone and concrete piers and a central drawbridge section is a significant visual indicator of North Augusta's ties to both the Savannah River and the railroad (Chicora) Eligible for inclusion on National Register.

7. 505 Ponce de Leon Avenue (c. 1920)

1½ story weatherboarded structure with lateral gable metal roof, exposed roof rafters, centered gable dormer and transoms at front entry.

8. 203 Clifton Avenue (c. 1910)

1-story weatherboarded structure with hipped roof and full façade porch, corbelled chimney, transom, turned porch posts with brackets, turned balusters.

- 9. 502 West Avenue (c. 1920)**
2½ story weatherboarded structure with pyramidal roof, front and left porch, decorative truss at front gable with arched Queen Anne block glass window and corbelled chimney.
- 10. 217 Jackson Street (c. 1905)**
2-story weatherboarded structure with gambrel metal roof, doubles hung sashes with geometric pane configurations on second story and corbelled chimney.
- 11. 820 Carolina Avenue (c. 1913)**
2½ story weatherboarded structure with hip and gable roof, full porch, corbelled chimneys, transom and side lights at front entrance, and transom over side porch entrance.
- 12. 914 Carolina Avenue (c. 1910)**
2½ story weatherboarded structure with truncated hip roof, full façade porch, Queen Anne block glass tripartite windows in front gable, ionic columns at entrance and fanlight.
- 13. 819 Tyler Avenue (c. 1920)**
1½ story weatherboarded structure with end to front gable roof, exposed rafters and purlins.

7.5 Cultural and Tourist Attractions and Facilities

North Augusta, as a suburb of Augusta, shares in many of the cultural activities and events provided by Augusta cultural organizations in Augusta facilities. However, the cultural activities and events offered in Augusta have not met all of the needs of North Augustans in recent years. Nonprofit community organizations in North Augusta including the Cultural Arts Council, Olde Town Preservation Association, Heritage Council and North Augusta 2000 have developed cultural activities and events in recent years to supplement the activities and events provided by Augusta organizations. Citizens continue to regularly express the need for additional cultural activities, facilities and events in North Augusta.

7.5.1 Wade Hampton Veterans Park - 300 Block of Georgia Avenue

Named after Civil War General Wade Hampton, the park has monuments dedicated to the veterans of every war our country has participated in since the revolution.

7.5.2 John C. Calhoun Square/Calhoun Park - Georgia and Carolina Avenues

Located downtown between Georgia, Carolina and Forest Avenues, Calhoun Park contains a fountain and an obelisk erected in memory of Thomas McKie Meriweather, the only resident of Hamburg to be killed in the Hamburg riot of 1876. The monument was erected in 1913 or 1914. At the south end of the park is a monument for those killed in the world wars. Originally, the park was rectangular, lying between Jackson and Forest Avenues. Calhoun Park is the site of the annual Christmas Tree Lighting and Carols in the Park.

7.5.3 Living History at Creighton Park - Lake Avenue at Spring Grove Avenue

The north area of Creighton Park, known as the Living History at Creighton Park, serves as the primary location for a variety of cultural venues such as the Music in the Park series throughout the spring and summer sponsored by the North Augusta Cultural Arts Council. The park is also the site of “A Day to Remember”, a colonial trades fair and militia muster held in the fall, and a spring Artisans Fair, both sponsored by the Olde Towne Preservation Association.

7.5.4 South Carolina Heritage Corridor

The 240 miles and fourteen counties that comprise the nationally recognized South Carolina Heritage Corridor are divided into four distinct regions and two routes that stretch from the port city of Charleston in the southern part of the state to the Blue Ridge Mountains of Oconee County in the north. Designated as a national heritage area, the Corridor is viewed as an economic development initiative attracting an estimated 700,000 visitors per year.

The Corridor travels through North Augusta along its Discovery Route, following the trail of the Charleston-Hamburg Railroad, the nation’s first and then longest railroad which stretched from Charleston to North Augusta (then Hamburg, South Carolina). The railroad led to the development of many small market towns along the way. From North Augusta, the corridor travels west and north through mill towns that thrived on power generated from water as it meandered down from the Blue Ridge Mountains to the north.

7.6 Religious Institutions

Seventeen (17) churches representing an extensive list of denominations are located in the North Augusta city limits.

- Church of Jesus Christ of Latter-Day Saints
- Fairview Presbyterian Church

- First Baptist Church of North Augusta
- First Providence Baptist Church
- Grace United Methodist Church
- Hammond Grove Baptist Church
- Holy Trinity Lutheran Church
- Immanuel Baptist Church
- North Augusta Bible Chapel
- North Augusta Church of Christ
- North Augusta Southern Methodist Church
- Our Lady of Peace Catholic Church
- Ridgeview Baptist Church
- Second Providence Baptist Church
- St. Bartholomew's Episcopal Church
- Victory Baptist Church & School

7.7 Community Festivals

The citizens of North Augusta enjoy a variety of cultural and historic events throughout the year. These events are sponsored and supported by numerous community organizations and businesses, the City of North Augusta and its neighbors and citizens.

7.7.1 North Augusta Cultural Arts Council

The North Augusta Cultural Arts Council, founded in 1996, is a not for profit organization whose mission is the support of existing arts and the development of new arts programs for the citizens of North Augusta. The Arts Council is governed by a volunteer Board of Directors and is funded by the City of North Augusta and various grants and donations.

Regular program activities include "Music in the Park," a series of free concerts throughout the summer at Creighton Living History Park. Other activities have included a citywide competitive student art show, a community artist-in-residence program and an artists' banner program in conjunction with the city.

In 2003, to provide the community with an indoor facility for the performing arts, the Arts Council solicited funding and, with the approval of the Aiken County Board of Education, completed extensive renovations to the North Augusta High School Auditorium. The \$120,000 in improvements funded primarily by the North Augusta 2000 foundation included new stage dressings and professional light and sound equipment. To date, several productions have been held in the auditorium including a special performance by the Augusta Symphony and "*A Tribute to Lewis Grizzard*," presented by the State Theater of Georgia.

7.7.2 Olde Town Preservation Association

The North Augusta Olde Towne Preservation Association was founded in 1991 to preserve the unique historic character of North Augusta. The Preservation Association hosts "A Day to Remember", a two-day colonial trades fair and militia muster at the Creighton Living History Park. The Preservation Association also hosts a spring Artisans Fair, shares historic topics and activities with local school children, and participates in numerous community and regional events.

7.7.3 Annual Events in North Augusta include:

- Music in the Park Summer Concert Series
- A Day to Remember Colonial Trades Fair and Militia Muster
- Jack-O-Lantern Jubilee
- Labor Day "Rest Fest"
- Lions Club Christmas Parade
- Carols in the Park
- Mayor's Prayer Breakfast
- Easter Egg Hunt

7.8 Literary Accomplishments

The North Augusta Historical Society published a book, *History of North Augusta, South Carolina*, in 1980. The book recounts North Augusta's early years through 1970 and includes homes, churches, clubs and organizations, city government, education and health services, businesses, people and more. A second volume, published in 2000 by the Heritage Council of North Augusta, covers the years the history of the community through the year 2000.

7.9 Goals, Objectives, Policies and Strategies

- 7.9.1 Facilitate the development and operation of a North Augusta Historical Museum to present the rich history of the community and display artifacts of the last hundred years.
- 7.9.2 Facilitate the construction and maintenance of a North Augusta Performing and Cultural Arts Facility that is appropriately scaled for the city to provide a local venue for performing and visual arts.
- 7.9.3 Support and encourage the North Augusta Cultural Arts Council to enhance and expand cultural program offerings in the visual and performing arts.

- 7.9.4 Improve publicity for area cultural events through enhanced relationships with the Augusta Metropolitan Convention and Visitors Bureau and others.
- 7.9.5 Support and promote cultural and historic events through city communication media including the city newsletter, *North Augusta Forward*, and the city website, www.northaugusta.net.
- 7.9.6 Support the restoration and preservation of significant historic properties including, especially, the Palmetto Lodge because of the risk of loss associated with its uncertain future.
- 7.9.7 Encourage the adaptive reuse of historic or architecturally significant buildings that connect the city with its past.
- 7.9.8 Provide information about National Register of Historic Places eligibility guidelines and incentives to owners of historic properties.
- 7.9.9 Develop a comprehensive brochure of historic properties in North Augusta in cooperation with the Chamber of Commerce or other community organizations to be used in local schools and as tourism brochure.
- 7.9.10 Develop and implement design guidelines in the Downtown Redevelopment District to enhance and preserve the historic and aesthetic character of the downtown.
- 7.9.11 Develop and implement zoning and design standards in the primary historic corridors including Georgia Avenue, Martintown Road, Carolina Avenue and West Avenue that permit small commercial uses but retain historic structures to the extent practicable and reinforce the original scale and character of the corridors.
- 7.9.12 Develop the former site of Hamburg as an historic park highlighting its role as the terminus of the Charleston to Hamburg Railroad and as a gateway to North Augusta at the 5th Street and Aiken-Augusta Highway (US 1) entrances to the city.
- 7.9.13 Develop a gateway park and visitor center near the James U. Jackson Memorial Bridge as part of the town center.
- 7.9.14 Develop a regional tourism marketing plan that emphasizes North Augusta's culture and history, especially the Savannah River.

Chapter 8 – Natural Resources

8.1 Introduction

The physical characteristics of the land and the areas' natural resources have played a significant role in the development of North Augusta area over the last three hundred years. Crops and timber have been produced. Kaolin and raw materials for brick, tile and concrete were mined in North Augusta. Water supplies from the Savannah River and its North Augusta tributaries have contributed to farming, commerce and domestic use. Undeveloped lands in the community continue to support a variety of plant and animal life.

As urban land use has spread and natural areas have developed, the community's interest in protecting natural resources while accommodating new development has risen. This element includes a brief inventory and assessment of North Augusta's natural resources and describes efforts being taken to protect them. Natural resources include flood plains, soil, water aquifers and recharge areas, watersheds and drainage ways, wetlands, agriculture and forestlands, and scenic views and sites.

8.2 Geographic Location

North Augusta is located in western Aiken County in central South Carolina adjacent to the Savannah River. Adjoining counties include Richmond and Columbia in Georgia to the south and west, and Edgefield County, South Carolina to the north. A substantial area of unincorporated Aiken County lies to the east and southeast. North Augusta is approximately 67 miles west of Columbia, the South Carolina state capitol, and 150 miles east of Atlanta, the Georgia state capitol.

8.3 Climate

North Augusta's climate is relatively mild and characterized by long warm summers and relatively short mild winters. Average temperatures in June are in the 70's while temperatures in January are in the 40's. Prevailing winds are from the southeast and southwest, bringing in moist tropical air from the Atlantic Ocean and the Gulf of Mexico. In summer the average temperature is 79 degrees and the average daily high exceeds 90 degrees in June, July and August. In winter the average temperature is 47 degrees and the average daily minimum temperature is 35 degrees. Total annual precipitation is approximately 46 inches. Annual precipitation amounts have been below normal for the last 45 years. The average relative humidity in mid afternoon is about 50 percent. Humidity is higher at night and the average at dawn is about 90 percent. (Table 8-1)

8.4 Topography

North Augusta and Aiken County are located on the "fall line", a geologic boundary following the Appalachian Mountain Range from Alabama to New York. In South

Carolina the “fall line” transition area separates the piedmont from the coastal plain topographic regions. Elevations range from 125 to 550 feet above sea level. In general the area is comprised of flat terrain and gently rolling hills with slopes ranging from zero to 20 percent.

Table 8-1

**Average Climatic Conditions
Minimum Period of Record: 30 Years**

Month	Temperature					Precipitation
	High	Low	Average	Record High	Record Low	
January	56°F	33°F	45°F	83°F (1949)	-1°F (1985)	4.50 inches
February	61°F	36°F	49°F	86°F (1962)	9°F (1973)	4.11 inches
March	69°F	43°F	56°F	89°F (1995)	12°F (1980)	4.61 inches
April	77°F	48°F	62°F	96°F (1986)	26°F (1982)	2.94 inches
May	84°F	57°F	70°F	99°F (1964)	35°F (1971)	3.07 inches
June	90°F	65°F	78°F	105°F (1952)	47°F (1984)	4.19 inches
July	92°F	70°F	81°F	107°F (1980)	55°F (1951)	4.07 inches
August	90°F	68°F	79°F	108°F (1983)	54°F (1968)	4.48 inches
September	85°F	62°F	74°F	101°F (1999)	36°F (1967)	3.59 inches
October	76°F	50°F	63°F	97°F (1954)	22°F (1952)	3.20 inches
November	68°F	41°F	54°F	90°F (1961)	11°F (1950)	2.68 inches
December	59°F	35°F	47°F	82°F (1998)	5°F (1981)	3.14 inches

Source: National Weather Service

8.5 Soils

Due to the variety of topography and geologic conditions within the city limits, numerous soil types are identified in North Augusta. Generally, soils in the community are identified as Troupe-Lakeland-Fuquay in the *Soil Survey of Aiken County Area, South Carolina* by the U.S. Department of Agriculture. Troupe-Lakeland-Fuquay is characterized as well-drained sandy soils that have loamy subsoil, and excessively drained soils that are sandy throughout. The *Soil Survey of Aiken County Area, South Carolina* is available for review in the city’s Department of Economic and Community Development.

8.6 Agricultural and Forest Land

Historically, much of what is now within the North Augusta city limits was farmed. Today there is very little land within the city utilized for agricultural purposes. The most significant and visible agricultural land use in North Augusta is the strawberry farm located on the McKie property on West Martintown Road at Knobcone Avenue. The strawberry farm utilizes approximately 20 acres. There is additional agricultural land within the North Augusta planning area, but it is limited and relatively small.

There is a considerable amount of undeveloped land that is timbered periodically both within the city limits and within the planning area. The forested lands are periodically timbered to take advantage of income opportunities, often just prior to land development activity. There is currently no land within the planning area that is exclusively for timbering purposes. New land development projects are not often planned with a goal of preserving high quality natural areas and existing tree stands. The result is often the clear cutting of forested land and unnecessary destruction of natural habitat.

8.7 Endangered Species

Relict Trillium (*Trillium reliquum*), an herbaceous member of the lily family, is listed as an endangered species in Georgia and South Carolina and is on the federal endangered species list. It exists within and adjacent to Riverview Park and on several riverfront parcels that are privately owned. There have been additional findings of Relict Trillium in other parts of the city north of I-20 and Bergen Road, specifically northeast of the Bergen Place development.

Bottlebrush Buckeye (*Aesculus parviflora*) is a wide spreading shrub native to South Carolina. It is currently listed as a Regional Species of Concern by the South Carolina Department of Natural Resources. A protected population is located on the Savannah River Bluffs Heritage Preserve. The native habitat is river banks and bluffs and wooded hillsides in the piedmont and coastal plain of the state.

The Rocky Shoals Spider Lily (*Hymenocallis coronaria*) is a perennial native to South Carolina, Georgia and Alabama. Also known as the shoals spider lily and cahaba lily, it is found in major streams and rivers in rocky shoals and in cracks of exposed bedrock. The Savannah River is a habitat of the rare flowering plant. The Rocky Shoals Spider Lily is listed as an endangered species in Georgia and as a species of concern in South Carolina. It has been proposed federal endangered species status.

All projects that require or utilize a direct federal approval, permit, grant, loan or loan guarantee must comply with provisions of the Endangered Species Act including consultation with the U.S. Department of the Interior to avoid adverse impacts on endangered species. Properties proposed for such permits or approvals are surveyed and evaluated for threatened and endangered species, especially Relict Trillium.

8.8 Conservation Areas and Open Space

The City of North Augusta and the planning area include several conservation, recreation and natural areas. The original plan for the city, prepared by Charles Boeckh, represented some of the best characteristics of the City Beautiful Movement in city planning and included the preservation of natural open space, steeply contoured land and natural drainage ways as parkland. The “Boeckh Plat” was based on a grid and set aside major open spaces following natural drainage ways leading to the Savannah River. Parks and

open space were envisioned on those drainage ways. The “Boeckh Ravine Parks,” located on both sides of the original city, have been developed to some degree.

The originally planned natural areas in the city have been zoned open space preservation for approximately thirty years and the potential for future development other than as parks and open space is limited. Additional areas of the city annexed over the last sixty years are currently subject to future development and include natural and sensitive lands and drainage ways. Some of those areas are in danger of insensitive development and destruction. Additionally, there are large undeveloped areas of environmentally sensitive land outside the city limits but within the planning area that are also in danger of insensitive development. One example of an appropriate land conservation effort was undertaken by the South Carolina Wildlife and Marine Resources Department when it acquired approximately 80 acres on the Savannah River north and northwest of the Savannah Barony subdivision for preservation in a natural state. The site, known as the Savannah River Bluffs Heritage Preserve, is part of the South Carolina Heritage Trust Program and is the only permanently protected habitat for the federally endangered Relict Trillium.

There are a number of relatively large undeveloped parcels close to the center of the city that include some areas of both steep slopes and wetlands. However, large portions of the unimproved parcels are appropriate for urban development. They are located east of Georgia along the bluff overlooking the Savannah River, east of Martintown Road between Martintown Road and the Savannah River, and east of US 25 in Belvedere.

8.9 Air Quality

Air quality is a significant issue throughout the country, in the Central Savannah River Area (CSRA) and in Aiken County. Air pollution has a direct impact on public health and well being. It also has implications for economic development, transportation, and the quality of life in a community. Air pollution in the CSRA, including North Augusta, is approaching limits set by the EPA.

Ozone, the main ingredient of smog, is a serious air quality problem. Even at low levels ozone can have a number of affects on the human respiratory system. Particulate matter is another air pollutant. It is any material that exists as solid or liquid in the atmosphere and may be in the form of fly ash, soot, dust, fog, fumes or other materials. Particulate matter causes irritation and damage to the respiratory system resulting in difficulty breathing, bronchitis and aggravated respiratory disease. Exposure to particulates affects individuals with chronic pulmonary or cardiovascular disease, influenza and asthma. It affects children and the elderly most severely. Current data indicate that the Augusta Metropolitan Area has an ozone problem. The states of Georgia and South Carolina monitor ozone in a variety of locations on both sides of the river. Monitoring stations in recent years have recorded ozone levels exceeding allowable standards on several occasions. Under the Federal Clean Air Act Amendment, violations occur when 8-hour ozone averages exceed 0.085 parts per million. Communities whose three-year averages

for ozone exceed the national 8-hour standard are designated as non-attainment areas. The Augusta metropolitan area has so far avoided such designation.

Non-attainment designation has implications for economic development and transportation in the area. Under non-attainment new or expanding industry that generates emissions would be subject to the EPA's new source review program requiring new plants and major modifications to existing plants to obtain a permit before construction which can be issued only if the new plant or major modification includes pollution control measures that reflect the best technology available.

Under the Clean Air Act metropolitan planning organizations in non-attainment areas must demonstrate through the transportation conformity process that planned transportation investment strategies and programs taken as a whole have air quality impacts consistent with the state implementation plan and that emissions do not exceed the target for emissions from mobile sources.

Aiken County is participating with the South Carolina Department of Health and Environmental Control (SCDHEC) and the EPA in an Early Action Compact (EAC). The EAC is a memorandum of agreement for the expressed purpose of developing and implementing an early action plan that will reduce ozone levels in the county to maintain compliance with the 8-hour ozone standard. The EAC represents a proactive effort to meet air quality standards sooner than required, December 31, 2007, under the 8-hour ozone implementation rule. Among the potential benefits of participation in the EAC are the positive impact on public health and environment, positive public reaction for voluntarily addressing air pollution problems ahead of the federal requirements, deferral of the effective date of non attainment designation thereby deferring costly and potentially unnecessary requirements associated with non attainment including the deferral of new source review on transportation conformity requirements. In March 2001 the Augusta Regional Transportation Study (ARTS) Metropolitan Planning Organization (MPO) Policy Committee endorsed a resolution authorizing the MPO to enter into a memorandum of agreement with certain federal agencies and the South Carolina Department of Transportation regarding interagency consultation procedures in South Carolina. Part of Aiken County is within the Augusta MPO study area. The memorandum of agreement spells out the criteria and procedures for the determination of the conformity of transportation plans, programs and projects in South Carolina areas designated as non-attainment or maintenance for national air quality standards. In 2002 the memorandum of agreement was signed by the ARTS MPO and other MPOs in South Carolina and the relevant state and federal agencies.

8.10 Water Resources

The dominant hydrographic feature in the city is the Savannah River. The river forms the city's southwestern boundary and serves as the state line between Georgia and South Carolina. North Augusta's potable water supply is pumped from the Savannah River. The stretch of the river adjacent to North Augusta is one of the more unique parts of the

waterway. Adjacent to North Augusta is where the river rolls over the fall line separating the piedmont and coastal plain physiographic provinces. The shallow waters of the fall line served as a river crossing for centuries and the characteristics are in sharp contrast to the deeper navigable reaches downstream. This change in the river's environment allows it to support a variety of plants, animals and wildlife, and gives residents a greater appreciation of the natural environment. Over the years a number of archaeological sites have been identified in the area, many of which are located in the flood plains and swamps near the river corridor.

8.10.1 Tributaries

There are a number of other hydrographic features within the city that are tributary to the Savannah River. They include Pole Branch, Fox Creek, Little Horse Creek and Horse Creek.

8.10.2 Carolina Bays

There are several Carolina bays within or adjacent to the North Augusta city limits. One significant Carolina bay is located on the Wertz property in the southeast quadrant of the I-20 – US 25 interchange at exit 5. It is known as Mathis Lake and will be skirted by the new I-520 alignment on the east.

8.10.3 New Savannah Bluff Lock & Dam

The Augusta Pool of the Savannah River between North Augusta, South Carolina and Augusta, Georgia has significantly influenced the development of both communities. Both cities have invested millions of dollars to improve the riverfront as an anchor for private redevelopment efforts. Created by the New Savannah Bluff Lock and Dam, the Augusta Pool is critical to maintain the municipal water supply intakes in North Augusta and the process water intakes for the SCE&G Urquhart power generating facility and five major manufacturing plants.

The City of North Augusta and Aiken County initiated a process to obtain title to the facility and manage it with a consortium of local governments, affected area industries and SCE&G. The consortium has urged the U.S. Army Corps of Engineers to improve the facility to current standards at federal expense before transferring operation responsibilities. If an agreement can be reached, the affected parties can affect a positive resolution of this matter – a mutually agreeable position to maintain the current, significant economic benefits to the CSRA that have been created by the Savannah River pool.

8.11 Floodplains and Wetlands

8.11.1 Floodplains

A substantial portion of the southwestern boundary of North Augusta bordering the Savannah River has been identified as within the river's floodplain and floodway. Additionally, portions of the drainage areas of several tributaries, Horse Creek, Pole Branch, Fox Creek, Crystal Lake Creek and Rapids Creek, and include both floodways and floodplains. Floodplain studies of the Savannah River and flood control measures constructed upstream from North Augusta conducted in the early 1990's resulted in the flood plain elevation within the city being lowered significantly. In 1994 revised Flood Insurance Rate Maps were published. In 1997 the River Golf Club was zoned Planned Development (PD). The development included a golf course, clubhouse and single family residential units along the river. The RiverNorth tract, another planned development, is also currently under development as a residential community. Both developments include substantial protected wetland areas. Flood Insurance Rate Maps are on file at the city's Department of Economic and Community Development and the Federal Emergency Management Agency (FEMA).

Since the dams were constructed on the Savannah River and the flood elevation was lowered in 1994, much of the available Savannah River frontage in the city has been developed for private residential use and ownership. The residential development has reshaped the riverbank, stabilized it with stone rip-rap and eliminated the natural riverbank vegetation. Some residential properties have violated city floodplain and floodway management regulations by filling in the floodway and modifying the riverbank. Areas of undeveloped riverfront land outside the city limits remain in a variety of parcel sizes and ownerships.

Public access to the river is now severely limited in the city and in the planning area both upstream and downstream of the city limits. Approximately one mile of riverfront, formerly the original North Augusta industrial area, has been purchased by the city for a riverfront park and Greenway. The limited amount of undeveloped land remaining on the riverfront presents additional opportunities for public access.

8.11.2 Wetlands

Substantial wetland areas have been identified along the river and its tributaries. The Sanders (RiverNorth between US 1 and I-520, the Palmetto Parkway), River Golf Club (between the 5th Street and 13th Street bridges) and Mason Turf Farm (east of the Palmetto Parkway) properties all contain substantial wetland areas. The wetlands areas of the River Club have been incorporated into the River Club Golf course. The RiverNorth wetlands have been reserved as a conservation area. The city also contains a number of smaller wetland areas along Horse Creek,

Little Horse Creek, Mim's Branch, Pole Branch, Fox Creek, Rapids Creek, Crystal Lake Creek and in the Boeckh Ravines.

Although the U.S. Army Corps of Engineers no longer claims jurisdiction for isolated upland wetlands, the SCDHEC does consider them "waters of the state" and requires mitigation if upland wetlands are impacted by development.

8.12 Goals, Objectives, Policies and Strategies

- 8.12.1 Cooperate with the states of South Carolina and Georgia, Aiken County, Augusta/Richmond County and Columbia County in the cooperative management of water resources in the Savannah River Basin. Maintain the Augusta Pool to preserve natural resources, provide for appropriate economic development and maintain an adequate water supply for the area.
- 8.12.2 Cooperate with Aiken County, the SCDHEC and the ARTS in the development and implementation of the Early Action Plan pursuant to the Aiken County Early Action Compact.
- 8.12.3 Prepare and adopt a Natural Areas Protection Plan to identify environmentally sensitive land areas and recommend means to protect air and water quality, wetlands, endangered species and open space. The plan will recommend regulations for permitting development in critical environmental areas. The plan will also establish priority-setting criteria for open space protection through conservation easements and public acquisition.
- 8.12.4 Acquire key properties identified in the Natural Areas Protection Plan including the Boeckh Ravine Parks not already owned by the city.
- 8.12.5 Adopt development regulations that require the riverbank on the Savannah River to be maintained in a natural state or for public access when adjacent land is proposed for development to minimize private control and destruction of the natural riverbank.
- 8.12.6 Adopt and enforce more stringent and specific regulations to protect the floodways on the Savannah River and its tributaries from encroachment.
- 8.12.7 Utilize available city funding and intergovernmental grants to acquire natural drainage ways, Carolina Bays, unprotected upland wetlands and other environmentally sensitive areas, for open space preservation, stormwater management, park land and extensions of the Greenway system.

- 8.12.8 Adopt development regulations that require land developers to reserve and protect, or dedicate to the city, an adequate portion of natural drainage ways and other environmentally sensitive areas to provide for open space preservation and stormwater management.
- 8.12.9 Adopt development regulations that encourage and permit cluster residential developments of a higher net density, including multi-family, in all residential zoning districts, where appropriate, with adequate buffers to preserve open space, maintain natural habitat areas and corridors and protect natural resources.
- 8.12.10 Adopt development regulations to require the preservation of existing significant trees and tree clusters where appropriate on land proposed for new development.
- 8.12.11 Adopt land development regulations to require the planting and/or preservation of trees in both commercial and residential developments.
- 8.12.12 Undertake the public works management and budget actions necessary to obtain the “Tree City USA” designation.
- 8.12.13 Design and implement a city program to plant street trees in existing rights of way where none currently exist and on city property where appropriate.
- 8.12.14 Continue implementing the network of Greenway trails while maintaining existing natural areas in the process.

Chapter 9 – Land Use

9.1 Introduction

The most significant effect of the implementation of a comprehensive plan is on the development and use of land. The historic development and use of land within the City of North Augusta has determined its current appearance and character. The future of the city will be determined both by what exists in 2005 and the way land is developed henceforward. The extent, timing and location of new development or the reuse of developed land will depend in large part on the elements described in the preceding chapters. The type and rate of population growth, the quality of economic development, the location and scope of increased community services and facilities, the type and location of housing construction, expansion of the transportation system and the level of protection of natural and historic resources all effect land use.

The purpose of this chapter is to profile existing land use patterns and trends and forecast future land use. The chapter assesses existing land use by reviewing the factors that contribute to existing land use patterns, the problems with development patterns and constraints placed upon development. The future land use plan reflects the community's desire to guide and direct growth and includes goals, policies and strategies that would support and reflect the goals, policies and strategies outlined in the eight previous elements of the plan. The Future Land Use Map is included in this chapter and reflects the land use goals, policies and strategies.

9.2 Existing Land Use

North Augusta is characterized by a mix of land uses including the traditional “Boeckh Plat” portion of the city; newer suburbs, developed primarily since 1950 when development of the Savannah River Plan was initiated, and undeveloped land, a majority of which has been annexed in the last 25 years. Existing land use also includes commercial corridors of varying age, industrial areas, public and institutional uses, utilities and utility corridors and the transportation network, primarily roads and streets.

An inventory of existing land use was completed utilizing the city's geographic information system (GIS) to identify the type, distribution and intensity of development in the city. Parcels were classified by primary use and depicted on the Existing Land Use Map 9-1. The inventory was completed utilizing information contained in the GIS database, review of aerial photography flown in 2000, and field observations. Land uses are classified under the following eight categories on the Existing Land Use Map.

9.2.1 Low Density Residential

The majority of the low density residential acreage consists of single-family detached subdivisions developed at densities of four units to the acre or less. The low density residential land is primarily located between major arterial and

collector roads. Low density residential includes manufactured housing located on individual lots and mobile home parks, none of which are located within the city limits but are scattered within the planning area.

9.2.2 High Density Residential

The majority of the high density residential land use is in multi-family structures, assisted living facilities, or high density townhouse pattern development. High density residential uses are scattered throughout the city and across a substantial portion of the planning area.

9.2.3 Commercial

Commercial land uses are primarily concentrated in the arterial corridors and on some scattered parcels. Uses include retail, office, highway-oriented business, and low-density residential. This category includes single family residential of less than six units per acre. The majority consists of single-family detached houses and subdivisions located between arterials and collector streets.

9.2.4 Industrial

The industrial category includes manufacturing, warehousing and distribution uses and, in some cases, includes vacant land committed to future industrial development. The majority of the industrial land use is located in the North Augusta Industrial Park east of US-1 and south of SC-125. Additional industrial land use is located on both sides of US-25 and I-20 between Ascauga Lake Road and the city limits.

9.2.5 Transportation, Communication and Utilities

The transportation category includes roads, streets, railroads and other land committed to transportation uses. It also includes utility substations, land devoted to municipal utilities including water towers and lift stations and radio, television and cell towers.

9.2.6 Public and Institutional

This category includes government offices and facilities and institutional land uses. Government uses include the municipal complex, public safety stations, libraries, post offices, schools and similar uses. The examples of institutional land uses include churches and cemeteries.

9.2.7 Parks, Recreation, Open Space and Conservation

This category includes land dedicated to active or passive recreational uses including the city's parks and recreation facilities located throughout the community, public and private golf courses, conservation areas and the North Augusta Greenway. The largest individual parcels include Riverview Park and the River Golf Club.

9.2.8 Vacant

This category includes land that is not currently developed or is utilized for forestry or agricultural purposes. It includes both large and small unimproved parcels throughout the community.

Table 9-1

Existing Land Use			
	Land Use Categories	Acres	Percent
1.	Low-Density Residential	19,654	46
2.	High density Residential	468	1
3.	Commercial	1,036	2
4.	Industrial	1,647	4
5.	Transportation, Communication and Utilities	2,524	6
6.	Public and Institutional	1,079	3
7.	Parks, Recreation, Open Space and Conservation	1,098	3
8.	Vacant	15,116	35
	Total	42,622	

9.2.9 Mapping Accuracy

There are approximately 7,420 acres in Edgefield County that are not currently included in the city's GIS database and are not included in Table 9-1. The majority of that land is dedicated to single family residential use or is vacant. Edgefield County is significantly behind the City of North Augusta and Aiken County in the development of its geographic information and there is no readily accessible source of data that can be blended with the city's current system. The lack of data on land use, parcel size, relationship and ownership in Edgefield County will create problems for the city in future years as the community grows to the north and west into Edgefield County.

9.3 Assessment of Existing Land Use

The development of North Augusta has been influenced by many of the same factors that have affected communities throughout the country. Those factors include major historic events including wars and the country's response to war. The Savannah River Site is an example in our area. Additionally, fluctuations in the national economy, advancements in

transportation and communication systems, improvements in building practices and national trends in housing style and demand regularly influence development patterns. Land use patterns have also been influenced by the area's geography and climate, the location of natural features, including the Savannah River and the fall line, natural and man-made disasters including periodic flooding of the Savannah River, the extension of public facilities including roads and highways, the development and expansion of major federal and state facilities and local development regulations.

A substantial amount of currently vacant land is located in the immediate vicinity of the two I-20 interchanges. Much of that land is zoned for commercial use. Additionally, the owners of sizeable parcels of land in those areas not currently zoned for commercial use have inquired about rezoning. The availability of commercially zoned land adjacent to the interstate could attract commercial development to that area at the expense of older areas of the city.

9.4 Historical Influences on Land Use

Existing land use in North Augusta reflects the history of the area. North Augusta was originally conceived and developed as a first tier suburb of Augusta. However, it was planned as a freestanding community with its own commercial downtown, residential areas, parks and open space, tourism and recreation facilities, and a substantial area set aside for industrial and manufacturing uses. A bridge spanning the river at 13th Street and the subsequent development of early mass transit in the form of a trolley line brought the community closer physically to Augusta.

Periodic flooding of the Savannah River significantly influenced the community's development, especially in those areas below the bluff. Large scale but temporary construction activity and the associated jobs influenced the community when major regional facilities including Thurmond Dam and Lake, the Savannah River Site and Fort Gordon were constructed. Those facilities have also created permanent jobs, attracted suburban residential development and supported commercial development. Regional facilities located in Augusta including the Medical College of Georgia and University Medical Center also influenced the rate of growth and development in North Augusta. Public utilities and roads have been improved and extended to meet demands created by periodic growth. As a result the city is currently well served by public water, sewer and solid waste services, electricity, natural gas, and communications and transportation.

Local zoning subdivision developmental regulations have had a major impact on land use patterns. Originally implemented in the early 1950s, the primary purpose of the city's zoning regulations was to segregate land uses to protect public health, safety and welfare. The city's zoning regulations were consistent with national models at the time and separated land uses into residential, commercial, industrial and recreation zones and established basic standards related to lot size, coverage and parking requirements for different land uses. Additionally, subdivision regulations set forth the standards for converting vacant land into building lots. Subdivision regulations also include design

standards for water and sewer systems, stormwater drainage and streets. Zoning and development standards also identify procedures for the approval of development plans.

The city’s zoning, land use and development regulations have been updated several times. The updates have generally occurred once per decade. The most recent update of the city’s zoning and land development regulations was in 1996. The land development regulations are due for another update.

9.5 Past Land Development Patterns

The “contemporary” development patterns of the last 50 years have been the generally accepted norm across the region and the country. The impact of those patterns, however, has been significant on the downtown area and older more compact neighborhoods. In the 20 years between 1980 and 1999, the city developed 1,770 lots on 866 acres, an average of 2.04 lots per acre (gross density). If the subdivision acreage is reduced by 20% to accommodate for streets and stormwater detention, the resulting net density is 2.55 lots per acre. The portion of the city included in the 1891 Boeckh plat generated approximately 13 lots per acre.

However, since 2000, primarily as a result of changing demands in the housing market, density has increased slightly. Between January 1, 2000, and March 31, 2004 the city platted 608 lots on 283 acres resulting in 2.15 lots per gross acre and 2.69 lots per net acre. The trend toward higher density development and smaller units should continue over the next ten years.

Table 9-2

Real Estate Developed 1980 – 1999

Subdivisions	2
Lots Developed	1,770
Acres Developed	866

Source: North Augusta Department of Economic and Community Development

Table 9-3

Real Estate Developed 2000 – 2004

	Subdivisions	Lots	Acres
2000	4	116	46.29
2001	6	162	69.09
2002	2	85	29.96
2003	9	245	137.54
2004	7	195	68.26
Total	28	803	351.14

Source: North Augusta Department of Economic and Community Development

9.6 Current Land Use and Development Trends

Some of the impacts of sprawl development including the increased dependence of the automobile and traffic congestion have been mentioned in other chapters. There are three types of development patterns typical of urban sprawl. They include leapfrog development, strip development, and low-density single dimensional development. All three are evident in North Augusta.

9.6.1 Leapfrog Development

Leapfrog development occurs when a new urban use, a residential subdivision for example, is developed in a rural or semi-rural location removed from the existing urbanized area. The new subdivision is often attractive to homebuyers because of its remote location and generally lower cost for a new home. The new subdivision is still close enough to take advantage of many urban services and amenities but requires a longer travel distance and travel time to access many of the services. When new subdivisions are developed in this manner, they increase the demand for public facilities and services including schools, police and fire protection, water, sanitary sewer and road maintenance.

New scattered subdivisions often conflict with their rural neighbors and increase development pressures on surrounding undeveloped land. Residential subdivisions with single-family homes on relatively large individual lots at a low density are the primary examples of leapfrog development in North Augusta.

Current state law in South Carolina supports additional leapfrog development. Both cities and counties are empowered with essentially the same ability to regulate and approve land development. Therefore, an informal but sometimes significant competition between property owners, and in some cases local governments, for development activity arises. Additionally, South Carolina annexation laws constrain the orderly growth of cities into unincorporated areas. Voluntary annexation of land into North Augusta has generally been tied to the extension of water or sewer or both into the undeveloped land. Annexation of unimproved land affords the city the opportunity to control the type and quality of development. The limitations created by the state law and the city's natural desire to control the quality of its built environment have resulted in significant leapfrog development and sprawl. The alternative, however, would have been even less dense development in unincorporated Aiken County where the standards for utility installations, street construction and subdivision design are substantially below those of the City of North Augusta.

One example of subdivision development in the county is the prevalence of subdivisions with "flagpole" lots. Flagpole lot development is attractive because it is relatively inexpensive. A substantial number of relatively large lots can be developed with a minimal amount of new road construction. Flagpole lots generally rely on septic systems for sanitary sewer and often utilize wells for

potable water. Flagpole lots are often platted irrespective of the terrain. Subsequently, the rather lengthy driveways are poorly constructed and maintained, creating erosion problems and making it difficult for public safety vehicle access. The city has annexed a number of previously platted flagpole lots.

9.6.2 Strip Development

Strip development is marked by extensive commercial development on both sides of major arterial roads. In most cities a combination of individual businesses and large shopping centers occur in a linear pattern on major arterials and in many cases on the adjoining collector streets. The largest concentration of such development occurs near interstate highway interchanges and where major arterial roads intersect one another. Typical characteristics of strip commercial development include multiple curb cuts, large expanses of asphalt parking lots and numerous commercial signs.

Ironically, the desire to separate land uses (i.e. separating commercial from residential areas), the construction of new roads, the widening of existing roads and trends in the commercial real estate market have contributed to strip commercial development. This development pattern, while widely accepted, is often cited as an unsightly and inefficient use of land and a major contributor to traffic congestion.

US 25 through Belvedere, Richland Avenue and Whiskey Road in Aiken, and Gordon Highway and Washington Road in Augusta are extreme examples of the effects of poorly planned strip commercial development. In North Augusta strip commercial development occurs on sections of Georgia Avenue, Knox Avenue and East Martintown Road. In recent years North Augusta has developed improved and enforced policies to significantly limit the extent of strip commercial development, most notably on West Martintown Road.

The alternative to strip commercial development, while still meeting the demands of the contemporary commercial real estate development market, is to provide for commercial development in nodes or clusters at the intersection of major arterials. The city has been fortunate that the intersection of East Martintown Road and Knox Avenue is following this pattern and is developing as a major commercial hub. Traffic congestion, however, will continue to be a problem with major commercial development on arterial corridors. Congestion management techniques include regulating access, coordinating access points across and between all of the parcels in the commercial node and controlling traffic flow through improved signalization. The South Carolina Department of Transportation (SCDOT) cannot adequately manage traffic congestion in growing commercial areas because it can not consider land use or more than one private parcel at a time in its access management decisions.

A second technique is to encourage higher density residential development close to commercial corridors and to provide for commercial development adjacent to established residential areas. The effect will be to reduce travel distances between residential areas and commercial destinations.

A third technique is to provide for small-scale neighborhood commercial uses within or adjacent to lower density residential subdivisions. Small scale compatible commercial uses in close proximity to residential areas will increase opportunities for walking and biking and reduce the need for vehicular trips.

9.6.3 Single Use Development

As described above, North Augusta, like most communities, has a large expanse of low-density single family residential subdivisions. Typically, detached single family residences are located on relatively large lots, a quarter acre or more, and front on local streets that most often terminate at a cul-de-sac. Many subdivisions are connected to arterials or collectors at a single access point. Until recently, subdivisions were developed with no other complementary improvements or land uses including sidewalks, neighborhood parks, open space or neighborhood commercial sites. Low-density single family residential subdivisions are widely accepted in the market place and offer a style of living that many families have come to desire and expect.

Land development regulations, the extension of public facilities and the availability of cheaper land in outlying areas of the community are factors that have contributed to the proliferation of single use development since World War II. The traditional Euclidian approach to zoning exercised by the City of North Augusta since the 1950's has had the affect of maintaining a separation between residential, commercial, industrial and institutional uses. And, as mentioned above, the extension of city water and sewer service through annexation agreements has had the effect of encouraging additional low density single use development.

Single use development, primarily residential, is often criticized for being an inefficient use of land for increasing dependence on the automobile and contributing to traffic congestion. However, in North Augusta's case most residential subdivisions are developed at low densities because they are encouraged by the city's subdivision regulations. Higher densities or a cluster development pattern could be more efficient and could save valuable open space. Additionally, subdivisions are often developed in isolation from one another with no planning for adequate traffic circulation. The result is more traffic on collector and arterial streets and an environment less friendly for pedestrians and bicyclists. The resulting separation from otherwise complementary uses including parks, open space and neighborhood businesses makes residents almost totally dependent on an automobile to move from home to other locations. Single use,

low density development also makes it difficult for the provision of cost effective public transit.

Much of the vacant land available for development in the city in recent years was zoned Planned Development (PD) upon annexation. The PD District permits a mix of uses including residential, commercial and office. However, almost all of the vacant land zoned PD and developed in the last ten years has been developed as single family residential subdivisions.

9.7 Effects of Current Trends

Current land use and development trends including leapfrog development, strip development and single use development are creating several negative effects on the quality of life in the community. If the trends are changed the negative effects can be reduced or stopped and positive effects generated.

9.7.1 Blight and Disinvestment

As population moves away from the traditional center of the city, commercial uses follow it. The result is disinvestment in the downtown area and in older neighborhoods. Disinvestment fosters blighting influences including a lack of maintenance of private property and reductions in property values generally. Neighborhoods developed on the fringes of the city prior to the housing boom created by the Savannah River site in the early 1950's and those developed for modest homes during the 1950's and 1960's are now showing symptoms of neglect, disinvestment and blight. Symptoms include an increase in the ratio of rental to owner occupied units, a reduction in the level of routine maintenance on structures, poorly maintained or overgrown yards, inoperable vehicles parked on streets and in yards, outdoor storage and clutter. In some neighborhoods the infrastructure constructed in conjunction with the neighborhood, i.e. streets, storm sewers, and curbs, gutters and sidewalks where they exist, are in various states of deterioration and failure. Neighborhoods that exhibit some symptoms of blight and disinvestment include portions of Carsville, Green Acres, Crystal Lake, Summerfield, Crestland, Brierfield and Lynnhurst.

Historically, as commercial development progressed on East Martintown Road and up Georgia Avenue toward Belvedere, downtown retail declined. Retail structures in the downtown were converted to less intensive office uses or demolished for parking lots. The major churches in the downtown area exerted a significant influence through the removal of structures to develop parking lots. Those lots serve a substantial, but infrequent, parking demand. The decline of retail uses in the downtown area continues. The downtown area has not enjoyed the commercial development and commercial spin-off that has occurred in other areas of the city as a result of the recent investment on Knox Avenue.

Additionally, most of the homes in the neighborhoods adjacent to the downtown were older and smaller than the homes being developed in newer subdivisions. Many of the older units were converted to rentals or became de facto low and moderate income housing. The result was an extended period of low maintenance. Housing conditions, especially west of the downtown area, reflect the lack of maintenance.

Ironically, the shopping centers on East Martintown Road that created the initial negative impacts on downtown retail are now experiencing similar problems. North Augusta Plaza, Crossroads Plaza and Martintown Plaza have all been adversely affected by new commercial development in the Knox Avenue corridor. All three shopping centers lost tenants to the Shoppes at North Augusta and commercial parcels made more attractive by the Knox Avenue improvements. The result, however, has been an increase in the retail market share because retail dollars are being attracted from Augusta. As a result the negative impact on the existing centers has been relatively short term and they are finding new tenants for the vacated space. The same is not true of Edgewood Square, the center on Edgfield Road that was anchored by Wal-Mart for almost twenty years. The 125,000 square foot 'big box' that formerly housed Wal-Mart was vacated in 2003 when Wal-Mart relocated to a new 205,000 square foot building in the Shoppes at North Augusta.

Competition in the commercial real estate development market, however, can outpace the growth in retail demand. New commercial space, if developed faster than the market grows, can result in permanent or long term empty commercial space. The recently approved River Commons development to be anchored by a Lowe's Home Improvement store affected the ability of the owners of the former Wal-Mart facility in Edgewood Square to attract a Home Depot to fill the vacant space. North Augusta is experiencing the same 'empty big box' syndrome that has affected many other communities across the country as a result of changes in retailing.

Similar dislocation will occur if new commercial real estate developments are approved in the wrong locations. A small but growing retail market is moving to the outskirts of the community. If fringe commercial development occurs at a pace faster than the retail market can support it, it is entirely feasible that retail tenants of North Augusta Plaza, Crossroads Market, Martintown Plaza and possibly the Shoppes at North Augusta and River Commons, will relocate to new commercial developments on the outskirts of the city. The most likely area for the new commercial development initially is on US 25 both north and south of I-20.

It is frequently argued that new commercial development will improve the tax base of the community and provide additional shopping choice to citizens. That is true as long as the retail market is expanding. If the result is the relocation of tenants, then the opposite is true. North Augusta Plaza, Crossroads Shopping Center and Martintown Plaza have paid significant taxes to the city over the last

20 years. A loss of tenants in those centers similar to the loss of Wal-Mart in Edgewood Square will reduce tax revenues to the city and decrease retail choices to citizens because of the longer drive to a retail destination.

9.7.2 Demand on Public Facilities and Services

As the downtown area, older neighborhoods and older commercial areas are or could be declining; other parts of the city are being developed and converted from rural to suburban uses. New residential and commercial development in the outlying areas generates an increase in the demand for water, sewer, sanitation and stormwater services. Additionally, the demand for public safety, education, roads and other public utilities increases dramatically. The provision of most of those services and the maintenance of most of those facilities will become the responsibility of the city. Already, an elementary school is being developed by the Aiken County School District on Five Notch Road to meet the demand of residential development north of I-20. The city also has plans for a new Public Safety Substation adjacent to the Palmetto Parkway.

At the same time that demands for service on the periphery of the original community are increasing, the values of property in declining neighborhood are decreasing or stagnating. Stagnant and decreasing property values can ultimately result in a reduction in taxes paid to the city, county and school district. The reduction in the relative share of taxes paid by declining neighborhoods further reduces the city's ability to respond to increased demands for service in newly developing areas.

Suburban growth has also increased traffic on area roads. Increased traffic creates the need to improve major intersections, install new traffic signals and controllers, and widen, extend and construct new collector and arterial roads. Additionally, demand has grown for the expansion and extension of the Greenway system for bicycle and pedestrian traffic. It is likely that demand for mass transit through the Best Friend Express will also increase over time, primarily from those with special needs.

The city has successfully maintained its ability to provide water and sewer services to new developments through adequate planning and capital investment. Additionally, the federally mandated requirement for stormwater management is being addressed by the city through the 2002 implementation of the stormwater utility fee and stormwater management program. The demand for additional parks and recreation programming in additional locations will also increase dramatically. Meeting the demand for new parks to provide increased recreation opportunities will be expensive and creates a significant challenge. New developments can and should participate in the cost of meeting that demand.

9.7.3 Impact on the Natural Environment

The impact of land use and development patterns on natural resources in North Augusta is typical of most suburban development. New development replaces natural ground cover with impervious surfaces including buildings, driveways, roads and parking lots. Although drainage facilities are required to be built in conjunction with new land development, there is an inevitable increase in stormwater runoff to natural drainage ways. While stormwater volume can be accommodated, quite often pollutants are carried with the runoff and the quality of the water in the drainage ways is adversely affected.

Development also alters local wetlands, flood plains and wildlife habitat, which has both environmental and economic consequences. Alteration of flood plains and wetlands make it considerably more difficult for drainage ways to handle large volumes of water during periods of heavy rainfall. Flooding that can result further alters the floodplain and creates an economic cost to the community and adjacent property owners.

Air quality is affected. As pointed out in the Natural Resources element, the Central Savannah River Area is currently experiencing high levels of ground level ozone. Increased urban development introduces more sources of air pollution. Increased air pollution, if not adequately addressed, has implications for the health of North Augusta citizens, the viability of economic development projects and investments in transportation improvements. Patterns of land development can also disrupt or eliminate plant and animal habitats and reduce the amount of open space. Some species of wildlife can adapt to the changes but others cannot. Land development patterns can be influenced in a way to maintain wildlife corridors and preserve significant wildlife habitat.

9.7.4 Impact on Quality of Life

The term ‘quality of life’ means different things to different people. In urban areas, it can mean a good climate, employment opportunities, affordable housing price and a wide choice, good schools, convenient and uncrowded transportation facilities, and adequate recreation and cultural amenities.

There are a number of conflicting viewpoints on the impact of sprawling growth patterns on the quality of life. Advocates of compact development argue that sprawl consumes valuable open space, increases congestion and the time spent in traffic, creates remote and isolated neighborhoods and contributes to the decline of downtown and older neighborhoods. Alternatively, some argue that most Americans prefer a low-density living environment and that suburbanization actually reduces traffic congestion. The differing viewpoints are evident to the North Augusta city staff, Planning Commission and City Council in the review and consideration of proposed development projects. Conflicting feedback on the impacts of developments and the effect on the quality of life is not uncommon.

Many citizens reflect the NIMBY (not in my back yard) attitude when faced with the prospect of a new nearby residential or commercial development. They sincerely argue that open space and timberland and green areas should be maintained to minimize negative impacts on existing neighborhoods. The attitude is generally that the new development should absorb the cost of maintaining open space and timberland and green areas to minimize negative impacts. Citizens request the strictest enforcement of development regulations related to buffering existing subdivisions from new development but vehemently resist regulations that promote connectivity, both vehicular and pedestrian, through street linkages and sidewalk construction. There is little discussion of or recognition that commercial and higher density residential developments provide a greater return to the city in the form of tax and fee revenues and proportionately demand less in services (with the possible exception of public safety services to multi-family residential uses). However, there are regular and consistent requests to improve public facilities and services (water, sewer, stormwater, streetlights, recreation, sanitation, public safety) or to provide them to underserved areas.

9.8 Growth Management to Overcome the Effects of Current Trends

The Introduction chapter of the 2005 Comprehensive Plan discussed the ten Quality Development Principles. Quality Development is compact, pedestrian oriented, mixed use development that reuses land and refocuses a larger share of growth into the central area of the community and areas that are already served by infrastructure. Quality Development reduces the share of growth that occurs on newly urbanizing land, farmland and environmentally sensitive land. Growth management is defined as government programs that control the timing, location and character of land use and development, and when used effectively, can implement Quality Development Principles.

There are a number of growth management strategies that can be employed to manage and implement Quality Development. Prior to implementation growth management strategies should be evaluated on the potential to achieve several objectives. Some of the objectives are included in the American Planning Association definition of Quality Development, others reflect good decision making and some are unique to North Augusta. The degree to which a proposed program, regulation or decision meets the objectives can be determined by answering the following questions.

1. Does it implement the vision of the Plan?
2. Is it cost effective? Will it achieve the desired result at a reasonable cost?
3. Will it serve to maintain or expand the unique sense of community and place that is North Augusta?
4. Is it equitable? Is it fair and does it benefit the greater community?
5. Does it expand available choices in housing, goods, services and transportation?
6. Is it affordable? Are adequate funds available to implement it?
7. Does it promote public health and the health of the community?
8. Is it a priority? Is it an important program to implement now?
9. Does it preserve natural and cultural resources?

9.9 Growth Management Programs

Growth management strategies to overcome current trends can be categorized in three program areas. Redevelopment projects invest in underutilized land in previously developed areas. Cities throughout the country are using redevelopment to create revitalized neighborhoods, downtowns and cultural districts. Infill development projects invest in vacant land within older areas of a community. Infill is transforming cities and suburbs by creating walkable retail districts and neighborhoods, introducing mixed use projects and emphasizing human scale development. Neighborhood revitalization is achieved through programs that facilitate reinvestment in existing and older neighborhoods. Commercial center revitalization encourages reinvestment in established commercial shopping centers through the addition of residential and office uses, creating new outparcels and improving pedestrian amenities.

9.9.1 Downtown and Riverfront Redevelopment

Redevelopment plans for the downtown and riverfront areas of North Augusta were first conceptualized 20 years ago. The series of plans for the downtown and the riverfront area adopted by the city are now in the early stages of implementation. The city has initiated and financed much of that implementation activity.

The developing riverfront areas of the community including RiverNorth, The River Club, Campbelltown Landing, and most recently, Hammond's Ferry in the central riverfront area, represent significant additions to the city. RiverNorth and The River Club are very low density, higher priced residential developments. The wetlands on those properties and market demand for riverfront lots have both contributed to pricing of lots. Campbelltown Landing is a more moderately priced development. Hammond's Ferry will be considerably denser and will offer a much wider range of housing choices. However, it is unlikely that it will be described as affordable. Within ten years it is very likely that the implementation of riverfront development along the city's Savannah River frontage will be consistent with the 1996 Master Plan for the North Augusta Riverfront Redevelopment District. Land available for development on the Savannah River is now severely limited. The annexation of riverfront parcels upstream and downstream of US 1 could provide for additional riverfront open space, commercial uses and residential development.

Redevelopment in the downtown area has progressed more slowly. The city's investment in the streetscaping of Georgia Avenue in 1999 has not generated the private investment anticipated at the time. Coincidentally, private investment on West Avenue in the downtown has been significant. Most of the new investment has been initiated by small businesses. The buildings constructed are consistent with the original West Avenue residential character and scale. Much of the

investment on West Avenue occurred prior to the planned 2005 streetscape improvements.

The redevelopment town center area of the downtown, bordered by Clifton Avenue, Georgia Avenue, the Greenway and West Avenue, is progressing slowly. Land assemblage by North Augusta 2000 and the city's decision to locate the new municipal complex in the town center will provide significant catalysts to additional redevelopment in the south end of the downtown.

The Georgia Avenue corridor, however, will likely require additional public assistance to trigger private reinvestment. It is important that redevelopment and new construction in the downtown area achieve the urban character envisioned for the downtown in the various redevelopment plans that have been developed since 1990. It is also important that redevelopment activity in the downtown include a mix of uses including retail, high density housing and professional office uses that provide jobs and pedestrian traffic.

9.9.2 Neighborhood Revitalization

Some of the older, more modest neighborhoods in North Augusta are beginning to deteriorate. Reinvestment in those neighborhoods through home improvements, construction of new homes on vacant or substantially underutilized lots and infill development on unimproved properties within and between existing neighborhoods can be pursued. The issue of privacy in existing neighborhoods and some newer residential developments has been a deterrent to the development of needed infill housing.

In recent years, the city has not undertaken any focused neighborhood revitalization program. In the early 1980s, with the assistance of a multi year Community Development Block Grant, the city provided rehabilitation loans in older neighborhoods. Since that time there have been no other programs on that scale. A second Community Development Block Grant was awarded in 1999 to assist in the renovation of low income properties in the somewhat isolated Carsville neighborhood. The Carsville program achieved only a modest success. More substantial programs fueled by private investment will be necessary to create any significant impact.

Infill development within and adjacent to existing neighborhoods will better utilize available infrastructure (potable water, sanitary sewer, storm sewer, roads and other utilities). It will also help to reinforce the strength of aging neighborhoods and increase density in older parts of the city. Obstacles to infill development for the purposes of neighborhood revitalization include land availability, land cost and NIMBYism. In many cases land that would otherwise be appropriate for development or redevelopment is not for sale or even potentially available for sale. In cases where land appropriate for infill development is available, the asking price is often higher than can be justified for

the economics of an infill project. Infill development is frequently opposed by existing neighborhood residents. NIMBY arguments against neighborhood infill include increased traffic and a possible negative effect on property values. A fear that is sometimes not clearly articulated is a fear of the type of people that might move into an infill development project. Studies have shown that neighborhoods that include a variety of housing sizes, types and ages are more vibrant, remain vibrant longer and retain their values. The Carolina Avenue and West Avenue corridors in North Augusta reflect the findings of the studies.

Neighborhood revitalization programs can take a number of forms. Capital investment in streets, sidewalks, stormwater drainage, water and sewer could be targeted where necessary to improve the character of older neighborhoods. Increased and proactive code enforcement related to poorly maintained properties including overgrown yards and deteriorating structures could also be pursued. A more capital intensive approach could include subsidized loans and in some cases grants for the rehabilitation of existing structures and for the construction of new housing. New infill housing construction could include detached single family units on vacant lots, the construction of accessory living units and the development of new multi-unit owner occupied housing on vacant parcels.

Neighborhoods that could be appropriate for revitalization expenditure include Lynnhurst, Hillcrest, Crestland, Green Acres, Edgewood Heights, Ridgecrest, Fairview Gardens, Crystal Lake, Brierfield, Fowkewood, the Boeckh area and others.

9.9.3 Commercial Center Revitalization

The redevelopment of older shopping centers provides potential for both infill development and redevelopment. The development of new centers including The Shoppes at North Augusta and River Commons has increased the competition for tenants in older centers. Breckenridge Plaza, Crossroads Market, North Augusta Plaza, Martintown Plaza, North Hills Plaza, Edgewood Square and Triangle Plaza lost tenants to new centers. New commercial development has not decimated existing commercial properties but most have had difficulty maintaining full occupancy and are experiencing deferred maintenance, especially in the parking areas. With the exception of Edgewood Square, and possibly Triangle Plaza, commercial centers in North Augusta have maintained a relatively stable retail mix.

However, as the community continues to grow to the north and west, existing centers will age and will be competing with new commercial centers adjacent to or near I-20 at Exit 5 initially and then Exit 1. The need to reposition and refurbish shopping centers will increase over time. The revitalization of commercial centers can include relatively simple and inexpensive façade renovations, additional landscaping and modifications to the internal circulation systems. In some cases, shopping centers with more than adequate parking can

create outparcels for ‘small box’ retailers including restaurants, drug stores, auto supply stores and others. The creation of outparcels, however, is sometimes complicated by lease provisions with existing anchor tenants. Major shopping center tenant leases frequently include requirements for a specific number of parking spaces and for clear visibility from the roadway. The renegotiation of anchor tenant lease provisions may be necessary for the creation of additional outparcels.

A more intensive redevelopment effort could include the substantial reconstruction of the center including the addition of new retail and residential structures. The ‘town center’ concept of commercial shopping centers lends itself to older centers with large underutilized parking areas. Additional buildings can be constructed to enclose more pedestrian-scaled spaces and improve the shopping environment. Multi-family housing can be constructed on subdivided parcels of the commercial property or constructed above new retail space. Market demand must be carefully calculated to determine the feasibility of existing commercial center redevelopment. Major factors to overcome include corporate retail demands, inertia (resistance to change), land cost and existing tenant lease provisions. The city could provide assistance to the owners of older commercial centers through regulatory incentives and technical assistance to facilitate commercial center redevelopment.

9.10 Future Land Use

Table 9-4 shows the breakdown of future land use by category in North Augusta. The projections for future land use are based on basic assumptions about development activity and intensity as well as formal and informal city policies for the appropriate location of different uses. Future land use will continue to be influenced by current development patterns or trends, the availability of utilities and improved roads, environmental constraints, the availability of land, proximity to complementary land uses and the city’s application of land use policies and regulations. Additionally, the city’s administration of these policies and regulations will substantially influence future land use on the periphery of the city.

Very often transportation objectives are regional. However the land use impacts of regional transportation projects are local. The completion of Phase 2 of I-520, the Palmetto Parkway, on the east side of the city will significantly influence future land use in that area, especially adjacent to the interchanges at US 1 and Belvedere-Clearwater Road. The proposed interchange on the Blanchard Tract, the new connector road from US 25 and the freeway-to-freeway interchange at I-20 will influence a large area on both sides of US 25 north and south of I-20 and on Ascauga Lake Road. Some of the areas to be influenced by the Palmetto Parkway are within the city limits. Some are in the unincorporated area of Aiken County and under county jurisdiction. Adequately managing growth in the areas influenced by I-520 will require cooperation between the city and county.

9.10.1 Future Residential Land Use

Over the next ten years new residential development in North Augusta will include a mix of housing types and a variety of settings. The majority of units constructed will be single family detached built in conventional suburban subdivisions. Conventional subdivision development will occur primarily north and west of I-20, east of US-25 and north of Belvedere-Clearwater Road. Substantial acreages contained within the Bergen, Blanchard, Kellogg, Burkhalter and Brandenburg properties and currently vacant will provide the land for that development. Infill development can occur within and adjacent to existing neighborhoods south of I-20 and west of US-25. Much of the infill development in the older area of the city can be developed as higher density single and multi-family in a traditional neighborhood style.

9.10.2 Future Commercial and Industrial Land Use

The continued residential growth of the community and diversification of the area's economy and employment will generate additional commercial and industrial investment. The majority of new commercial development will be attracted to areas near where new conventional subdivisions are being developed, primarily in areas where open space is being urbanized. Parcels on roads and intersections with high vehicle traffic counts will continue to be especially attractive for commercial uses. Those include US 25, Martintown Road, Belvedere-Clearwater Road, Five Notch Road and the Aiken-Augusta Highway. New interchanges associated with I-520 will also attract large scale commercial investment. Areas of undeveloped and under-developed land adjacent to the Palmetto Parkway corridor will be subjected to commercial development pressures. A substantial portion of that land is outside the city and regulated by Aiken County. Aiken County's land use policies and development regulations are significantly different than the city's. A need exists to coordinate city and county land use policies and development regulations in areas adjacent to the Palmetto Parkway.

The city's single industrial park, approximately 300 acres, has no additional land available for new industry to locate. The only area currently identified for a potential industrial park is 300 acres in Blanchard Park straddling the I-520 alignment. The provision of an additional 300 to 500 acres of industrial land is desirable to expand the job base within the city. In addition to Blanchard Park other appropriate locations would be adjacent to I-520 or I-20 or both with easy access to the interstate system.

New and expanded office development could occur in conjunction with industrial areas and in revitalized or redeveloped shopping centers. City policies can provide incentives for the location of new office, personal service and retail facilities within the downtown, within older areas near the downtown, and, specifically, in the town center area of the downtown.

9.10.3 Other Land Uses

The acreage committed to formal parks, recreation, and open space activities will increase significantly in the future in accordance with adopted plans, programs and city policies. Land utilized for transportation, communication and utilities will also increase at approximately the same rate as land is developed for residential, commercial and industrial uses.

9.11 Future Land Use Plan and Map

Future land use in the city and the surrounding planning area is divided into the eight categories depicted on Map 9-3, Future Land Use Map, and described in Table 9-5, Future Land Use Map Legend. The Future Land Use Map Legend provides general descriptions of the type and scale of uses recommended and permitted in the corresponding area shown on the Land Use Map. Property considered for rezoning or annexation into the city should be zoned in accordance with the classification for the property as shown on the Future Land Use Map. Property proposed for annexation or rezoning that is contrary to the Future Land Use Map would receive either a negative recommendation from the Planning Commission or would include a recommendation to amend the Future Land Use Map.

The relative size in acres of future land uses is shown in Table 9-4, Future Land Use Allocation.

Table 9-4

Future Land Use Allocation			
	Land Use Category	Acres	Percent
1.	Low Density Residential	33,607	67
2.	High Density Residential	523	1
3.	Commercial	1,990	4
4.	Industrial	505	1
5.	Mixed Use	9,253	18
6.	Institutional, Government and Public Facilities	310	1
7.	Transportation, Communication and Utilities	3,163	7
8.	Parks, Recreation, Open Space, and Conservation	691	1
	Total	50,042	

9.12. Future Land Use Classifications

9.12.1 Low Density Residential

The predominant land use in this category will continue to be single family detached and attached subdivisions. However, it may include small amounts of

neighborhood commercial. Specific zoning districts will regulate the range. A development project in this classification could be designed in a different form and clustered in one area with a higher net density but the same overall gross density to avoid steep slopes or protect environmentally sensitive areas. Buffers between the clustered project and conventional single family subdivisions would be required. A planned development or a traditional neighborhood development could also be developed in this classification provided the gross density and other general standards were not exceeded.

9.12.2 High Density Residential

This classification is to provide for a wide range of housing types, styles and densities. Specific zoning districts will regulate the range to a greater degree than the land use classification description. Both Traditional Neighborhood Development and Planned Development projects are permitted and encouraged in this classification. A larger amount of neighborhood commercial use to serve the higher density would be permitted. The general standards in this classification are much broader than in the Low Density Residential classification.

9.12.3 Commercial

The commercial classification is intended for a wide range of commercial uses. Specific zoning districts will more narrowly define the permitted uses and development standards. Small scale and fully enclosed manufacturing and assembly uses may be permitted in the heavier intensity commercial districts. Residential uses may be permitted in an area classified for commercial land use as a subordinate or accessory use or in a mixed use project. High density residential uses developed adjacent to existing or planned commercial uses may also be permitted. Separate developments that are exclusively low density residential are discouraged.

9.12.4 Industrial

The industrial classification is intended for areas that provide relatively large sites for manufacturing, large scale assembly and distribution uses. Development standards provide a wide range of development options. Uses in this classification generally provide a relatively large number of jobs, often create heavy truck and peak period traffic and contribute significantly to the tax base. Land identified in the industrial classification is located adjacent to freeway arterials and interstate highways. If not physically separated from residential and lower intensity commercial uses, a substantial buffer and screen would be required.

9.12.5 Institutional, Government and Public Facilities

This classification provides for public buildings including administrative offices, schools and libraries. It also includes hospitals, churches and cemeteries. Development standards vary by building type, use and location. Structures housing religious, institutional and government uses are not limited to this classification. They may be developed in some residential, most commercial and mixed use districts including planned developments and traditional neighborhood developments. Larger scale uses in this category including government complexes, educational and medical campuses and cemeteries may be zoned exclusively for the use.

9.12.6 Mixed Use

The mixed use classification permits most residential, commercial, institutional, government and religious uses. Land uses can be developed in a variety of forms. The downtown and riverfront areas are the most significant mixed use areas in the city. Some areas adjacent to interstate highways and along major arterial corridors are also appropriate for the mixed use classification. Within this classification zoning districts with substantially different standards may be located adjacent to each other.

9.12.7 Transportation, Communication and Utilities

This classification is limited to land uses exclusively for roads and larger scale utility uses. Examples may include interstate highways and rest areas, electrical substations, water and sewer treatment and storage facilities, mass transit facilities, and communications towers and transmission sites. Development standards are broad and subject to conditional review.

9.12.8 Parks, Recreation, Open Space, and Conservation

This classification applies to land that is or should be predominantly undeveloped and retained for open space conservation, environmental protection or stormwater management. It also includes land that has been improved or designated for outdoor recreation purposes including golf courses and parks. Zoning districts in this classification include those designed for community facilities and open space preservation. Development standards are broad and subject to conditional review.

The maximum densities (described in dwelling units per acre), maximum building height (described as the distance from average grade at the building to the mean height of the roof) and principal permitted uses are recommended and should be followed by the Planning Commission in designing and applying zoning districts in each classification. The maximums, however, may be exceeded when the Planning Commission concludes that the facts support a deviation and in Planned Developments approved by the City Council.

Table 9-5

Land Use Map Legend				
	Land Use Classification	Maximum Residential Density	Maximum Building Height	Principal Permitted Uses
1.	Low Density Residential	8.0	40	Residential including single family detached, attached and cluster, small scale neighborhood commercial, civic, and institutional
2.	High Density Residential	24.0	60	Residential including single family detached, attached, cluster and multi-family residential, neighborhood commercial, civic and institutional
3.	Commercial	24.0	60	Retail, personal service, office, restaurant and highway oriented business at a variety of scales and intensities, multi-family residential
4.	Industrial	0.2	75	Large scale manufacturing, research, distribution and business services, accessory residential
5.	Mixed Use	24.0	75	All uses except industrial
6.	Institutional, Government and Public Facilities	0.2	40	Public administration offices, schools, libraries, hospitals, churches, cemeteries, accessory residential
7.	Transportation, Communication and Utilities	0.2	70	Highways, electrical substations, water and sewer treatment and storage facilities, transit facilities, communications towers, accessory residential
8.	Parks, Recreation, Open Space, and Conservation	0.1	25	Open space, conservation areas, golf courses, parks, environmental protection and preservation, accessory residential

9.13 Goals, Objectives, Policies and Strategies

- 9.13.1 Protect low-density residential areas from the encroachment of conflicting land uses including large-scale commercial uses that generate high traffic volumes through natural and landscaped buffers and transitional land uses including townhouses, professional offices and well-landscaped parking areas.
- 9.13.2 Adopt landscaping and screening standards to insure a sense of privacy for individual units in multi-family, townhome, small lot single-family and other compact residential developments.
- 9.13.3 Encourage the revitalization of older neighborhoods by providing incentives for appropriate infill development. (See Chapter 3.)

- 9.13.4 Adequately enforce private property maintenance and landscaping codes to reduce potentially blighting influences in neighborhoods and commercial areas.
- 9.13.5 Adopt and enforce a minimum property maintenance code and implement a program to ensure that both owner-occupied and rental properties are habitable and adequately maintained or removed.
- 9.13.6 Encourage and provide incentives for higher density residential and higher intensity commercial infill development on vacant land to promote a more compact urban form and discourage sprawl. Infill should occur where adequate infrastructure, public facilities, and services are available.
- 9.13.7 Encourage compact design to create more secure neighborhoods.
- 9.13.8 Develop a neighborhood revitalization plan and program to prevent the deterioration of older and declining residential neighborhoods.
- 9.13.9 Encourage mixed-use development, especially in the downtown area and adjacent to commercial centers.
- 9.13.10 Permit vertical mixed uses (ground floor retail and upper-level residential) uses in neighborhood preservation, neighborhood commercial and general commercial districts.
- 9.13.11 Provide for small scale; relatively low traffic volume, low impact commercial neighborhood commercial uses adjacent to single family neighborhoods to provide for the daily needs and services of one or more neighborhoods.
- 9.13.12 Develop a commercial center revitalization plan and program to provide incentives for the revitalization and redevelopment of older commercial centers.
- 9.13.13 Provide incentives for the conversion of existing commercial centers into walkable, mixed-use 'town center' projects.
- 9.13.14 Develop design standards and regulations to insure that new retail shopping centers are designed to emphasize building design at a pedestrian scale, improve pedestrian circulation, enhance the attractiveness of public spaces and minimize the visual emphasis placed on parking areas and single-use big box structures.

- 9.13.15 Develop design standards and regulations applicable to single-use big box retail structures to regulate scale and provide for appropriate reuse alternatives in the event the use is abandoned.
- 9.13.16 Develop regulations to permit vendors to offer sidewalk service in appropriate commercial areas including the downtown and town center.
- 9.13.17 Discourage commercial development along arterials and collector roads where such land use has not been previously established except at major intersections.
- 9.13.18 Encourage industrial development adjacent to the two I-20 interchanges and the three I-520 interchanges.
- 9.13.19 Establish a joint planning process in cooperation with Aiken County to determine the appropriate uses and scale of development adjacent to the I-20 and I-520 interchanges and cooperatively implement interchange development plans.
- 9.13.20 Develop and adopt joint land development regulations with Aiken County to apply to growing areas adjacent to the city limits, especially the I-520 corridor. Such regulations should include requirements for access management, internal connectivity and external connectivity with more than one arterial or collector road, the availability of adequate public facilities and services, and carefully defined land use controls.
- 9.13.21 Adopt regulations to require the reservation of areas for appropriately scaled community greens or neighborhood parks in new subdivisions.
- 9.13.22 Develop design standards and regulations for sidewalks and streets to ensure safety and mobility for pedestrians and bicycles.
- 9.13.23 Encourage and facilitate the location of desired retail uses close to the established commercial core areas of the city (downtown and the Martintown Road and Knox Avenue commercial node) prior to locating in a commercial node adjacent to an I-20 or I-520 interchange.
- 9.13.24 Require market demand and competition analyses prior to the approval of new commercial uses to avoid the relocation of existing commercial tenants and vacant commercial space in established areas.
- 9.13.25 Adopt an overlay district or other regulatory tool that will permit the enforcement of design guidelines and form based zoning provisions to guide appropriate uses and traditionally scaled redevelopment in the

original city area of the Boeckh Plat. Such overlay district or other regulatory tool should provide special emphasis on the traditionally commercial downtown area and incorporate the neighborhood preservation corridor provisions addressed in section 9.13.45.5.

- 9.13.26 Develop a new zoning district and form based regulations specific to the town center area of the downtown to insure that a mix of uses are developed at a scale and design appropriate for an urban town center.
- 9.13.27 In cooperation with community nonprofit organizations develop programs to celebrate older and established areas of the city including the downtown and original Boeckh plan area through festivals, specialized signage, expanded streetscape improvements, landscaping, historic preservation designations and rehabilitation awards.
- 9.13.28 Expedite the development review process by expanding the scope of administrative approvals. Planning Commission review and approval should be limited to major projects, waivers, rezoning applications and other issues requiring discretionary consideration.
- 9.13.29 Provide clear criteria and procedures for the approval of development applications and the vesting of approved development rights.
- 9.13.30 Develop regulations to require master development concept plans for all adjacent parcels of property owned by an applicant to avoid incremental and unconnected project planning and design.
- 9.13.31 Develop flexible zoning districts and regulations to allow developers to easily respond to market demands.
- 9.13.32 Adopt regulations and procedures that encourage and assist applicants for controversial land use or development project approvals (rezoning, planned development, large scale projects) to initiate citizen participation with neighboring property owners through public meetings or design charrettes prior to formal consideration by the Planning Commission.
- 9.13.33 Include flexible zoning provisions in commercial zones to provide for a mix of uses, especially residential, and to permit the renovation of existing commercial properties without the need for lengthy rezoning procedures.
- 9.13.34 Define an area of the city and close-in unincorporated areas where urban growth is preferred and develop a plan to facilitate that growth. Such 'preferred urban growth and priority investment area' should

include the established and developed areas of the city and appropriate undeveloped areas that are close to the established areas.

- 9.13.35 Consider financial and regulatory incentives for compact residential and neighborhood commercial development in the ‘preferred urban growth area’ to facilitate build out. Property outside the ‘preferred urban growth area’ should not be eligible for incentives. Some areas of higher priority within the ‘preferred urban growth area’ should be eligible for increased incentives.
- 9.13.36 Pursue annexation of those areas within the ‘preferred urban growth area’ that are not currently within the city limits.
- 9.13.37 Develop a plan to expand the North Augusta city limits in cooperation with Aiken and Edgefield Counties and annex areas appropriate for future urban development.
- 9.13.38 Complete the research necessary for the GIS mapping of the portion of Edgefield County within the planning area.
- 9.13.39 Adequately evaluate the future land use and realistic development potential of properties under consideration for annexation prior to applying a zoning classification to the annexed area.
- 9.13.40 Develop and adopt clear design guidelines and development regulations so that streets, buildings, and public spaces work together to create a sense of place in new residential and commercial development and redevelopment projects.
- 9.13.41 Adopt regulations applicable to residential preservation corridors and areas that regulate building type more specifically than by land use.
- 9.13.42 Discourage strip commercial development (office and retail) on arterial corridors and encourage commercial development in compact nodes around major intersections (Martintown and Knox Avenues, Georgia and Knox Avenues, Martintown Road and West Avenue, Martintown and Atomic Roads, Martintown Road and US 1).
- 9.13.43 Evaluate the potential benefits of permitting light industrial and distribution uses in the East Martintown Road corridor east of Atomic Road.
- 9.13.44 Amend the highway corridor overlay district development regulations applicable to building and site design to make commercial areas more walkable.

9.13.45 Amend the highway corridor overlay district to identify segments for specific land use policies and regulations in the following categories:

1. Gateway/Interchange – Connections between interstate and arterials, interstate highway oriented high intensity mixed use, limited and shared access, large parcels, high quality appearance and landscaping, limited buffers between uses.
2. Commercial – High intensity auto oriented retail, office and service nodes on large parcels on arterial intersections.
3. Mixed Use – Moderate intensity commercial land uses on medium sized parcels.
4. Residential – Low to moderate intensity residential (primarily existing) use on small to moderate sized parcels.
5. Neighborhood Preservation – Low intensity, small-scale residential, commercial and personal service uses within existing and new residential structures that preserve the traditional character. The neighborhood preservation corridor regulations will emphasize residential as the primary use and will also encourage mixed use structures that provide for residential, commercial office and personal service uses. The utilization of alleys will be emphasized.

9.13.46 Apply the highway corridor category land use policies and regulations to the following corridor segments:

1. Martintown Road
 - 1.1 US 1 to Atomic Road – Medium intensity mixed use, primarily commercial.
 - 1.2 Atomic Road to Knox Avenue/Jersey Avenue – High intensity commercial.
 - 1.3 Jersey to Hampton – Low intensity residential, neighborhood commercial and office with planted medians where appropriate.
 - 1.4 Hampton to River Bluff – low to moderate intensity mixed use with planted medians.
 - 1.5 River Bluff Drive to Knobcone Avenue – Low intensity residential and neighborhood preservation with planted medians.
 - 1.6 Knobcone Avenue to Gregory Lake Road – High Intensity mixed-use interchange.
 - 1.7 Gregory Lake Road to City Limits – Moderate intensity mixed use with planted medians (when SC 230 is widened).
2. Knox Avenue and US 25/Edgefield Road
 - 1.1 Martintown Road to Georgia Avenue – High intensity commercial with planted medians.

- 1.2 Georgia Avenue to I-20 – Medium intensity mixed use.
 - 1.3 I-20 to City limits – High intensity commercial with planted medians
3. US 1, Aiken-Augusta Highway
 - 1.1 Savannah River to Martintown Road – Limited access open space/buffer entry corridor.
 - 1.2 Martintown Road to Atomic Road – High intensity mixed use interchange
 4. Belvedere-Clearwater Road
 - 1.1 US 25 to Ridgefield Drive – Moderate intensity mixed use.
 - 1.2 Ridgefield Drive to Old Sudlow Lake Road – High intensity mixed use interchange.
 5. Five Notch Road from Georgia Avenue to Walnut Lane – Low intensity mixed use development
 6. Georgia Avenue
 - 1.1 Jackson Avenue to Observatory Avenue – Neighborhood preservation, low intensity residential, neighborhood commercial and office with planted medians where appropriate.
 - 1.2 Observatory Avenue to Marion Avenue – Low intensity mixed use development with planted medians.
 - 1.3 Marion Avenue to Knox Avenue – Moderate intensity mixed use.
 7. Buena Vista Avenue from Brookside Avenue to Martintown Road – Low intensity mixed use development with planted medians.
 8. West Avenue from Forrest Avenue to Martintown Road – Low intensity neighborhood preservation with mixed residential, office and personal service uses in limited appropriate locations.
 9. Carolina Avenue from Forrest Avenue to Martintown Road – Low intensity neighborhood preservation with mixed residential, office and personal service uses in limited appropriate locations.
- 9.13.47 Apply the Gateway/Interstate Interchange highway corridor land use policies and regulations to the following corridor segments:
1. I-20, Exit 1, Martintown Road and I-20.
 2. I-20, Exit 5, US 25 and I-20, including the area around the I-520/I-20 interchange and Ascauga Lake Road.
 3. I-520, Exit 17, US 1.

4. I-520 Exit at Belvedere Clearwater Road.
5. I-520 Exit on the Blanchard Park property.

- 9.13.48 Amend the sign regulations to reduce the overall amount of signage permitted, provide an adequate amount of sign area for thoroughfare commercial (auto dealerships and others) and institutional uses (churches, schools, public facilities and others), improve the image of the community, and comply with recent federal and state legislation and case law.
- 9.13.49 Amend the zoning map of the city as needed to reflect the future land use map and the policies contained in this Comprehensive Plan.

Chapter 10 – Implementation

10.1 Introduction

This chapter summarizes all of the projects, programs and activities described in the Goals, Objectives, Policies and Strategies sections of Chapters 2 through 9. In addition to compiling them into one section it identifies the responsible agency, time frame, potential cost, and possible or likely funding source for each. In some cases a project, program or activity identified in one chapter is closely related to or duplicated by a project, program or activity listed in another chapter. Where applicable the interrelationships or duplications are identified in the description. Additionally, guiding principles from various chapters are reiterated here for guidance in the design and implementation of each project, program or activity.

10.1.1 Vision of the 2005 Comprehensive Plan

The vision for the City of North Augusta has been crafted over a period of years by a number of individuals, elected officials, civic leaders and community organizations. The vision is for a city that, above all, retains its traditional character and “small town” sense of closeness and friendliness. The community places a significant value on working together to achieve common goals. North Augusta will continue to grow and will provide expanding choices and opportunities to its citizens. However, it will grow in a way that respects its unique history and personality. Older areas of the community, especially the downtown and riverfront, will be maintained and restored. New areas will grow with a quality that is consistent with community traditions. Sensitive environments, both natural and built, will be respected and reinforced by new development. The Savannah River will become an even greater commercial and recreational activity center of the city. Any adverse impacts or conditions resulting from growth and new development will be anticipated to the extent possible and mitigated in conjunction with the development to maintain the quality of life in the community as defined by mobility, accessibility, choice and the cost of public services.

The 2005 North Augusta Comprehensive Plan provides an extensive set of goals, objectives, policies, and projects that will guide the growth and development of the city over the next ten years. Most are interrelated and mutually dependent. All will facilitate managed quality growth. Many of the objectives and projects relate to program specific or site specific planning efforts. A regional open space plan and a downtown area redevelopment plan are two examples. The more precise planning processes and specific projects can provide a more detailed articulation of the vision. If pursued and implemented consistently, the plan can help to achieve the shared vision of the future for the City of North Augusta.

10.1.2 Quality Development Principles

The ten Quality Development Principles summarize the characteristics of successful development in North Augusta and outline best development practices for the community.

1. Mix land uses.
2. Allow compact design and development.
3. Create a range of housing opportunities and choices.
4. Encourage walkable communities.
5. Foster distinctive, attractive communities with a strong sense of place at a human scale.
6. Encourage the preservation of open space, farmland, natural beauty and critical environmental areas.
7. Strengthen and direct development toward existing communities.
8. Provide a variety of transportation choices.
9. Make development decisions predictable, fair and cost effective.
10. Encourage community and stakeholder participation and collaboration in development decisions.

10.1.3 Economic Development Goals

The city's economic development program is designed to create a full service community that provides high quality opportunities and choices to the citizens of North Augusta in the areas of jobs, housing, professional services, entertainment and retail goods. Historically, the economy of the North Augusta area was dependent upon the Savannah River, primarily for transportation. The future of the city will also be significantly affected by the river as a cultural and recreational amenity. Opportunities and choices include:

1. Quality jobs to improve family incomes and reduce the need to commute.
2. High quality retail goods, personal and business services and entertainment activities to serve the needs of residents and retain consumer spending and business activity in the community.
3. More choices in quality housing types, styles, sizes and price range to serve the needs of a wider range of residents.
4. Expanded utilization of the Savannah River for low impact and environmentally sensitive recreational, commercial and cultural uses.

10.1.4 Growth Management Objectives

There are a number of growth management strategies that can be employed to manage and implement Quality Development. Prior to implementation, growth management strategies should be evaluated on the potential to achieve several objectives. Some of the objectives are included in the definition of Quality Development, others reflect good decision making and some are unique to North Augusta. The degree to which a proposed project, program, activity, regulation or other decision meets the objectives can be determined by answering the following questions in the positive.

1. Does it implement the vision of the plan?
2. Is it cost effective? Will it achieve the desired result at a reasonable cost?
3. Will it serve to maintain or expand the unique sense of community and place that is North Augusta?
4. Is it equitable? Is it fair and does it benefit the greater community?
5. Does it expand available choices in housing, goods, services and transportation?
6. Is it affordable? Are adequate funds available to implement it?
7. Does it promote public health and the health of the community?
8. Is it a priority? Is it an important program to implement now?
9. Does it preserve natural and cultural resources?

10.2 Population

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
2.7.1	Monitor demographic changes in the city to understand the continually changing trends related to the growth and increasing needs and demands of the minority Hispanic population and other changing demographic trends in the city.	Continuing	E&CD	Varies	Annual Budget
2.7.2	Monitor demographic changes in the city to understand the increasing percentage of the population that is at the poverty level and develop growth related policies and programs to reverse the trend.	Continuing	E&CD	Varies	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
2.7.3	Expand the city's marketing programs to promote North Augusta as a community with a high quality of life and a unique place to relocate or retire.	Continuing	E&CD	Varies	Annual Budget
2.7.4	Encourage infill residential development in undeveloped areas of the city, especially those areas that are near the original city limits. (See 3.9.1 and 3.9.3)	Continuing	E&CD	Varies	Annual Budget

10.3 Housing

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
3.9.1	Encourage residential infill and redevelopment in older and established neighborhoods. (See 2.7.4 and 3.9.3)	Continuing	E&CD	Varies	Annual Budget
3.9.2	Permit and encourage the development of higher density infill housing in established areas of the city in most future land use classifications and zoning districts.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
3.9.3	Prepare and adopt infill housing design and development standards to require the compatibility of infill development with existing neighborhoods and address both the construction of new units on individual lots and new neighborhood projects adjacent to established neighborhoods. The standards should specifically deal with building size, relationship to the street, relationship to immediate neighbors, privacy and potential traffic conflicts. Standards for infill neighborhoods should provide for flexibility in lot sizes and street standards. (See 2.7.4 and 3.9.1)	2006-2007	Planning Commission, E&CD, City Council	\$30,000 consulting fees	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
3.9.4	Encourage and require more compact development patterns and higher quality design and building materials to increase and maintain property values.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
3.9.5	Permit and encourage a wider range of housing types, sizes and styles to provide increased housing choices and to increase home ownership.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
3.9.6	Expand the definition and permissible size of accessory living units in residential areas of the city.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
3.9.7	Encourage live-work units in both residential and commercial areas. (See 4.7.2)	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
3.9.8	Permit and encourage neighborhood commercial uses to be located within and adjacent to residential neighborhoods to provide more options to residents, encourage pedestrian and bicycle travel and increase neighborhood vitality.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
3.9.9	Support community based organizations, including Habitat for Humanity and similar organizations, to construct new and revitalize older housing units for home ownership.	2005-2015	Planning Commission, E&CD, City Council	NA	Annual Budget
3.9.10	Enhance code enforcement efforts related to property maintenance to prevent neighborhood deterioration. (See 3.9.11, 9.13.4, 9.13.5)	Continuing	E&CD	NA	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
3.9.11	Design and implement an effective and efficient program to eliminate vacant and unsafe structures in accordance with the requirements of the International Building Code and state law to reduce blighting influences and prepare land for new housing development. (See 3.9.10, 9.13.4, 9.13.5)	Continuing	E&CD	NA	Annual Budget
3.9.12	Consider requirements for the inclusion of high density housing within and adjacent to large scale commercial shopping center developments in conjunction with new development and center renovations.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
3.9.13	Prepare and adopt flexible minimum housing design standards for new residential construction. Minimum standards will be designed to provide a variety of housing sizes, styles and price ranges and will be intended to maintain the quality of design and construction, add value to neighborhoods, define distinctive places, provide safe neighborhoods, enhance the public realm and create sustainable neighborhoods that age well.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
3.9.14	Adopt zoning regulations applicable to single family detached subdivisions that provide for a minimum building envelope in addition to minimum lot size and minimum setbacks.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
3.9.15	Design and implement a community education program to inform home builders, developers and the home buying public of the city's housing choices and quality goals.	2006 and Continuing	Planning Commission, E&CD, City Council	NA	Annual Budget

10.4 Economic Development

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
4.7.1	Encourage and attract new retail uses to serve existing and new residents of the city. Desirable new retail uses include a home improvement outlet; sit down restaurants, a major bookstore, an electronic and appliance outlet and a movie theater complex.	Continuing	E&CD	NA	Annual Budget
4.7.2	Research and develop programs to prevent or avoid the 'big box vacancy' problem in current occupied locations and to create adaptive reuses of vacant big boxes when they occur.	Continuing	E&CD	NA	Annual Budget
4.7.3	Continue to work with Aiken County, the South Carolina Department of Transportation, and the South Carolina Transportation Infrastructure Bank to complete the Palmetto Parkway (I-520) in Aiken County.	2005-2009	E&CD, City Council	NA	Annual Budget
4.7.4	To increase employment levels in the city, expand the scope, size and uses of permissible home occupations and provide for acceptable live-work units in appropriate areas of the community.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
4.7.5	Facilitate the development of a small-scale conference center in conjunction with a privately owned and operated hotel in the downtown area or on the riverfront.	2006-2008	City Council, E&CD	\$4,000,000	Riverfront Fund, Federal Funds
4.7.6	Cooperate with the North Augusta Chamber of Commerce, North Augusta 2000 and other area organizations to develop programs to increase the awareness of North Augusta opportunities and generally improve both the internal and external image of the community.	Continuing	City Departments	NA	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
4.7.7	Cooperate with the North Augusta Chamber of Commerce, North Augusta 2000 and other area non-profit organizations to develop programs to improve tourism in the city.	Continuing	City Departments	NA	Annual Budget
4.7.8	Cooperate with the North Augusta Chamber of Commerce, North Augusta 2000 and other area organizations to develop programs to improve the downtown area for businesses and residents.	2005-20015	E&CD, City Council	NA	Annual Budget
4.7.9	Cooperate with prospective industrial developers and facilitate the development of a business/industrial park on approximately 300 acres on the Blanchard Park property or another appropriate location near I-20 or I-520.	2006-2015	City Council, E&CD	Unknown	Unknown
4.7.10	Encourage and assist property owners and prospective developers in the appropriate development and redevelopment of the downtown area and riverfront in accordance with the Master Plan for the North Augusta Riverfront Redevelopment District. Such redevelopment should be designed at a pedestrian scale, optimize pedestrian connectivity, maintain a high level of design quality, support a high level of quality in the public realm and minimize reliance on the automobile for transportation within the downtown.	Continuing	Planning Commission, E&CD	NA	Annual Budget
4.7.11	Develop a program to encourage and assist private reinvestment and redevelopment in the downtown area.	2007-2009	Planning Commission, E&CD	NA	Annual Budget
4.7.12	Encourage regional commercial development (those uses and services with a market area substantially larger than the city limits) to locate adjacent to interstate interchanges.	Continuing	Planning Commission, E&CD	NA	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
4.7.13	Encourage and assist the owners and managers of older shopping centers to renovate, improve and expand the retail mix, provide a mix or both residential and commercial uses where appropriate, increase intensity, create outparcels for additional tenants, establish pedestrian and vehicular connectivity with neighboring commercial and residential areas, and add landscaping and pedestrian amenities.	Continuing	Planning Commission, E&CD	NA	Annual Budget
4.7.14	Encourage and support the increased utilization of the Savannah River for commercial and recreational transportation uses including but not limited to canoeing and kayaking, boat rentals, water taxi services, tourist cruises, and others. (See 5.14.24)	Continuing	Planning Commission, City Departments, City Council	NA	Annual Budget

10.5 Transportation

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
5.14.1	Adopt and enforce an official map pursuant to SC Code § 6-29-340(B)(2)(c) showing the location of existing and proposed public roads, streets and highways. Amend the Comprehensive Plan and Code.	2006-2007	Planning Commission, City Departments, City Council	NA	Annual Budget
5.14.2	Review and update the official map and various transportation plans and project lists at least every three years. Plans to be reviewed and updated include but are not limited to: the long range project plan, the intersection improvement plan, traffic signal improvement plan, Greenway, bicycle and pedestrian master plan, and sidewalk installation and improvement plan.	2007 2009 2011 2013 2015	Planning Commission, City Departments, City Council	NA	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
5.14.3	Increase vehicular, pedestrian and bicycle connectivity between existing subdivisions and commercial hubs to reduce the level of traffic on existing arterials and collectors.	Continuous	City Departments, City Council	Varies	Sales Tax and City Funds
5.14.4	Provide for adequate vehicular connectivity within and between new subdivisions to reduce the traffic on arterials and collectors while avoiding the creation of cut through traffic corridors.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
5.14.5	Adopt development regulations that require new development projects that create traffic impacts to mitigate those impacts through on-site and an equitable share of the cost of off-site roadway improvements as necessary.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
5.14.6	Adopt development regulations that require new developments to provide necessary rights of way for and an equitable share of the cost of transportation improvements, including future controlled access collectors, to city standards where necessary to implement the planned transportation network.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
5.14.7	Adopt development regulations (access management standards) that require an acceptable LOS be maintained on arterials and collectors within the city. Access management standards would control curb cuts and high turning movements on arterials and collectors and will apply to both new development and major renovations.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
5.14.8	Consider development regulations that require the installation and maintenance of urban design enhancements including increased landscaping, reduced signage, masonry building materials, pavement treatments, street lights and poles, traffic signals and poles, and other street furniture in commercial and higher density residential developments on collector and arterial roads.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
5.14.9	Consider development regulations that require all new residential and commercial developments install sidewalks and provide for adequate internal vehicular and pedestrian circulation, and external vehicular and pedestrian connectivity to adjacent developments, subdivisions and the Greenway. (See 5.14.10, 5.14.12, 5.14.18, 5.14.25, 6.13.9, 8.12.15)	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
5.14.10	Implement the citywide Greenway, pedestrian and bicycle master circulation plan that includes the primary Greenway system, Greenway extensions and connectors, multi-purpose trails adjacent to arterial highways, sidewalks and share the road bicycle lanes. The plan shall emphasize and prioritize connections to parks, schools, commercial areas, churches and other public facilities and is designed to ultimately connect every neighborhood, park and commercial area in the city. (See 5.14.9, 5.14.12, 5.14.18, 5.14.25, 6.13.9, 8.12.15)	Continuous	City Departments, City Council	Varies	Sales Tax and City Funds
5.14.11	Adopt standards and procedures for the design and installation of traffic calming improvements where vehicular speed within and through residential neighborhoods is or may become excessive.	2007-2009	E&PW, E&CD, City Council	\$25,000	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
5.14.12	Continue the program of retrofitting existing streets to provide a citywide sidewalk network where reasonable, economically feasible and regular use will occur. (See 6.13.18)	Continuous	E&PW, City Council	Varies	Sales Tax and City Funds
5.14.13	Adopt updated road and street design standards to provide for neighborhood scaled streets to calm traffic and provide for on-street parking. (See 4.14.14)	2006-2008	Planning Commission, E&CD, City Council	\$10,000	Annual Budget
5.14.14	Adopt local road and street standards that, subject to topography, natural drainage ways, and other environmentally sensitive areas, provide for shorter block lengths and connectivity. (See 4.14.13)	2006-2008	Planning Commission, E&CD, City Council	(See 4.14.13)	Annual Budget
5.14.15	Support the improvement of the Aiken County Transit System in the North Augusta planning area to provide adequate transit services for those that utilize it.	Continuous	City Departments, City Council	Varies	Annual Budget
5.14.16	Assist the Aiken County Transit System to locate Best Friend Express transit stops at appropriate locations to facilitate transit travel including commercial centers, large parking and employment locations, schools and the Greenway system.	Continuous	City Departments, City Council	NA	Annual Budget
5.14.17	Assist the Aiken County Transit System to plan for new routes and connections to new developments in growing areas of the city including the Palmetto Parkway corridor.	Continuous	City Departments, City Council	NA	Annual Budget
5.14.18	Cooperate with the Aiken County School District to determine whether the development of sidewalks that allow students to walk and bicycle to school will be widely used and if so to build sidewalks.	2009-2011	City Departments, City Council	NA	Sales Tax and City Funds
5.14.19	Continue to implement the city's comprehensive way-finding signage system citywide.	Continuous	E&PW, City Council	Varies	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
5.14.20	Adopt development regulations that provide incentives to locate parking for commercial and multi-family developments where it can be screened from public view by buildings and landscaping.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
5.14.21	Evaluate “road diets” or the downsizing or narrowing of existing streets, including some collectors and arterials, to calm traffic and make them more pedestrian friendly where road and lane width is not necessary to carry current and projected traffic volumes.	2006-2010	Planning Commission, E&PW, E&CD, City Council	(See 4.14.13 and 4.14.14)	Annual Budget
5.14.22	Develop and implement a plan to install landscaped medians on appropriate segments of arterial roads to beautify the corridors and to assist in controlling vehicular turning movements and maintaining an adequate LOS. Arterials to be considered initially include East and West Martintown Road, Knox Avenue, Georgia Avenue/US 25, Aiken-Augusta Highway/US 1 and Five Notch Road.	Continuous	E&PW, PR&LS, City Council	Varies annually	Sales Tax, State and Federal Funds, City Funds
5.14.23	Cooperate with Augusta-Richmond County, Columbia County, Aiken County and the Augusta Canal Authority to provide interstate connections between the North Augusta Greenway system, Augusta Riverwalk, the Augusta Canal Bikeway system and the Columbia County Bikeway system. (See 6.13.19)	2009-2011	City Departments, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
5.14.24	Encourage and support the increased utilization of the Savannah River for commercial and recreational transportation uses including but not limited to canoeing and kayaking, boat rentals, water taxi services, tourist cruises and others. (See 4.7.14)	2007-2015	Planning Commission, E&CD, City Council	Unknown	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
5.14.25	Adopt standards and procedures that specify the use of trees and other plantings to provide shelter, beauty, urban heat reduction and separation from automobile traffic on sidewalks, multipurpose paths and Greenway connectors, especially when they are located adjacent to or within an arterial or collector right of way.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
5.14.26	To the extent practicable, design and improve the Greenway and pedestrian circulation system providing access to public facilities, parks and commercial developments for aging populations and the disabled in accordance with the ADA. (See 5.14.9, 5.14.10, 5.14.12, 5.14.18, 6.13.9 8.12.15)	Continuous	City Departments, City Council	Varies	Sales Tax, City Funds
5.14.27	In cooperation with the SCDOT, FHWA and Aiken County, incorporate land conservation into transportation project planning.	Continuous	Planning Commission, E&CD, City Council	NA	Annual Budget
5.13.28	Facilitate the funding and improvement of poorly operating intersections in the city to improve traffic safety and maintain an acceptable LOS.	2005-2015	City Departments, SCDOT, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
5.14.29	Facilitate the coordination and synchronization of traffic signals to reduce congestion and maintain LOS.	2005-2015	City Departments, SCDOT, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
5.14.30	Where appropriate, assist land developers with the funding and construction of new collectors where necessary and identified in the Long Range Transportation System plan.	As needed and requested	City Departments, SCDOT, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
5.14.31	Assist Aiken County and SCDOT to complete I-520 as expeditiously as possible.	2005-2008	E&CD, City Council	NA	Annual Budget

10.6 Community Facilities

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
6.13.1	In cooperation with Edgefield County, Aiken County and the affected utility service districts, identify a logical and rational urban service area boundary or “preferred urban growth area” for the city.	2006-2010	Planning Commission, E&CD, City Council	\$100,000	Annual Budget
6.13.2	Initiate annexation procedures to expand the city limits to include the established urban growth area.	Continuing	Planning Commission, City Council	Varies	Annual Budget
6.13.3	Establish standards and regulations to require developers to reserve or provide land for appropriately sized neighborhood and community parks based on the size of the ultimate development.	2007	Planning Commission, City Departments, City Council	\$25,000	Annual Budget
6.13.4	Design and develop a municipal complex that will facilitate private reinvestment in the community, provide a landmark for North Augusta residents and visitors, and serve the city’s needs for up to fifty years.	2005-2007	Planning Commission, City Departments, City Council	Unknown	Sales Tax, City Funds
6.13.5	Design and implement a state of the art management information system that improves municipal efficiency and the quality of services to citizens.	2005-2010	City Departments, City Council	Unknown	City Funds
6.13.6	Cooperate with North Augusta 2000 in the utilization of its Land Bank in the acquisition of sites for future community facilities.	2006-2010	City Departments, City Council	NA	NA
6.13.7	Modify the land development (subdivision) regulations and construction standards as necessary to improve the quality of road, curb and gutter and sidewalk construction to improve the quality and extend the life of public improvements deeded to the city. (See 6.13.8, 6.13.9, 6.13.10)	2005-2007	Planning Commission, E&CD, E&PW, City Council	NA	Provide for in the Code

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
6.13.8	Modify the development regulations as necessary to provide for an adequate maintenance guarantee period for infrastructure accepted by the city. (See 6.13.7, 6.13.9, 6.13.10)	2005-2006	Planning Commission, E&CD, E&PW, City Council	NA	Provide for in the Code
6.13.9	Modify the subdivision and street design and construction standards to include minimum standards for street widths, block lengths, cul de sac lengths, street connectivity, trees, Greenway and other pedestrian connections, sidewalks (a minimum of 5 feet wide) and driveways. (See 5.14.10, 5.14.25, 6.13.7, 6.13.8, 6.13.10 8.12.15)	2005-2007	Planning Commission, E&CD, E&PW, City Council	NA	Provide for in the Code
6.13.10	Modify the development regulations to provide for private “parking lots” as opposed to public or private streets in higher density residential developments (multi-family, townhouse, etc.). Such private parking lots would be treated similar to commercial parking lots and could be developed to parking lot standards. Parking lots would not be accepted for ownership or maintenance by the city.	2005-2006	Planning Commission, E&CD, E&PW, City Council	NA	Provide for in the Code
6.13.11	Monitor and update the federally required Incident Management Plan (emergency operations plan) as necessary.	Continuous	City Departments, City Council	Varies	Annual Budget
6.13.12	Cooperate with the Aiken County Public School District to insure that school improvements and new school siting and construction developments are designed and integrated into existing developments with similar requirements expected of other development types.	2005-2010	Planning Commission, E&CD	NA	NA
6.13.13	Expand the cooperative effort with the Aiken County Public School District in the utilization of recreation facilities.	Continuous	City Departments, City Council	Varies	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
6.13.14	Adopt land development regulations that require that public facilities and services are adequate and available at the time the demand for such services and facilities generated by the development occurs.	2005-2006	Planning Commission, E&CD, E&PW, City Council	NA	Provide for in the Code
6.13.15	Evaluate the application of impact fees or other development related fees when appropriate to assist in financing new or improved facilities and increased services when the demand for facilities and services is generated by the development. Consider whether the completion and opening of I-520, is a rational basis for the imposition of an impact fee. Amend the Comprehensive Plan and Code.	2006-2008	Planning Commission, City Departments, City Council	\$50,000	Annual Budget
6.13.16	Locate new municipal facilities on sites that will support infill development in older areas of the city, will reduce traffic congestion and will connect with established (or will serve to implement planned) pedestrian and bicycle corridors.	Continuous	Planning Commission, City Departments, City Council	Varies	Varies
6.13.17	Utilize the Parks and Recreation Facilities Master Plan in the determination and prioritization of capital expenditures for parks and recreation facilities.	Continuous	Planning Commission, City Departments, City Council	Varies	Varies
6.13.18	Continue the implementation of the sidewalk construction program throughout the city 'complete the streets' by providing sidewalks to schools, parks and public places in areas where regular use will occur. (See 5.14.12)	Continuous	E&PW, City Council	Varies	Sales Tax, City Funds

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
6.13.19	Coordinate with the City of Augusta and the Augusta Canal Authority to develop a pedestrian and bicycle connection across the Savannah River to provide links between the North Augusta Greenway, the Augusta Riverwalk and Georgia Golf Hall of Fame and the Augusta Canal bikeway system. (See 5.14.23)	2009-2011	City Departments, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
6.13.20	Complete the acquisition of the Boeckh Ravine Parks system. (See 6.13.22, 8.12.3, 8.12.4)	2008-2012	City Departments, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
6.13.21	Implement the capital projects identified in the Master Plan for the North Augusta Riverfront Redevelopment District and not already listed in a capital improvement program.	2008-2015	Planning Commission, City Departments, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
6.13.22	Prepare and adopt a property acquisition plan for critical stormwater drainage areas. (See 6.13.20, 8.12.3, 8.12.4)	2006-2007	Planning Commission, City Departments, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
6.13.23	Periodically (annually or biannually) update the various capital improvement project lists and continue to implement projects according the overall capital improvement program.	Continuous	Planning Commission, City Departments, City Council	NA	Annual Budget
6.13.24	Adopt and enforce an official map pursuant to SC Code § 6-29-340(B)(2)(c) showing the location of existing and proposed utility rights of way and public building sites. Amend the Comprehensive Plan and Code. (See 4.14.1)	2006-2007	Planning Commission, City Departments, City Council	NA	Annual Budget

10.7 Cultural Resources

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
7.9.1	Facilitate the development and operation of a North Augusta Historical Museum to present the rich history of the community and display artifacts of the last hundred years.	2006-2009	City Departments, City Council, Heritage Council	Unknown	Sales Tax, State and Federal Funds, City Funds
7.9.2	Facilitate the construction and maintenance of a North Augusta Performing and Cultural Arts Facility that is appropriately scaled for the city to provide a local venue for performing and visual arts.	2007-2011	City Departments, City Council, Cultural Arts Council	Unknown	Sales Tax, State and Federal Funds, City Funds
7.9.3	Support and encourage the North Augusta Cultural Arts Council to enhance and expand cultural program offerings in the visual and performing arts.	Continuous	City Departments, City Council	Varies	Annual Budget
7.9.4	Improve publicity for area cultural events through enhanced relationships with the Augusta Metropolitan Convention and Visitors Bureau and others.	Continuous	City Departments, City Council	NA	NA
7.9.5	Support and promote cultural and historic events through city communication media including the city newsletter, <i>North Augusta Forward</i> , and the city website, www.northaugusta.net .	Continuous	City Departments, City Council	Varies	Annual Budget
7.9.6	Support the restoration and preservation of significant historic properties.	Continuous	City Departments, City Council	NA	Annual Budget
7.9.7	Encourage the adaptive reuse of historic or architecturally significant buildings that connect the city with its past.	Continuous	City Departments, City Council	Varies	Annual Budget
7.9.8	Provide information about National Register of Historic Places eligibility guidelines and incentives to owners of historic properties.	Continuous	E&CD	NA	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
7.9.9	Develop a comprehensive brochure of historic properties in North Augusta in cooperation with the Chamber of Commerce or other community organizations to be used in local schools and as tourism brochure.	2007-2008	E&CD	\$3,000	Annual Budget
7.9.10	Develop and implement design guidelines in the Downtown Redevelopment District to enhance and preserve the historic and aesthetic character of the downtown.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
7.9.11	Develop and implement zoning and design standards in the primary historic corridors including Georgia Avenue, Martintown Road, Carolina Avenue and West Avenue that permit small commercial uses but retain historic structures to the extent practicable and reinforce the original scale and character of the corridors.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
7.9.12	Develop the former site of Hamburg as an historic park highlighting its role as the terminus of the Charleston to Hamburg Railroad and as a gateway to North Augusta at the 5th Street and Aiken-Augusta Highway (US 1) entrances to the city.	2010-2012	Planning Commission, City Departments, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
7.9.13	Develop a gateway park and visitor center near the James U. Jackson Memorial Bridge as part of the town center.	2011-2013	Planning Commission, City Departments, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
7.9.14	Develop a regional tourism marketing plan that emphasizes North Augusta's culture and history, especially the Savannah River.	2007-2008	E&CD, Chamber of Commerce	Unknown	Annual Budget, Private Sources

10.8 Natural Resources

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
8.12.1	Cooperate with the states of South Carolina and Georgia, Aiken County, Augusta-Richmond County and Columbia County in the cooperative management of water resources in the Savannah River Basin. Maintain the Augusta Pool to preserve natural resources, provide for appropriate economic development and maintain an adequate water supply for the area.	Continuous	City Departments, City Council	NA	Annual Budget
8.12.2	Cooperate with Aiken County, the SCDHEC and the ARTS in the development and implementation of the Early Action Plan pursuant to the Aiken County Early Action Compact.	Continuous	City Departments, City Council	NA	Annual Budget
8.12.3	Prepare and adopt a Natural Areas Protection Plan to identify environmentally sensitive land areas and recommend means to protect air and water quality, wetlands and open space. The plan will recommend regulations for permitting development in critical environmental areas. The plan will also establish priority-setting criteria for open space protection through conservation easements and public acquisition. (See 6.13.20, 6.13.22, 8.12.4)	2006-2008	Planning Commission, City Departments, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
8.12.4	Acquire key properties identified in the Natural Areas Protection Plan including the Boeckh Ravine Parks not already owned by the city. (See 6.13.20, 6.13.22, 8.12.3)	2008-2012	City Departments, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
8.12.5	Adopt development regulations that require the riverbank on the Savannah River to be maintained in a natural state or for public access when adjacent land is proposed for development to minimize private control and destruction of the natural riverbank.	2005-2006	Planning Commission, E&CD, E&PW, City Council	NA	Provide for in the Code
8.12.6	Adopt and enforce more stringent and specific regulations to protect the floodways on the Savannah River and its tributaries from encroachment.	2005-2006	Planning Commission, E&CD, E&PW, City Council	NA	Provide for in the Code
8.12.7	Utilize available city funding and intergovernmental grants to acquire natural drainage ways, Carolina Bays, unprotected upland wetlands and other environmentally sensitive areas, for open space preservation, stormwater management, park land and extensions of the Greenway system.	Continuous	Planning Commission, City Departments, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
8.12.8	Adopt development regulations that require land developers to reserve and protect, or dedicate to the city, an adequate portion of natural drainage ways and other environmentally sensitive areas to provide for open space preservation and stormwater management.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
8.12.9	Adopt development regulations that encourage and permit cluster residential developments of a higher net density, including multi-family, in all residential zoning districts, where appropriate, with adequate buffers to preserve open space, maintain natural habitat areas and corridors and protect natural resources.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
8.12.10	Adopt development regulations to require the preservation of existing significant trees and tree clusters where appropriate on land proposed for new development.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
8.12.11	Adopt land development regulations to require the planting and/or preservation of trees in both commercial and residential developments.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
8.12.12	Undertake the public works management and budget actions necessary to obtain the "Tree City USA" designation.	2006-2007	City Departments, City Council	NA	Annual Budget
8.12.13	Design and implement a city program to plant street trees in existing rights of way where none currently exist and on city property where appropriate.	2007-2008	Planning Commission City Departments, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
8.12.14	Continue implementing the network of Greenway trails while maintaining existing natural areas in the process. (See 5.14.9, 5.14.10, 5.14.12, 5.14.18, 5.14.25, 6.13.9)	Continuous	City Departments, City Council	Varies	Sales Tax, State and Federal Funds, City Funds

10.9 Land Use

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
9.13.1	Protect low-density residential areas from the encroachment of conflicting land uses including large-scale commercial uses that generate high traffic volumes through natural and landscaped buffers and transitional land uses including townhouses, professional offices and well-landscaped parking areas.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.2	Adopt landscaping and screening standards to insure a sense of privacy for individual units in multi-family, townhome, small lot single-family and other compact residential developments.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.3	Encourage the revitalization of older neighborhoods by providing incentives for appropriate infill development. (See Chapter 3.)	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.4	Adequately enforce private property maintenance and landscaping codes to reduce potentially blighting influences in neighborhoods and commercial areas. (See 3.9.10, 3.9.11, 9.13.5)	Continuing	E&CD	NA	Annual Budget
9.13.5	Adopt and enforce a minimum housing maintenance code and implement a program to ensure that both owner-occupied and rental properties are habitable and adequately maintained or removed. (See 3.9.10, 3.9.11, 9.13.4)	Continuing	E&CD	NA	Annual Budget
9.13.6	Encourage and provide incentives for higher density residential and higher intensity commercial infill development on vacant land to promote a more compact urban form and discourage sprawl. Infill should occur where adequate infrastructure, public facilities and services are available.	2006-2008	Planning Commission, E&CD, City Council	Unknown	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
9.13.7	Encourage compact design to create more secure neighborhoods.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.8	Develop a neighborhood revitalization plan and program to prevent the deterioration of older and declining residential neighborhoods.	2008-2010	Planning Commission, City Departments, City Council	Unknown	Annual Budget
9.13.9	Encourage mixed-use development, especially in the downtown area and adjacent to commercial centers.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.10	Permit vertical mixed uses (ground floor retail and upper-level residential) in neighborhood preservation, neighborhood commercial and general commercial districts.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.11	Provide for small scale; relatively low traffic volume, low impact neighborhood commercial uses adjacent to single family neighborhoods to provide for the daily needs and services of one or more neighborhoods.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.12	Develop a commercial center revitalization plan and program to provide incentives for the revitalization and redevelopment of older commercial centers. Amend the Comprehensive Plan and Code to implement.	2006-2008	Planning Commission, E&CD, City Council	\$60,000	Annual Budget
9.13.13	Provide incentives for the conversion of existing commercial centers into walkable, mixed-use 'town center' projects. Amend the Comprehensive Plan and Code to implement.	2006-2008	Planning Commission, E&CD, City Council	Unknown	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
9.13.14	Develop design standards and regulations to insure that new retail shopping centers are designed to emphasize building design at a pedestrian scale, improve pedestrian circulation, enhance the attractiveness of public spaces and minimize the visual emphasis placed on parking areas and single-use big box structures. Amend the Comprehensive Plan and Code to implement.	2007-2008	Planning Commission, E&CD, City Council	\$40,000	Annual Budget
9.13.15	Develop design standards and regulations applicable to single-use big box retail structures to regulate scale and provide for appropriate reuse alternatives in the event the use is abandoned. Amend the Comprehensive Plan and Code to implement.	2007-2008	Planning Commission, E&CD, City Council	\$40,000	Annual Budget
9.13.16	Develop regulations to permit vendors to offer sidewalk service in appropriate commercial areas including the downtown and town center.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.17	Discourage commercial development along arterials and collector roads where such land use has not been previously established except at major intersections.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.18	Encourage industrial development adjacent to the two I-20 interchanges and the three I-520 interchanges.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.19	Establish a joint planning process in cooperation with Aiken County to determine the appropriate uses and scale of development adjacent to the I-20 and I-520 interchanges and cooperatively implement interchange development plans.	2006-2008	Planning Commission, E&CD, City Council	NA	Annual Budget

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
9.13.20	Develop and adopt joint land development regulations with Aiken County to apply to growing areas adjacent to the city limits, especially the I-520 corridor. Such regulations should include requirements for access management, internal connectivity and external connectivity with more than one arterial or collector road, the availability of adequate public facilities and services, and carefully defined land use controls.	2006-2008	Planning Commission, E&CD, City Council	NA	Annual Budget
9.13.21	Adopt regulations to require the reservation of areas for appropriately scaled community greens or neighborhood parks in new subdivisions.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.22	Develop design standards and regulations for sidewalks and streets to ensure safety and mobility for pedestrians and bicycles.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.23	Encourage and facilitate the location of desired retail uses close to the established commercial core areas of the city (downtown and the Martintown Road and Knox Avenue commercial node) prior to locating in a commercial node adjacent to an I-20 or I-520 interchange.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.24	Require market demand and competition analyses prior to the approval of new commercial uses to avoid the relocation of existing commercial tenants and vacant commercial space in established areas.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
9.13.25	Adopt an overlay district or other regulatory tool that will permit the enforcement of design guidelines and form based zoning provisions to guide appropriate uses and traditionally scaled redevelopment in the original city area of the Boeckh Plat. Such overlay district or other regulatory tool should provide special emphasis on the traditionally commercial downtown area and incorporate the neighborhood preservation corridor provisions addressed in section 9.13.45.5. Amend the Comprehensive Plan and Code to implement. (See 9.13.12)	2006-2008	Planning Commission, E&CD, City Council	\$60,000	Annual Budget
9.13.26	Develop a new zoning district and form based regulations specific to the town center area of the downtown to insure that a mix of uses are developed at a scale and design appropriate for an urban town center. Amend the Comprehensive Plan and Code to implement.	2006-2008	Planning Commission, E&CD, City Council	\$40,000	Annual Budget
9.13.27	In cooperation with community nonprofit organizations develop programs to celebrate older and established areas of the city including the downtown and original Boeckh plan area through festivals, specialized signage, expanded streetscape improvements, landscaping, historic preservation designations and rehabilitation awards.	Continuous	Planning Commission, City Departments, city Council	NA	Annual Budget
9.13.28	Expedite the development review process by expanding the scope of administrative approvals. Planning Commission review and approval should be limited to major projects, waivers, rezoning applications and other issues requiring discretionary consideration.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
9.13.29	Provide clear criteria and procedures for the approval of development applications and the vesting of approved development rights.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.30	Develop regulations to require master development concept plans for all adjacent parcels of property owned by an applicant to avoid incremental and unconnected project planning and design.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.31	Develop flexible zoning districts and regulations to allow developers to easily respond to market demands.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.32	Adopt regulations and procedures that encourage and assist applicants for controversial land use or development project approvals (rezoning, planned development, large scale projects) to initiate citizen participation with neighboring property owners through public meetings or design charrettes prior to formal consideration by the Planning Commission.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.33	Include flexible zoning provisions in commercial zones to provide for a mix of uses, especially residential, and to permit the renovation of existing commercial properties without the need for lengthy rezoning procedures.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
9.13.34	Define an area of the city and close-in unincorporated areas where urban growth is preferred and develop a plan to facilitate that growth. Such 'preferred urban growth and priority investment area' should include the established and developed areas of the city and appropriate undeveloped areas that are close to the established areas. Amend the Comprehensive Plan and Code to implement.	2008-2010	Planning Commission, E&CD, City Council	Unknown	Annual Budget
9.13.35	Consider financial and regulatory incentives for compact residential and neighborhood commercial development in the 'preferred urban growth area' to facilitate build out. Property outside the 'preferred urban growth area' should not be eligible for incentives. Some areas of higher priority within the 'preferred urban growth area' should be eligible for increased incentives.	2009-2011	Planning Commission, E&CD, City Council	Unknown	Sales Tax, State and Federal Funds, City Funds
9.13.36	Pursue annexation of those areas within the 'preferred urban growth area' that are not currently within the city limits.	2009 2015	Planning Commission, E&CD, City Council	Unknown	Annual Budget
9.13.37	Develop a plan to expand the North Augusta city limits in cooperation with Aiken and Edgefield counties and annex areas appropriate for future urban development.	2009 2015	Planning Commission, E&CD, City Council	Unknown	Annual Budget
9.13.38	Complete the research necessary for the GIS mapping of the portion of Edgefield County within the planning area.	2006-2008	E&CD	\$30,000	Annual Budget
9.13.39	Adequately evaluate the future land use and realistic development potential of properties under consideration for annexation prior to applying a zoning classification to the annexed area.	Continuous	Planning Commission, E&CD, City Council	NA	Provide for in the Code

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
9.13.40	Develop and adopt clear design guidelines and development regulations so that streets, buildings, and public spaces work together to create a sense of place in new residential and commercial development and redevelopment projects.	2007-2009	E&CD	\$30,000	Annual Budget
9.13.41	Adopt regulations applicable to residential preservation corridors and areas that regulate building type more specifically than by land use.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.42	Discourage strip commercial development (office and retail) on arterial corridors and encourage commercial development in compact nodes around major intersections (Martintown and Knox Avenues, Georgia and Knox Avenues, Martintown Road and West Avenue, Martintown and Atomic Roads, Martintown Road and US 1).	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.43	Evaluate the potential benefits of permitting light industrial and distribution uses in the East Martintown Road corridor east of Atomic Road.	2006-2009	Planning Commission, E&CD, City Council	NA	Annual Budget
9.13.44	Amend the highway corridor overlay district development regulations applicable to building and site design to make commercial areas more walkable.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
9.13.45	<p>Amend the highway corridor overlay district to identify segments for specific land use policies and regulations in the following categories:</p> <ol style="list-style-type: none"> 1. Gateway/Interchange – Connections between interstate and arterials, interstate highway oriented high intensity mixed use, limited and shared access, large parcels, quality appearance and landscaping, limited buffers between uses. 2. Commercial – High intensity auto oriented retail, office and service nodes on large parcels on arterial intersections. 3. Mixed Use – Moderate intensity commercial land uses on medium sized parcels. 4. Residential – Low to moderate intensity residential (primarily existing) uses on small to moderate sized parcels. 5. Neighborhood Preservation – Low intensity, small-scale residential, commercial and personal service uses within existing and new residential structures that preserve the traditional character. The neighborhood preservation corridor regulations will emphasize residential as the primary use and will also encourage mixed use structures that provide for residential, commercial office and personal service uses. The utilization of alleys will be emphasized. 	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
9.13.46	<p>Apply the highway corridor category land use policies and regulations to the following corridor segments: (See 9.13.41)</p> <p>1. Martintown Road</p> <p>1.1 US 1 to Atomic Road – Medium intensity mixed use, primarily commercial.</p> <p>1.2 Atomic Road to Knox Avenue/Jersey Avenue – High intensity commercial.</p> <p>1.3 Jersey to Hampton – Low intensity residential, neighborhood commercial and office with planted medians where appropriate.</p> <p>1.4 Hampton to River Bluff – low to moderate intensity mixed use with planted medians.</p> <p>1.5 River Bluff Drive to Knobcone Avenue – Low intensity residential and neighborhood preservation with planted medians.</p> <p>1.6 Knobcone Avenue to Gregory Lake Road – High intensity mixed-use interchange.</p> <p>1.7 Gregory Lake Road to city limits – Moderate intensity mixed use with planted medians (when SC 230 is widened).</p> <p>2. Knox Avenue and US 25/Edgefield Road</p> <p>1.1 Martintown Road to Georgia Avenue – High intensity commercial with planted medians.</p> <p>1.2 Georgia Avenue to I-20 – Medium intensity mixed use.</p> <p>1.3 I-20 to city limits – High intensity commercial with planted medians</p> <p>3. US 1, Aiken-Augusta Highway</p> <p>1.1 Savannah River to Martintown Road – Limited access open space/buffer entry corridor.</p> <p>1.2 Martintown Road to Atomic Road – High intensity mixed use interchange</p>	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
9.13.46, cont.	<p>4. Belvedere-Clearwater Road</p> <p>1.1 US 25 to Ridgefield Drive – Moderate intensity mixed use.</p> <p>1.2 Ridgefield Drive to Old Sudlow Lake Road – High intensity mixed use interchange.</p> <p>5. Five Notch Road from Georgia Avenue to Walnut Lane – Low intensity mixed use development</p> <p>6. Georgia Avenue</p> <p>1.1 Jackson Avenue to Observatory Avenue – Neighborhood preservation, low intensity residential, neighborhood commercial and office with planted medians where appropriate.</p> <p>1.2 Observatory Avenue to Marion Avenue – Low intensity mixed use development with planted medians.</p> <p>1.3 Marion Avenue to Knox Avenue – Moderate intensity mixed use.</p> <p>7. Buena Vista Avenue from Brookside Avenue to Martintown Road – Low intensity mixed use development with planted medians.</p> <p>West Avenue from Forrest Avenue to Martintown Road – Low intensity neighborhood preservation with mixed residential, office and personal service uses in limited appropriate locations.</p> <p>9. Carolina Avenue from Forrest Avenue to Martintown Road – Low intensity neighborhood preservation with mixed residential, office and personal service uses in limited appropriate locations.</p>	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code

Number	Project, Program, Activity	Implementation Period	Responsibility	Cost Estimate	Funding Source
9.13.47	Apply the Gateway/Interstate Interchange highway corridor land use policies and regulations to the following corridor segments: 1. I-20, Exit 1, Martintown Road and I-20. 2. I-20, Exit 5, US 25 and I-20, including the area around the I-520/I-20 interchange and Ascauga Lake Road. 3. I-520, Exit 17, US 1. 4. I-520, Exit at Belvedere Clearwater Road. 5. I-520, Exit on the Blanchard Park property.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.48	Amend the sign regulations to reduce the overall amount of signage permitted, provide an adequate amount of sign area for thoroughfare commercial (auto dealerships and others) and institutional uses (churches, schools, public facilities and others), improve the image of the community, and comply with recent federal and state legislation and case law.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code
9.13.49	Amend the zoning map of the city as needed to reflect the future land use map and the policies contained in this Comprehensive Plan.	2005-2006	Planning Commission, E&CD, City Council	NA	Provide for in the Code

APPENDIX A

**2005
COMPREHENSIVE PLAN
CITIZEN SURVEY**

Appendix A
2005 Comprehensive Plan Citizen Survey

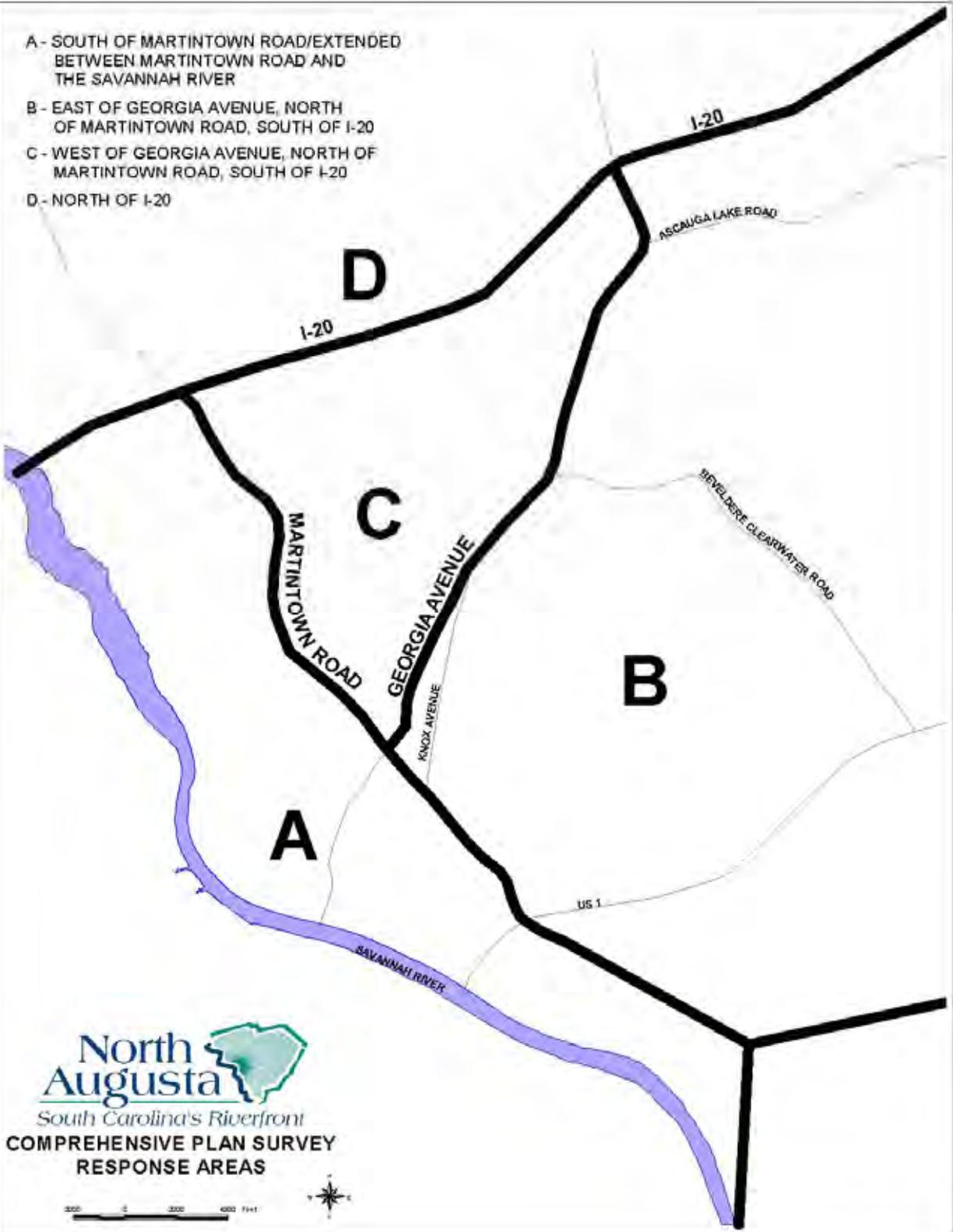
Economic and Community Development Memorandum 05-81	July 11, 2005
Results and Evaluation – Comprehensive Plan Citizen Survey	
Survey Response Summary	June 29, 2005
Comprehensive Plan Citizen Survey Documents	
Notice of Selection Postcard	May 20, 2005
Request Letter and Survey	May 25, 2005
Follow Up Postcard	June 6, 2005
Follow Up Letter and Survey	June 14, 2005

A - SOUTH OF MARTINTOWN ROAD/EXTENDED
BETWEEN MARTINTOWN ROAD AND
THE SAVANNAH RIVER

B - EAST OF GEORGIA AVENUE, NORTH
OF MARTINTOWN ROAD, SOUTH OF I-20

C - WEST OF GEORGIA AVENUE, NORTH OF
MARTINTOWN ROAD, SOUTH OF I-20

D - NORTH OF I-20



North Augusta
South Carolina's Riverfront
**COMPREHENSIVE PLAN SURVEY
RESPONSE AREAS**

Department of Economic and Community Development

Memorandum # 05-81

To: North Augusta Planning Commission

From: Skip Grkovic, AICP, Director of Economic and Community Development

Subject: Results and Evaluation – 2005 Comprehensive Plan Citizen Survey

Date: July 11, 2005

In accordance with direction provided by the North Augusta Planning Commission, the staff of the Department of Economic and Community Development undertook a random sample mail survey of North Augusta residents prior to completing the 2005 Comprehensive Plan. The survey was designed to supplement an ongoing citizen participation process initiated in 2001. Mark White of Freilich, Leitner and Carlisle convened a series of focus groups as part of his development regulation consulting contract with the city. Additional input was received and discussions held on comprehensive plan policies, programs, and projects at subsequent regular and special meetings of the Planning Commission and City Council, and at the annual City Council planning retreat, North Augusta Forward.

To maximize the response rate and insure reliable results the staff utilized survey procedures prescribed by Patricia Salant, MA and Don A. Dillman, PhD., the authors of *How to Conduct Your Own Survey*, (John Wiley and Sons, Inc., New York. 1994). According to Salant and Dillman, carefully adhering to a four step surveying process would result in obtaining a 50% to 60% response rate.

Timeline

The survey method recommended by Salant and Dillman specified four separate mailings to improve the response rate. The first mailing was a postcard sent to survey recipients on May 20, 2005. The postcard notified each household that it had been randomly selected to take part in the survey and that the survey questionnaire would be sent in a few days. The survey form was sent on May 25, 2005 with a cover letter requesting that the survey be completed and returned by June 3. On June 6, 2005 a second postcard was sent to the addresses from which a survey had not been returned. The second card encouraged each addressee to take the time to complete and return the survey. The second post card successfully generated additional survey responses. On June 14 a second survey and cover letter were sent to the outstanding addresses with a final request that it be completed and returned. A stamped return envelope was included with both survey mailings. The final deadline to respond was set for June 17, 2005. Several surveys were received after the final deadline and were included in the evaluation.

Survey Design

The survey was designed to solicit responses from existing households and current residents of the city. The purpose was to measure attitudes and preferences in several comprehensive plan related issue areas and to solicit guidance on the how to manage growth and development over the next ten years. The survey was not designed to gather information on specific projects or to measure the market demand for types of development.

A random sample listing of residential properties in the city was created utilizing the city's geographic information system (GIS). A random sample selection software application designed to be used with the GIS software employed by the city was utilized. A list of 575 properties within the city limits of North Augusta was requested. The sample was limited to properties located in residential (R-1, R-2, R-3 and R-4), planned development (PD), office commercial (C-1), neighborhood commercial (C-2), and downtown core commercial (C-4) zoning districts. The resulting list was reviewed and commercial properties were removed. The list included both owner occupied and renter occupied units. Single-family detached, duplex, townhouse and apartment units were all included in the sample. The resulting list was checked against the city's utility records to verify that utility services were provided at each address. The final list totaled 543 residential properties.

The city was broken into four areas for the purpose of distributing questionnaires and to generally identify the geographic location of the respondents. The goal was to insure a relatively uniform distribution within the city. There was no intent to measure differences in responses from different parts of the city. There was no attempt to divide the city into areas that contained equal numbers of housing units. The map attached to the survey divided the city into four areas. Generally, the areas are: the properties located between the river and Martintown Road (A); the area east of Georgia Avenue and south of I-20 (B); the properties between Martintown Road and Georgia Avenue south of I-20 (C); and the area within the city limits north of I-20 (D).

To verify a relatively uniform distribution of surveys, the number of residential parcels in each area was calculated. The number of surveys sent to each area was determined and the percentage of responses from each area was calculated. The results are shown in the following table. Although there are some slight differences in the of response rate from the different areas, the differences are relatively minor. An adequate geographic cross section of the city was sampled.

Area	Portion of All Parcels in the City	Percentage of All Surveys Sent	Response Rate
A	43.8%	42.7%	41.9%
B	19.2%	17.5%	13.2%
C	25.7%	25.8%	29.6%
D	12.0%	14.2%	15.3%

Response

Of the 543 questionnaires sent, 40 were returned as undeliverable. The result was a survey sample of 503 successfully delivered to a residence. The city received a return of 338 surveys resulting in a 67.2% response rate. It is important to note that not all 338 surveys returned were complete in their entirety. Some respondents failed to answer individual questions or portions of multipart questions. The responses to each question or portion of a question were tabulated only for the responses received, i.e. blank responses were not included in the tabulation. The number of responses to individual questions varied. However, for every question or portion of a question, the number of responses exceeded 300.

Survey Error

Salant and Dillman identify four types of errors that can be encountered in survey procedure, coverage error, sampling error, measurement error and nonresponse error.

Coverage error occurs when the list from which the sample is drawn does not include all elements of the population that researchers wish to study. In the case of the North Augusta Citizen Survey, for example, only current residents of the city were surveyed. There was no attempt to survey commercial property owners or individuals residing outside the city who may have a desire to move into it.

Sampling Error occurs when the survey uses only a sample of all of the people in the population as opposed to a census, which collects information from every individual in the population. A sampling error is the only error that can be quantitatively measured. The sampling error in the North Augusta survey, based upon tables provided by Salant and Dillman, indicate a sampling error of approximately $\pm 5\%$.

Measurement error occurs when a respondent's answer to a question is inaccurate, imprecise or cannot be compared in a useful way to other respondents' answers. It is extremely difficult to eliminate measurement errors especially in a random mailed survey. The way questions are written and the way choices of answers are presented also influence measurement error. The use of a range of responses to a question, i.e. most important to least important, strongly agree to strongly disagree, etc. can reduce

or minimize measurement error in a survey. A range of choices to answer questions were utilized extensively in the North Augusta survey.

A nonresponse error occurs when a significant number of people in the survey sample do not respond to the questionnaire and are different from those who do respond in a way that could be important to the results of the survey. For example, the 2000 census of North Augusta shows that 53% of the population is female and 47% is male. The respondents to the survey were 60.7% female and 39.3% male. There was a larger percentage of females that responded to the survey than are represented in the population. However, the difference is not significant for the purposes of this survey.

The age of the respondents, however, shows a greater departure from the census data. 65.8% of survey respondents were older than 45 years of age. According to the 2000 census, 35.5% of the population of the city is over the age of 45. The difference is rationalized somewhat because the survey was directed to adults who were the head of the household. At the time of the 2000 census 27.4% of the population was under the age of 20. Accordingly, when the under 20 group is removed from the comparison, the discrepancy is less. However, any interpretation of the results to specific questions should keep in mind the average age of respondents.

Survey Evaluation

The following discussion addresses some but not all of the results to survey questions. Results that are considered significant or remarkable because they differ from expectations are addressed briefly. Question numbers relate to the number of each question on the survey. Please refer to the survey instrument or the tabulated results for the wording of the question.

For each question where there is a range of answers (a scale of 1 to 5) shows an average score as well as the percentage response in each category. The average represents the total of all of the responses, 1 through 5, divided by the total number of responses for that question. It represents the mean response and is a general indicator of the importance, agreement or need indicated in the responses to each question.

Demographics. The sex, age and geographic distribution of the respondents have already been discussed. Other remarkable responses to the survey relate to the size of the household, number of children in the home and the length of time the respondent had lived in the City of North Augusta. The results to question 3 indicate that 65.5% of the respondents live in households with only one or two members and the results to question 4 show that 69.8% of the respondents have no children living in the home. Answers to question 5 show that 70.8% of the respondents have lived in the city more than 10 years and 50.9% had lived in North Augusta for more than 20 years. These results are somewhat consistent with the age of the respondents.

Housing. The results to question 8 show that 95.3% of the survey respondents owned the home where they lived. The census results show that 60.5% of the housing units in North Augusta were owner occupied in 2000. The percentage of survey respondents who rented their homes was 4.7% and the renter occupied units in the 2000 census was 32%. Therefore, the respondents who owned their own home were more inclined to respond to the survey than renters. That statistic is also consistent with the duration of residency in the city.

The results to question 9 show that 93.3% of the respondents lived in detached single-family homes and 6.1% lived in attached duplex or townhome units. Accordingly, a total of 99.4% of respondents lived in a single-family unit. Less than 1% lived in apartment units and mobile homes combined. The 2000 census showed that 85.5% of city residents lived in detached and attached single-family units. The results to the housing questions are not dramatically inconsistent.

Housing Preferences. The majority of responses to questions 10 and 11 indicate that detached single-family homes are the most desirable style of new construction. However, 93.3% of the respondents lived in detached single-family homes at the time of the survey. More than half of the respondents indicated that moderately priced detached homes were important. Affordable housing, although not specifically defined, was important to more than a third of the respondents.

Walkable Housing Location. A surprising number, more than a third in most cases, of the respondents were capable of walking to a variety of destinations from their current residence. Parks and the Greenway were identified as the most readily located. When asked how important walking to a specific destination would be if moving to a new house, the numbers were not as high. Parks and the Greenway were also at the top of the list of desired destinations within walking distance.

Community Character. When asked about the character of the community, the results were distributed across a wide range. A significant number, 64.0%, believe that North Augusta is a bedroom community. The city tag line, *South Carolina's Riverfront*, was a good description of the community to 79.9%. A significant number, approximately 90% in each case, agreed that North Augusta is a vibrant growing community, offers a very good quality of life, and that it is a friendly, neighborly place to live.

Community Growth. Question 15 asked respondents to evaluate the effect that new growth has had over the last ten years on the community. 86.1% of the respondents to question 15 said that the city had improved or improved a lot. 82.8% of the respondents to question 16 said that continuing the development of the Greenway system was

important to them. A similar percentage, 83.3% of the respondents to question 17, stated that continuing the efforts to attract new businesses was important.

Retail Businesses. In question 18 the respondents were asked to rate the types of businesses that were needed in the community. Not surprisingly, 65.3% indicated that a movie theater was needed or greatly needed and 78.8% identified sit down restaurants as being needed. Only 18.4% indicated that additional fast food restaurants were needed. In question 19, 65.6% of the respondents said that it was important to continue the city's efforts to attract new businesses to the Knox Avenue-East Martintown Road commercial node.

An open ended question related to needed new business was included in question 18. A summary of the additional responses is shown in the following table. The responses duplicated some of the businesses listed in question 18. There were also some suggestions that did not relate to the question and are not listed here. The responses are listed in random order. The complete unedited list of open ended response to question 18 is available from the Department of Economic and Community Development.

Specialty Gift Shop	Manufacturing jobs, industry
Plant nurseries	Welding/fabrication
Full-size garden center	Professional jobs
Outdoor recreation	Miniature golf
Computer software	Swimming pool
Bookstore	Pet friendly swimming areas
Coffee shop	Arby's
Target	Walgreen's
Nice steak restaurant	Somewhere for teenagers to hang out
Seafood restaurant	Sam's Club
Hotels	A cable operator other than Comcast
Bakery	Internet Café
Mom and Pop sandwich shop	Aquatics center
A gym like Gold's	Small/medium size amusement park
Home Depot	Circuit City
Hometown businesses, entertainment	Michael's
Belk's	Other department store
Books-A-Million	Upscale retail clothing store
Bank	No more fireworks stores
Cracker Barrel	Fresh Market

Cultural Activities. Survey recipients were asked in question 20 to indicate the need for additional cultural activities in the community. The responses indicated the greatest need for concerts, arts and crafts fairs, street festivals and plays. An open ended question was also asked about cultural activities. A summary of the additional responses is shown in the following table. The responses duplicated some of the businesses and activities listed in questions 18 and 20. There were also some suggestions that did not relate to cultural activities and are not listed here. The responses are listed in random order. The complete unedited list of open ended response to question 20 is available from the Department of Economic and Community Development.

Semi Pro Football, stadium, No hockey	Amphitheatre
Water park	Any youth or elderly activities
A community player's group	Old fashioned tent revivals
A historic district like Williamsburg	Auditorium
Adult music/dinner club, classical jazz	Somewhere for the Arts to perform
Senior Citizen Center and activities	Sport events that bring new people

Growth Management. Survey recipients were asked in question 21 to indicate whether they agreed or disagreed with ways that the city could manage its growth in the future. Growth management tools ranging from stricter sign regulations and landscaping requirements to tree preservation and the required construction of pedestrian connections in new subdivisions were listed. The various types of growth management tools received a wide range of responses. The growth management tool that most respondents agreed with, 91.3%, was the requirement for street trees, sidewalks, and more streetlights in all new developments. Additional tools that received fairly strong agreement were tree preservation, additional landscaping, and the construction of neighborhood parks in new developments. When asked whether no development controls should be applied so that property owners could do what they want, only 14.3% of the survey respondents agreed.

Question 22 related to annexation and expansion of the city boundaries. 71.9% of the respondents indicated that it was important for the city to continue to grow through annexation so that growth and development in areas around the city could be managed in the same manner that city growth has been managed.

Question 23, the final question, related to the application of design standards to new development. 92.5% of the respondents agreed that design standards should be applied in the downtown area. The Georgia, Carolina and West Avenue corridors were supported by 88.3%. The survey results also indicate that a significant majority believes that it is important to apply design standards to new commercial developments, commercial corridors and new residential developments.

North Augusta Comprehensive Plan

CITIZEN SURVEY

RESULTS

June 29, 2005

General

1. Please indicate if you are:

1.1	Male	39.3%
1.2	Female	60.7%

2. What is your age?

2.1	Under 18	0.3%
2.2	18 - 24 years	2.1%
2.3	25 - 34 years	12.2%
2.4	35 - 44 years	19.6%
2.5	45 - 54 years	24.9%
2.6	55 - 64 years	15.1%
2.7	65 - 74 years	14.8%
2.8	75 and older	11.0%

3. Please circle the number of people currently living in your household including yourself.

3.1	1	25.6%
3.2	2	39.9%
3.3	3	14.3%
3.4	4	13.7%
3.5	5	4.2%
3.6	6	1.8%
3.7	7	0.6%
3.8	8	0.0%
3.9	9 or more	0.0%

4. How many children under the age of 18 live in your home?

4.1	0	69.8%
4.2	1	15.0%
4.3	2	10.2%
4.4	3	4.2%
4.5	4	0.6%
4.6	5 or more	0.3%

5. How long have you lived in North Augusta?

5.1	less than 1 year	3.9%
5.2	1-5 years	14.9%
5.3	6-10 years	10.4%
5.4	11- 20 years	19.9%
5.5	over 20 years	50.9%

6. Where do you work?

6.1	North Augusta	16.7%
6.2	Aiken County	18.8%
6.3	Edgefield County	1.5%
6.4	Augusta/Richmond Co.	26.1%
6.5	Columbia County	3.0%
6.6	Somewhere else	3.3%
6.7	Not employed	4.8%
6.8	Retired	25.8%

7. Using the map on the back of the cover letter enclosed with the survey, please indicate the area of the city where you live.

7.1	A	41.9%
7.2	B	13.2%
7.3	C	29.6%
7.4	D	15.3%

Housing

8. Do you own or rent your home?

8.1	Own	95.3%
8.2	Rent	4.7%

9. Which of the following best describes the type of housing you live in?

9.1	Detached single family	93.3%
9.2	Attached, single family (duplex or townhouse)	6.1%
9.3	Multi-family (apartment or condominium)	0.3%
9.4	Mobile (manufactured) home	0.3%

10. Please circle the number that best represents your belief about each style of new housing that is needed in North Augusta. (Please circle the number that represents your response for each style)

		Very Important 1	Somewhat Important 2	Neutral 3	Somewhat Unimportant 4	Very Unimportant 5	Average
10.1	Single family detached homes	79.3%	10.2%	8.0%	0.6%	1.9%	1.36
10.2	Duplexes	5.6%	28.3%	33.2%	15.7%	16.8	3.09
10.3	Townhomes	17.9	46.7%	26.1%	3.8%	5.5%	2.32
10.4	Apartments	9.3%	25.1%	35.1%	14.8%	15.5%	3.01
10.5	Mobile homes	1.1%	3.9%	10.9	11.2%	73.0%	4.51

11. Please circle the number that best represents your belief about each type of new housing that is needed in North Augusta? (Please circle the number that represents your response for each type)

		Very Important 1	Somewhat Important 2	Neutral 3	Somewhat Unimportant 4	Very Unimportant 5	Average
11.1	Higher income 'estate' homes	13.4%	33.9%	30.1%	11.0%	11.6%	2.74
11.2	Moderately priced detached homes	66.6%	23.7%	5.8%	1.9%	1.9%	1.49
11.3	Affordable housing	41.7%	26.8%	20.2%	7.3%	4.0%	2.05
11.4	Rental units	8.2%	19.6%	30.9%	17.5%	23.0%	3.25
11.5	Mobile homes	2.4%	3.1%	11.7%	11.7%	71.1%	4.46

12. Are you or the members of your family able to comfortably walk from your home to each of the following? (Please circle the number that represents your response for each location)

		Yes	No	Don't know
12.1	Church	33.1%	66.9%	0.0%
12.2	School	39.8%	57.4%	2.8%
12.3	Park	58.4%	39.8%	1.9%
12.4	Greeneway	52.6%	45.5%	1.9%
12.5	Grocery store	36.4%	63.3%	0.3%
12.6	Convenience store	43.1%	56.3%	0.6%
12.7	Restaurant	25.8%	73.6%	0.6%

13. If you were planning to move to another house, how important would it be to you to be able to walk to the following? (Please circle the number that represents your response for each location)

		Very Important 1	Somewhat Important 2	Neutral 3	Somewhat Unimportant 4	Very Unimportant 5	Average
13.1	Church	16.7%	17.6%	32.5%	13.0%	20.1%	3.02
13.2	School	13.4%	15.6%	30.9%	13.4%	27.1%	3.26
13.3	Park	31.9%	28.4%	20.0%	8.8%	10.6%	2.37
13.4	Greeneway	31.1%	28.9%	21.4%	6.9%	11.3%	2.37
13.5	Grocery store	19.5%	18.7%	28.5%	14.7%	17.8%	2.91
13.6	Convenience store	16.6%	19.4%	30.1%	14.7%	19.1%	3.00
13.7	Restaurant	16.1%	18.6%	28.3%	17.1%	19.6%	3.04

Community Character

14. Please indicate the extent to which you agree or disagree with each of the following statements about North Augusta. (Please circle the number that represents your response for each statement)

		Strongly agree 1	Somewhat agree 2	Neither agree nor disagree 3	Somewhat disagree 4	Strongly disagree 5	Average
14.1	North Augusta is a bedroom community	26.1%	37.9%	29.0%	3.8%	3.2%	2.20
14.2	North Augusta is the center of the Central Savannah River Area (CSRA)	17.1%	32.6%	26.2%	17.1%	7.0%	2.64
14.3	North Augusta is South Carolina's riverfront	47.9%	32.0%	12.5%	6.4%	1.5%	1.83
14.4	North Augusta is a vibrant growing community	57.8%	29.5%	7.9%	4.0%	0.9%	1.61
14.5	North Augusta should grow faster	10.7%	20.1%	30.5%	26.8%	11.9%	3.09
14.6	North Augusta offers a very good quality of life	64.0%	29.2%	4.0%	2.2%	0.9%	1.48
14.7	North Augusta is a friendly, neighborly place to live	65.7%	25.2%	5.5%	2.4%	1.5%	1.50
14.8	North Augusta is growing too fast	13.2%	25.2%	38.0%	15.3%	8.0%	2.79
14.9	North Augusta is losing its small town feel	22.0%	30.1%	19.3%	20.8%	7.8%	2.62
14.10	There are not enough jobs available in North Augusta	26.2%	26.2%	39.6%	6.1%	1.8%	2.31
14.11	Traffic congestion is becoming a problem in North Augusta	18.0%	26.5%	26.5%	19.8%	9.1%	2.76
14.12	The quality of new development in North Augusta is not very good	6.7%	15.9%	34.6%	27.2%	15.6%	3.29
14.13	It is too difficult/expensive to build in North Augusta	10.1%	22.1%	39.0%	19.6%	9.2%	2.96

		Strongly agree 1	Somewhat agree 2	Neither agree nor disagree 3	Somewhat disagree 4	Strongly disagree 5	Average
14.14	I worry about the number of people moving into the community	11.6%	22.2%	30.7%	21.0%	14.6%	3.05
14.15	I worry about the type of people moving into the community	21.7%	21.4%	31.3%	14.5%	11.1%	2.72

15. In summary, how would you rate the impact that new development has had on the character of North Augusta over the past 10 years? North Augusta has: (Please circle the number that represents your response)

Improved a lot 1	Improved 2	Not changed 3	Gotten worse 4	Gotten a lot worse 5	Average
29.5	56.6%	4.8%	7.5%	1.5%	1.95

Community Growth

16. In recent years the city has worked to develop the Greenway system. How important is it for the city to continue to construct sidewalks, trails and Greenway connectors to connect neighborhoods, commercial areas, open spaces, parks, and schools? (Please circle the number that represents your response)

Very Important 1	Somewhat Important 2	Neutral 3	Somewhat Unimportant 4	Very Unimportant 5	Average
57.5%	25.3%	9.3%	3.9%	3.9%	1.71

17. In recent years the city has worked to attract new businesses to the community. How important is it for the city to continue to expend time, effort, and money to attract new businesses to North Augusta? (Please circle the number that represents your response)

Very Important 1	Somewhat Important 2	Neutral 3	Somewhat Unimportant 4	Very Unimportant 5	Average
52.2%	31.1%	9.6%	4.0%	3.1%	1.75

18. If the city continues its efforts to attract businesses to the community, please indicate the need for the following types of businesses in North Augusta. (Please circle the number that represents your response for each type of business.

		Greatly needed 1	Needed 2	Neutral 3	Not needed 4	Not at all needed 5	Average
18.1	Movie theater	35.6%	29.7%	20.7%	9.6%	4.0%	2.16
18.2	Sit down restaurants	43.9%	34.9%	15.0%	5.3%	0.9%	1.84
18.3	Fast food restaurants	3.5%	14.9%	30.5%	41.0%	10.2%	3.39
18.4	Coffee shop	16.1%	29.2%	34.8%	15.8%	4.0%	2.62
18.5	Appliance store	8.7%	33.3%	34.6%	17.4%	5.9%	2.79
18.6	Electronics store	9.2%	26.6%	41.1%	18.4%	5.1%	2.84
18.7	Home furnishings store	12.1%	37.7%	34.6%	10.3%	5.3%	2.59
18.8	Barber/beauty shop	6.2%	17.8%	45.5%	21.8%	8.7%	3.09
18.9	New and used auto dealership	4.4%	6.3%	32.0%	37.3%	19.9%	3.62
18.10	Auto repair	7.5%	23.4%	39.9%	20.9%	8.4%	2.99
18.11	Grocery store	9.8%	10.1%	35.6%	33.4%	11.0%	3.26
18.12	Health clinic/doctor's office	19.6%	30.7%	30.1%	15.5%	4.7%	2.57
18.13	Bar/tavern/club	8.8%	13.8%	22.3%	22.9%	31.7%	3.53
18.14	Laundry service	4.7%	11.6%	49.5	21.6	12.2	3.24
18.15	Drug store/pharmacy	7.8%	11.5%	41.6%	24.7%	14.5%	3.27
18.16	Others (Please specify)	See Memo 05-81, Comp. Plan Citizen Survey Results					

19. In recent years the city has encouraged the development of new retail stores close to the center of the city (Wal-Mart, Lowe's, Chick-Fil-A). How important is it for the city to continue to encourage the location of new retail businesses on Knox Avenue and East Martintown Road? Please circle the number that represents your response)

Very Important 1	Somewhat Important 2	Neutral 3	Somewhat Unimportant 4	Very Unimportant 5	Average
33.2%	32.4%	17.3%	9.6%%	7.7%	2.27

20. The city of North Augusta has supported art and cultural activities for a number of years. Please indicate the need for the following types of activities and events in North Augusta. (Please circle the number that represents your response for each type of activity or event)

		Greatly needed 1	Needed 2	Neutral 3	Not needed 4	Not at all needed 5	Average
20.1	Concerts	27.3%	42.6%	23.9%	4.6%	1.5%	2.10
20.2	Plays	20.9%	39.7%	31.7%	6.2%	1.5%	2.28
20.3	Historical reenactments	13.1%	31.8%	41.7%	10.3%	3.1%	2.59
20.4	Arts and crafts fairs	19.1%	46.0%	30.9%	3.7%	0.3%	2.20
20.5	Street festivals	23.4%	42.5%	27.4%	5.8%	0.6%	2.17
20.6	Museum	16.4%	29.4%	38.1%	12.4%	3.7%	2.58
20.7	Art gallery	15.7%	27.5%	42.0%	11.4%	3.4%	2.59
20.8	Performing arts theater	18.6%	29.3%	37.2%	10.4%	4.4%	2.53
20.9	Others (Please specify)	See Memo 05-81, Comp. Plan Citizen Survey Results					

21. Please indicate the extent to which you agree or disagree with the following ways the city could manage the way it grows and develops in the future. (Please circle the number that represents your response for each approach)

		Strongly agree 1	Somewhat agree 2	Neither agree nor disagree 3	Somewhat disagree 4	Strongly disagree 5	Average
21.1	Reduce the allowable size and number of commercial signs	36.8%	38.0%	19.5%	3.6%	2.1%	1.96
21.2	Regulate the color and appearance of commercial signs	34.1%	33.8%	24.7%	4.0%	3.7%	2.10
21.3	Require that large trees be preserved in new commercial and residential developments	59.5%	26.1%	10.5%	2.7%	1.2%	1.60
21.4	Require more landscaping in new commercial and residential developments	47.9%	32.8%	14.5%	3.6%	1.2%	1.77
21.5	Require street trees, sidewalks and more streetlights in all new developments	60.2%	31.1%	5.7%	2.1%	1.2%	1.54

		Strongly agree 1	Somewhat agree 2	Neither agree nor disagree 3	Somewhat disagree 4	Strongly disagree 5	Average
21.6	Allow smaller neighborhood commercial uses (grocery, restaurant, day care, barber/beauty salon, etc) next to neighborhoods	21.3%	31.6%	22.2%	15.2%	9.7%	2.60
21.7	Permit small-scale commercial/retail uses on West Martintown Road between the Greenway and Knobcone Avenue	10.6%	32.2%	30.4%	11.2%	15.5%	2.89
21.8	Limit the size of new stores to prevent more "big box" retailers	25.6%	28.4%	28.4%	11.6%	6.1%	2.44
21.9	Allow more types of housing (single-family, townhome, multi-family) to be built near each other in new subdivisions	10.2%	27.1%	25.6%	18.1%	18.1%	3.04
21.10	Require interconnected streets that prevent cut-through traffic and reduce congestion on major roads	29.1%	35.3%	21.8%	7.1%	6.7%	2.27
21.11	Require bike paths and trails (Greenway connectors) in new developments	33.9%	32.4%	23.9%	5.5%	4.2%	2.14
21.12	Require neighborhood parks in new developments	33.4%	38.0%	21.3%	4.9%	2.4%	2.05
21.13	Require that more open space be preserved in new developments	32.0%	37.5%	25.7%	3.0%	2.1%	2.07

		Strongly agree 1	Somewhat agree 2	Neither agree nor disagree 3	Somewhat disagree 4	Strongly disagree 5	Average
21.14	Provide no controls. Allow people to do what they want with their land	6.4%	7.9%	9.4%	18.5%	57.8%	4.13

22. The city has grown in size through annexation over the last ten years. How important is it for the city to continue to annex areas adjacent to the city limits in order to be able to better manage the growth and development of those areas. (Please circle the number that represents your response)

Very Important 1	Somewhat Important 2	Neutral 3	Somewhat Unimportant 4	Very Unimportant 5	Average
35.2	36.7%	19.3%	4.3%	4.6%	2.06

23. Design standards can be used to preserve the character of an established neighborhood and to control the quality and character of new neighborhoods and commercial areas. Design standards regulate building size, location, materials, color, style, landscaping, and parking. Please indicate your level of agreement with the need for design standards for each of the following areas. (Please circle the number that represents your response for each area)

		Strongly agree 1	Somewhat agree 2	Neither agree nor disagree 3	Somewhat disagree 4	Strongly disagree 5	Average
23.1	Downtown	62.5%	30.0%	4.7%	1.6%	1.3%	1.49
23.2	The Georgia, Carolina and West Avenue corridors (Old Towne)	53.7%	34.6%	8.3%	1.9%	1.5%	1.63
23.3	Commercial corridors	48.1%	35.2%	12.0	3.5%	1.3%	1.75
23.4	New single-family residential neighborhood developments	37.5	38.8	13.8	7.4%	2.5%	1.98
23.5	New multi-family residential neighborhood developments	40.8	35.0	16.3%	4.9%	2.8%	1.93
23.6	New commercial developments	51.2	33.2	10.6%	3.4%	1.6%	1.71

Dear North Augusta Resident:

You have been selected to participate in a survey sponsored by the North Augusta Planning Commission. The information you provide in responding to the survey will be used in preparing the North Augusta Comprehensive Plan. Within the next few days you will receive the survey in the mail. Please complete it and return it by the date specified on the survey form. Your responses to the survey questions will be utilized by the Planning Commission and City Council to finalize goals, objectives, and priorities for the growth of our community over the next ten years.

Thank you for your cooperation and assistance in this important project.

Ed Meloan, Chairman
North Augusta Planning Commission

May 20, 2005



May 25, 2005

RESIDENT
ADDRESS
NORTH AUGUSTA, SC 29841

Dear North Augusta Resident:

Several days ago you should have received a post card from me requesting your assistance in completing a survey sponsored by the North Augusta Planning Commission. The 23 question survey is enclosed with this letter. A stamped self-addressed envelope for returning the survey is also enclosed.

You are one of 500 North Augusta citizens randomly selected to participate. Survey responses will be used by the Planning Commission to finalize the goals, objectives, and policies included in the city's ten year Comprehensive Plan. The draft of the 2005 Comprehensive Plan can be viewed on the city's website at www.northaugusta.net. The Plan will be finalized and adopted later this year.

The survey will require only a few minutes of your time. The following instructions describe how the survey should be completed and when it should be returned.

- An adult in the household should complete the survey.
- Please respond to every part of every question the best you can.
- The map on the back of this letter is needed to answer question 7.
- After you have completed the 6 page survey, please refold it and seal it in the stamped self-addressed return envelope.
- **Please mail the survey back to the Planning Commission on or before June 3, 2005.**

Thank you for your assistance and cooperation. If you have any questions about the survey you may call the Department of Economic and Community Development at 441-4221. The results of the survey will be summarized and published in a future edition of North Augusta Forward, the city newsletter distributed quarterly with utility billing statements.

Thank you again for your help. We sincerely appreciate your input and assistance.

Sincerely,

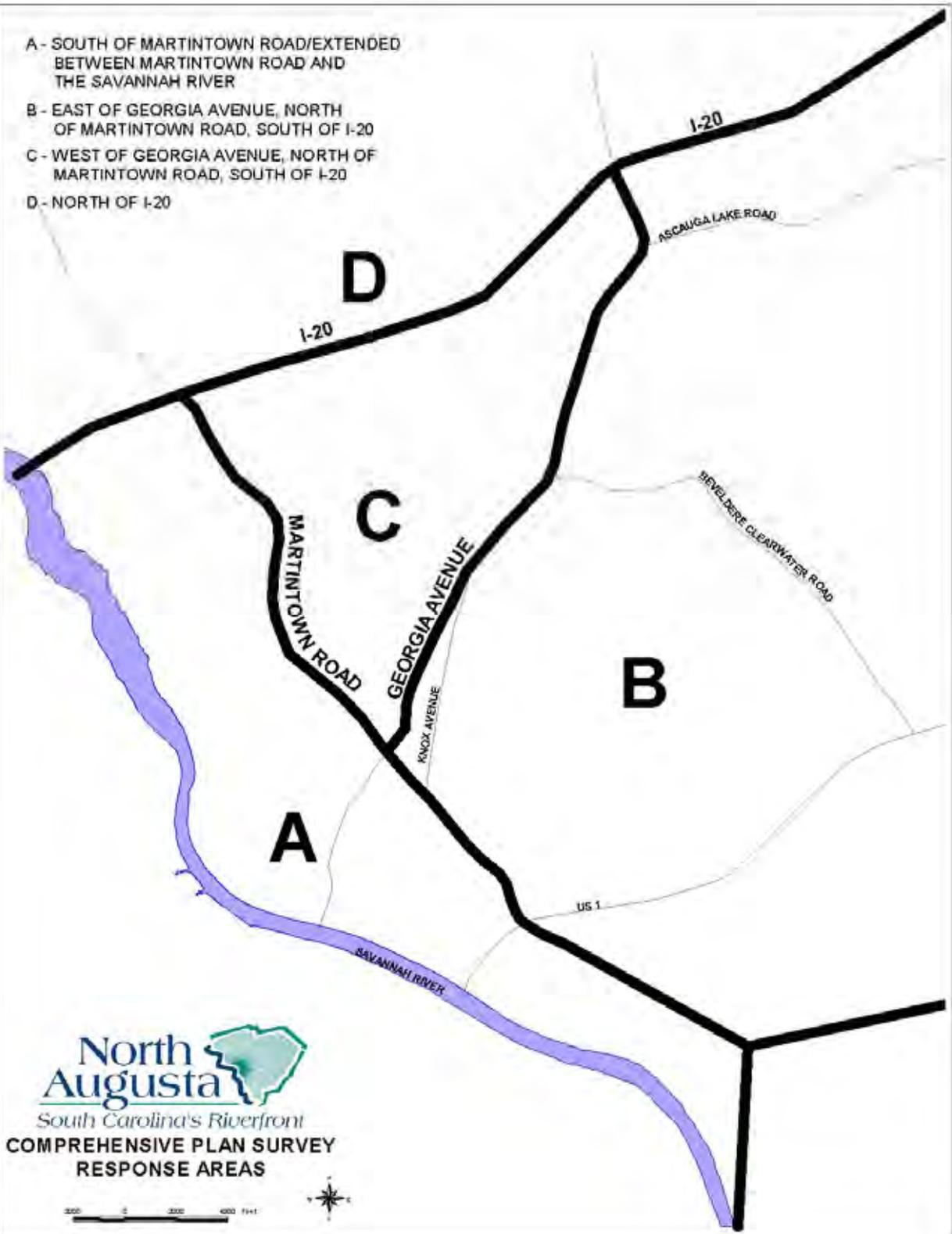
Ed Meloan, Chairman
North Augusta Planning Commission

A - SOUTH OF MARTINTOWN ROAD/EXTENDED
BETWEEN MARTINTOWN ROAD AND
THE SAVANNAH RIVER

B - EAST OF GEORGIA AVENUE, NORTH
OF MARTINTOWN ROAD, SOUTH OF I-20

C - WEST OF GEORGIA AVENUE, NORTH OF
MARTINTOWN ROAD, SOUTH OF I-20

D - NORTH OF I-20



North Augusta Comprehensive Plan

CITIZEN SURVEY

May 2005

General

1. Please indicate if you are:

- Male
 Female

2. What is your age?

- Under 18
 18 - 24 years
 25 - 34 years
 35 - 44 years
 45 - 54 years
 55 - 64 years
 65 - 74 years
 75 and older

3. Please circle the number of people currently living in your household including yourself.

1 2 3 4 5 6 7 8 9 or more

4. How many children under the age of 18 live in your home?

0 1 2 3 4 5 or more

5. How long have you lived in North Augusta?

- less than 1 year
 1-5 years
 6-10 years
 11- 20 years
 over 20 years

6. Where do you work?

- North Augusta
 Aiken County
 Edgefield County
 Augusta/Richmond County
 Columbia County
 Somewhere else (please specify) _____
 Not employed
 Retired

7. Using the map on the back of the cover letter enclosed with the survey, please indicate the area of the city where you live.

A B C D

Housing

8. Do you own or rent your home? _____ Own _____ Rent

9. Which of the following best describes the type of housing you live in?

- _____ Detached single family
- _____ Attached, single family (duplex or townhouse)
- _____ Multi-family (apartment or condominium)
- _____ Mobile (manufactured) home

10. Please circle the number that best represents your belief about each style of new housing that is needed in North Augusta. (Please circle the number that represents your response for each style)

	Very Important	Somewhat Important	Neutral	Somewhat Unimportant	Very Unimportant
Single family detached homes	1	2	3	4	5
Duplexes	1	2	3	4	5
Townhomes	1	2	3	4	5
Apartments	1	2	3	4	5
Mobile homes	1	2	3	4	5

11. Please circle the number that best represents your belief about each type of new housing that is needed in North Augusta? (Please circle the number that represents your response for each type)

	Very Important	Somewhat Important	Neutral	Somewhat Unimportant	Very Unimportant
Higher income 'estate' homes	1	2	3	4	5
Moderately priced detached homes	1	2	3	4	5
Affordable housing	1	2	3	4	5
Rental units	1	2	3	4	5
Mobile homes	1	2	3	4	5

12. Are you or the members of your family able to comfortably walk from your home to each of the following? (Please circle the number that represents your response for each location)

	Yes	No	Don't know
Church	1	2	3
School	1	2	3
Park	1	2	3
The Greeneway	1	2	3
Grocery store	1	2	3
Convenience store	1	2	3
Restaurant	1	2	3

13. If you were planning to move to another house, how important would it be to you to be able to walk to the following? (Please circle the number that represents your response for each location)

	Very Important	Somewhat Important	Neutral	Somewhat Unimportant	Very Unimportant
Church	1	2	3	4	5
School	1	2	3	4	5
Park	1	2	3	4	5
Greeneway	1	2	3	4	5
Grocery store	1	2	3	4	5
Convenience store	1	2	3	4	5
Restaurant	1	2	3	4	5

Community Character

14. Please indicate the extent to which you agree or disagree with each of the following statements about North Augusta. (Please circle the number that represents your response for each statement)

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
North Augusta is a bedroom community	1	2	3	4	5
North Augusta is the center of the Central Savannah River Area (CSRA)	1	2	3	4	5
North Augusta is South Carolina's riverfront	1	2	3	4	5
North Augusta is a vibrant growing community	1	2	3	4	5
North Augusta should grow faster	1	2	3	4	5
North Augusta offers a very good quality of life	1	2	3	4	5
North Augusta is a friendly, neighborly place to live	1	2	3	4	5
North Augusta is growing too fast	1	2	3	4	5
North Augusta is losing its small town feel	1	2	3	4	5
There are not enough jobs available in North Augusta	1	2	3	4	5
Traffic congestion is becoming a problem in North Augusta	1	2	3	4	5
The quality of new development in North Augusta is not very good	1	2	3	4	5
It is too difficult/expensive to build in North Augusta	1	2	3	4	5
I worry about the number of people moving into the community	1	2	3	4	5
I worry about the type of people moving into the community	1	2	3	4	5

15. In summary, how would you rate the impact that new development has had on the character of North Augusta over the past 10 years? North Augusta has: (Please circle the number that represents your response)

Improved a lot	Improved	Not changed	Gotten worse	Gotten a lot worse
1	2	3	4	5

Community Growth

16. In recent years the city has worked to develop the Greenway system. How important is it for the city to continue to construct sidewalks, trails and Greenway connectors to connect neighborhoods, commercial areas, open spaces, parks, and schools? (Please circle the number that represents your response)

Very Important	Somewhat Important	Neutral	Somewhat Unimportant	Very Unimportant
1	2	3	4	5

17. In recent years the city has worked to attract new businesses to the community. How important is it for the city to continue to expend time, effort, and money to attract new businesses to North Augusta? (Please circle the number that represents your response)

Very Important	Somewhat Important	Neutral	Somewhat Unimportant	Very Unimportant
1	2	3	4	5

18. If the city continues its efforts to attract businesses to the community, please indicate the need for the following types of businesses in North Augusta. (Please circle the number that represents your response for each type of business)

	Greatly needed	Needed	Neutral	Not needed	Not at all needed
Movie theater	1	2	3	4	5
Sit down restaurants	1	2	3	4	5
Fast food restaurants	1	2	3	4	5
Coffee shop	1	2	3	4	5
Appliance store	1	2	3	4	5
Electronics store	1	2	3	4	5
Home furnishings store	1	2	3	4	5
Barber/beauty shop	1	2	3	4	5
New and used auto dealership	1	2	3	4	5
Auto repair	1	2	3	4	5
Grocery store	1	2	3	4	5
Health clinic/doctor's office	1	2	3	4	5
Bar/tavern/club	1	2	3	4	5
Laundry service	1	2	3	4	5
Drug store/pharmacy	1	2	3	4	5
Others (Please specify)					

19. In recent years the city has encouraged the development of new retail stores close to the center of the city (Wal-Mart, Lowe's, Chick-Fil-A). How important is it for the city to continue to encourage the location of new retail businesses on Knox Avenue and East Martintown Road? Please circle the number that represents your response)

Very Important	Somewhat Important	Neutral	Somewhat Unimportant	Very Unimportant
1	2	3	4	5

20. The city of North Augusta has supported art and cultural activities for a number of years. Please indicate the need for the following types of activities and events in North Augusta. (Please circle the number that represents your response for each type of activity or event)

	Greatly needed	Needed	Neutral	Not needed	Not at all needed
Concerts	1	2	3	4	5
Plays	1	2	3	4	5
Historical reenactments	1	2	3	4	5
Arts and crafts fairs	1	2	3	4	5
Street festivals	1	2	3	4	5
Museum	1	2	3	4	5
Art gallery	1	2	3	4	5
Performing arts theater	1	2	3	4	5
Others (Please specify)					

21. Please indicate the extent to which you agree or disagree with the following ways the city could manage the way it grows and develops in the future. (Please circle the number that represents your response for each approach)

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Reduce the allowable size and number of commercial signs	1	2	3	4	5
Regulate the color and appearance of commercial signs	1	2	3	4	5
Require that large trees be preserved in new commercial and residential developments	1	2	3	4	5
Require more landscaping in new commercial and residential developments	1	2	3	4	5
Require street trees, sidewalks and more streetlights in all new developments	1	2	3	4	5
Allow smaller neighborhood commercial uses (grocery, restaurant, day care, barber/beauty salon, etc) next to neighborhoods	1	2	3	4	5
Permit small-scale commercial/retail uses on West Martintown Road between the Greenway and Knobcone Avenue	1	2	3	4	5
Limit the size of new stores to prevent more "big box" retailers	1	2	3	4	5
Allow more types of housing (single-family, townhome, multi-family) to be built near each other in new subdivisions	1	2	3	4	5
Require interconnected streets that prevent cut-through traffic and reduce congestion on major roads	1	2	3	4	5
Require bike paths and trails (Greenway connectors) in new developments	1	2	3	4	5
Require neighborhood parks in new developments	1	2	3	4	5
Require that more open space be preserved in new developments	1	2	3	4	5
Provide no controls. Allow people to do what they want with their land	1	2	3	4	5

22. The city has grown in size through annexation over the last ten years. How important is it for the city to continue to annex areas adjacent to the city limits in order to be able to better manage the growth and development of those areas. (Please circle the number that represents your response)

Very Important	Somewhat Important	Neutral	Somewhat Unimportant	Very Unimportant
1	2	3	4	5

23. Design standards can be used to preserve the character of an established neighborhood and to control the quality and character of new neighborhoods and commercial areas. Design standards regulate building size, location, materials, color, style, landscaping, and parking. Please indicate your level of agreement with the need for design standards for each of the following areas. (Please circle the number that represents your response for each area)

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Downtown	1	2	3	4	5
The Georgia, Carolina and West Avenue corridors (Old Towne)	1	2	3	4	5
Commercial corridors	1	2	3	4	5
New single-family residential neighborhood developments	1	2	3	4	5
New multi-family residential neighborhood developments	1	2	3	4	5
New commercial developments	1	2	3	4	5

Thank you for your time and cooperation. Please place the completed survey in the stamped, preaddressed envelope and return it to the Planning Commission.

Dear North Augusta Resident:

On May 26, 2005 the North Augusta Comprehensive Plan survey form was sent to you. The cover letter enclosed with the survey requested that you complete and return the questionnaire by Friday, June 3, 2005. We have not yet received your response. If you recently mailed it, thank you, and please disregard this card.

However, if you haven't yet completed the form, please take the time now to fill it out and return it. If you did not receive the survey or have misplaced it, please call 441-4221 and we will provide you with a new copy.

Thank you again for your cooperation and participation in the process of defining the goals and priorities for North Augusta's growth over the next ten years.

Ed Meloan, Chairman
North Augusta Planning Commission

June 6, 2005



June 14, 2005

RESIDENT
ADDRESS
NORTH AUGUSTA, SC 29841

Dear North Augusta Resident:

Several days ago you should have received a follow-up reminder post card from me requesting that you complete the Planning Commission survey we sent to you on May 25. We have not yet received your response. Another copy of the 23 question survey is enclosed. Please take the time to complete the survey and return it to us in the enclosed stamped self-addressed envelope. It will require only a few minutes of your time.

Survey responses will be used by the Planning Commission to finalize the goals, objectives, and policies included in the city's ten year Comprehensive Plan. The draft of the 2005 Comprehensive Plan can be viewed on the city's website at www.northaugusta.net.

The following instructions describe how the survey should be completed and when it should be returned.

- An adult in the household should complete the survey.
- Please respond to every part of every question the best you can.
- The map on the back of this letter is needed to answer question 7.
- After you have completed the 6 page survey, please refold it and seal it in the stamped self-addressed return envelope.
- **Please mail the survey back on or before June 17, 2005.**

Thank you for your assistance and cooperation. If you have any questions about the survey you may call the Department of Economic and Community Development at 441-4221. The results of the survey will be summarized and published in a future edition of North Augusta Forward, the city newsletter distributed quarterly with utility billing statements.

Thank you again for your help. We sincerely appreciate your input and assistance.

Sincerely,

Ed Meloan, Chairman
North Augusta Planning Commission

Maps

Chapter 1 - Introduction

Map 1-1 Planning Area

Chapter 2 - Population Element

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Map 2-2 Population Change 1990-2000
Map 2-3 2000 Census Tracts and Block Groups
Map 2-4 Population Density

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Chapter 4 - Economic Development Element

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Map 4-2 Market Area
Map 4-3 Per Capita Income
Map 4-4 Household Income

Chapter 5 - Transportation Element

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Map 5-2 Master Bicycle and Pedestrian Development Plan
Map 5-3 Public Transportation
Map 5-4 Palmetto Parkway Proposed Alignment

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Map 6-1 Park System
Map 6-2 Public Safety and EMS Stations
Map 6-3 Public Water System
Map 6-4 Public Sewer System
Map 6-5 Drainage Basins
Map 6-6 Proposed Water and Sewer Projects
Map 6-7 Public Schools

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Map 7-1 Boeckh Plat
Map 7-2 Cultural Resources

Chapter 8 - Natural Resources Element

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Map 8-2 Floodplains

Chapter 9 - Land Use Element

Map 9-1 Existing Land Use
Map 9-2 Development, Redevelopment and Revitalization Opportunities
Map 9-3 Future Land Use

Map 1-1
Planning Area

Columbia County
GA

Edgefield County
SC

Aiken County
SC

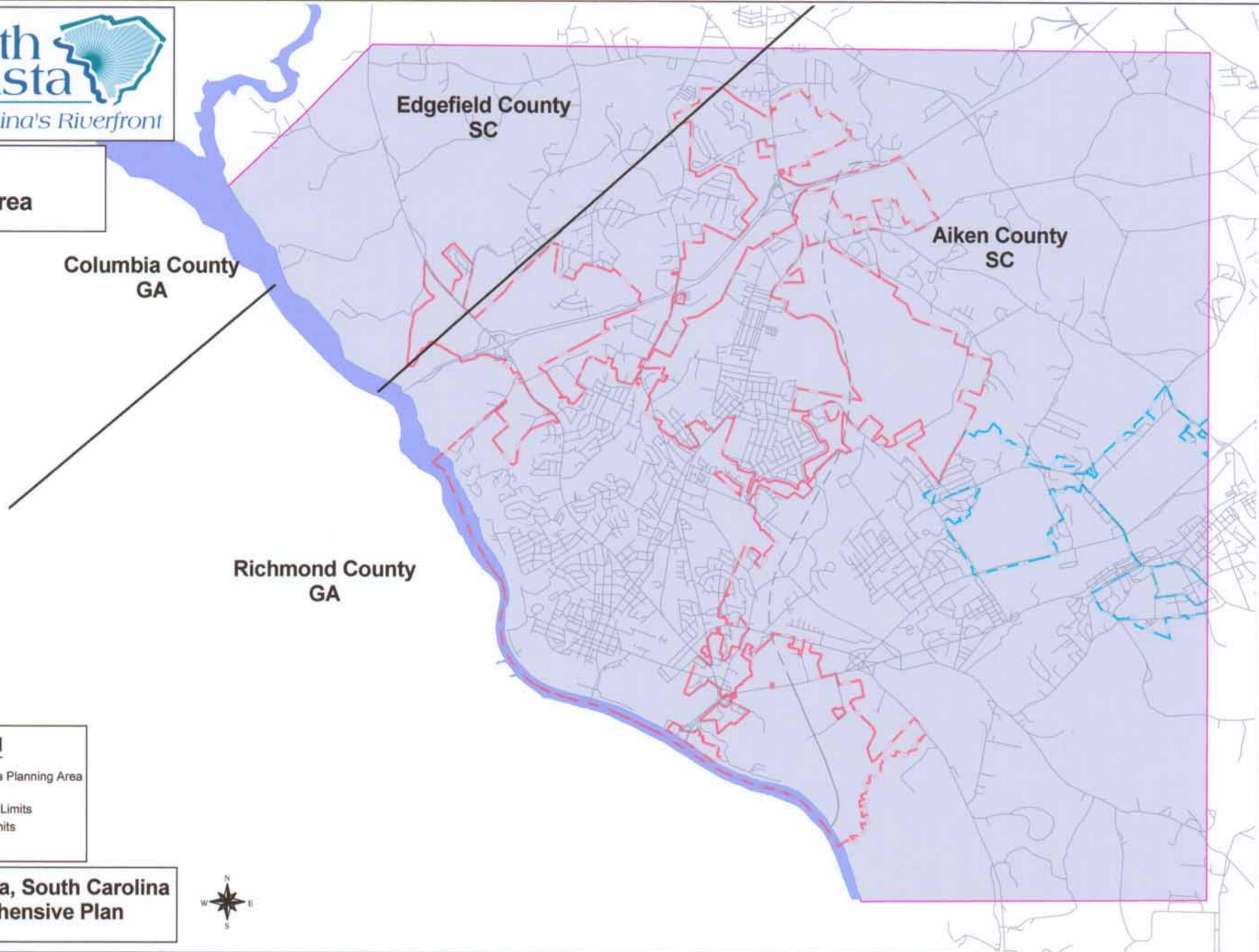
Richmond County
GA

Legend

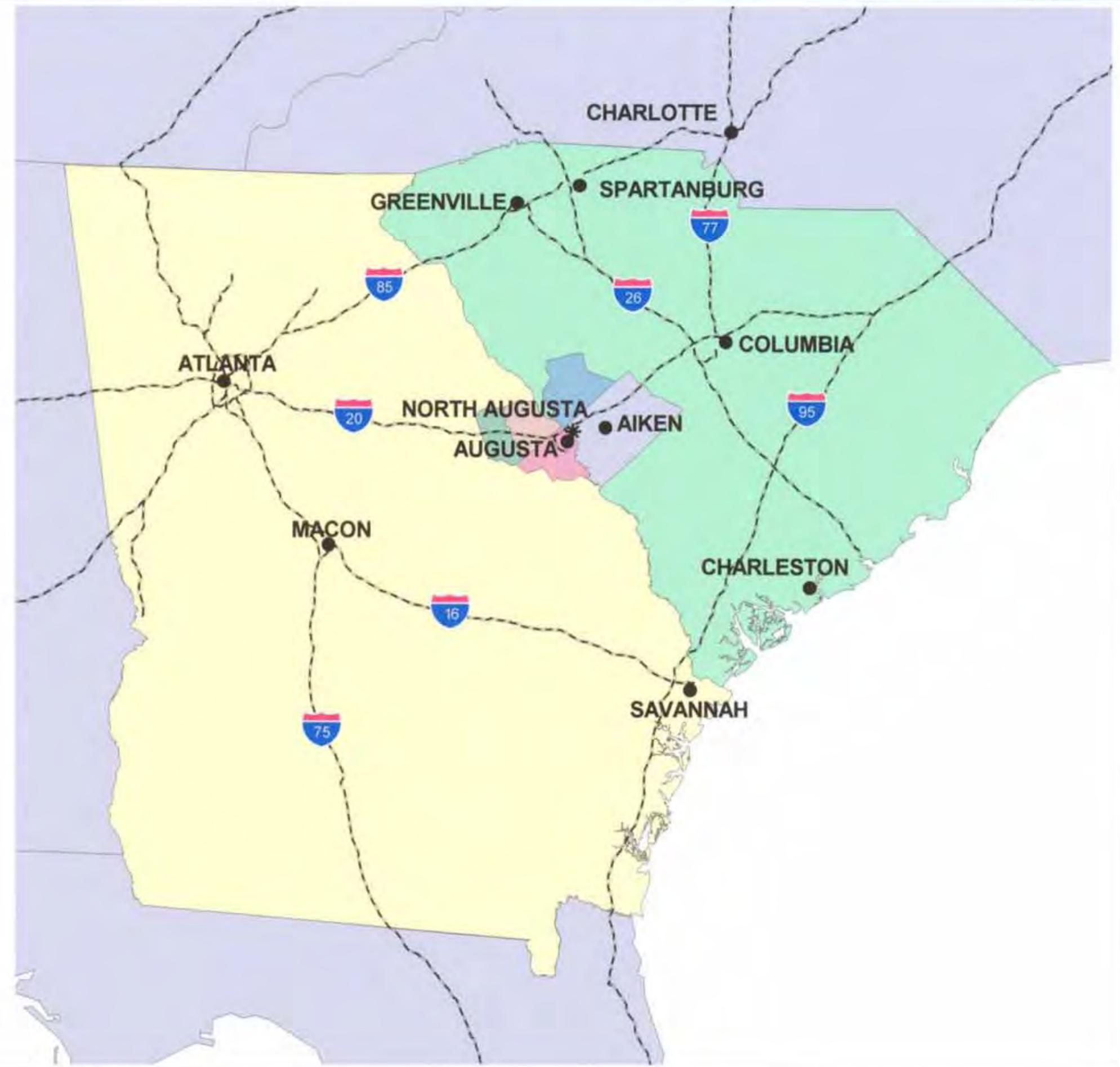
- 2005 North Augusta Planning Area
- Roads
- North Augusta City Limits
- Burnettown City Limits
- Savannah River

North Augusta, South Carolina
2005 Comprehensive Plan

December 16, 2005



Map 2-1
North Augusta
Location Map



Legend

Metropolitan Statistical Area (MSA)

- Aiken County
- Edgefield County
- Columbia County
- McDuffie County
- Richmond County

States

- Georgia
- South Carolina
- Southeastern United States

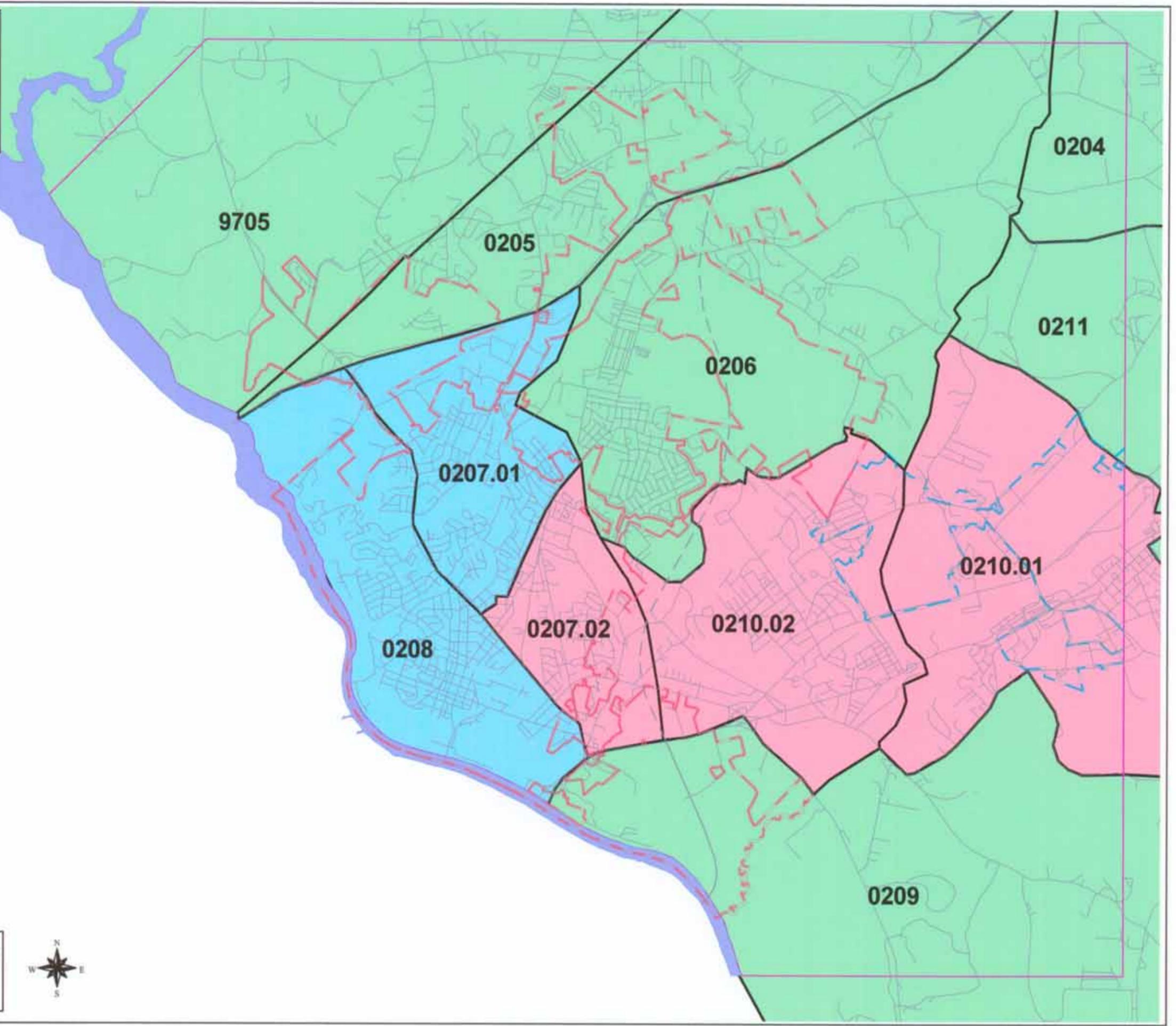


Map 2-2
Population Change
1990-2000

Legend

Census Tracts

- Net Population Decline
- 0% to 10% Net Population Increase
- >10% Net Population Increase
-  Roads
-  North Augusta City Limits
-  Burnettown City Limits
-  Planning Area
-  Savannah River



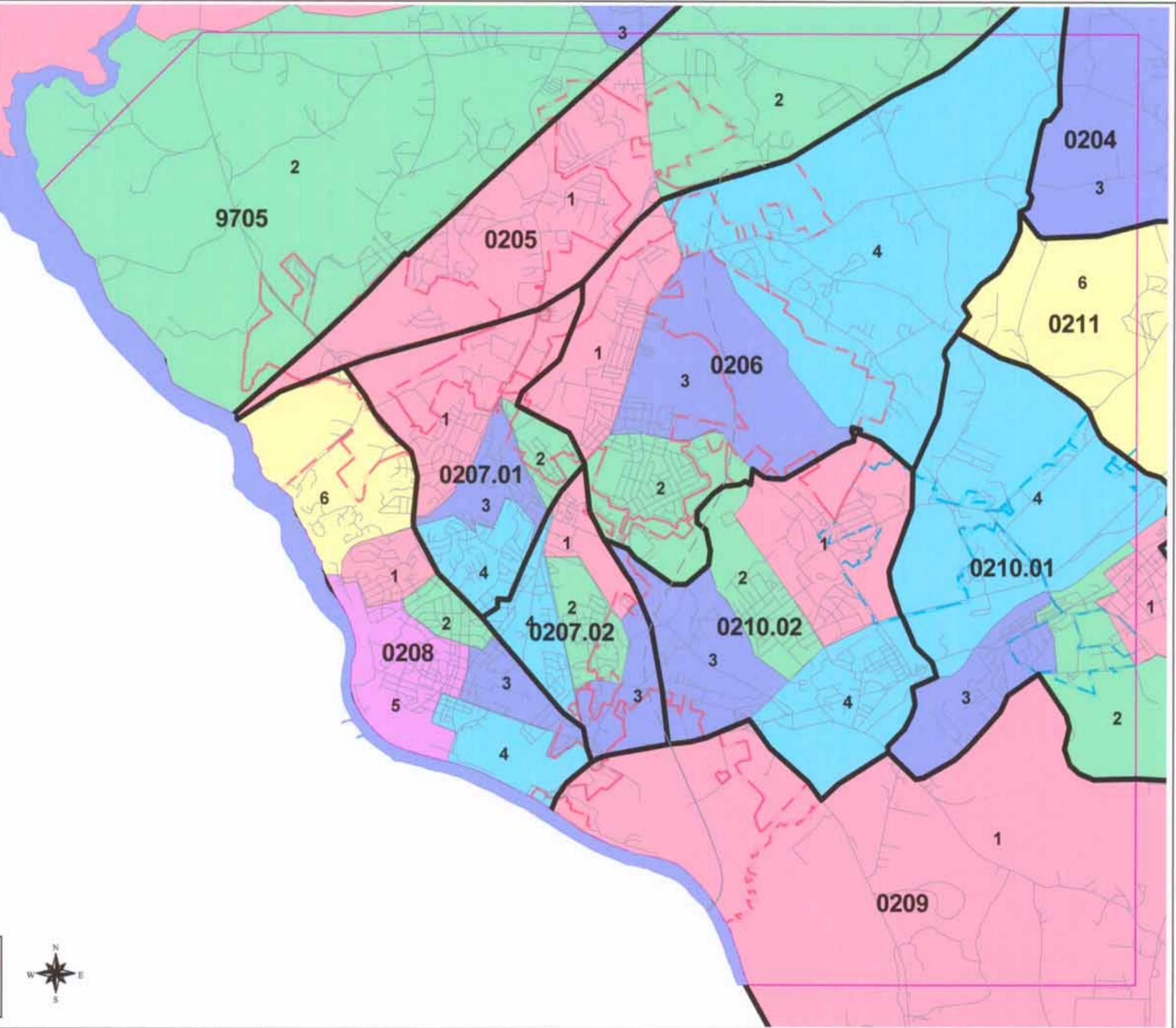
**Map 2-3
2000 Census Tracts
and Block Groups**

Legend

Census Block Groups

- 1
- 2
- 3
- 4
- 5
- 6

Roads
 North Augusta City Limits
 Burnettown City Limits
 Planning Area
 Savannah River

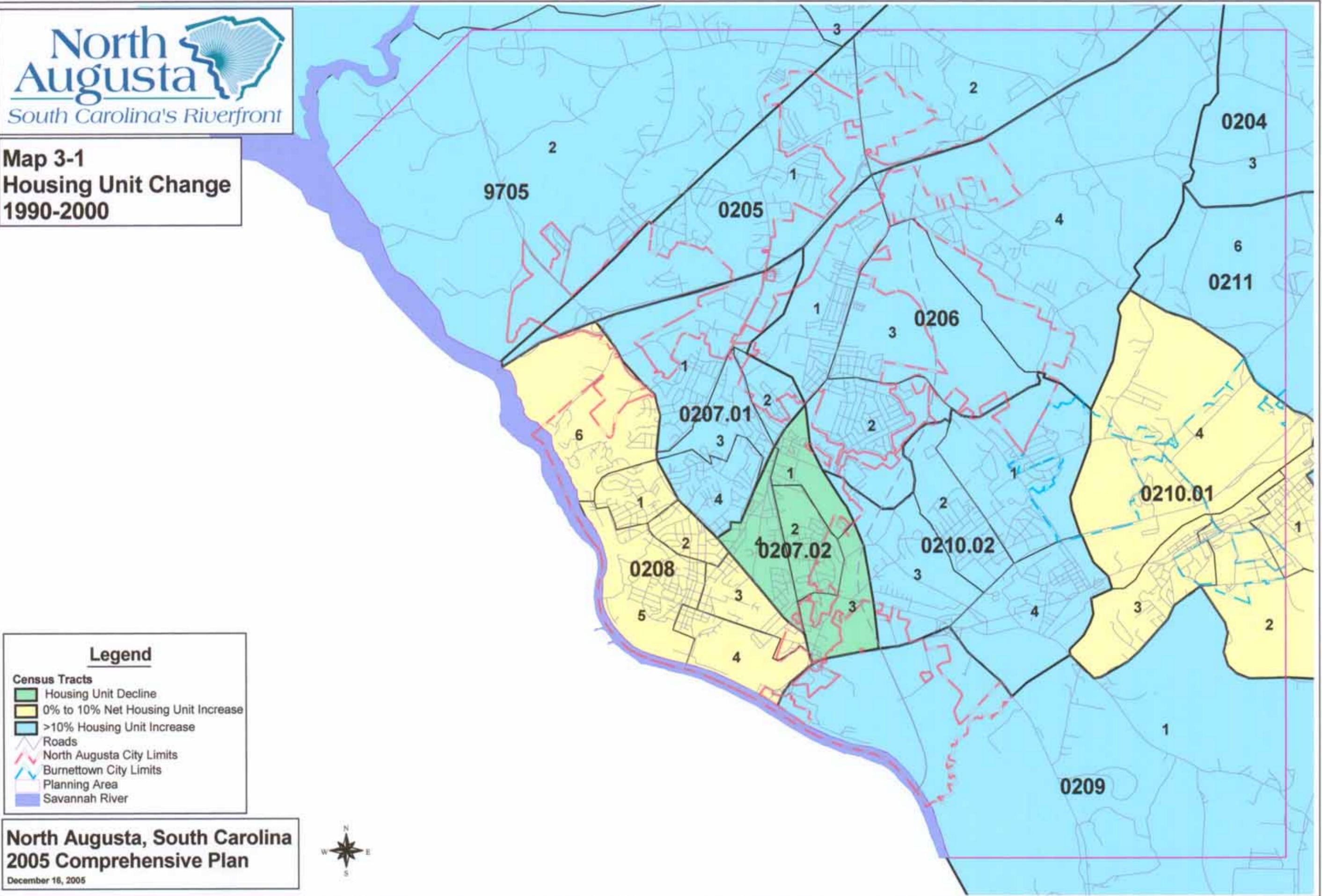


Map 3-1
Housing Unit Change
1990-2000

Legend

Census Tracts

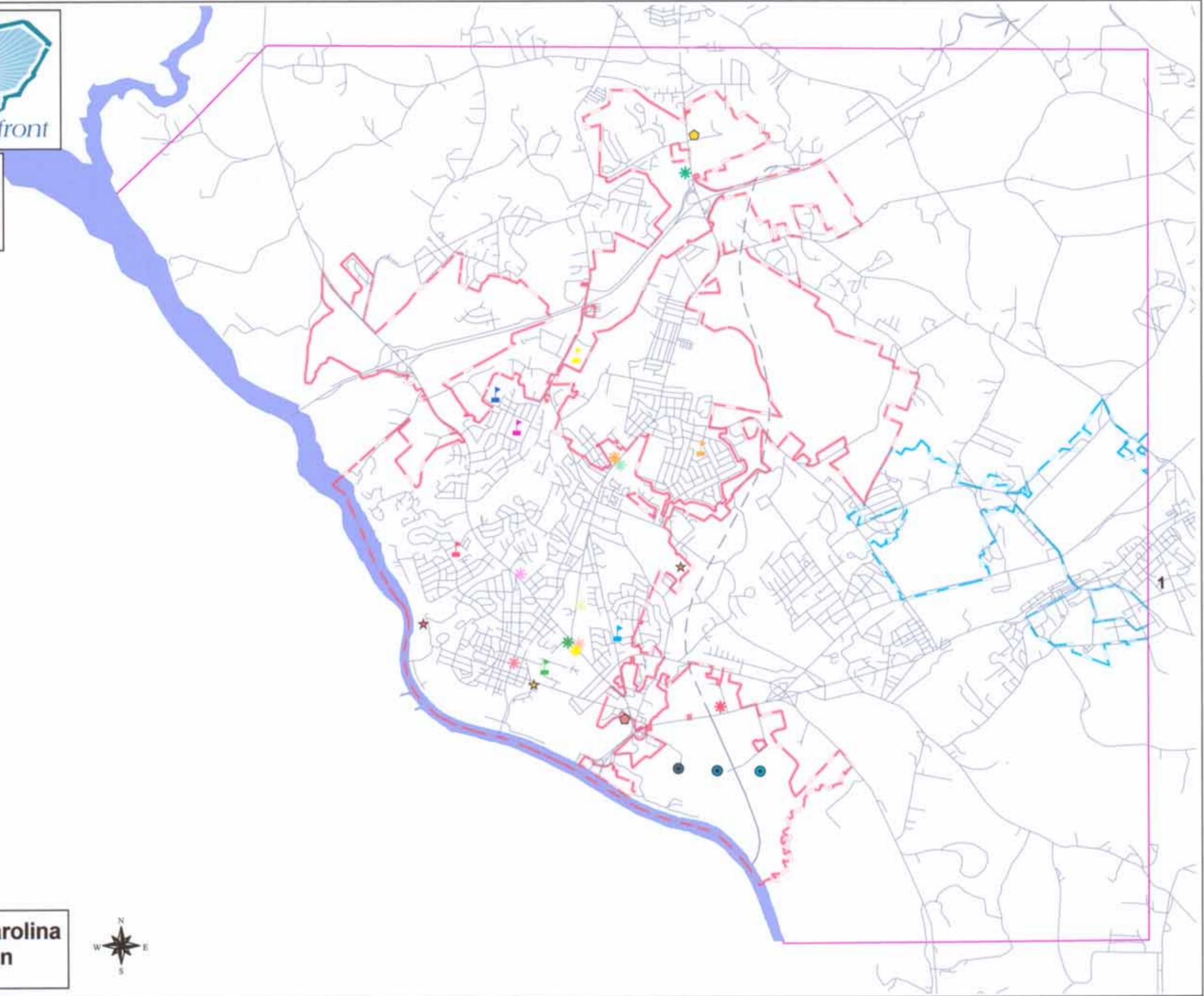
- Housing Unit Decline
- 0% to 10% Net Housing Unit Increase
- >10% Housing Unit Increase
- Roads
- North Augusta City Limits
- Burnettown City Limits
- Planning Area
- Savannah River



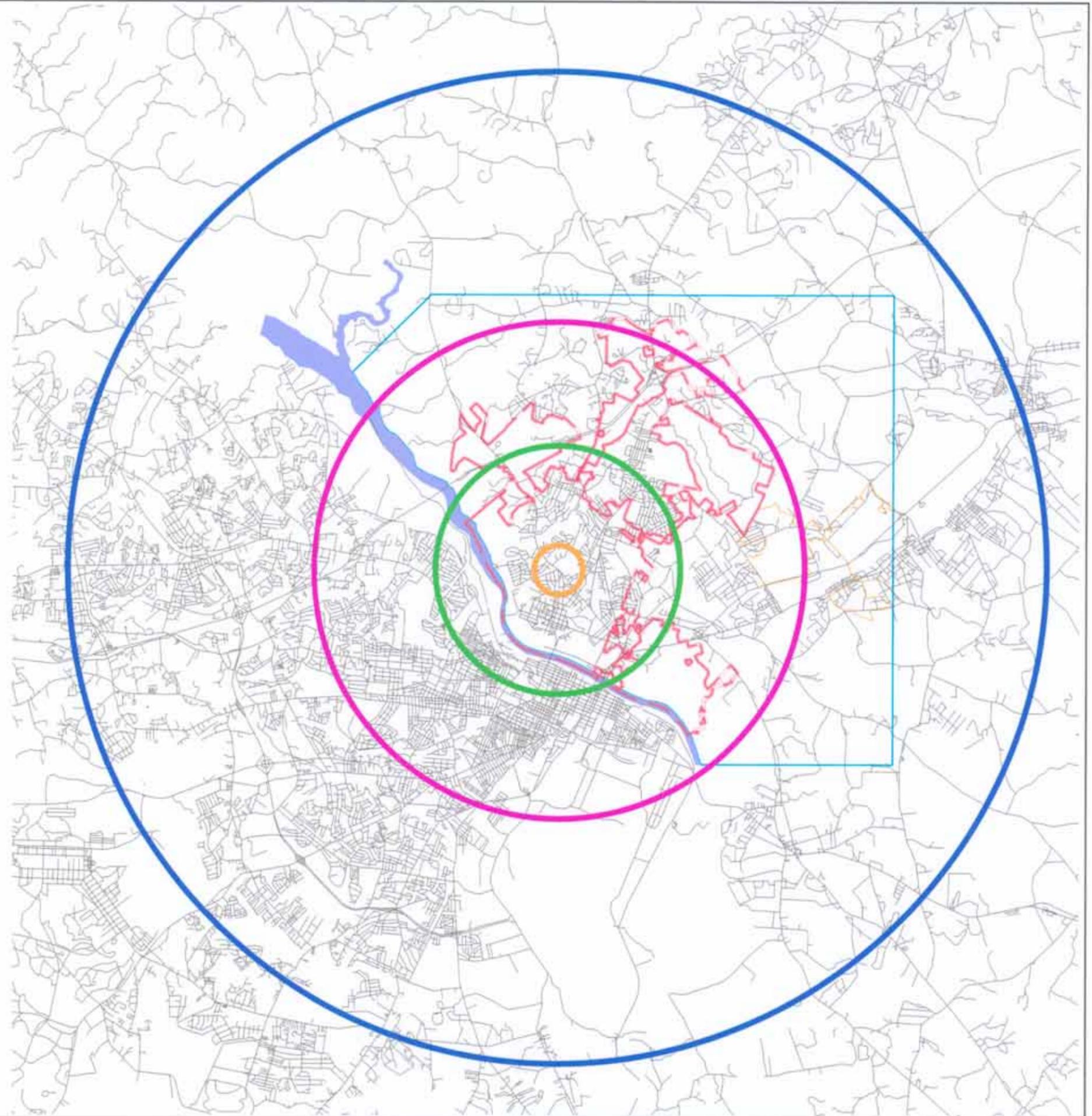
**Map 4-1
Employment Centers**

Legend

- Office/Warehouse**
 - Business Technology Center
 - Merovan
- Government**
 - ★ North Augusta Operations Facility
 - ★ North Augusta Riverview Park
 - ★ North Augusta Municipal Building
- Manufacturing**
 - Halocarbon Products
 - TTX-Hamburg Division
 - CYTEX Surface Specialties
- Service/Retail**
 - ★ Automotive Sales
 - ★ Crossroads Market
 - ★ Edgewood Square
 - ★ Market Place
 - ★ Martintown Plaza
 - ★ Downtown North Augusta
 - ★ North Augusta Plaza
 - ★ North Hillis Shopping Center
 - ★ Shoppes at North Augusta
 - ★ Triangle Plaza
- Public Schools**
 - Hammond Hill Elementary School
 - North Augusta Elementary School
 - Belvedere Elementary School
 - Mossy Creek Elementary School
 - North Augusta Middle School
 - Paul Knox Middle School
 - North Augusta High School
- Roads
- North Augusta City Limits
- Burnettown City Limits
- Planning Area
- Savannah River



**Map 4-2
 North Augusta
 Market Area**

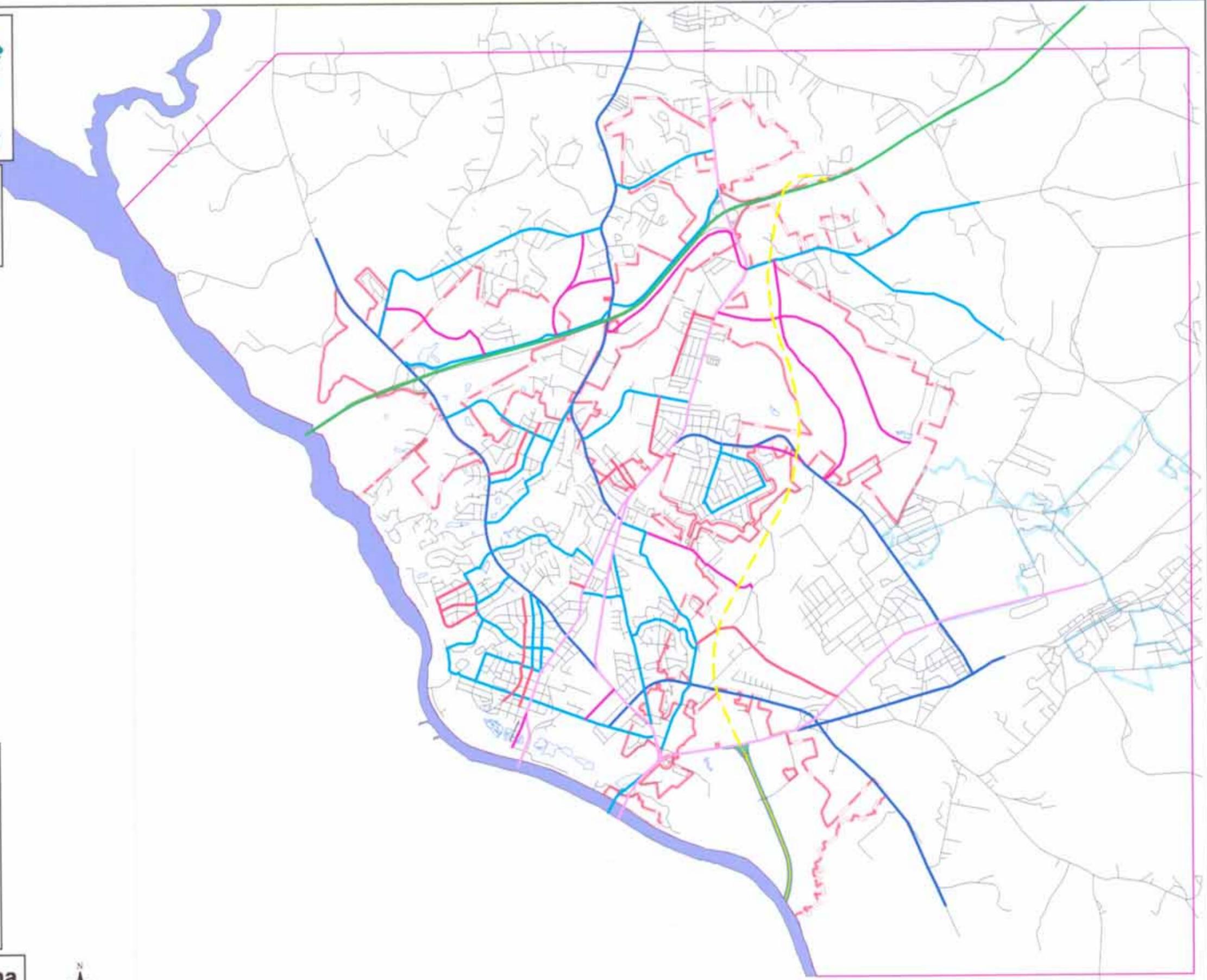


Legend

-  1 Mile
-  5 Mile
-  10 Mile
-  20 Mile
-  Roads
-  North Augusta City Limits
-  Burnetown City Limits
-  Planning Area
-  Savannah River



Map 5-1
Existing and Proposed
Transportation Facilities



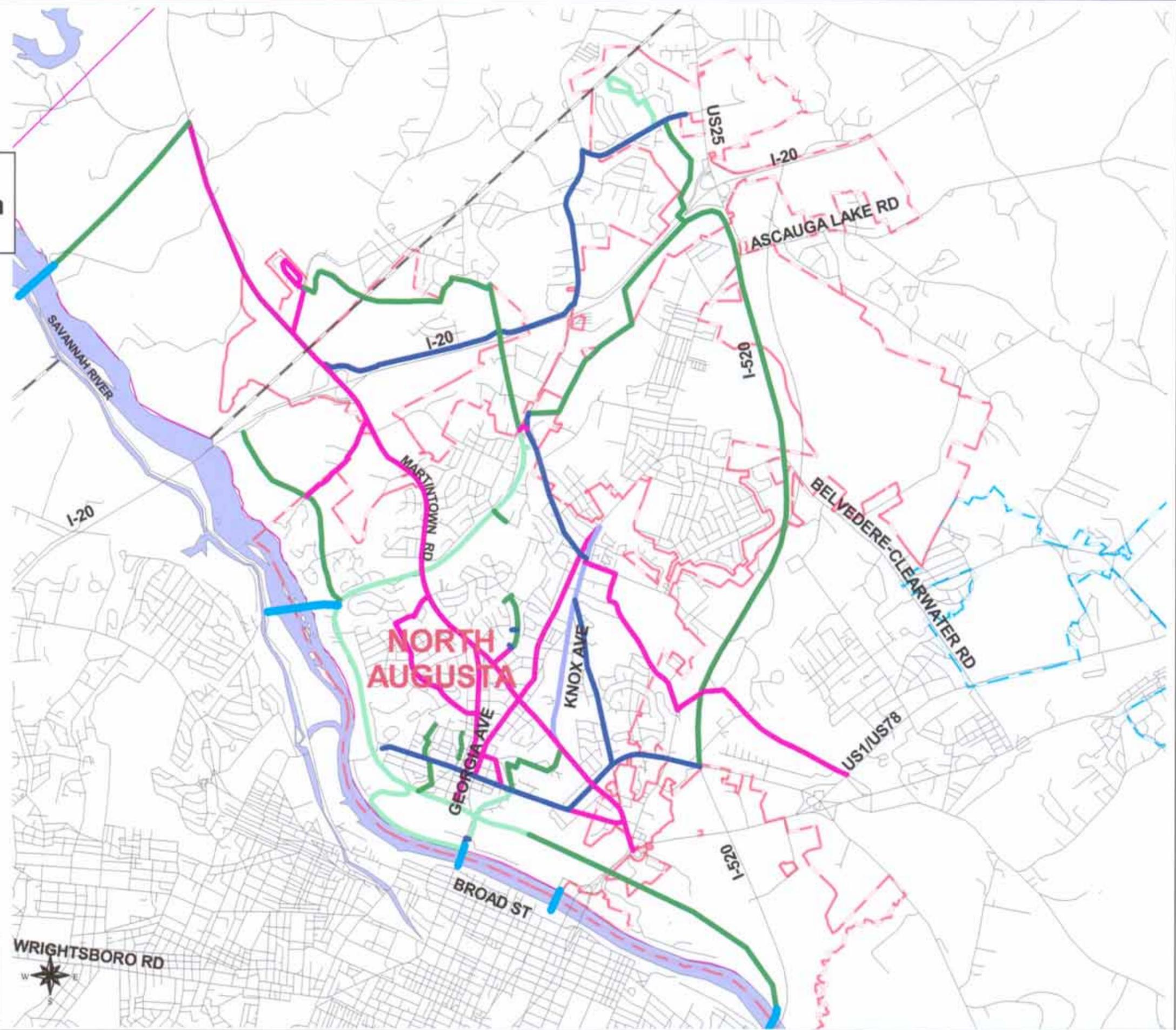
Legend

- Interstate Highways
- Other Principal Arterials
- Minor Arterials
- Collectors
- Local
- Principal Arterial-Other Freeways & Expressways
- Proposed Collector
- Roads
- North Augusta City Limits
- Burnettown City Limits
- Planning Area
- █ Savannah River



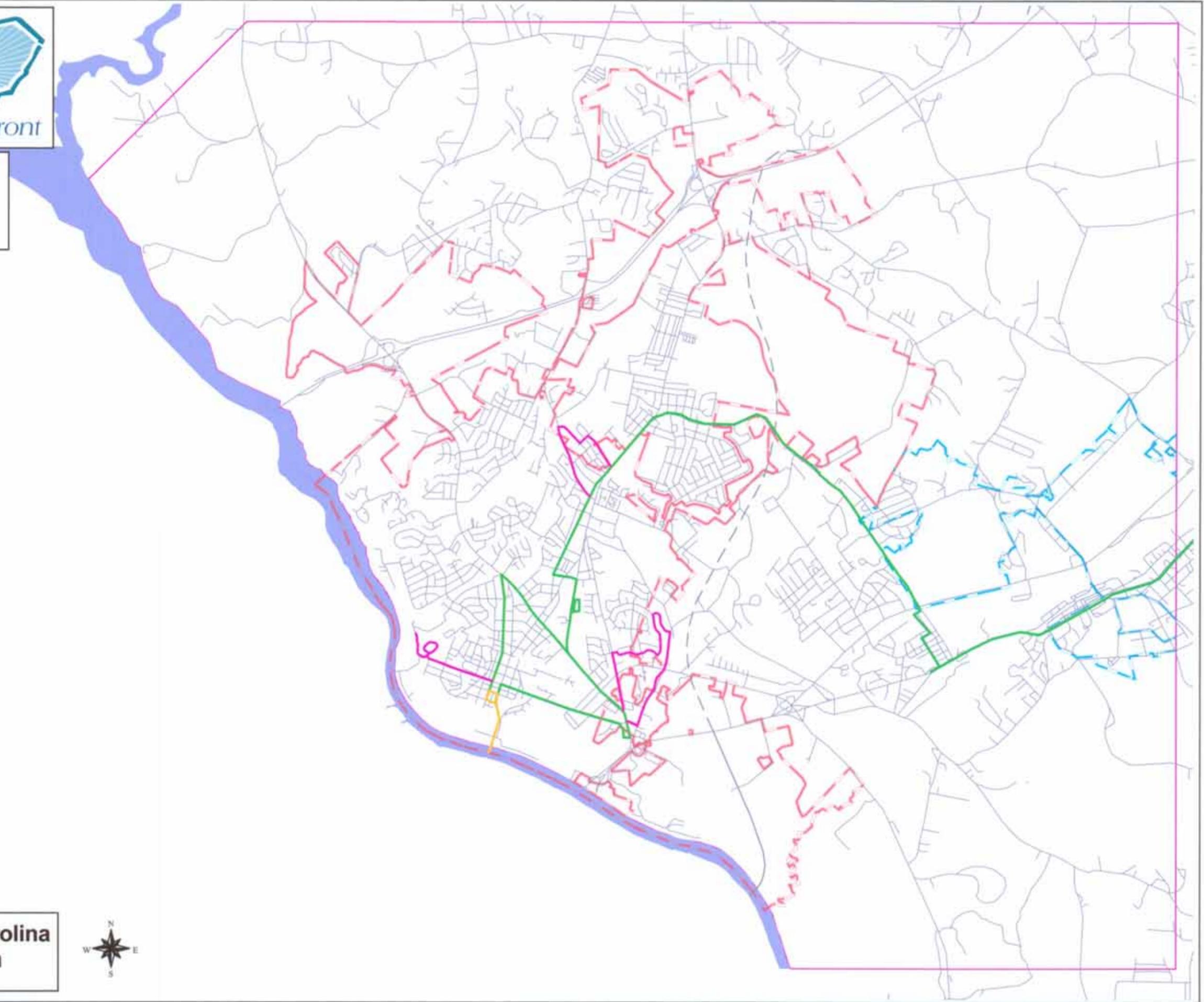
Map 5-2
Master Bicycle & Pedestrian
Development Plan

- Legend**
-  Existing Greenway
 -  Existing Bikeway
 -  Proposed Greenways
 -  Proposed Bikeways
 -  Share the Road
 -  Bridge Connections
 -  Roads
 -  North Augusta City Limits
 -  Burnettsville City Limits
 -  Planning Area
 -  Savannah River

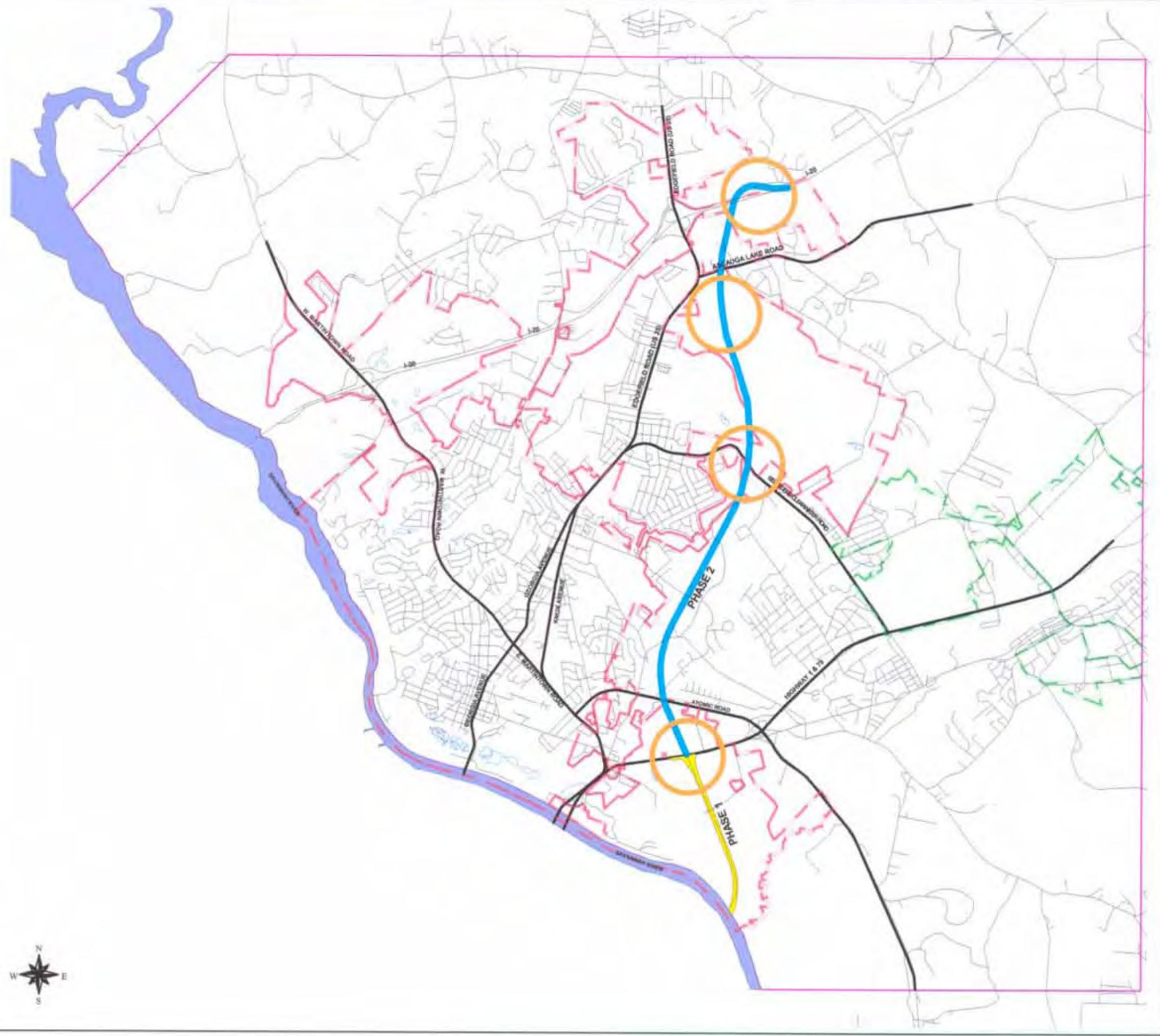


**Map 5-3
 Public Transportation
 Routes**

- Legend**
- Public Transportation
 - Augusta Downtown Shuttle
 - North Augusta
 - NA Proposed
 - Roads
 - North Augusta City Limits
 - Burnettown City Limits
 - North Augusta Planning Area
 - Savannah River



**Map 5-4
Palmetto Parkway, I-520
Proposed Alignment**



Legend

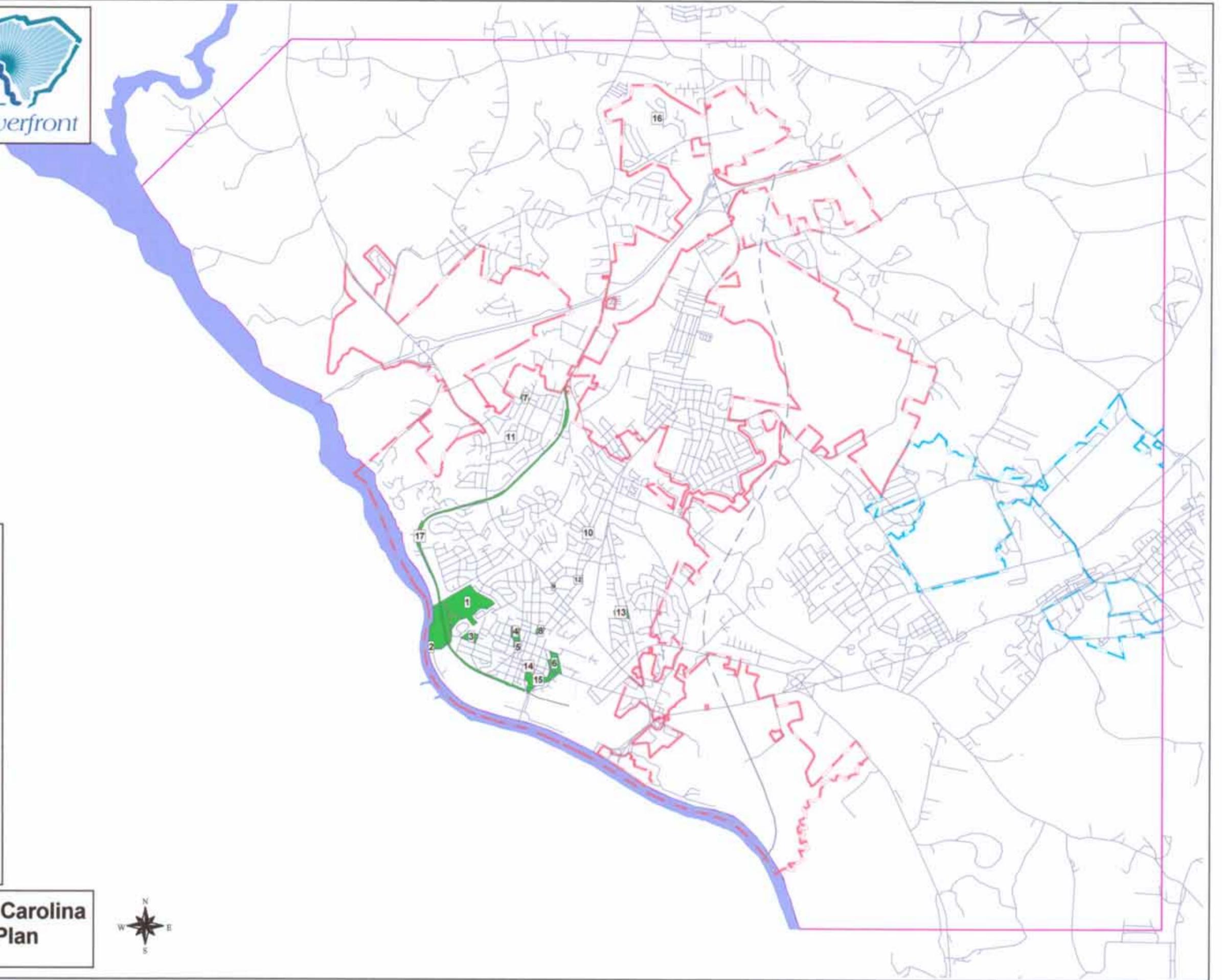
- Palmetto Parkway Phase 1
- Palmetto Parkway Phase 2
- Interchange Areas
- Roads
- North Augusta City Limits
- Burnettown City Limits
- Planning Area
- Savannah River



**Map 6-1
North Augusta
Park System**

Legend

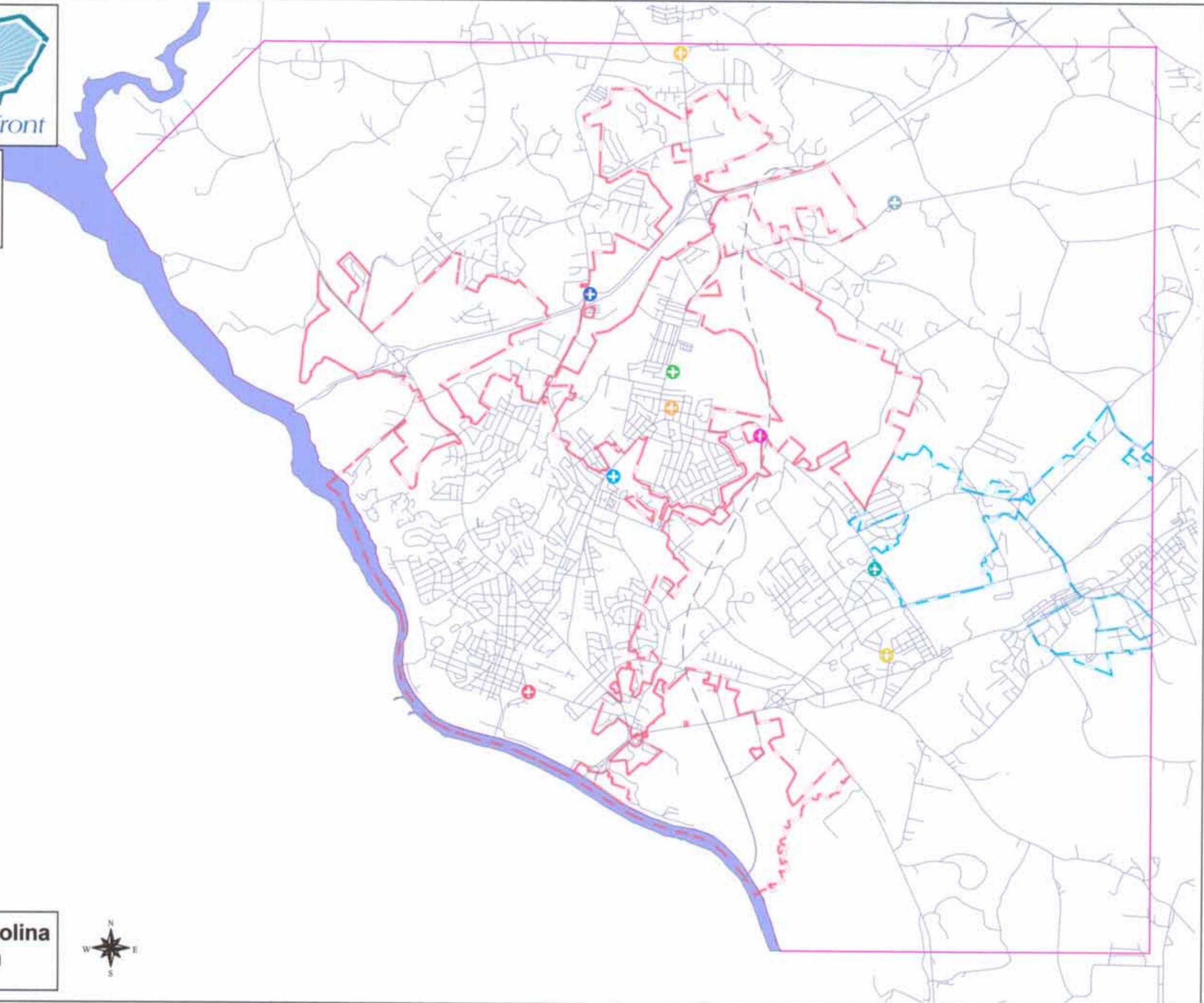
- Park System
- 1. Riverview Park
- 2. NA Boat Ramp
- 3. Lions Field
- 4. Living History Park
- 5. Creighton Park
- 6. Maude Edenfield Park
- 7. Col Leroy Hammond Park
- 8. Calhoun Park
- 9. Butler Park
- 10. Bunting Park
- 11. Curtis Drive Park
- 12. Davenport Park
- 13. Summerfield Park
- 14. Wade Hampton Park
- 15. Water Works Park
- 16. Walnut Lane Park
- 17. Greenway Trail
-  Roads
-  North Augusta City Limits
-  Burnettown City Limits
-  Planning Area
-  Savannah River



**Map 6-2
Public Safety Stations**

Legend

- Public Safety Stations
-  North Augusta Station 1
 -  North Augusta Station 2
 -  Proposed North Augusta Station 3
 -  North Augusta/Belvedere Rescue Squad
 -  Aiken County Sub Station
 -  Belvedere Fire Department Station 1
 -  Belvedere Fire Department Station 2
 -  Bath Fire Department Station 2
 -  Clearwater Fire Department
 -  GVW Fire Department
 -  Roads
 -  North Augusta City Limits
 -  Burnettown City Limits
 -  Planning Area
 -  Savannah River



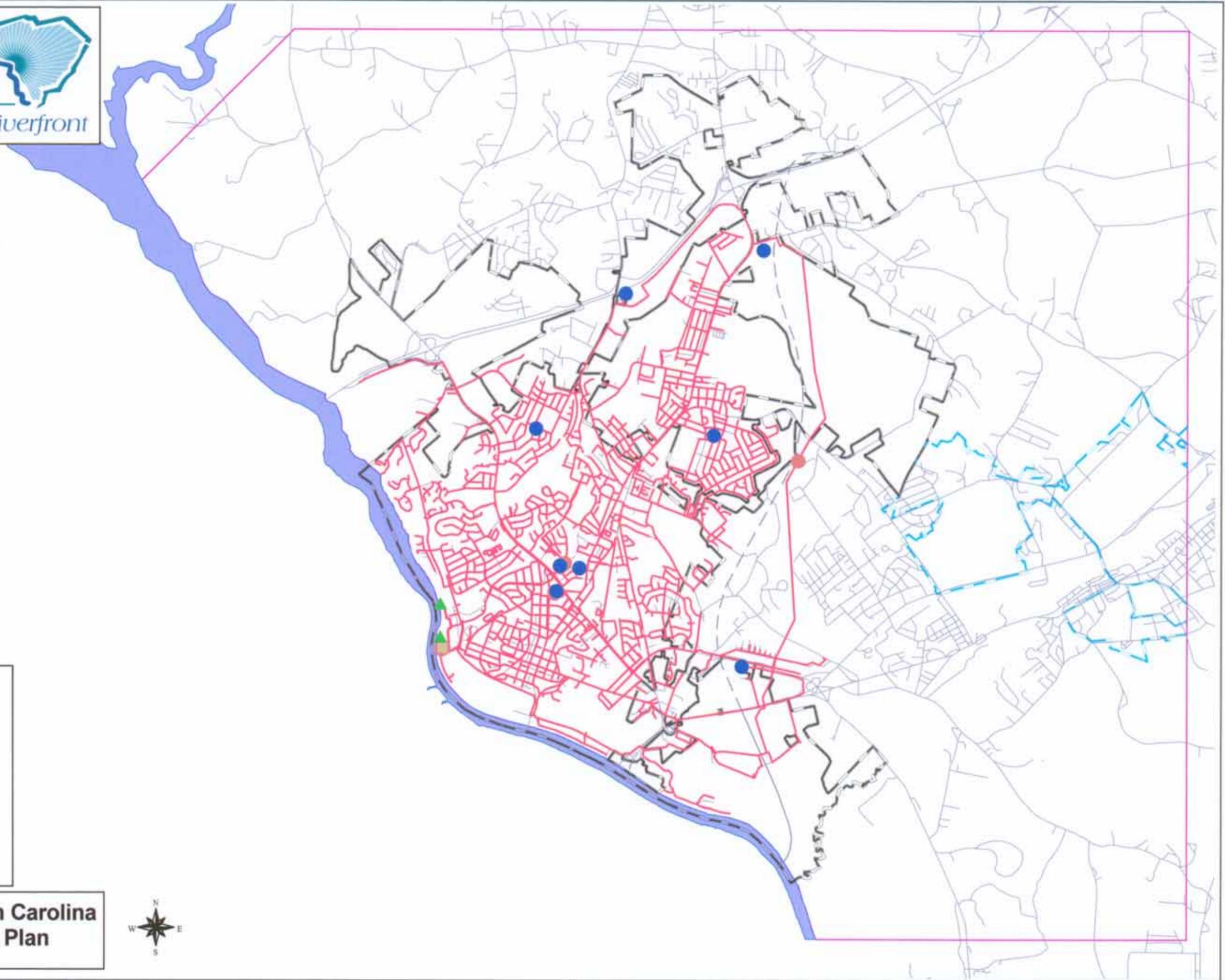
**Map 6-3
North Augusta
Water System**

Legend

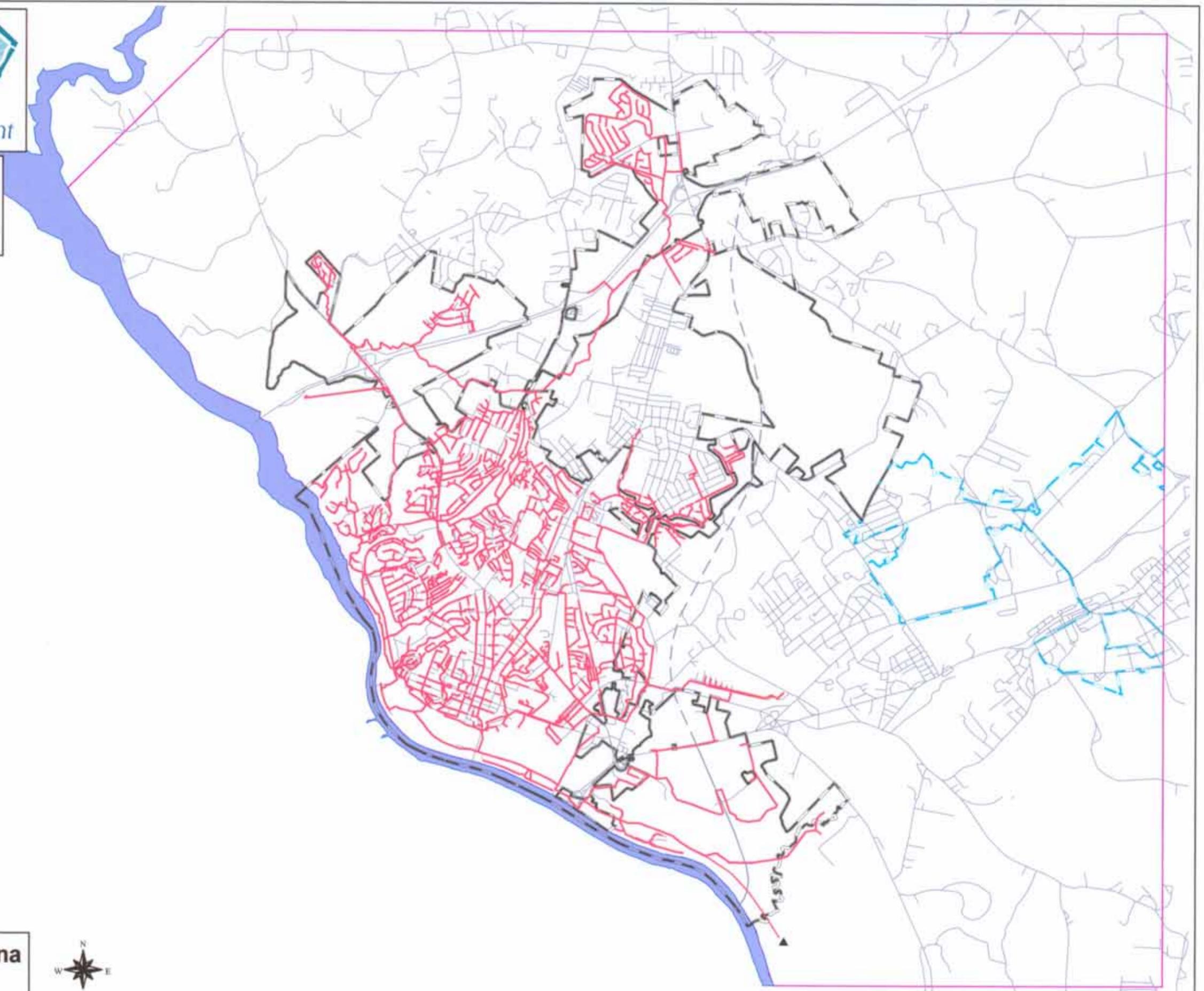
- Facilities
- Booster Station
 - Raw Water Intake
 - Treatment Plant
 - Water Storage Tanks
 - Major Water Lines
 - Roads
 - North Augusta City Limits
 - Burnettown City Limits
 - Planning Area
 - Savannah River

**North Augusta, South Carolina
2005 Comprehensive Plan**

December 16, 2005



Map 6-4
North Augusta
Sanitary Sewer System

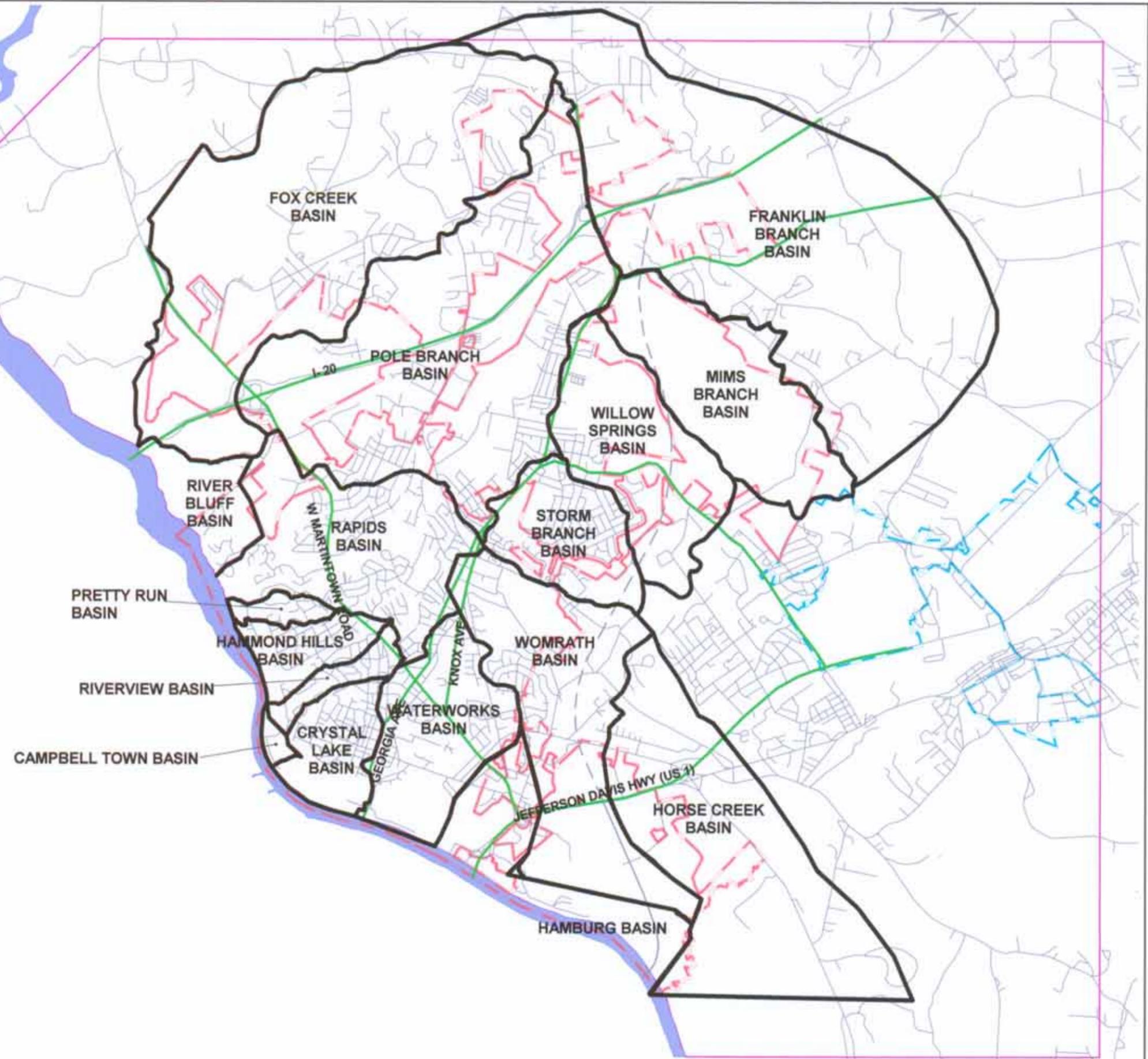


Legend

Facilities

- ▲ Wastewater Treatment Plant
- Red line Major Sewer Lines
- Black line Roads
- Black line City Limits
- Dashed blue line Burnettown City Limits
- Pink box Planning Area
- Blue area Savannah River

Map 6-5
North Augusta Area
Drainage Basins



Legend

- Basin Limits
- Roads
- North Augusta City Limits
- Burnetown City Limits
- Planning Area
- Savannah River

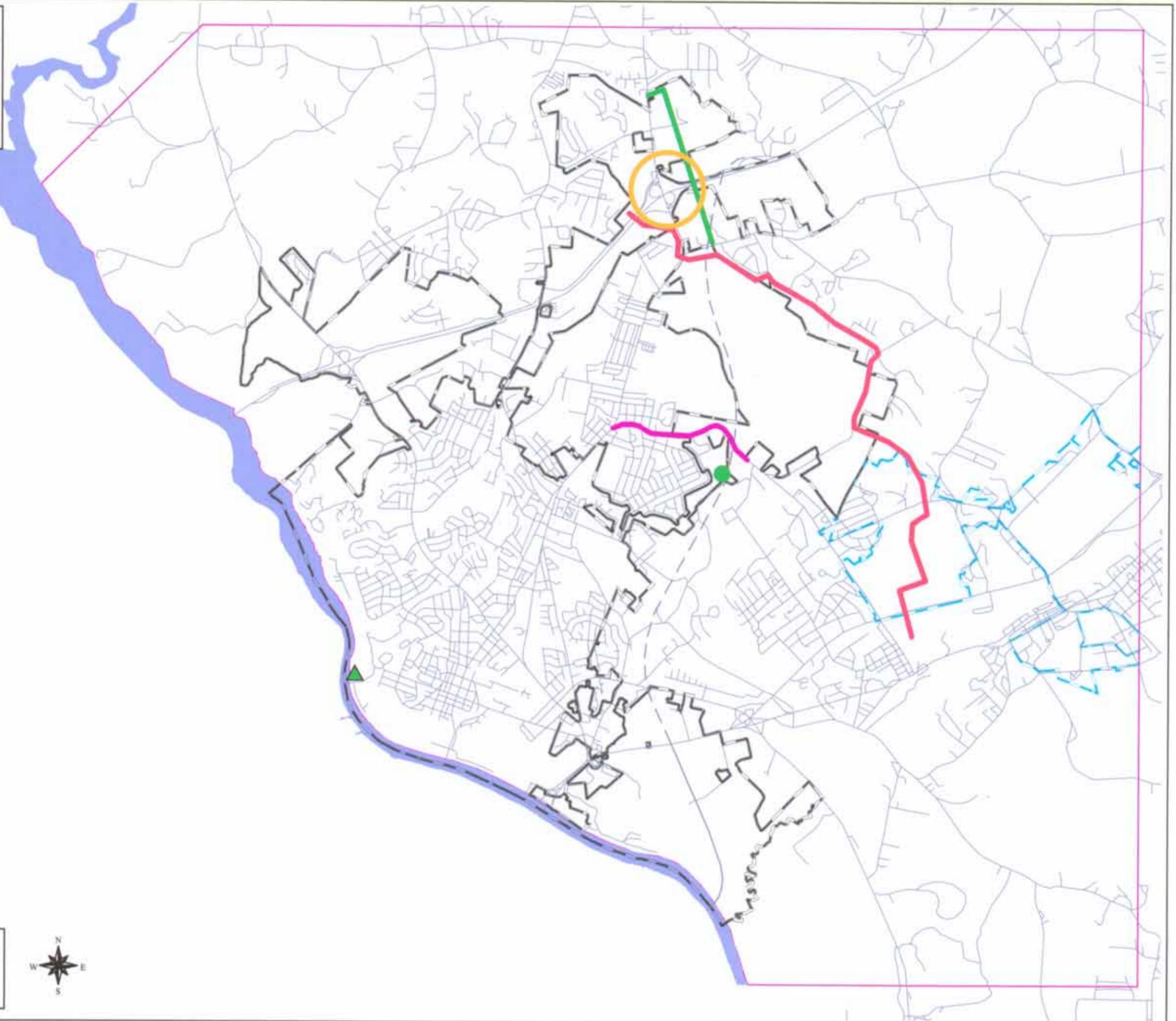


**Map 6-6
Proposed Water and
Sewer Construction
Projects**

Legend

Facilities

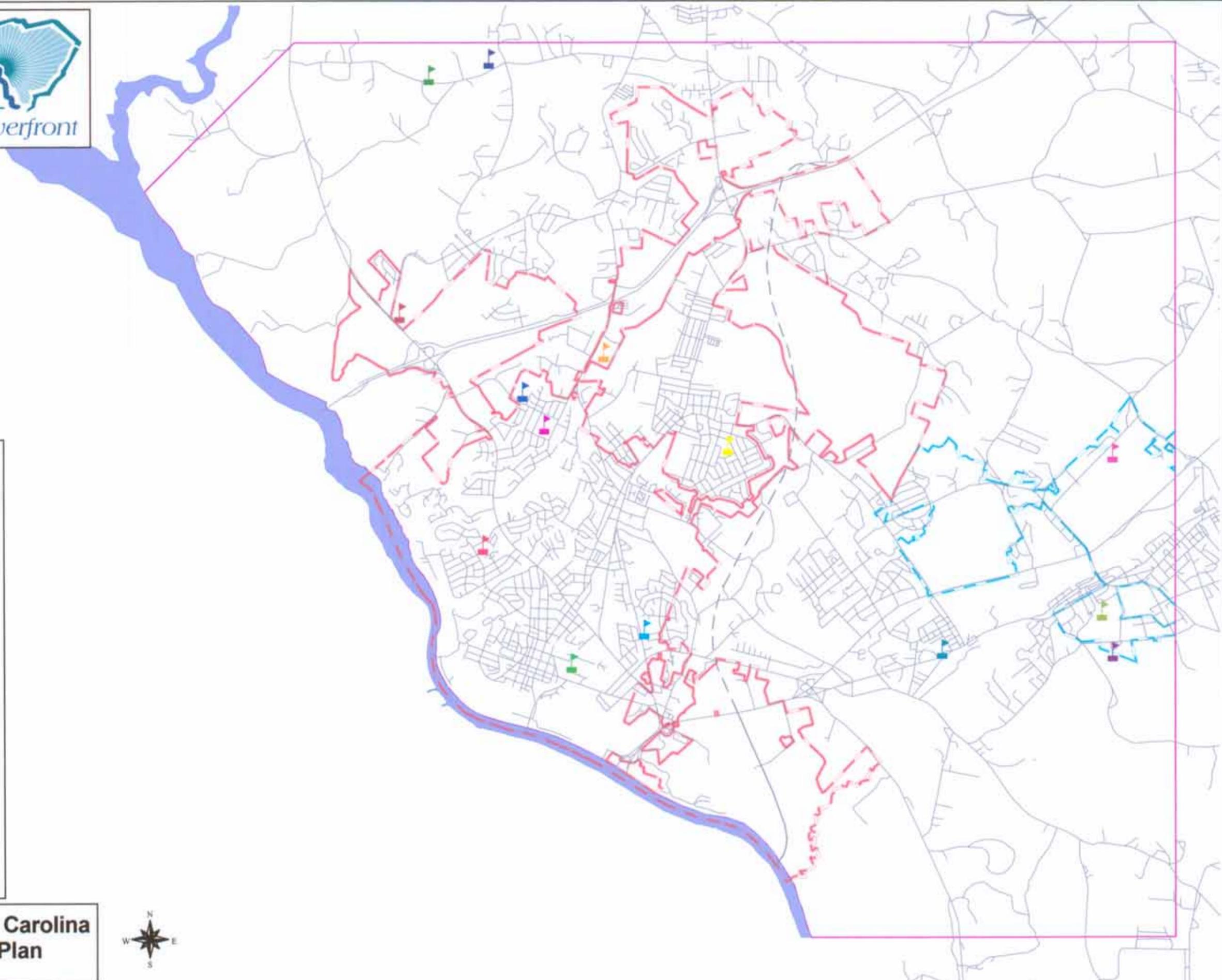
-  3MG Water Tank
-  Water Treatment Plant Expansion
-  Elevated Water Storage Tank
-  24" Water Main
-  12" Water Main
-  Sewer Line Extension
-  Roads
-  North Augusta City Limits
-  Burnetown City Limits
-  Planning Area
-  Savannah River



**Map 6-7
Public Schools**

Legend

- Public Schools
-  Hammond Hill Elementary School
 -  North Augusta Elementary School
 -  Belvedere Elementary School
 -  Mossy Creek Elementary School
 -  North Augusta Middle School
 -  Paul Knox Middle School
 -  North Augusta High School
 -  Merriweather Elementary School
 -  Merriweather Middle School
 -  Fox Creek High School
 -  Clearwater Elementary School
 -  Jefferson Elementary School
 -  LBC Middle School
 -  Midland Valley High School
 -  Roads
 -  North Augusta City Limits
 -  Burnettown City Limits
 -  Planning Area
 -  Savannah River





**Map 7-2
Cultural Resources**

Legend

Historic Places

- Butler Avenue Historic District
- National Register Listing
- Notable Buildings in the Historic District
- Potentially Eligible for National Register

Parks

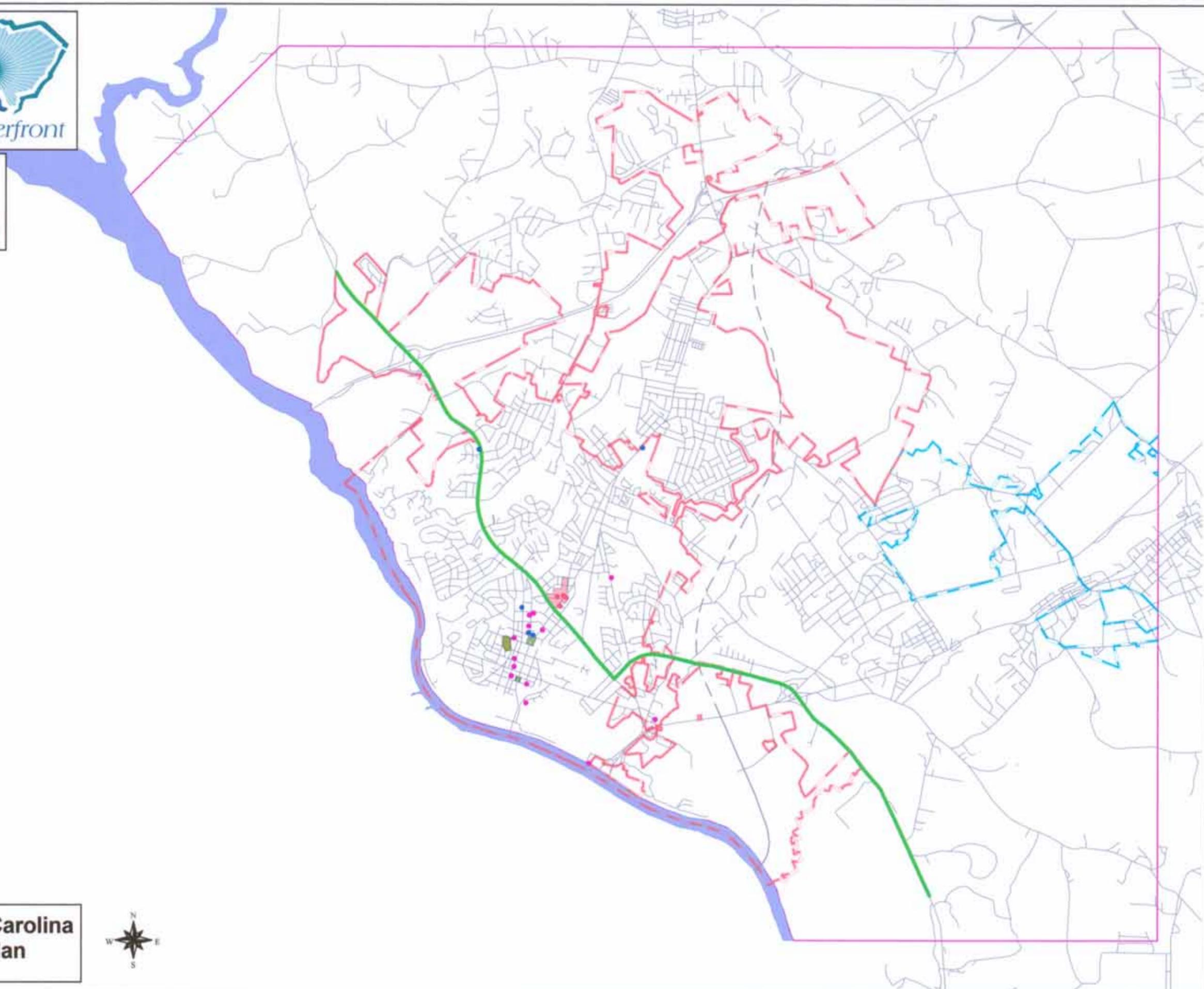
- J.C. Calhoun Park
- Creighton Living History Park
- Wade Hampton Park
- South Carolina Heritage Corridor

Roads

- North Augusta City Limits
- Burnettown City Limits

Planning Area

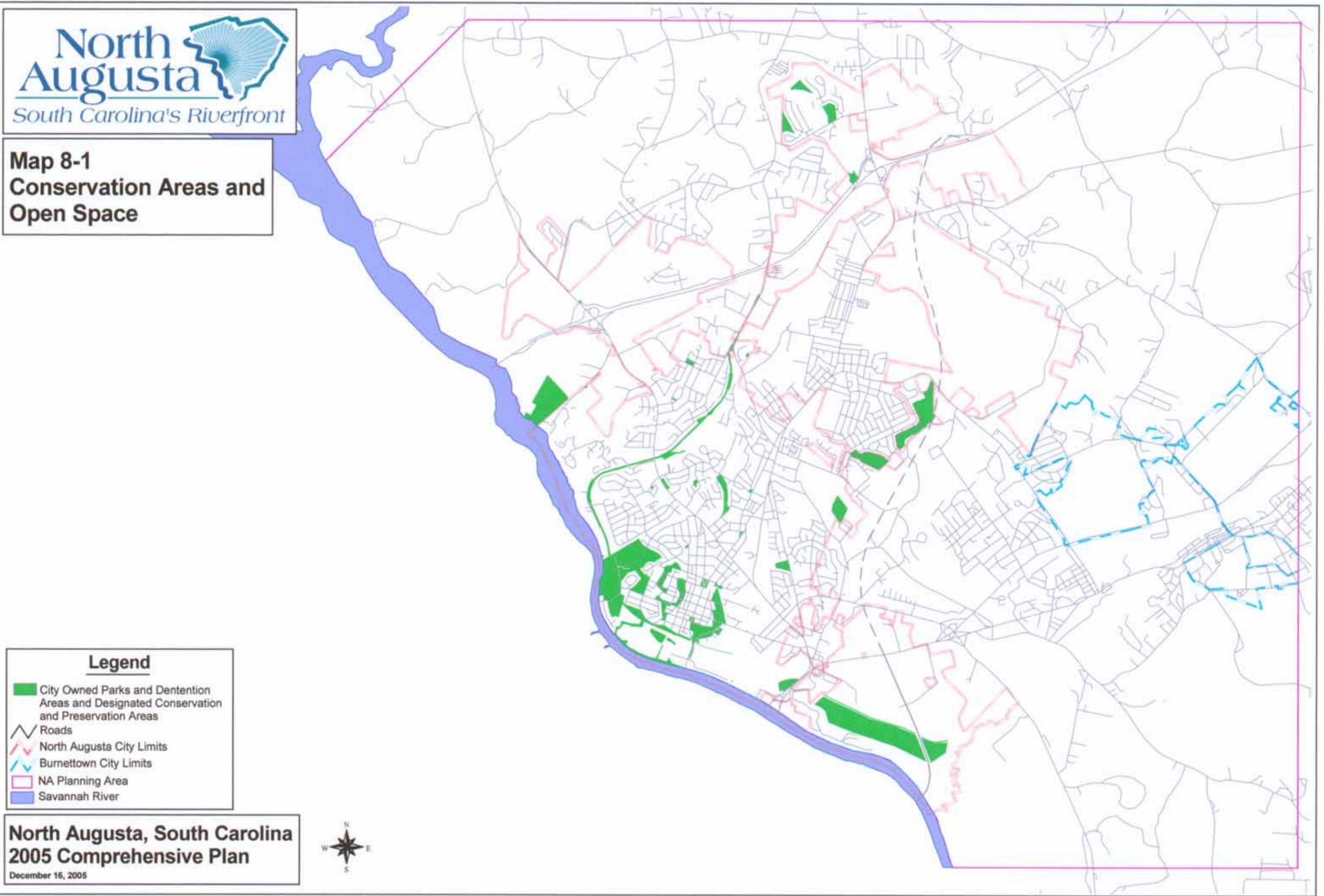
- Planning Area
- Savannah River



**Map 8-1
Conservation Areas and
Open Space**

Legend

- City Owned Parks and Dentention Areas and Designated Conservation and Preservation Areas
- Roads
- North Augusta City Limits
- Burnettown City Limits
- NA Planning Area
- Savannah River



North Augusta



South Carolina's Riverfront

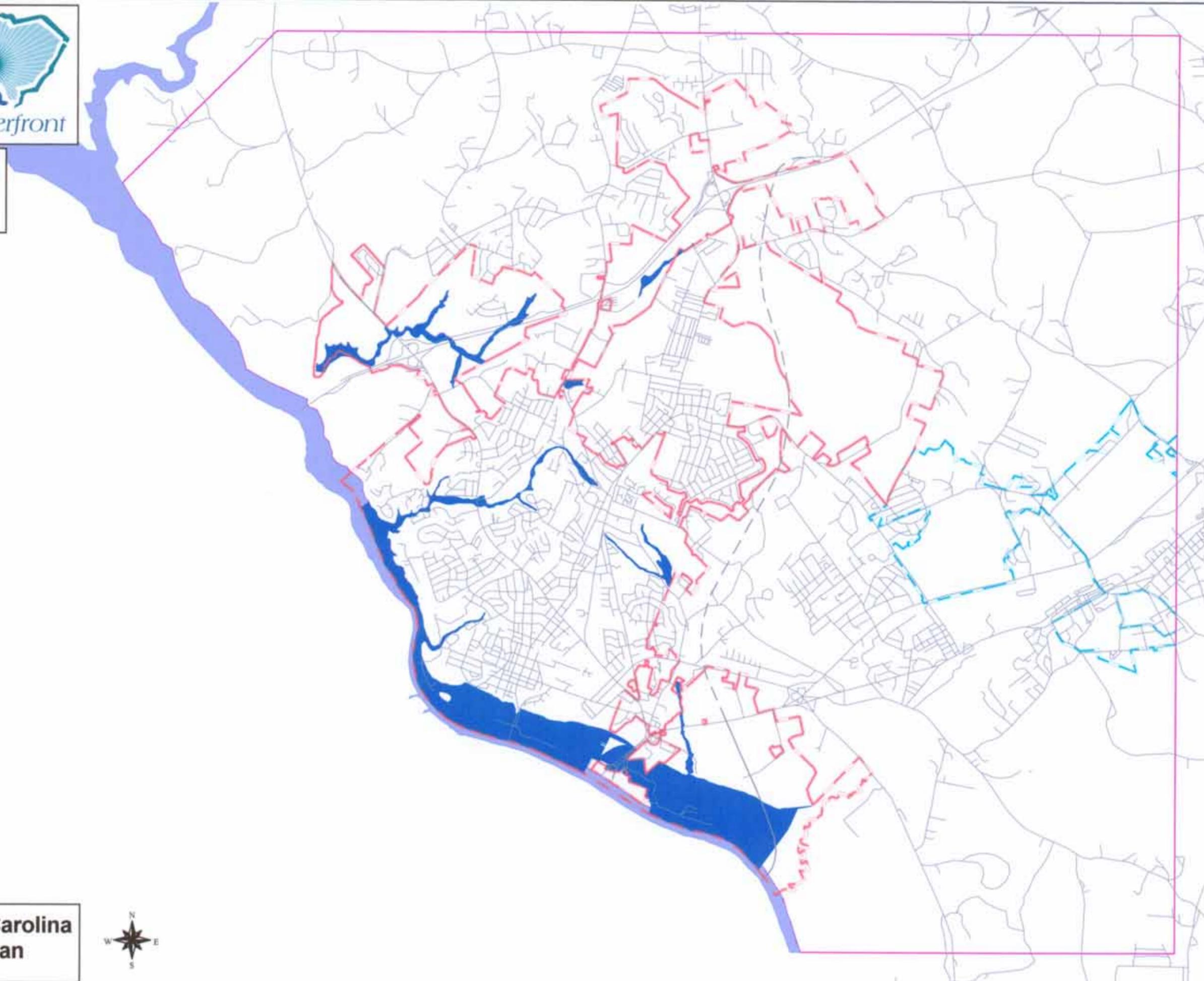
Map 8-2 Floodplains

Legend

-  Flood Areas
-  Aiken County Roads
-  North Augusta City Limits
-  Burnettown City Limits
-  Planning Area
-  Savannah River

**North Augusta, South Carolina
2005 Comprehensive Plan**

December 16, 2005

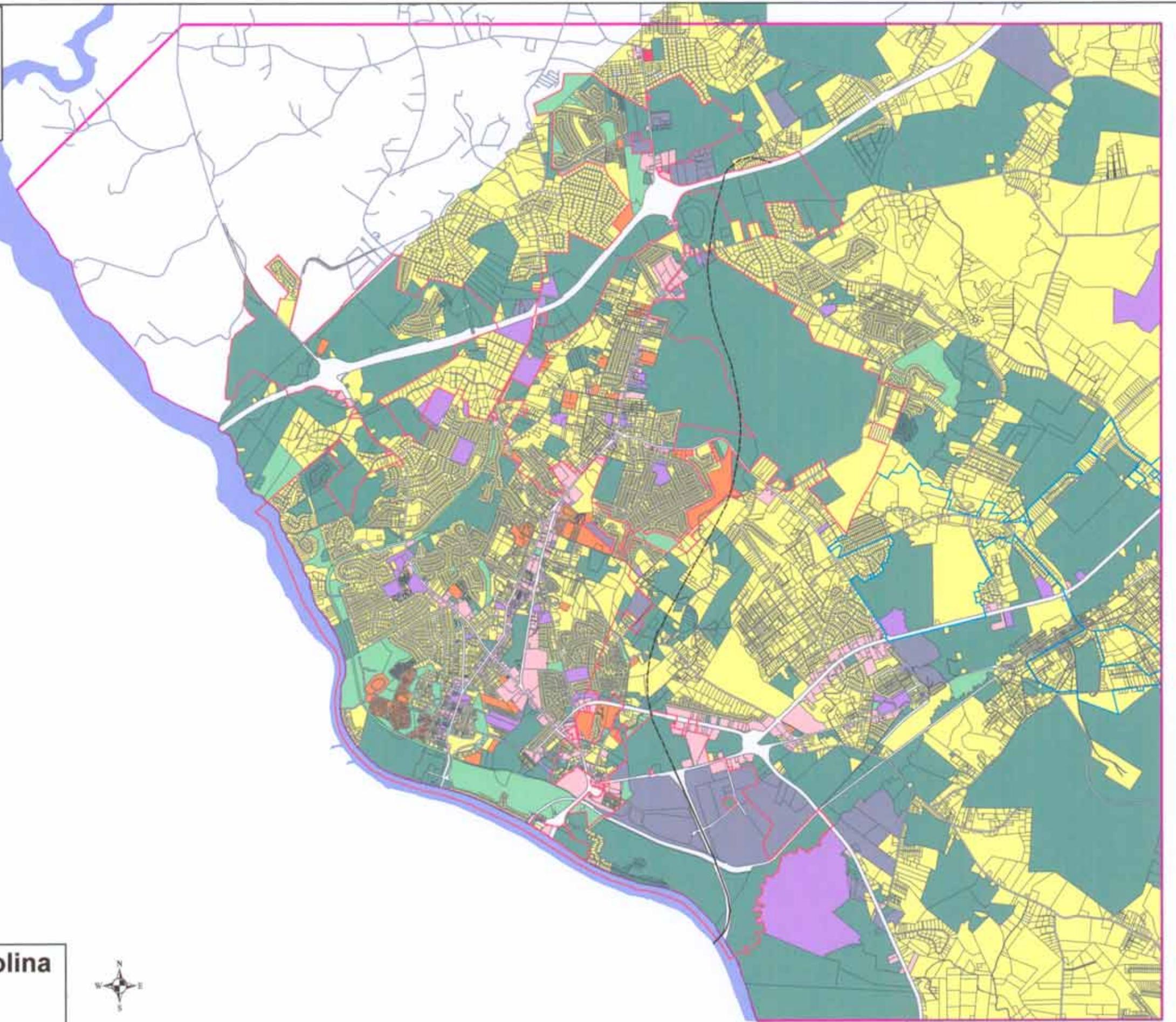


**Map 9-1
Existing Land Use**

Legend

LANDUSE

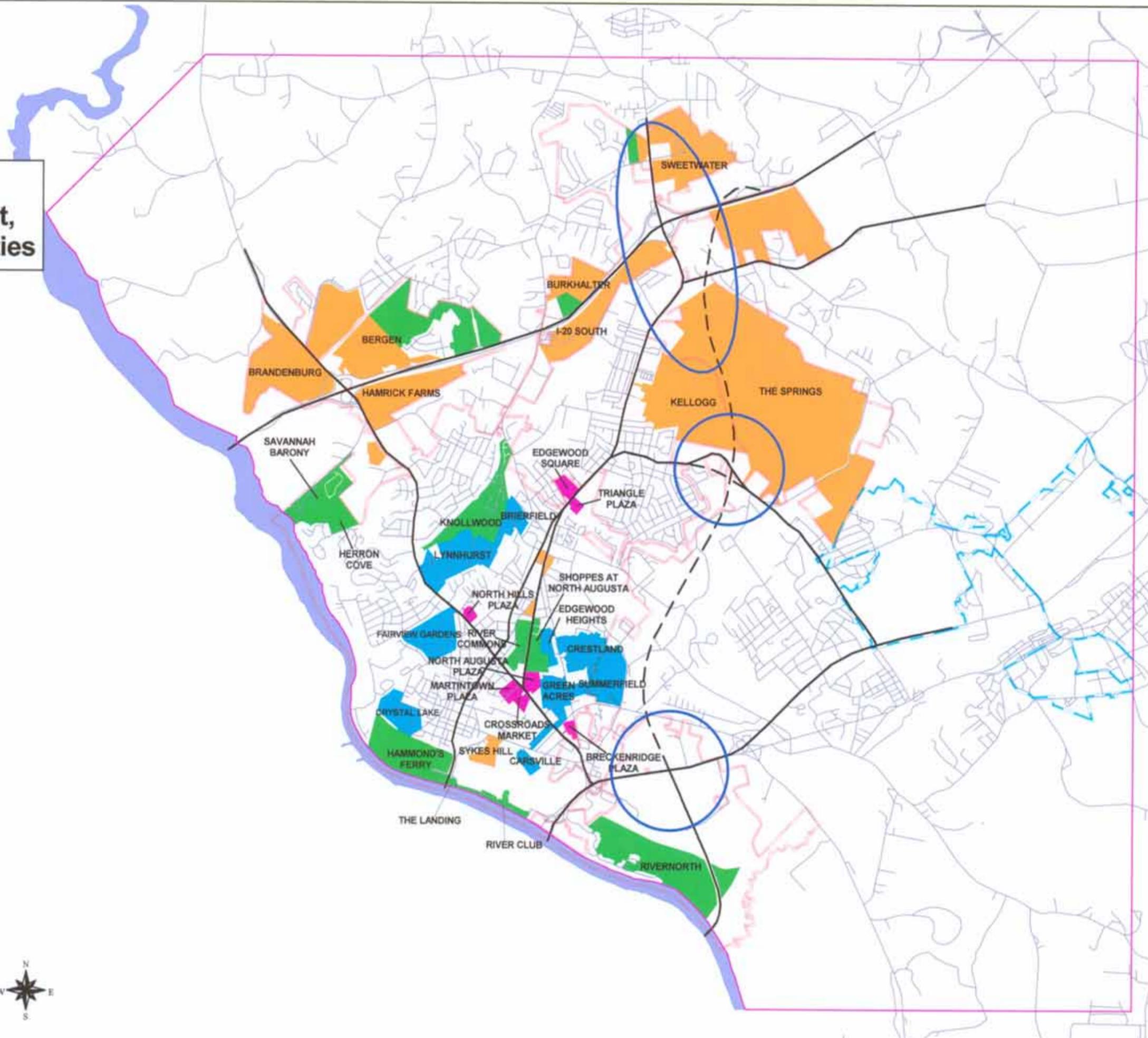
- Vacant
- Commercial
- Low Density Residential
- High Density Residential
- Transportation, Communication, Utilities
- Industrial
- Open Space Preservation, Parks, Recreation
- Public Facility, Institution, Church
- North Augusta City Limits
- Burnetown City Limits
- Planning Area
- Savannah River



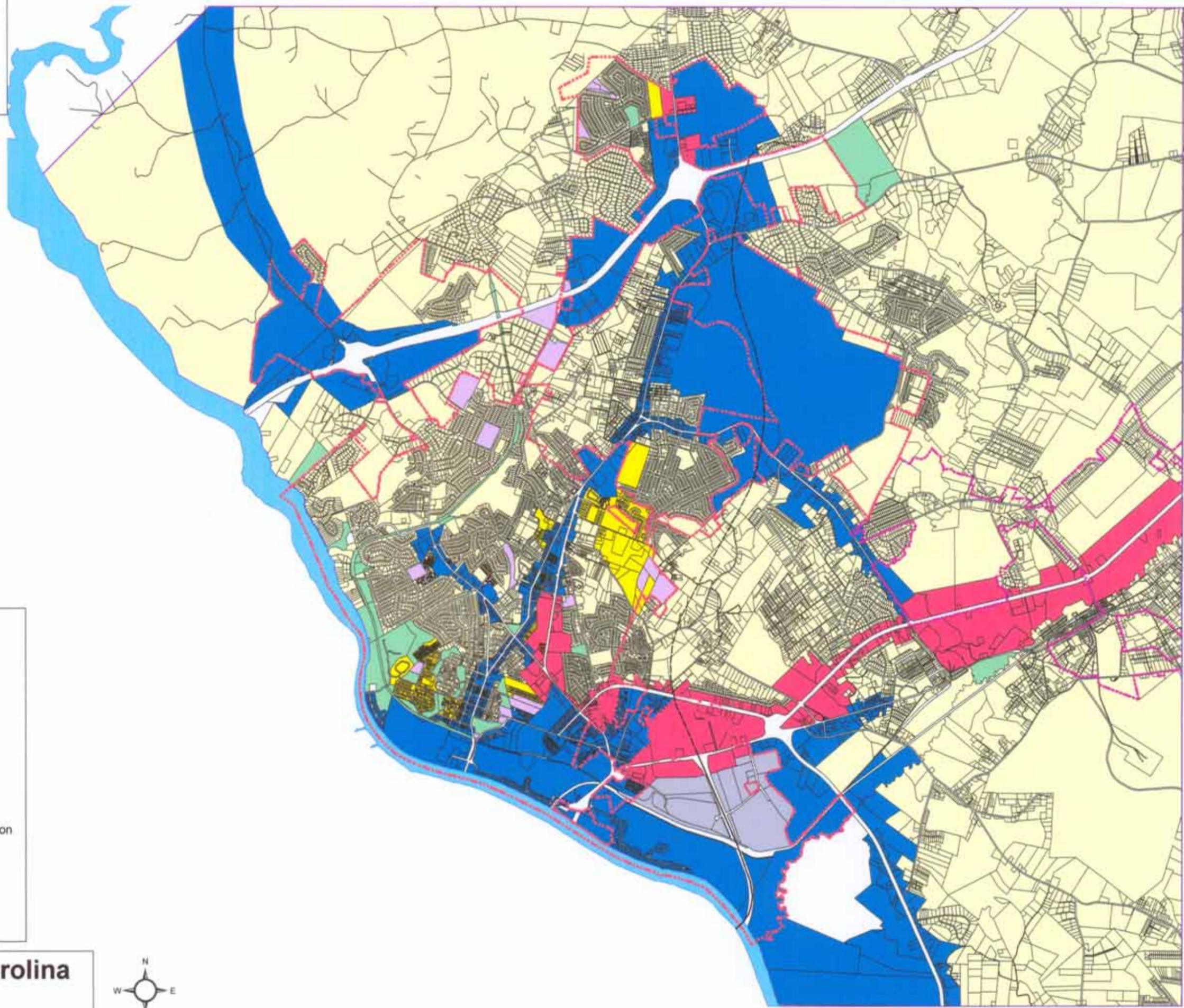
**Map 9-2
Development, Redevelopment,
and Revitalization Opportunities**

Legend

- Established, Older Neighborhoods
- Established, Older Commercial Centers
- Development Opportunities
- Developing Properties
- I-520 Interchange Development Areas
- Roads
- North Augusta City Limits
- Burnettown City Limits
- Savannah River
- Planning Area



**Map 9-3
Future Land Use**



Legend

- Low Density Residential
- High Density Residential
- Commercial
- Industrial
- Mixed Use
- Institutional, Government and Public Facilities
- Transportation, Communication and Utilities
- Parks, Recreation, Open Space, and Conservation
- NA City Limits
- Burnetown City Limits
- Planning Area
- Savannah River

