



GROVETOWN COMPREHENSIVE PLAN (2006-2016)

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CSRA Regional Development Center
For:
City of Grovetown, Georgia

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INTRODUCTION

Grovetown is a city redefining itself. Located in southern Columbia County, Georgia and adjacent to the United States Army Signal Corps' home of Fort Gordon, new residential development fuels Grovetown's conversion from a "country cross-roads" into a community with all of the amenities of a 21st century city. This combination of country charm and modern amenities serves as the basis for why Grovetown refers to itself as "A Friendly Little City."

Originally incorporated in 1881, the City of Grovetown is 1 of 41 member municipalities of the Central Savannah River Area Regional Development Center (CSRA RDC) located in Augusta. Grovetown's close proximity to Augusta positions it roughly half way between the state capitols of Georgia and South Carolina. Grovetown's location in south-central Columbia County also places it at the edge of the developing urbanized area of metropolitan Augusta. It lies on high ground just to the northwest of Fort Gordon near the northern end of the Middle Savannah River sub-basin.

WHY PLAN?

Successful communities don't just happen - they must be continually shaped and guided. A community must actively manage its land use, infrastructure and resources, and respond to changing circumstances if it is to continue to meet the needs of its residents. Grovetown residents value the character and diversity of their city, the strong sense of community, and the easy access to recreational opportunities. Concern about maintaining the current economic development trend, providing for adequate infrastructure and ensuring adequate recreational and educational opportunities for its old and new citizens are issues that the city is continuously trying to address. Comprehensive planning, based on good data and public consultation, will assist the community to address these, and many other concerns.

WHAT IS THE COMPREHENSIVE PLAN?

The comprehensive plan is the official guiding document for the future of the city of Grovetown. It is designed to formulate a coordinated, long-term planning program for the city. The plan lays out a desired future, and guides how that future is to be achieved. It serves as a guide to both the public and private sector by providing a picture of how land will develop, how housing will be made available, how jobs will be attracted and retained, how open space and the environment will be protected, how public services and facilities will be provided, and how transportation facilities will be improved. Further, the plan guides elected and appointed officials as they deliberate community development issues and convey policy and intended programs of action to residents. In short, the comprehensive plan is a unified document providing consistent policy direction.

The comprehensive plan is structured to be a dynamic document, subject to amendment when conditions within the city or county change significantly. Periodic updates are needed to ensure that it continues to meet the needs of the citizens of Grovetown. The

previous *Grovetown Comprehensive Plan* was prepared in 1991. Many of the items recommended for implementation were completed or became irrelevant as years passed. This new plan addresses changes in the community since the last comprehensive plan.

HOW TO USE THE COMPREHENSIVE PLAN

The comprehensive plan is not, in itself, an implementation tool - but rather a guide to action. It is intended to serve as a reference point for potential users. For example, the Planning Commission or City Council may use the plan's policies to decide whether to approve a proposed rezoning of land. The Board of Education may use the plan to determine future student enrollment and corresponding facilities expansion. The Tax Assessors' Office may use the plan to estimate future digests.

A number of companion planning documents should be used in conjunction with this comprehensive plan. These include:

- *Grovetown Zoning Ordinance*
- *Columbia County Comprehensive Plan*
- *Columbia County/Grovetown/Harlem Joint Solid Waste Management Plan*
- Other local and state regulatory documents.

Unlike sector or single issue planning documents, which only generally refer to issues such as transportation, economic development, parks and recreation, annexation, and community services, the comprehensive plan addresses these issues in a coordinated manner.

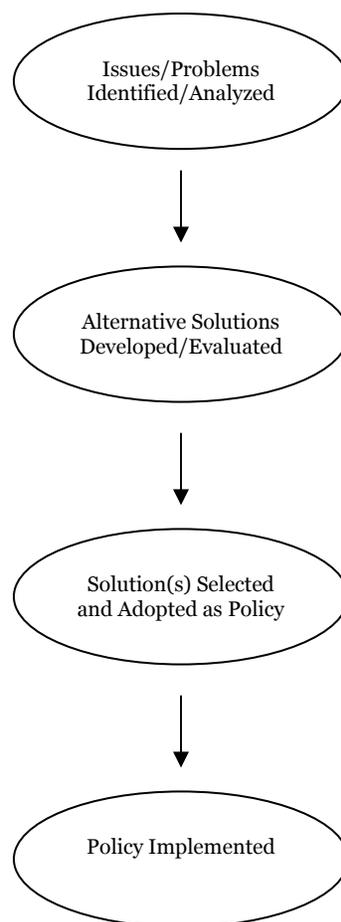
PLANNING DEVELOPMENT PROCESS

As illustrated in **Figure 1-A**, the comprehensive plan is in the product of extensive local government and citizen involvement through structured workshops and unstructured discussion sessions.

Planning/Advisory Committee

Preparations for the comprehensive plan began with the creation of the Grovetown Advisory Committee. The primary purpose of the committee was to oversee and assist in the process of drafting the comprehensive plan. The committee was composed of Grovetown elected officials, government employees and residents. The committee's roles included communicating the concerns of interested groups regarding the development of the city; providing a forum for discussion of differing views; developing statements of the

Figure 1-A: Plan Development Process



community's vision and goals; and recommending goals, policies and implementation measures.

During the winter of 2005-06 and spring of 2006, staff from the CSRA RDC collected background information about the planning area through historical research, site visits, and information gathered from local officials. The Advisory Committee then provided direction and guidance by discussing the various issues raised at public hearings. Specific plan chapters were then prepared for the various functional elements of the plan. Additional activities of the Advisory Committee are highlighted in the *Community Participation Plan* portion of the *Grovetown Comprehensive Plan*.

Public Consultation

The plan's development is subject to a comprehensive public involvement process. Public involvement serves to educate community leaders about planning issues and to build constituency support - both necessary ingredients for any successful comprehensive plan. Each person at the table represents many others and offers insight on something overlooked by planners. By involving the public as a partner throughout the planning process, the message sent is that people's ideas matter. And if a known and quantifiable effect on the plan is seen and people feel the plan is theirs, not just something imposed by a regional planning agency, they are likely to become advocates for its implementation.

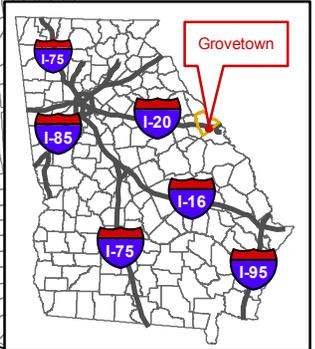
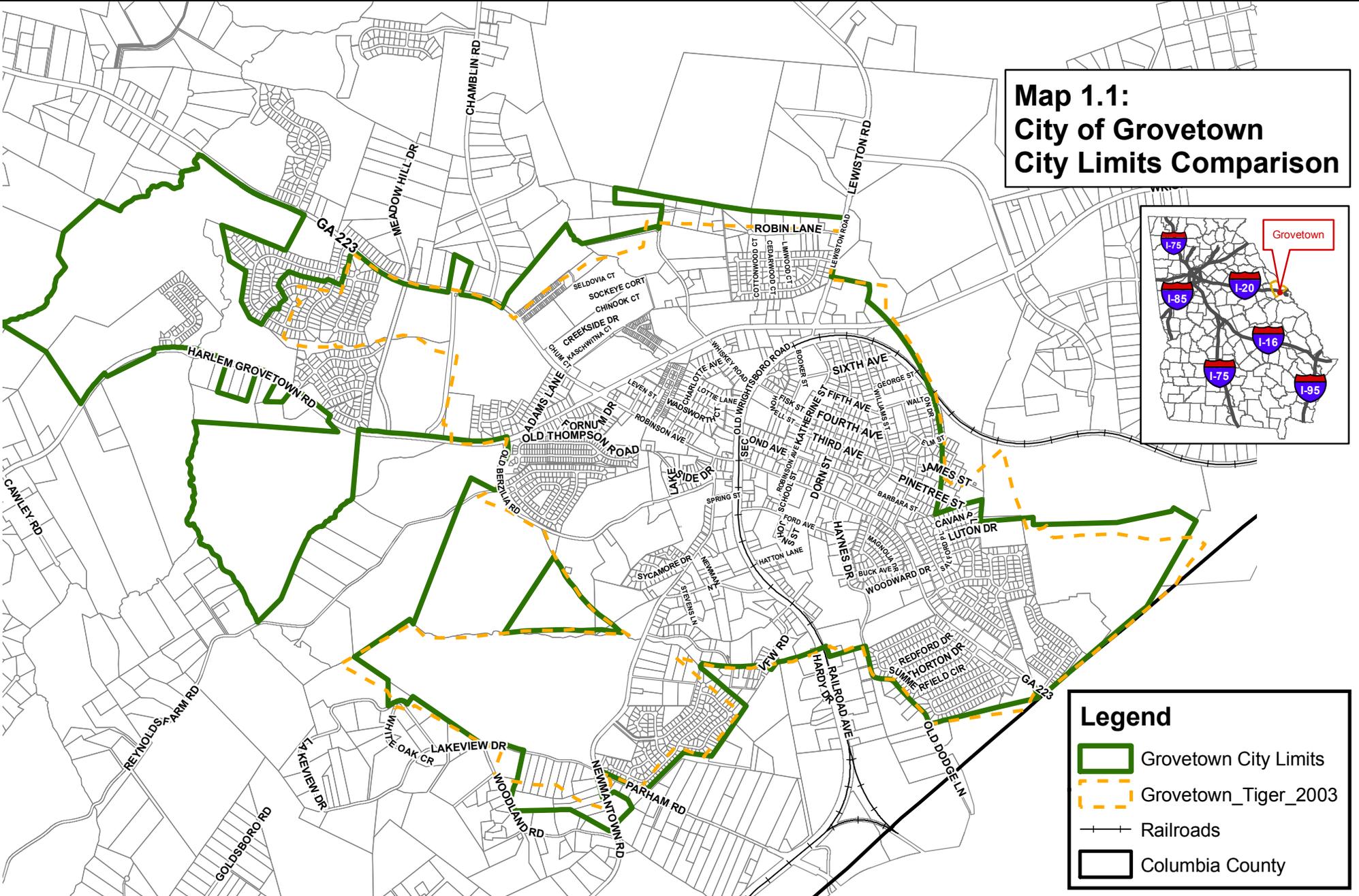
Grovetown Comprehensive Plan Components

The process to update the *Grovetown Comprehensive Plan* conforms to the requirements established by the Georgia Department of Community Affairs' "Standards and Procedures for Local Comprehensive Planning." Grovetown's updated comprehensive plan document includes 3 principal components: *Community Assessment*, *Community Participation Plan* and *Community Agenda*. The *Community Assessment* portion of the plan includes chapters 1 through 10. The *Community Assessment* analyzes existing conditions in Grovetown and defines issues and opportunities which may be addressed later in the planning process. The information provided in the *Community Assessment*, combined with public input, provides the basis for the goals, objectives and actions established during the final *Community Agenda* portion of the *Plan* (**Chapter 11**). The *Community Participation Plan* is found in **Appendix A**.

Mapping Specifications

The "Standards and Procedures for Local Comprehensive Planning" require that a number of maps be submitted with the *Grovetown Comprehensive Plan* – most relating to the "Natural and Cultural Resources" and "Land Use" components. Required digital maps must illustrate city boundaries according to the U.S. Census Bureau's TIGER boundary files. Unfortunately, as **Map 1.1** illustrates, TIGER boundaries vary greatly from the actual city limits. In Grovetown's case, many of these variations are the direct result of recent annexation activity – annexations that are not reflected in TIGER files as being within the municipal limits.

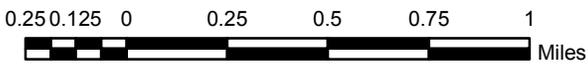
Map 1.1: City of Grovetown City Limits Comparison



Legend

- Grovetown City Limits
- Grovetown_Tiger_2003
- Railroads
- Columbia County

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Central Savannah River Area
Regional Development Center
GIS Department
3023 Riverwatch Parkway, Suite A
Augusta, GA 30907-2016
www.csrardc.org
July, 2006



It is unadvisable to conduct a comprehensive planning process that ignores large areas of a community due to a lag in map updates. To address this issue, Grovetown city staff utilized annexation records to provide plan preparers with an accurate city boundary for use in this plan document. Other than **Maps 5.1** through **5.7** (Natural and Cultural Resources), maps included in this document utilize the updated municipal boundaries. All of the analysis in the *Grovetown Comprehensive Plan* is also based on the city's updated boundary, rather than TIGER files. To ensure consistency with state requirements, digital versions of all *Grovetown Comprehensive Plan* maps utilizing TIGER boundaries will also be provided to the Georgia Department of Community Affairs.

ISSUES AND OPPORTUNITIES

The *Grovetown Comprehensive Plan* considers issues and opportunities that are applicable to Grovetown and have been identified through data compilation and community input. A discussion with the Grovetown Advisory Committee during the initial committee meeting in January, 2006 yielded the preliminary list of issues and opportunities found in **Figure 1-B**.

The issues and opportunities listed in this section were discussed in greater detail during the preparation of the *Plan*. A more thorough discussion of community issues and opportunities can be found in the "Assessment" section of each chapter. The recommendations contained within chapters 2 through 10 of the *Community Assessment* are preliminary and were expanded upon further during preparation of the *Community Agenda* subject to additional community-wide input.

Figure 1-B: Preliminary Grovetown Issues and Opportunities
<p>Economic Development:</p> <ul style="list-style-type: none"> • Grovetown exports the vast majority of its labor. • We have to decide whether we want to remain a bedroom community or develop a more diverse economy within the city. • There are very few opportunities to work within the city limits.
<p>Natural and Cultural Resources:</p> <ul style="list-style-type: none"> • Additional linkages to Euclhee Creek Greenway can be made. • There are historic homes in center city that can be preserved. • The veteran's memorial is developing as a community gathering space. • Additional resources could be dedicated to Grovetown Museum.
<p>Facilities and Services:</p> <ul style="list-style-type: none"> • We need to find additional sources of drinking water. • We need to find additional ways to discharge sewage. • Additional storage space is needed at city buildings. • Grovetown has grown to the point where a full-time administrator may be necessary. • Training opportunities are the greatest public safety staff need. • Additional water storage capacity will be needed in the near future.
<p>Housing:</p> <ul style="list-style-type: none"> • Many mobile homes are becoming vacant. • Incompatible housing types are being built next to single-family homes. • More community space may be linked to new developments.
<p>Land Use:</p> <ul style="list-style-type: none"> • We have to make room for additional commercial areas in the city. • Some center-city properties could be redeveloped. • There is an opportunity to create a more traditional town center.
<p>Transportation:</p> <ul style="list-style-type: none"> • Development regulations can be revised to require sidewalks on developing commercial frontage. • Links can be made to the Euclhee Creek Greenway from adjacent development. • Standards can be developed for collector streets.
<p>Intergovernmental Coordination:</p> <ul style="list-style-type: none"> • Partnerships with Augusta-Richmond County can be developed to assist in the provision of water and the disposal of sewer. • There is potential for greater coordination with economic development agencies.



INTRODUCTION

Defining a community’s population characteristics is an essential part of any comprehensive planning process. A variety of factors, including housing, economic development, community facilities and future land use are directly influenced by population data. A thorough understanding of population projections helps to ensure that goals and policies established in other parts of a comprehensive plan are truly consistent with the community’s future needs.

When planning for Grovetown’s future, it is important to recognize the community’s relationship with surrounding unincorporated Columbia County and how county trends affect many factors within the city. Grovetown’s location within the Augusta-Aiken Metropolitan Statistical Area (MSA) (Columbia, McDuffie and Richmond Counties in Georgia, and Aiken and Edgefield Counties in South Carolina), also ties the community’s prosperity directly to the health of the greater urban area. As a result, this plan often compares the statistics of Grovetown with Columbia County and the regional population center of Augusta-Richmond County.

The principal sources of information for this chapter are the United States Census Bureau and the Georgia Department of Education. While other data resources such as Woods and Poole Economics, Inc., the United States Department of Commerce, and the United States Department of Labor are typically utilized to help create a more accurate community picture, many of the statistics directly appurtenant to population figures in this chapter are not compiled or readily available at the municipal level. Regardless, the information that is presented within the chapter provides a detailed picture of Grovetown’s population trends.

HISTORICAL POPULATION TRENDS

Grovetown’s location within south-central Columbia County places it at the western edge of the urbanized portion of the Augusta-Aiken MSA. From the time of Grovetown’s 1881 incorporation, until the construction of Camp (now Fort) Gordon in 1942, Grovetown remained a rural village known primarily as a summer haven for wealthy Augustans.

Figure 2-A illustrates that more recently, rapid population growth has been a consistent trend at the local and state level. Grovetown, Columbia County and the state of Georgia all exhibit high growth rates between 1980 and 2000. During this period, the state of Georgia experienced a 50 percent increase in overall population, Grovetown experienced population growth of 79.9 percent and Columbia County more than doubled its population with a 20 year growth rate of 122.6 percent.

Figure 2-A: Grovetown, Columbia County, State of Georgia Total Population			
	1980	1990	2000
Grovetown	3,384	3,596	6,089
Columbia County	40,118	66,031	89,288
Georgia	5,457,566	6,478,216	8,186,453
<i>Source: U.S. Census Bureau</i>			

Figure 2-A also shows that Columbia County began experiencing an accelerated growth pattern in the 1980s, increasing its population over a 10 year period by a rate of 64.6



percent. The County’s growth rate in the 1980s was significantly higher than Grovetown’s during this time. Grovetown grew from a population of 3,384 to 3,596 between 1980 and 1990 – a modest growth rate of 6.3 percent when compared with unincorporated Columbia County. Grovetown’s population increased from 3,596 in 1990 to 6,089 in 2000 – a much higher growth rate of 69.3 percent.

Grovetown’s most recent population growth trends are similar to the 1990s. U.S. Census

Figure 2-B: Grovetown Population Estimates, 2000-2004					
Year	2000	2001	2002	2003	2004
Total Population	6089	6306	6496	6662	6919
Annual Rate (%) of Change	NA	+3.6%	+3.0%	+2.6%	+3.9%
<i>Source: U.S. Census Bureau</i>					

estimates from 2000 to 2004 (**Figure 2-B**) illustrate a 4 year growth rate of 13.6 percent. This figure is supported by the fact that the City of Grovetown issued no fewer than 1195 residential building permits between 2000 and 2005.

POPULATION PROJECTIONS

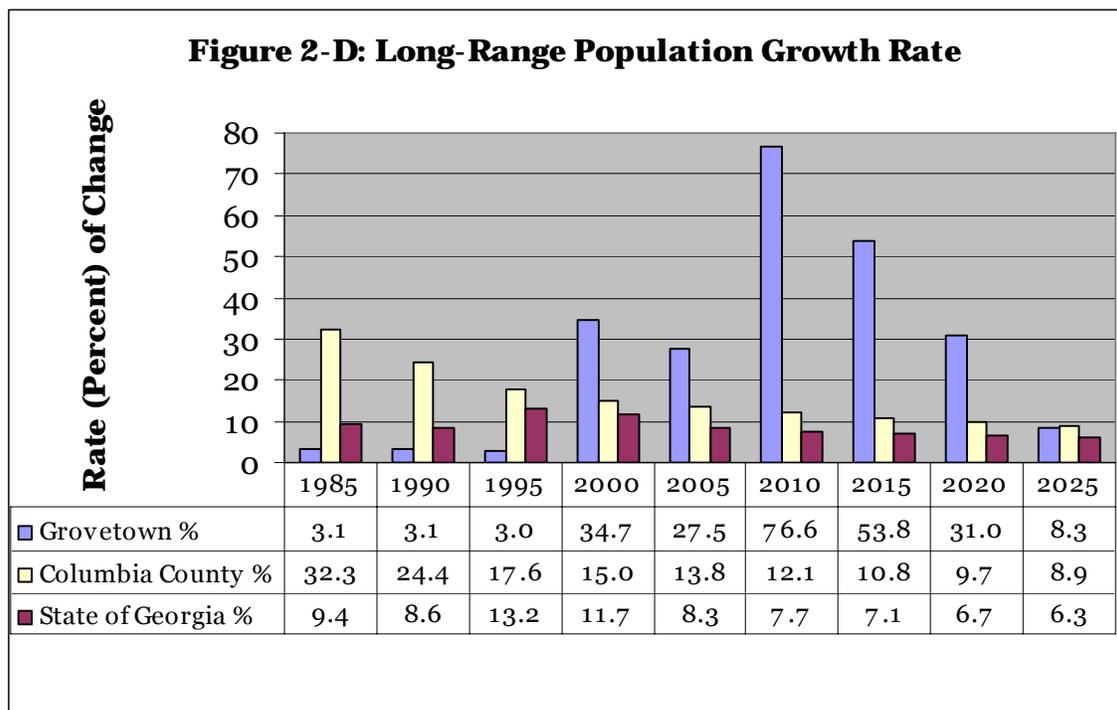
Grovetown, Columbia County and the state of Georgia are all projected to sustain significant population increases over the next 20 year period (**Figure 2-C**). Between 2000 and 2025, the state of Georgia is expected to increase its population by 3,411,109 people – a growth rate of 41.7 percent. Columbia County will add 61,463 people over the same 25 year period, increasing at a rate of 68.8 percent. Grovetown’s addition of 23,815 new residents translates into a 391 percent growth rate – fueled by voluntary annexation on behalf of developers. Evidence of Grovetown’s ability to maintain such a high growth rate in the near term is illustrated by the fact that, of the 1195 residential building permits issued by the City between 2000 and 2005, 62 percent of the permits were issued in 2004 and 2005 alone. During 2004 and 2005, Grovetown also approved subdivision plats/permits for 1636 single-family, mobile home and townhouse dwellings. At least 55 percent of the residential lots/units in these approved developments have yet to receive building permits. In preparing city of Grovetown population projections the CSRA Regional Development Center considered average family household size, out-

Figure 2-C: Grovetown, Columbia County, State of Georgia: Total Population Projections						
	2000	2005	2010	2015	2020	2025
Grovetown	6,089	7,762	13,703	21,078	27,613	29,904
Columbia County	89,288	101,581	113,873	126,166	138,458	150,751
State of Georgia	8,186,453	8,868,675	9,550,897	10,233,118	10,915,340	11,597,562
<i>Source: U.S. Census Bureau, Grovetown Dept. of Planning and Zoning (Some Calculations by CSRA RDC)</i>						

migration and a gradual decrease in potential vacancy rates. A comparison of Grovetown’s estimated 2005 population with the total number of residential water customers in Grovetown (according to type of housing unit) supports the CSRA RDC’s projections. Regardless, Grovetown is expected to surpass 10,000 people by 2008.



As with Columbia County and the state of Georgia, **Figure 2-D** shows that Grovetown’s growth rate is expected to slow over time. All 3 jurisdictions, however, should continue to experience substantial population increases through 2025.



Households

An increase of Grovetown’s population will naturally result in an increase of the total number of households within the community. By looking at Grovetown’s projected average household size (**Figure 2-E**), and the small degree of increase over time, it is apparent that the percentage of household growth between 2005 and 2025 will roughly correspond with the rate of population growth. In contrast, Columbia County shows a gradual trend of decreasing household size.

Figure 2-E: Grovetown, Columbia County: Average Household Size, 2005-2025

	2000	2005	2010	2015	2020	2025
Grovetown	2.82	2.83	2.83	2.84	2.84	2.85
Columbia County	2.85	2.78	2.72	2.65	2.58	2.51

Source: U.S. Census Bureau

Non-family-structured households make up 23 percent of all households within Grovetown. When compared to the percentage of non-family households within Columbia County and Augusta-Richmond County (18 and 32 percent, respectively),

Figure 2-F illustrates that Grovetown tends to reflect a character similar to Columbia County.

Figure 2-F: Grovetown, Columbia County, Augusta-Richmond County: Household Type (2000)				
Household Type	Grovetown (#)	Grovetown (%)	Columbia County (%)	Augusta-Richmond County (%)
Total Households	2,106	N/A	N/A	N/A
Family Households	1,627	77%	82%	68%
Non-Family Households	479	23%	18%	32%

Source: U.S. Census Bureau, SF3, Table P14 (Calculations by: CSRA RDC)

Age

Figure 2-G illustrates historical trends and projections of Grovetown’s population categorized by age group. Since 1980 most age groups within Grovetown have experienced a significant increase in overall numbers except 18–20 year olds and 21-24 year olds. Between 1980 and 2005 the percentage of 18-20 year olds in Grovetown grew only slightly while the 21-24 year old category decreased by over 24 percent. In contrast, the 35-44 year old age group grew by over 348 percent between 1980 and 2005. Corresponding increases are projected for these age groups through 2025.

Figure 2-G: Grovetown Population By Age Projections					
Age	1980	2005	Rate (%) of Change 1980-2005	2025	Rate (%) of Change 2005-2025
0 – 4	441	699	+58.6%	2353	+236.5%
5 – 13	493	1510	+206.2%	6232	+312.8%
14 – 17	192	401	+109.0%	1504	+274.8%
18 – 20	296	338	+14.1%	921	+172.8%
21 – 24	478	362	-24.2%	586	+61.7%
25 – 34	650	1441	+121.8%	5496	+281.3%
35 – 44	323	1448	+348.2%	6358	+339.2%
45 – 54	241	758	+214.3%	3143	+314.9%
55 – 64	161	386	+139.6%	1480	+283.7%
65 +	109	432	+296.6%	1839	+325.4%

Source: U.S. Census Bureau, City of Grovetown (Calculations by: CSRA RDC)

As a percentage of Grovetown’s overall population, **Figure 2-H** shows that 5-13 year olds now represent the community’s largest age group at over 19 percent. The next largest age groups are 35-44 and 25-34 year olds, each at over 18 percent of Grovetown’s

POPULATION

overall population. By 2025, 35-44 year olds will be the most representative age group within Grovetown at over 21 percent. The 18-20 year old age group is currently the smallest age category in Grovetown, representing just over 4 percent of the population in 2005. By 2025, 21-24 year olds will be Grovetown’s least representative age group at just under 2 percent of the overall population.

Figure 2-H: Grovetown: Percent of Total Population by Age Group

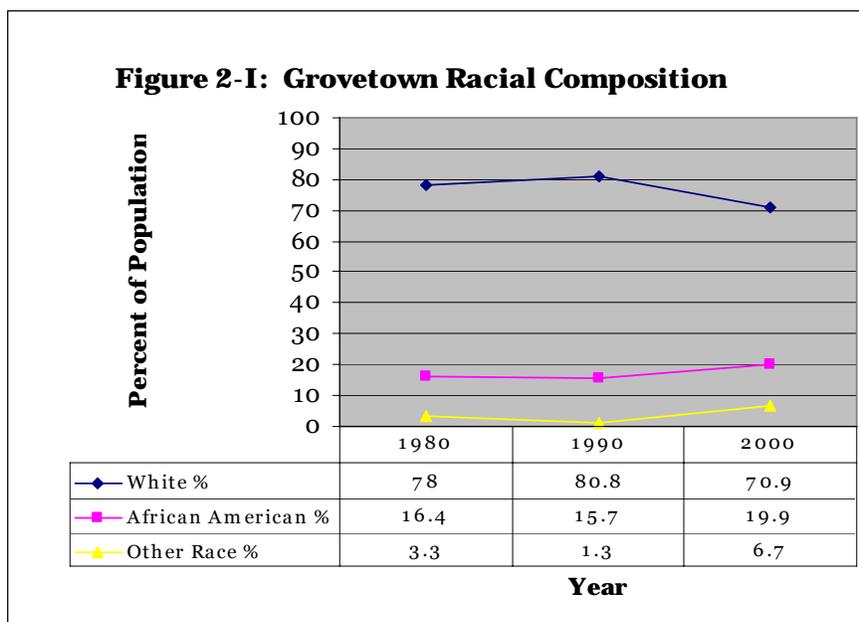
Age	Percent (%) of 1980 Population	Percent (%) of 2005 Population	Percent (%) Change 1980-2005	Percent (%) of 2025 Population	Percent (%) Change 2005-2025
0 – 4	13.0%	9.0%	-4.0%	7.9%	-1.1%
5 – 13	14.6%	19.5%	+4.9%	20.8%	+1.4%
14 – 17	5.7%	5.2%	-0.5%	5.0%	-0.1%
18 – 20	8.8%	4.4%	-4.4%	3.1%	-1.3%
21 – 24	14.1%	4.7%	-9.5%	2.0%	-2.7%
25 – 34	19.2%	18.6%	-0.6%	18.4%	-0.2%
35 – 44	9.5%	18.7%	+9.0%	21.3%	+2.6%
45 – 54	7.1%	9.8%	+2.6%	10.5%	+0.8%
55 – 64	4.8%	5.0%	+0.2%	5.0%	-0.0%
65 +	3.2%	5.6%	+2.4%	6.2%	+0.6%

Source: U.S. Census Bureau, (Calculations by: CSRA RDC)

Racial and Ethnic Composition

Figure 2-I shows that in 2000, Grovetown’s population was roughly 71 percent white, 20 percent African American and just under 7 percent listed as “other race.” For purposes of this plan, the category of “other race” includes those groups listed by the United States Census as: American Indian and Alaska Native, Asian, Native Hawaiian

Figure 2-I: Grovetown Racial Composition



and Other Pacific Islander, and “Some other race” (meaning a survey respondent was unable to identify with any one of the primary racial categories). Since 1990, there has



been a noticeable decline of Grovetown's white population as a percentage of the community's overall population.

Between 1980 and 2000, Grovetown also experienced a 277 percent increase in the number of Hispanic residents in the community – rising from a total population of 149 to 563. Hispanics now make up at roughly 9 percent of the overall Grovetown population according to the 2000 Census. It is important to note that according to the U.S. Census Bureau's *“Overview of Race and Hispanic Origin: Census 2000 Brief”* (March, 2001), race and Hispanic origin are two distinct concepts. People of Hispanic ethnic origin may identify with 1 or more different racial groups including white, African American, American Indian, etc.

EDUCATION

The education level of a community is often a determinant of economic development potential. The skill levels of residents in an area can be inferred from the level of education prevalent in the community. Companies requiring skilled workers may look for areas with high rates of high school graduates while industries requiring highly-skilled workers may seek counties with large numbers of college graduates. The reverse is also true, with communities often seeking to attract companies that are a good fit for the educational level of its citizens.

Educational level is also important when evaluating a school system's quality. If the number of high school dropouts is particularly high for a certain area, the school system could be in need of improvement. School system quality can also be a factor in determining quality of life for the citizens of an area. The better the school system - the better the perceived quality of life.

Educational Attainment

Grovetown children attend the Columbia County school system. Children from kindergarten through 5th grade attend Grovetown Elementary School. Sixth grade to 8th grade students attend Grovetown Middle School, and 9th through 12th graders attend Harlem High School.

Between 1980 and 2000, the educational attainment level of Grovetown's residents changed significantly. **Figure 2-J** shows that in 1980, less than 6 percent of Grovetown's citizens were college graduates. By 2000, over 21 percent of Grovetown residents were college graduates. During this time, the total number of residents with a college education increased from 85 to 732.

While Grovetown has exhibited a significant increase in the number of residents who have obtained a college education, it still lags behind Columbia County, Augusta-Richmond County and the state of Georgia. **Figure 2-K** shows that Grovetown's population also continues to include a higher percentage of its people with less than a high school education (24.9 percent) than surrounding counties and the state of Georgia.

Figure 2-J: Grovetown Educational Attainment, 1980-2000

	1980 Population 25 Years or Older		1990 Population 25 Years or Older		2000 Population 25 Years or Older	
	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)
Less than 9th Grade	248	17.0%	160	8.7%	255	7.7%
9th to 12th Grade (No Diploma)	224	15.3%	393	21.3%	572	17.2%
High School Graduate (Includes GED)	678	46.4%	772	41.9%	1,078	31.6%
Some College (No Degree)	249	17.0%	341	18.5%	752	22.3%
Associate Degree	N/A	N/A	45	2.4%	309	8.9%
Bachelor's Degree	61	4.2%	100	5.4%	305	8.8%
Graduate or Professional Degree	24	1.6%	33	1.8%	118	3.4%

Source: U.S. Census Bureau

Figure 2-K: Educational Attainment, Percent (%) of Population 25 Years or Older, 2000

	Grovetown	Columbia County	Augusta - Richmond County	State of Georgia
Less than 9th Grade	7.7%	4%	7%	8%
9th to 12th Grade (No Diploma)	17.2%	8%	15%	14%
High School Graduate (Includes GED)	31.6%	26%	30%	29%
Some College (No Degree)	22.3%	22%	23%	20%
Associate Degree	8.9%	8%	6%	5%
Bachelor's Degree	8.8%	20%	12%	16%
Graduate or Professional Degree	3.4%	12%	7%	8%

Source: U.S. Census Bureau, SF3, 2000

Test Scores and Dropout Rates

All students seeking a Georgia high school diploma must pass the Georgia High School Graduation Tests (GHSGT) and the Georgia High School Writing Assessment (GHSWA). The GHSGT is divided into four 4 components: English/language arts, math, social



POPULATION

studies and science. Students are given up to 5 opportunities to pass each of these examinations with the first opportunity coming during their 11th grade year. Initial assessment at this time provides each student with enough time to retake the examinations prior to the end of their 12th grade year.

Figure 2-L: Harlem High School, Percentage of 11th Graders Passing State of Georgia Standardized Tests (1st Attempt)

	2002-03	2003-04	2004-05
English/Language Arts	94%	93%	95%
Mathematics	90%	93%	92%
Social Studies	78%	83%	83%
Science	70%	75%	71%
Writing	90%	92%	93%

Source: (Georgia) Governor's Office of Student Achievement, Georgia High School Graduation Tests (GHS GT) & Georgia High School Writing Assessment (GHSWA)

As previously stated, Grovetown children attend Harlem High School. **Figure 2-L** illustrates the percentage of Harlem High School 11th graders who passed the various components of the GHS GT and GHSWA on their first attempt over the last 3 year period. Focusing on the number of students who passed each of the exams on the first attempt is a more candid snap-shot of

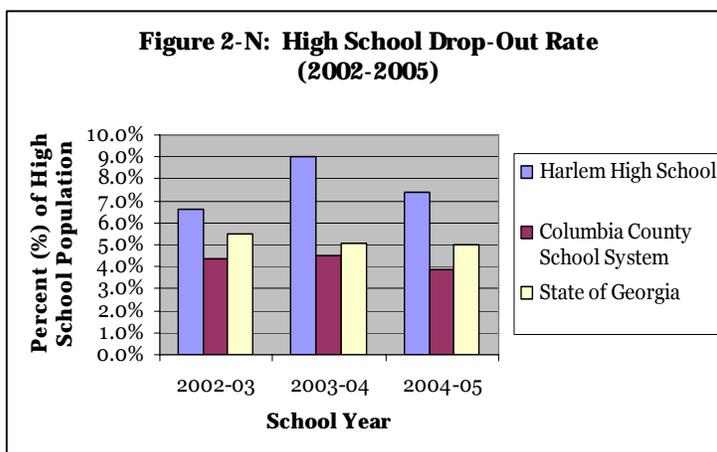
school achievement because results on subsequent exams may be affected by the provision of more resources to particular students than may be typical. Harlem High School's 2004-2005 test results are slightly lower than Columbia County; but, general show a higher level of achievement than the state of Georgia as a whole **Figure 2-M**.

Figure 2-M: 2004-05 Percentage of 11th Graders Passing State of Georgia Standardized Tests (1st Attempt)

	Harlem High School	Columbia County School System	State of Georgia
English/Language Arts	95%	97%	95%
Mathematics	92%	97%	92%
Social Studies	83%	92%	84%
Science	71%	83%	68%
Writing	93%	96%	89%

Source: (Georgia) Governor's Office of Student Achievement, Georgia High School Graduation Tests (GHS GT) & Georgia High School Writing Assessment (GHSWA)

In addition to testing results, Harlem High School drop-out rates are not only above the Columbia County and state of Georgia average, they appear to show a gradual increase (**Figure 2-N**) – rising from 6.8 percent in 2002-03 to 7.4 percent in 2004-05. The Columbia County and state of Georgia drop-out rates declined during this period to a 2004-05 total of 3.9 and 5.0 percent, respectively.



INCOME

Household Income and Poverty

To measure Grovetown’s household income characteristics, this chapter focuses on median household income rather than average household income. Especially for a population base the size of Grovetown’s, average household income can often be skewed by a small number of particularly wealthy or poor residents. In contrast, a median figure can provide a more detailed picture of community character by clearly identifying a baseline number which roughly half of a community’s residents exceed. This chapter also focuses on household income rather than per capita income due to population figures that suggest significantly larger numbers of families as opposed to single person households.

Figure 2-O: Change in Median Household Income			
	1990	2000	Percent (%) Increase
Grovetown	\$20,647	\$33,382	+61.7%
Columbia County	\$40,122	\$55,682	+33.8%
Augusta -Richmond County	\$25,265	\$33,086	+31.0%
State of Georgia	\$36,810	\$42,433	+15.3%

Source: U.S. Census Bureau, STF3 1990, SF3 2000

Grovetown’s rapid population growth in the 1990’s was fueled by new residents that raised the city’s median household income by over 22 percent – from \$20,647 to \$33,382. As shown in **Figure 2-O**, Grovetown’s increase in median

household income outpaced Columbia County by over 17 percent. Between 1990 and 2000, the median household income actually decreased in Augusta-Richmond County by almost 1 percent and in the state of Georgia by over 12 percent.

Although the previous Figure shows that the rate of change for median household income was fairly high for some of the jurisdictions, **Figure 2-P** shows that the percentage of people living in poverty remained fairly constant. Even though

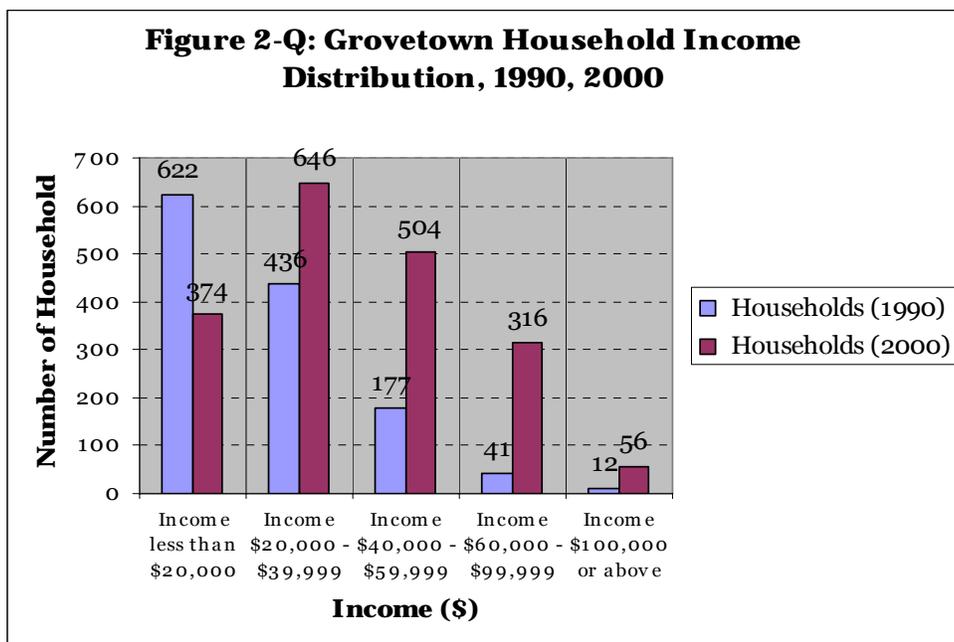
Figure 2-P: Poverty Level: 1989, 1999			
	1989 Percent (%) Below Poverty Level	1999 Percent (%) Below Poverty Level	Percent (%) Change, 1989-1999
Grovetown	18.3%	18.6%	+0.3%
Columbia County	6.6%	5.1%	-1.5%
Augusta-Richmond County	18.2%	19.6%	+1.4%
State of Georgia	13.2%	13%	-0.2%

Source: U.S. Census Bureau, STF3 1990, SF3 2000 (Calculations by CSRA RDC)

Columbia County and the state of Georgia show slight decreases in the percentage of population living below the poverty level (minus 1.5 & 0.2, respectively) the significant increases in the population of both jurisdictions between 1990 and 2000 mean that Grovetown, Augusta-Richmond County, Columbia County and the state of Georgia all have greater total numbers of people living in poverty.

Distribution of Households by Income

Figure 2-Q illustrates that between 1990 and 2000, Grovetown increased the number and percentage of households living in higher income brackets. The most rapid increase in household income distribution was by families earning between \$60,000 and \$99,000 rising from 41 to 316 families – a rate of growth of 670 percent. While Grovetown’s total population increased dramatically between 1990 and 2000, the number of families in the lowest income bracket actually decreased almost 40 percent from 622 to 374 total families.



ASSESSMENT

POPULATION

While the construction of Fort Gordon in the early 1940s facilitated Grovetown’s population growth during much of the 20th century, such growth remained relatively slow until the 1990s. As with most metropolitan areas throughout the United States during that time, the greater Augusta area was experiencing decades of suburban development on the outer fringes of the community. Grovetown’s location was too far removed from the majority of suburban growth during the 1980s. Grovetown’s rapid population increase did not begin until the 1990s, while Columbia County’s rate of growth began to increase rapidly in the 1980s. This discrepancy suggests that the majority of Columbia County’s growth in the 1980s was occurring in the south-eastern portion of the county. The expansion of low-density residential subdivisions and supporting commercial services did not extend west to Grovetown until the mid-1990s.

Grovetown’s recent population growth trends are not due solely to the suburban-style development of vacant parcels within the town’s original boundaries. Grovetown’s growth has largely been fueled by an active annexation policy. There is no evidence that Grovetown’s annexation trends, or Columbia County’s continued suburban growth, will change in the near future.

Households

Grovetown’s projected population growth will naturally result in an increase of the total number of households within the community. The fairly consistent projection of average household size in Grovetown between 2005 and 2025 suggests that the corresponding rapid population growth will necessitate an increased investment in services and facilities that support all age groups. In contrast with Grovetown, Columbia County shows a gradual trend of decreasing household size. The discrepancy between the 2 jurisdictions may indicate that a greater percentage of younger families with children will continue to locate within Grovetown while a greater percentage of retirees may locate within the unincorporated portions of the county.



Young families continue to purchase starter-homes in many of Grovetown’s new subdivisions.

When comparing Grovetown’s percentage of non-family households (23 percent) to Columbia County and Augusta-Richmond County (18 and 32 percent, respectively) Grovetown tends to reflect a character similar to Columbia County. Grovetown’s smaller percentage of non-family households in relation to Augusta-Richmond County

may indicate a smaller percentage of multi-family housing options, and a lack of college age students residing in town. The slightly higher percentage of non-family households in town, in relation to Columbia County, can be attributed to soldiers from Fort Gordon seeking housing options off-base.

Age

Grovetown's rapid population increase since the mid-1990s has translated into an increase the size of most age groups. While the number of people aged 65 and older has grown significantly, people aged 35-44 and 5-13 have also increased in impressive numbers. The growth of these age groups may indicate that some retirees and growing families with small children are attracted to Grovetown by new housing units that are more affordable when compared to unincorporated Columbia County.

Between 1980 and 2005, Grovetown's population of 18-20 year olds and 21-24 year olds actually decreased. At first glance, the loss of younger individuals in these age groups may seem to contradict the trends of growth that are typical of Grovetown. When one considers Grovetown's commuting patterns, the lack of white-collar jobs within the municipal limits, the lack of multi-family housing and the lack of a university or technical school, it becomes apparent that there are few incentives for Grovetown's young single population to remain in town. It is probable that many of the people in these age groups wish to live closer to school or work and, are not yet advanced enough in their careers to afford one of Grovetown's many single-family homes.

Race and Ethnicity

The information provided within **Figure 2-I** does not seem to indicate any significant shift in racial makeup within Grovetown. While the white population has decreased as an overall percentage of the town's population, at 70.9 percent it remains the city's largest single racial group. The most significant change in Grovetown's racial and ethnic figures is the noticeable increase in the numbers of ethnically Hispanic residents. One possible explanation for the increase in Hispanic residents may be the large amount of residential construction occurring within Grovetown and in surrounding Columbia County. This theory is difficult to prove definitively; however, because as Grovetown's employment figures show an increase in construction labor, construction jobs have decreased slightly region-wide.

EDUCATION

Educational Attainment

Since 1980, Grovetown's gradual decrease in the percentage of persons not receiving at least a high school education, and corresponding increase of residents with a college degree, illustrates that a skilled workforce is emerging within the community. While Grovetown's educational attainment levels remain noticeably lower than Columbia County, the community is now comparable to Augusta-Richmond County and the state of Georgia. The increasing suburbanization of the community, combined with the positive reputation of the Columbia County school system, suggests that Grovetown's

educational attainment levels will continue to rise and compare more favorably to the rest of Columbia County in the future. The Columbia County Board of Education's recent decision to build a new elementary school in Grovetown reaffirms their commitment to providing the best possible facilities for the area's children.

Based on local education attainment levels, Grovetown's workforce is well suited to continue supplying the construction and service industries while also providing opportunities for continued investment in the manufacturing sector emerging in the immediate vicinity of town. The increase in college educated residents has also resulted in an acknowledgement that Grovetown should find ways to promote local growth in office-based professional services including occupations such as bankers, accountants, doctors, architects, engineers, etc.

Test Score and Dropout Rate

State-wide standardized test scores for students attending Harlem High School generally do not compare favorably to those of the entire Columbia County school system. The Harlem High School drop-out rate is also noticeably higher than both the Columbia County School System and the state of Georgia. The overall reputation of the Columbia County school system, and high county-wide achievement scores, will likely mean that Harlem High School's current achievement scores will not serve as an immediate deterrent to promoting new development in the Grovetown area. Even so, a concerted effort should be made to work with the Columbia County Board of Education to find ways to bring Harlem High School attainment levels in line with the rest of the county. A long-term failure to address this disparity may result in future industries locating in other portions of Columbia County.

INCOME

The rise in median household income for Grovetown residents is not surprising given the suburbanization of the area between 1990 and 2000. This trend is consistent with a rise in median property value in Grovetown and Columbia County. Even the higher rate of change in Grovetown's median household income (approximately 62 percent) compared to the rest of Columbia County is to be expected given that the town has suddenly shifted from a rural economy to one with suburban characteristics.

A statistic of concern is the consistently high percentage of Grovetown families living in poverty (over 18 percent). This number has actually increased slightly from 1990 to 2000 meaning that Grovetown's increasing wealth has not been distributed to all segments of the population. In contrast, Grovetown has also seen a decrease in families in the lowest income bracket seems to contradict the poverty rate statistics. It is possible that while household incomes have increased between 1990 and 2000, household sizes have increased at a faster rate – requiring families to earn more money to maintain their standard of living.

INTRODUCTION

Economic development is an ongoing and sustaining process - essential to planning for the future. It represents opportunity for the resident population. Virtually all residents participate in some way in the local economy, whether they produce, sell, or consume goods and services. Continued economic growth and diversification is also important to the revenue base of the City of Grovetown. A local economy that balances residential with non-residential growth; and, can rely on multiple industry sectors for employment will be better equipped to keep pace with current municipal service demands, and also meet long-term maintenance responsibilities.

The purpose of the *Grovetown Comprehensive Plan's* economic development section is to analyze past trends and current conditions in order to assess strengths and weaknesses in the local economy. Using information related to economic base, labor force, and economic development resources, this chapter provides an in-depth look at the economic variables that drive the Grovetown economy.

The principal sources of information in this chapter are the United States Census Bureau, the United States Department of Commerce and the United States Department of Labor. Because Grovetown's economic well-being is tied so closely with the health of the region, this chapter briefly examines the regional economy as a whole. Many of the other data sets within this chapter also compare Grovetown's economic statistics with surrounding jurisdictions. In some instances, data was not available at the municipal level. In these cases, Columbia County has been substituted for the city in order to study applicable topics using the most pertinent alternative measures.

REGIONAL ECONOMIC CONTEXT

As previously discussed within the *Plan*, Grovetown is part of the 5 county Augusta-Aiken Metropolitan Statistical Area (MSA). Additionally, Grovetown is part of the 13 county Augusta-Aiken Economic Area (EA). The Augusta-Aiken EA is established by the United States Commerce Department's Bureau of Economic Analysis and relies on commuting patterns, federal OMB data, newspaper circulation, etc. to determine which rural counties are reliant on the economic health of a given MSA.

Figure 3-A illustrates recent employment by industry trends for the Augusta-Aiken MSA and EA. The trends in both statistical areas are similar - showing the majority of people working in "government and government services." Retail trade and manufacturing are identified as other principal employment sectors.

Trends illustrated by **Figure 3-A** show a significant growth of employment by "other services" accounting for over 8 percent growth in employment within the MSA and over 10 percent growth in employment within the EA between 2001 and 2003. "Other services" refers to individuals engaged in a variety of occupations that are difficult to categorize, such as: equipment and machine repair, religious services, personal care, pet care, laundry, photocopying services, etc. In addition, the Figure shows similar decreases in the number of individuals within the region employed in manufacturing over the 2001-2003 timeframe.

Figure 3-A: Regional Employment by Industry (2001-2003)

	Augusta-Aiken (GA-SC) MSA			Augusta-Aiken (GA-SC) EA		
	2001 Number (#) of Jobs	2003 Number (#) of Jobs	Percent (%) Change 2001-2003	2001 Number (#) of Jobs	2003 Number (#) of Jobs	Percent (%) Change 2001- 2003
Total Employment	271,852	275,121	+1.2%	300,755	302,847	+0.7%
Construction	19,693	19,517	-0.9%	20,994	20,942	-0.2%
Manufacturing	29,419	26,830	-8.8%	36,854	33,053	-10.3%
Wholesale Trade	5,154	5,501	+6.7%	5,473	5,853	+6.9%
Retail Trade	31,426	31,687	+0.8%	34,111	34,530	+1.2%
Transportation & Warehousing	5,196	5,514	+6.1%	5,434	6,118	+12.6%
Information	4,247	3,909	-8.0%	4,451	4,153	-6.7%
Finance & Insurance	6,926	7,263	+4.9%	7,454	7,943	+6.6%
Real Estate & Rental & Leasing	6,859	6,895	+0.5%	7,216	7,202	-0.2%
Administrative & Waste Services	28,707	27,973	-2.6%	29,176	28,265	-3.1%
Educational Services	2,323	2,669	+14.9%	NA	NA	NA
Health Care & Social Assistance	21,911	23,093	+5.4%	NA	NA	NA
Arts, Entertainment & Recreation	4,231	4,206	-0.6%	4,401	4,359	-1.0%
Accommodation & Food Services	16,485	17,861	+8.3%	17,462	18,575	+6.4%
Other Services except Public Administration	14,198	15,343	+8.1%	15,317	16,892	+10.3%
Government & Government Enterprises	55,040	56,008	+1.8%	60,918	61,566	+1.1%

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis, Table CA25N

ECONOMIC BASE AND TRENDS

Employment by Industry

While some of the “employment by industry” numbers for Grovetown’s residents mirror the regional employment statistics in the prior Figure, **Figure 3-B** illustrates a few obvious differences. It is important to note that the data presented in **Figure 3-B** is not from the same source as **Figure 3-A**. **Figure 3-B** relies instead on the U.S. Census for local employment figures because the U.S. Commerce Department does not prepare annual “employment by industry” statistics at the municipal level. As a result, Grovetown’s “employment by industry” statistics are not as recent as the regional

statistics provided by the U.S. Department of Commerce. To minimize discrepancies, **Figure 3-B** has been prepared so that the employment categories are at least similar to those in **Figure 3-A**. Regardless, the variation in sources does not discount the fact that local employment trends can vary greatly throughout a statistical region.

Figure 3-B: Grovetown Employment by Industry (1980-2000)						
	1980	1990	1990 Percent	2000	2000 Percent	Percent (%) Change 1990- 2000
Agriculture, Forestry, Fishing	5	30	2.1%	19	<1%	-36.7%
Construction	63	202	14.1%	203	8.2%	+0.5%
Manufacturing	192	150	10.5%	337	13.7%	+124.7%
Wholesale Trade	8	38	2.7%	30	1.2%	-21.1%
Retail Trade	159	376	26.2%	327	13.3%	-13.0%
Transportation, Warehousing, and Utilities	64	45	3.1%	168	6.8%	+273.3%
Information	NA	NA	NA	104	5.2%	N/A
Finance, Insurance, & Real Estate	40	64	4.5%	127	5.2%	+98.4%
Professional, Management, Administrative	11	44	3.1%	199	8.1%	+352.3%
Educational, Health and Social Services	100	192	13.4%	484	19.7%	+152.1%
Entertainment, Recreation, and Services	36	12	<1%	220	9%	+1733.3%
Other Services	23	125	8.7%	128	5.2%	+2.4%
Public Administration	103	155	10.8%	110	4.5%	-29.0%
Total Employed Civilian Population	804	1,433	NA	2,456	NA	+71.4%

Source: U.S. Census Bureau

Figure 3-B suggests that a regional decline in manufacturing employment is not a trend being shared by Grovetown. Between 1990 and 2000, the number of Grovetown individuals employed in the manufacturing sector grew by more than 100 percent. This growth may be the result of the Horizon South Industrial Park directly north of the municipal limits. During this same period of time retail trade, as an overall percentage of Grovetown employment, decreased from over 26 percent to slightly more than 13 percent of the total labor-force. By 2000, **Figure 3-B** illustrates that employment of Grovetown residents by industry is fairly well-balanced without any single industry sector making up a disproportionate share.

When comparing the largest “employment by industry” sectors of Grovetown with Columbia County and the Augusta-Aiken MSA, solely utilizing the U.S. Census Bureau’s employment classifications, all 3 jurisdictions are consistent. In all 3 jurisdictions, “educational, health and social services” makes up the largest employment sector – followed by manufacturing and retail trade. The similarity results because the U.S. Census Bureau does not maintain a classification for “government and government enterprises.” For example, many of the “government” workers identified by the U.S. Commerce Department in **Figure 3-A** may have occupations such as teacher or social

worker and thus be classified in Census figures within the “educational, health and social services” category.

Employment by Industry Projections

In projecting employment trends, it is important to note that the vast majority of Grovetown workers are actually employed outside the municipal boundaries. Because of this fact, and the fact that Grovetown employment figures make up a small percentage of the overall employment base in the county and region, **Figure 3-C** examines employment projections prepared for Columbia County in the *Columbia County Growth Management Plan*. A review of Columbia County industry projections illustrates in what industry sectors Grovetown residents can expect to be employed.

Figure 3-C: Columbia County Employment by Industry Projections (2005-2025)						
	2005	2010	2015	2020	2025	2005-2025 Increase
Agriculture	348	399	399	494	544	196
Forestry, Fishing, Related Activities	145	167	167	206	227	82
Mining	73	83	83	103	114	41
Utilities	128	147	147	182	200	72
Construction	4549	5218	5214	6450	7114	2565
Manufacturing	3664	4202	4199	5194	5729	2065
Wholesale Trade	851	976	975	1206	1331	480
Retail Trade	5584	6405	6400	7917	8732	3148
Transportation, and Warehousing	621	713	712	881	972	350
Information	499	573	572	708	781	281
Finance and Insurance	1826	2095	2093	2589	2856	1030
Real Estate and Rental and Leasing	2368	2716	2714	3357	3703	1335
Professional and Technical Services	1126	1292	1291	1597	1761	635
Management of Companies and Enterprises	109	125	125	155	170	61
Administrative and Waste Services	2918	3347	3344	4136	4563	1645
Educational Services	950	1090	1089	1347	1486	536
Health Care and Social Assistance	3004	3445	3442	4285	4697	1693
Arts, Entertainment and Recreation	739	847	846	1047	1155	416
Accommodation and Food Services	2654	3044	3042	3763	4151	1496
Other Services except Public Administration	3123	3582	3580	4428	4884	1761
Federal, Civilian	143	164	163	202	223	80
Military	271	311	310	384	423	153
State and Local	4024	4615	4612	5704	6292	2269
Total employed civilian population	39717	45556	45519	56308	62108	22391

Source: Columbia County Growth Management Plan (2005)



Figure 3-C indicates that the County’s industry growth will be led by retail trade and construction – growing by 3148 and 2565 jobs, respectively over the next 20 year period. In contrast to the region as a whole, Columbia County will also see gains in manufacturing employment, gaining almost 2100 jobs. Many of these high wage manufacturing jobs may directly impact Grovetown by being located within the Horizon South Industrial Park.

LABOR FORCE

Labor Force Participation

The number of Grovetown residents participating in the labor force is illustrated in **Figure 3-D**. The increase in labor force participation reflects Grovetown’s rapid population growth beginning in the 1990s. Individuals shown as not participating in the labor force are not classified as unemployed. Such individuals may include children not yet 16 years of age, retirees, stay-at-home spouses or people engaged primarily in volunteer labor.

As a percentage of Grovetown’s overall population, the civilian labor force remained relatively unchanged between 1990 and 2000 – increasing by less than 1 percent to a total of 63.2 percent. The percentage of civilian unemployed in Grovetown remained largely unchanged during this period rising by less than a percentage point. During this time, the total number of Grovetown residents employed by the armed forces also remained largely unchanged; but, as a percentage of the overall population, military employees in Grovetown decreased from 10.4 percent to 6.3 percent. The largest shift in Grovetown labor force participation between 1990 and 2000 was the increase of residents who were not engaged in the labor force – rising from 27.4 to 30.6 percent.

Figure 3-D: Grovetown Labor Force Participation (1990-2000)				
	1990		2000	
	Number of People	Percent	Number of People	Percent
Total People	2,481	NA	4,193	NA
In labor force:	1,802	72.6%	2,911	69.4%
Civilian Labor force	1,545	62.3%	2,648	63.2%
Civilian Employed	1,433	57.8%	2,456	58.6%
Civilian unemployed	112	4.5%	192	4.6%
In Armed Forces	257	10.4%	263	6.3%
Not in labor force	679	27.4%	1,282	30.6%

Source: U.S. Census Bureau, SF3

Labor Force by Occupation

Employment by “occupation” differs from employment by “industry”. Occupation refers to the type of work that one performs for a particular industry sector. For example, a person employed by the manufacturing industry may oversee plant operations and therefore hold a management occupation. In contrast, his or her co-worker may be responsible for preparing the manufacturing plant’s product or seeking customers to buy the product. This individual would obviously then be involved in a production or sales occupation, respectively.



Figure 3-E: Grovetown Civilian Labor Force by Occupation (2000)

Employed civilian population 16 years and over	Number (#)	Percent (%)
Management, professional, and related occupations	503	20.5%
Service occupations	422	17.2%
Sales and office occupations	717	29.2%
Farming, fishing, and forestry occupations	19	0.8%
Construction, extraction, and maintenance occupations	352	14.3%
Production, transportation, and material moving occupations	443	18.0%

U.S. Census Bureau, SF3, Table DP-3

Figure 3-E illustrates that - at 29.2 percent - the majority of Grovetown residents in the civilian labor force in 2000 were in sales and office occupations. The Figure also illustrates that the occupations of Grovetown residents are spread fairly evenly among a variety of occupation classifications. The lack of individuals employed in occupations associated with farming, fishing and forestry occupations is consistent with Grovetown’s employment by industry numbers and reflects the suburban nature of the community.

Labor Force by Place of Work

While the preceding sections of this chapter highlight the industry and occupational sectors in which Grovetown residents are employed, it is important to note that this does not mean that these jobs are located within the municipal limits of Grovetown. **Figure 3-F** illustrates that of the 2648 individuals listed as employed in the civilian labor force in 2000, all worked within the state of Georgia. In contrast, the vast majority of Grovetown workers continue to be employed outside of the municipal limits (referred to in the Figure as “place of residence”) in spite of the increase of Grovetown’s total land area between 1990 and 2000. Between 1990 and 2000, the percentage of Grovetown’s labor force working outside of the municipal limits remained unchanged at approximately 91.8 percent.

Figure 3-F: Grovetown Labor Force by Place of Work, (1990-2000)

Category	1990	2000
Total population	3,596	6,089
Worked in State of residence	1,649	2,648
Worked outside of state of residence	0	0
Worked in place of residence	135	216
Worked outside of place of residence	1,514	2,429

Source: U.S. Census Bureau, SF1

Personal Income

Personal income for Grovetown and Columbia County households rose steadily from 1990 to 2000. **Figure 3-G** takes aggregate U.S. Census household income data from both decades, and divides the total by the number of Grovetown and Columbia County households in order to determine (by percentage) the predominant sources of income generated by community residents. **Figure 3-G** also calculates the change of average household income by type, from 1990 to 2000, in order to determine the rate at which average income increased or decreased throughout the decade. Finally, using the Consumer Price Index, a figure of 32 percent inflation between 1990 and 2000 is



factored into the average household income “rate of change” in order to determine whether overall increases in wages translate into greater consumer buying power.

Figure 3-G: Grovetown, Columbia County: Personal Income by Type (Constant 2000\$)

	Grovetown					Columbia County	
	1990	Percent (%) of total (1990)	2000	Percent (%) of total (2000)	Rate (%) of change (1990-2000)	Percent (%) of total (2000)	Rate (%) of change (1990-2000)
Aggregate wage or salary income for households	25,965,271	76.0%	63,870,400	78.9%	+10.7%	79.0%	+3.8%
Aggregate other types of income for households	501,059	1.5%	2,093,100	2.6%	+87.7%	1.8%	+100.1%
Aggregate self employment income for households	3,464,810	10.1%	6,114,600	7.6%	-20.6%	5.3%	+15.3%
Aggregate interest, dividends, or net rental income	431,269	1.3%	1,880,200	2.3%	+96.4%	5.1%	+31.9%
Aggregate social security income for households	1,038,014	3.0%	2,767,400	3.4%	+20.1%	3.0%	+53.0%
Aggregate public assistance income for households	197,544	0.6%	536,600	1.0%	+22.5%	0.3%	-10.2%
Aggregate retirement income for households	2,586,507	7.6%	3,711,000	4.6%	-35.4%	5.5%	+45.7%
Total Income	34,184,474	NA	80,973,300	NA	+6.6%	NA	+9.2%

*Source: U.S. Census Bureau, SF3 (Some calculations by: CSRA RDC)
 \$ Assumes 32 percent inflation between 1990-2000*

Figure 3-G illustrates that, at roughly 79 percent, both Grovetown and Columbia County households continue to receive a large percentage of their income from wages and salaries. In contrast, a very small portion of Grovetown residents rely on public assistance as a source of household income. The Figure also illustrates that between 1990 and 2000 income in Grovetown earned from “interest, dividends, or net rental income,” and “commissions, bonuses and tips” (referred to in the Figure as: “other types of income”) increased significantly in value – rising by roughly 96 percent and 87 percent respectively. During the same period, the value of social security income in Columbia County increased by almost 70 percent. The most significant decreases between 1990 and 2000 in the value of Grovetown’s income sources are the categories of retirement income and self-employment income – decreasing by approximately 35 and 21 percent. Both of these sources, however, encompass a very small percentage of Grovetown’s overall aggregate income.

Annual Wage by Industry

In order to determine the most recent trends in average wages for Grovetown workers, **Figure 3-H** utilizes statistics from the U.S. Department of Labor. Like many of the data sets compiled by the U.S. Census Bureau, the average wage information compiled by the U.S. Department of Labor can not be obtained at the municipal level. Regardless, because Grovetown is located within Columbia County and, most Grovetown workers work outside the municipal limits, county-level statistics are utilized to provide the most comparable data. In addition, when calculating the rate of change (2001-2004) of average annual salaries within the Figure, an inflation rate of 7 percent (Consumer Price Index) was incorporated. Factoring inflation into the “rate of change” calculation provides a more accurate picture as to whether wage increases have resulted in increased consumer buying power. Decreases in buying power are illustrated in the Figure by industry sectors that show an increase in average annual wage between 2001 and 2004, but show a negative number in the “rate of change.”

Figure 3-H: Columbia County: Estimated Average Annual Wage by Selected Industries (Constant 2004\$)

Industry Sector	2001 Estimated Average Annual Wage	2004 Estimated Average Annual Wage	Rate (%) of Change (2001-2004)
Construction	30,540	30,458	-0.3%
Manufacturing	40,144	40,743	+1.5%
Wholesale Trade	41,246	42,447	+2.9%
Retail Trade	23,475	24,509	+4.4%
Transportation & Warehousing	29,056	29,608	+1.9%
Information	50,679	48,465	-4.4%
Finance & Insurance	31,177	31,342	+0.5%
Real Estate & Rental & Leasing	21,762	24,037	+10.5%
Administrative & Waste Services	18,147	15,928	-12.2%
Educational Services	19,510	19,116	-2.0%
Health Care & Social Assistance	24,110	26,729	+10.9%
Arts, Entertainment & Recreation	15,008	13,402	-10.7%
Accommodation & Food Services	9,567	9,791	+2.3%
Other Services except Public Administration	19,906	19,288	-3.1%

*Source: U.S. Dept. of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages
\$ Assumes 7 percent inflation between 2001-2004*

Figure 3-H illustrates that within Columbia County the greatest rate of change in wages between 2001 and 2004 was in the “health care and social assistance” and “real estate,

rental and leasing” professions with growth rates of over 10 percent each. While jobs in the information industry continue to earn the highest average annual wage at 48,465 dollars a year (2004), wage increases of only 2.3 percent between 2001 and 2004 did not keep pace with inflation. This trend in Columbia County of wages increasing at a rate slower than inflation is shared by 3 other industry sectors.

ECONOMIC RESOURCES

State Resources

Georgia Department of Economic Development

The Georgia Department of Economic Development (GDEcD) is the principal state-level agency engaged in business, trade partnership and tourist recruitment. The agency is led by an experienced board which includes executives from many of the state’s leading employers. GDEcD works in collaboration with multiple state and federal programs, and maintains a worldwide marketing campaign targeting more than 15,000 companies with the potential to expand or relocate in Georgia. Examples of recent recruitment successes include (From most recent):

- *Latexco Manufacturing Facility (Lavonia, GA):* 40 new jobs, \$10 million investment.
- *Kia Assembly Plant (West Point, GA):* 2800 jobs (+2600 supplier jobs), \$1.2 billion investment.
- *Target Import Warehouse (Savannah, GA):* 200+ jobs.
- *Sara Lee Distribution Center (Macon, GA):* 140 jobs, \$24 million investment.

Within the CSRA region, GDEcD has assisted in facilitating the location of Meltblown Technologies to Sandersville resulting in up to 100 jobs and \$1.7 million of investment to Washington County. Even closer to Grovetown, GDEcD’s assistance helped Columbia County to attract a 2002 \$35 million expansion of Quebecor World Inc., the world’s largest commercial printer.

Regional Resources

Central Savannah River Area Regional Development Center

The Central Savannah River Area Regional Development Center (CSRA RDC) is available to provide a variety of economic development activities to its 13 county and 41 municipal member jurisdictions. Designated the region’s “economic development district” by the U.S. Department of Commerce’s Economic Development Administration, the CSRA RDC’s development activities include assistance with:

- Site selection and initial consultation; and,
- Prospect development initiatives; and,
- Project management; and,
- Business retention activities.

The CSRA RDC's Local Government Services staff is available to assist CSRA communities by preparing, developing and administering a variety of state and federal grants tailored to meet each jurisdiction's needs. The CSRA RDC Planning staff can also conduct various economic development studies and provide data collection services. The CSRA RDC provides mapping services to local communities which can be utilized to assist in economic development efforts initiated by local public or private sector organizations.

The CSRA Business Lending Corporation is an additional component of the CSRA RDC. The Business Lending Corporation is a non-profit corporation licensed to deliver the SBA-504 program by the U.S. Small Business Administration. The SBA-504 loans administered by the Business Lending Corporation provide businesses with low, fixed rates to finance a portion of business start-up or improvement costs. A variety of other similar loan programs are also administered by the Business Lending Corporation in an effort to increase and improve business investment activity throughout the CSRA region and beyond to the rest of Georgia and portions of South Carolina.

Georgia Power, Economic Development Division

Georgia Power's Economic Development Division is charged with the responsibility of attracting businesses to the state. The Division is engaged in marketing the state of Georgia to potential investors and maintaining a database of sites appropriate for business investment. Georgia Power also serves as a consultant to local communities by providing technical advice on how to attract business investment. In addition to these services, Georgia Power's Community Development Department acts as a clearinghouse for communities to identify funding opportunities to make substantive and aesthetic improvements to local infrastructure.

Local Resources

Columbia County Chamber of Commerce

The Columbia County Chamber of Commerce provides a variety of services to help enhance the business environment of Columbia County's existing and prospective businesses and industries. The Chamber of Commerce actively markets business opportunity in the county and facilitates the efforts of a variety of business interests to promote and maintain the growth of the local economy. Recent Chamber efforts are leading to the creation of a Columbia County Convention and Visitor's Bureau which provides a more focused marketing tool for local cultural and natural resources.

Development Authority of Columbia County

The Development Authority of Columbia County is the principal economic development agency of Columbia County and its municipalities. The organization's primary mission is to recruit new businesses to Columbia County and to provide the necessary assistance to existing businesses in order to retain them, assist with relocation or expand. Working in cooperation with the Columbia County Board of Commissioners and Chamber of Commerce, the Development Authority is able to market local site selection and expansion opportunities to existing or prospective Columbia County businesses.

Education and Training

Augusta Technical College

The mission of Augusta Technical College is to promote the educational, economic, and community development of the Central Savannah River Area. The college provides training in multiple medical-related and technology fields. Campuses are located in Richmond, Burke, and McDuffie counties – with a new location planned for Columbia County. Among the many personal and professional growth opportunities offered by Augusta Technical College, are 2 initiatives designed specifically to boost the state of Georgia’s economic development potential: the Center for Advanced Technology (CADTEC) and Quick Start.

The Center for Advanced Technology (CADTEC) at Augusta Technical College was founded to provide manufacturers in the CSRA region with access to information on the latest business technologies and training opportunities necessary to ensure long-range competitiveness in the world market. CADTEC offers multiple training and consultation opportunities to business and industry that are designed to showcase emerging industrial technologies and innovations. CADTEC also offers its clients assessments designed to establish objectives, criteria and training necessary to regain or maintain their competitive edges in the market.

Augusta Technical College also serves as a provider of the Georgia Department of Technical and Adult Education's Quick Start training program. Quick Start provides job-specific training for Georgians to enter the workforce in new and expanding industries. Through the Quick Start program, employers can work with Certified Economic Development Trainers provided by local technical colleges to coordinate project management and employee training to ensure an ample supply of specialized labor. The state-funded program is one of the many incentive tools that the state can provide to encourage businesses to locate in Georgia. All training services are available at no cost to client companies.

ASSESSMENT**REGIONAL ECONOMIC CONTEXT**

The Augusta-Aiken MSA and EA show continued growth of employment opportunities and overall population during the early part of the decade. This chapter illustrates that much of the regional employment growth is based in service and retail sector industries. Growth in these industry sectors is often a reaction to population growth in an area – rather than serving as the source of such growth. While such a trend is a natural product of overall population growth, it will be important for the region to closely monitor service sector growth to ensure that it reflects a balance between higher-paying administrative and professional services and lower-paying service sector jobs (ex. fast-food, grocery stores, etc.)

The Augusta-Aiken area has also shown overall decreases in the number of individuals employed in high-paying industry sectors such as manufacturing and information – declining between 2001 and 2003 by 8.8 and 8.0 percent, respectively. Declining employment in high-paying industry sectors can lead to a decline in disposable income by household – and a tax base that is growing at a slower rate than population – placing a greater burden on services. In addition, the small overall employment number within the MSA in information industry sectors (3,909 in 2003) suggests that the region may not be competitive in the growing technology sector. A recognition of these regional economic limitations, combined by Grovetown’s proximity to the Horizon South Industrial Park, place it in a competitive position for recruiting businesses in higher-paying industry sectors.

ECONOMIC BASE AND TRENDS**Employment by Industry**

Grovetown has benefited by the fact that it is located adjacent to one of the few areas of unincorporated Columbia County which is designated for industry. While region-wide manufacturing employment has declined – Grovetown’s has increased. In addition, during 2000 more Grovetown residents (19.7 percent) were employed in the “education, health and social service” industry sector than any other. As demonstrated in Figure 3-H, the “health and social services” portions of this industry sector had the highest rate of average annual wage increase between 2001 and 2003. Grovetown can capture a greater number of people employed by these industry sectors, and keep more of them employed within the municipal limits, by identifying areas of the city that can be reserved for manufacturing and office land uses.



Although located outside the Grovetown municipal limits, Grovetown residents continue to benefit from direct access to high paying manufacturing jobs.

Employment by Industry Projections

Continued growth of the construction and retail trade sectors throughout Columbia County is the natural result of a county-wide population boom. Grovetown should continue to gain a share of these jobs as the result of new projected residential development on the outskirts of the city. As a whole, many of these jobs are fairly low-paying and will occur naturally as the population in the area continues to grow. It is important, however, for the City to actively recruit retail establishments to sites within the municipal limits – as opposed to the outskirts. In the same way it currently courts residential development, Grovetown should consider ways to utilize data on such factors as building permits, available land, population projections, community facilities, etc. to present to real estate development firms in an effort to ensure that new service industries and office development is targeted to specific areas within the municipal limits.

Columbia County is also projected to experience increases in employment in the manufacturing industry. Strategically located adjacent to the Horizon South Industrial Park, Grovetown should focus its business recruitment efforts on additional high-wage manufacturing jobs. It is possible for the City to identify additional land that may be appropriate for future manufacturing uses and work with surrounding jurisdictions and economic development agencies to build on the apparent success of the existing industrial park.

LABOR FORCE

Labor Force Participation

Labor force participation by Grovetown's residents remains consistently high. Regardless of whether residents work within the municipal limits or not, maintaining low unemployment levels in Grovetown is dependant on identifying and enhancing industry clusters, and acknowledging weaknesses in the regional economy – rather than just the municipal economy. Data presented in this chapter suggests that likely industry clusters in the regional economy are medical and educational institutions. A weakness may be the lack of high-technology and information industries. Grovetown should continue to actively participate with adjacent jurisdictions and economic development organizations to enhance regional employment opportunities.

Labor Force by Occupation

Grovetown's population by occupation appears to be well-balanced. Retaining such balance can be accommodated by continuing to provide for a variety of housing options and identifying areas within the city where non-residential land uses and growth should occur.

Labor Force by Place of Work

The vast majority of Grovetown residents continue to work outside of the municipal limits. While Grovetown's population and overall land area has increased significantly between 1990 and 2005, the change has not resulted in a noticeable increase of non-



New commercial spaces on Grovetown's major thoroughfares may accommodate more office and retail development within the municipal limits.

residential property. Because Grovetown remains located on the periphery of Columbia County's suburban expansion, existing commercial and office property has not yet been fully developed. Assuming Columbia County's suburban expansion continues beyond Grovetown, increases in service sector and retail employment opportunities within the municipal limits will naturally increase to provide convenience to surrounding residents – and more revenue to the City.

Grovetown's future development scenario proposed in Chapter 8 accounts for the need to accommodate non-residential land uses by designating areas where future office and retail uses are preferred.

Personal Income

Self-employment income is decreasing as an overall percentage of community-wide personal income. This decrease can translate into a smaller proportion of the overall population that are generating employment opportunities within the municipal limits – possibly via home-occupation businesses or via businesses that are registered to receive mail at a residence. The corresponding increases in wage and salary, or retirement income as a percentage of community-wide personal income indicates that a significant portion of Grovetown's new residents are not working within the city. As previously suggested, Grovetown should focus on capturing a portion of these largely service related jobs that are currently being exported outside of the community.

Annual Wage by Industry

Wage increases by industry vary greatly when compared to inflation. Most of the service-based and manufacturing industries that Grovetown should focus on recruiting have seen wage increases at a faster rate than inflation.

ECONOMIC RESOURCES

Grovetown will continue to benefit from the rapid growth and development that is occurring throughout Columbia County. By actively working with regional economic development agencies, Grovetown has the ability to develop a diverse economy based on multiple industry sectors and internal employment opportunities.

INTRODUCTION

Analysis of the type, condition and cost of a community's housing stock are just a few of the factors that help determine whether community development trends are meeting the needs of today's population; and, promoting long-term sustainable growth. In a city such as Grovetown – where a large proportion of the community's land area is designated for residential development – it is especially important to determine whether such development offers a variety of housing choices for a diverse population. Similar to a local economy that is not dependant on a single industry, communities that offer multiple housing options are better prepared to meet future demographic and economic shifts.

As a result, the *Grovetown Comprehensive Plan's* housing component is not only intended to determine whether adequate housing stock exists within Grovetown to serve a growing population; but, to determine whether the available housing stock is suitable to meet the anticipated needs of Grovetown's new residents. In analyzing housing suitability, it is necessary to consider whether Grovetown offers varying types of dwelling units, and units that are financially accessible to households in multiple income classes – providing more opportunity for people to work and live within the city.

The principal sources of information in this chapter are the United States Census Bureau and the City of Grovetown Planning and Development Department. Most of the figures within this chapter compare Grovetown's housing trends with surrounding Columbia County and adjacent Augusta-Richmond County. In some instances, data is not available at the municipal level. In these instances, Columbia County has been substituted for the city in order to study the most pertinent alternative measure.

HOUSING TYPES AND MIX

Types of Housing Units

Population increases in Grovetown that began in the mid-1990s have been met by a corresponding increase in the total number of dwelling units within the municipal limits. The 71.8 percent increase in total housing units between 1980 and 2000 – as shown in **Figure 4-A** – illustrates a housing growth rate that is similar to overall population growth within the city. The Figure also shows that the vast majority of housing growth is in single-family detached dwellings, which now account for the largest percentage of dwelling units in Grovetown. During this same period, mobile homes continued to account for a large share of Grovetown's housing stock – increasing by 40.3 percent to a total of 968 units. Taken together, single-family dwelling units (including single-family attached, single-family detached and mobile homes) accounted for almost 95 percent of Grovetown's housing stock by 2000. In contrast, the Figure shows that there was very little development of multi-family housing between 1980 and 2000.

Figure 4-A: Grovetown, Type of Housing Units

	1980	1980 Percent	1990	1990 Percent	2000	2000 Percent	Percent (%) Change 1980-2000
Single Units (detached)	621	45.1%	598	39.9%	1,202	50.8	+5.7%
Single Units (attached)	7	0.5%	4	0.3%	63	2.7%	+2.2%
Double Units	0	0%	24	1.6%	24	1%	+1%
3 to 9 Units	54	3.9%	73	4.9%	68	2.9%	-1%
10 to 19 Units	6	0.4%	67	4.5%	34	1.4%	+1%
20 to 49 Units	0	0%	0	0%	0	0%	0
50 or more Units	0	0%	0	0%	9	0.4%	+0.4%
Mobile Home or Trailer	690	50.1%	721	48.1%	968	40.9%	-9.2%
All Other	0	0%	12	0.8%	0	0%	0%
Total Housing Units	1,378	N/A	1,499	N/A	2,368	N/A	+71.8%

Source: U.S. Census Bureau (Some calculations by: CSRA RDC)

Figure 4-B shows that Grovetown’s housing stock is beginning to mirror that of surrounding Columbia County – driven primarily by the development of “stick-built” single-family dwellings. While it is apparent that mobile homes still make up a much higher percentage of Grovetown’s housing stock than in Columbia County and Augusta-Richmond County, over 2/3 of these units already existed in 1990. Over the last 2 decades, increases in “stick-built” single-family dwelling units have fueled the housing growth in both Grovetown and Columbia County. In fact, by 2000 the cumulative total of single-family housing types (including single-family attached, single-family detached and mobile homes) as a percentage of overall housing stock is virtually identical between both communities.

Figure 4-B: Grovetown, Columbia County, Augusta-Richmond County: Types of Housing (2000)

	Grovetown	Columbia County	Augusta-Richmond County
Single-Family Detached	50.8%	77.3%	61.4%
Single-Family Attached	2.7%	2.5%	3.8%
Duplex	1.0%	1.7%	3.4%
Multi-Family	4.7%	4.9%	22.7%
Manufactured Housing	40.9%	13.6%	8.7%

Source: U.S. Census Bureau, SF3, 2000

Differences between Grovetown and Columbia County with Augusta-Richmond County are partially the result of the latter having developed during a much earlier time-period in a more traditional urban pattern. With almost a quarter of its overall housing units being multi-family, many Augusta-Richmond County neighborhoods exhibit more dense development patterns.

Household Type

While household type was previously discussed in Chapter 2 (See **Figure 2-F**), it is necessary to revisit this topic in greater detail in order to compare the types of households that make-up Grovetown’s population with available housing stock. **Figure 4-C** expands upon **Figure 2-F** by breaking down family households and non-family households by size.

Figure 4-C: Grovetown, Columbia County, Augusta-Richmond County: Household Type (2000)

Household Type	Grovetown (#)	Grovetown (%)	Columbia County (%)	Augusta-Richmond County (%)
Total Households	2,106	N/A	N/A	N/A
Family Households	1,627	77%	82%	68%
2-person	459	22%	29%	26%
3-person	456	22%	21%	18%
4-person	422	20%	20%	13%
5-person	176	8%	8%	7%
6 or more people	114	5%	3%	3%
Non-Family Households	479	23%	18%	32%
1-person	371	18%	15%	28%
2-person	91	4%	2%	4%
3-person	13	<1%	<1%	<1%
4-person	4	<1%	0%	<1%
5-person	0	0%	0%	<1%
6 or more people	0	0%	0%	<1%

Source: U.S. Census Bureau, SF3, Table P14 (Calculations by: CSRA RDC)

The high percentage of family households in Grovetown and Columbia County is consistent with the high percentage of single-family homes in each community. In Grovetown, roughly 3/4 of family households include more than 2 people. It is likely that many of these households include children - with the parents being attracted to detached single-family units as opposed to multi-family housing. With 32 percent of its total population living in a non-family household, Augusta-Richmond County’s household composition tends to reflect the greater availability of multi-family housing units illustrated in **Figure 4-B**. Multi-family development in Augusta-Richmond County can be attributed to not only the historic development pattern, but also to the fact that the community remains home to the majority of the metropolitan area’s institutional uses such as colleges and hospitals.

In contrast to the low overall percentage of multi-family units within Grovetown’s boundaries (less than 5 percent of total dwelling units), 23 percent of the city’s households are characterized as “non-family.” Because there is a disparity between the

number of non-family households and multi-family dwelling units, many of Grovetown’s non-family households are probably meeting their housing needs by residing in the community’s many manufactured housing units or single-family homes.

CONDITION AND OCCUPANCY

Age of Housing

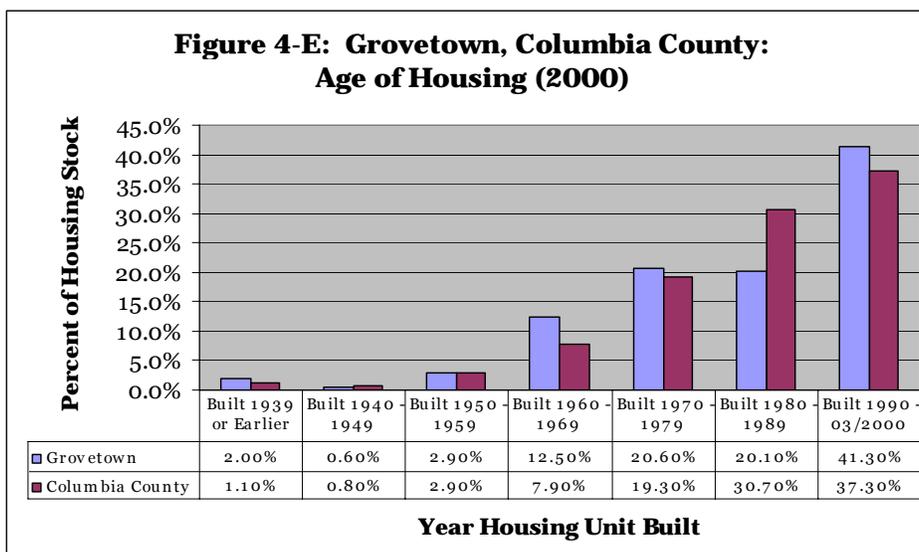
Figure 4-D provides data on the age of housing units in Grovetown. The city’s recent and rapid growth is evident when looking at the number of housing units built between 1995 and March of 2000. In less than a 5 year period, Grovetown increased its overall housing supply by more than 25 percent. Over 40 percent of Grovetown’s housing units have been built since 1990.

Figure 4-D: Grovetown Age of Housing (1990-2000)				
	1990		2000	
	Number (#) of Units	Percent (%) of Units	Number (#) of Units	Percent (%) of Units
Built 1995 – March, 2000	NA	NA	647	27.3%
Built 1990 - 1994	NA	NA	331	14.0%
Built 1989 or Earlier*	1438	100%	1390	58.7%
Built 1980-1989*	462	32.1%	477	20.1%
Built 1970 - 1979	583	40.5%	487	20.6%
Built 1960 - 1969	178	12.4%	295	12.5%
Built 1950 - 1959	100	7.0%	69	2.9%
Built 1940 - 1949	13	0.9%	14	0.6%
Built 1939 or Earlier	102	7.1%	48	2.0%

Source: U.S. Census Bureau, SF3, 2000; STF3, 1990
** Note: STF3 (1990) data includes only housing units built through 1988*

Figure 4-D also suggests that there are very few historic homes existing within Grovetown. In 1990, the city contained an inventory of just over 100 housing units built prior to 1940 – roughly 7 percent of the total housing stock. The small 1990 number is not necessarily unexpected – the area had remained fairly rural and sparsely populated prior to World War II. By 2000 however, only 48 homes remained that were constructed prior to 1940 – accounting for only 2 percent of the total housing stock.

Figure 4-E again illustrates a parallel between the growth and development patterns of Grovetown and Columbia County. Except for units constructed in Columbia County in the 1980s, the city and county’s break-down of housing stock is very similar.



Due largely to the fact that much of the city’s housing stock is fairly new, **Figure 4-F** shows that there are very few housing units in Grovetown that lack adequate plumbing or kitchen facilities. Small improvements in both categories between 1990 and 2000 may be the result of older manufactured housing units and abandoned homes being removed from the housing supply.

Figure 4-F: Grovetown Housing Conditions (2000)

	1990	2000
Complete Plumbing Facilities	1,470	2,337
Percent (%) with Complete Plumbing Facilities	98%	99%
Complete Kitchen Facilities	1,470	2,346
Percent (%) with Complete Kitchen Facilities	98.1%	99%
Total Housing Units	1,499	2,368

Source: U.S. Census Bureau, SF3, 2000

Occupancy Characteristics

Data provided in **Figure 4-G** shows that Grovetown (at 35.9 percent) has a higher percentage of rental housing units than Columbia County or the state of Georgia. In spite of this fact, a majority of homes within Grovetown were owner-occupied by 2000. Grovetown’s lower overall owner-occupancy rates can be attributed to the construction

Figure 4-G: Grovetown, Columbia County, State of Georgia: Occupancy Characteristics of Housing Units

	Grovetown				Columbia County		State of Georgia	
	1990 Number (#) of Housing Units	1990 Percent (%) of Total Units	2000 Number (#) of Housing Units	2000 Percent (%) of Total Units	2000 Number (#) of Housing Units	2000 Percent (%) of Total Units	2000 Number (#) of Housing Units	2000 Percent (%) of Total Units
Vacant	200	13.6%	252	10.6%	2,201	6.6%	275,368	8.4%
Owner Occupied	563	38.3%	1,265	53.4%	25,544	76.7%	2,029,293	61.8%
Renter Occupied	707	48.1%	851	35.9%	5,576	16.7%	977,076	29.8%

Source: U.S. Census Bureau, SF3, 2000, Table DP-4; STF3, 1990



of housing units that are more affordable than other portions of Columbia County; and, to the continued demand for “off-base” housing by soldiers stationed at Fort Gordon. Regardless, Grovetown’s growth is obviously attracting a greater number of residents who intend to stay and invest in the community of the long-term. The total number of owner-occupied units in Grovetown grew between 1990 and 2000 by over 124 percent.

	Grovetown	Columbia County	State of Georgia
Owner-Occupied Units	5.2%	2.9%	1.9%
Rental Units	15.8%	9.1%	8.2%

Source: U.S. Census Bureau, SF 1, Table DP 1

Figure 4-H shows that the vacancy rate of rental units in Grovetown is significantly higher than vacancy in housing units that are for sale only. Grovetown exhibits a higher vacancy rate on housing units for sale than Columbia County; but, some of this may be attributed to the rapid pace of construction.

The vacancy rates presented in **Figure 4-H** have not seemed to affect the demand for new housing in the city. Between 2000 and 2005, 1195 new residential building permits were issued – boosting the number of housing units in 2000 by an additional 50.5 percent to a total of 3563 units. Based on additional lots platted in 2004 and 2005, a minimum of 900 additional dwelling units could be permitted in the near future.

COST OF HOUSING

Between 1990 and 2000, the median property value in Grovetown increased by almost 70 percent. **Figure 4-I** shows that median property values in Grovetown have now surpassed 85,600 dollars. While this number still lags behind Columbia County and the state of Georgia, Grovetown’s median property value combined with continual increases in building permits and platted residential lots, shows that the community continues to gain in popularity – and that the quality of new units continues to increase.

		1990 (\$)	2000(\$)	Percent (%) Change 1990-2000
Grovetown	Median Property Value	50,500	85,600	+69.5%
	Median Rent	362	421	+12.3%
Columbia County	Median Property Value	83,200	118,000	+41.8%
	Median Rent	442	620	+40.3%
Augusta-Richmond County	Median Property Value	47,700	76,800	+61%
	Median Rent	300	506	+68.6%
State of Georgia	Median Property Value	70,700	111,200	+57.3%
	Median Rent	433	613	+41.6%

Source: U.S. Census Bureau, SF3 (2000)

Figure 4-I does show that Grovetown’s median rents are increasing at a much slower rate than Columbia County and Augusta-Richmond County. Between 1990 and 2000, Grovetown’s median rent increased by only 12.3 percent – far below the rate of inflation over the same period. In contrast, increases in median rents in Columbia County and Augusta-Richmond County (40.3 and 68.6 percent, respectively) far exceeded those within Grovetown. When considering Grovetown’s lower median rents with the higher rental vacancy rates illustrated in **Figure 4-H**, it may be possible that the city’s rental housing stock is aging and not being replaced at rates similar to Columbia County and Augusta-Richmond County.

COST-BURDENED HOUSEHOLDS

Figure 4-J compares the total number of cost-burdened households in Grovetown with those in Columbia County, Augusta-Richmond County and the state of Georgia. A “cost-burdened” household refers to those households that spend 30 percent or more of their annual income on housing related expenses. There is a distinct difference between a household that is cost-burdened and one that is in poverty. There are cost-burdened households across every income class – often times categorized as such because they may be living above their means either as a result of their own choices or, from limited housing options. Another reason that households may be living in a cost-burdened situation is that housing costs in the community may have increased at a dramatically higher rate than family income.

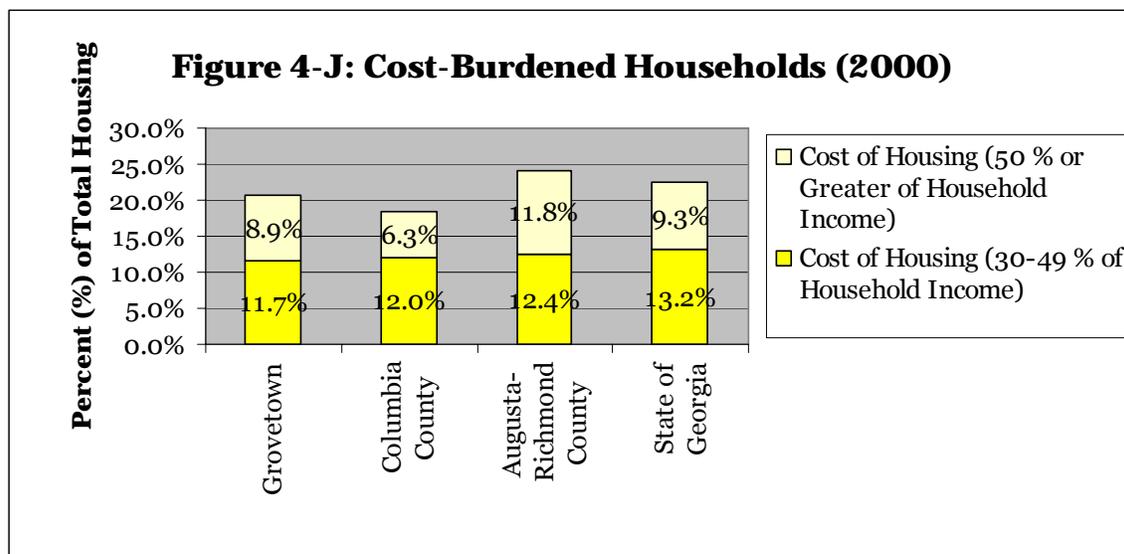


Figure 4-J shows that just over 20 percent of Grovetown households are living in a cost-burdened condition – with a little less than half of this number (8.9 percent) classified as “severely cost-burdened” – spending more than 50 percent of their annual income on housing related costs. Grovetown’s current level of cost-burdened households is fairly consistent with the other communities highlighted in the Figure.

The percentage of cost-burdened households in Grovetown, spending between 30 and 49 percent of their annual incomes on housing, more than doubled between 1990 and 2000

(from 5.5 to 11.7 percent). The 1990 Census did not, however, calculate the percentage of severely cost burdened households – so there is no number with which to compare the 8.9 percent of severely cost-burdened households identified by the 2000 Census. Regardless, it is apparent the total number of cost-burdened households in the community has risen in Grovetown over time.

Figure 4-K compares the number of affordable housing units available to Columbia County residents based on varying levels of median household income. The Figure is based on Columbia County data as opposed to Grovetown because the housing supply data provided by the U.S. Department of Housing and Urban Development is not available at the municipal level. Regardless, the numbers presented in the Figure take into account both unincorporated and incorporated portions of the county. The Figure also examines whether the available affordable housing stock is safe and sufficient to meet occupants’ needs or, exhibits problems ranging from inadequate facilities to inadequate size.

Figure 4-K: Columbia County, Supply of Affordable Housing Units (2000)

	Rental Supply	Owned Supply	Total Supply	Percent of Housing Stock	Households	Percent of Total Households	Total Households with Housing Problems**	Ratio of Affordable Housing Supply to Households with Housing Problems
MFI 30*	863	0	863	2.6%	1713	5.5%	1105	1/1.3
MFI 50*	1436	4361	5797	17.4%	6087	19.6%	1161	5/1
MFI 80*	2644	7749	10393	31.2%	11594	37.3%	1739	6/1
MFI 100*	1107	14204	15311	46.0%	15382	49.3%	2686	5.7/1

Source: U.S. Department of Housing and Urban Development, Comprehensive Housing Affordability Strategy, 2000; U.S. Census Bureau, SF3 (Some Calculations by CSRA RDC)
**MFI30 means housing that is affordable for families earning 30 percent of median family income. MFI 50 means housing that is affordable for families earning 50 percent of median family income. Etc.*
***Households with a housing problem refers to households that are cost-burdened, and/or living in units that are overcrowded, and/or living in units that lack adequate plumbing or kitchen facilities.*

Figure 4-K suggests that by 2000, the affordable housing supply in Columbia County for income classes earning 100 percent of median family income or less was close to meeting local demand. The only exception was for households earning less than 30 percent of median household income. For this income group, there are roughly twice as many households as there is available housing stock. As a result, the majority of households within this income group are living in a unit with 1 or more problems. In contrast, households earning between 50 and 100 percent of median income, are far less likely to be required to live in a dwelling unit with 1 or more housing problems. It is important to note that the Figure does not specify whether existing units are located in close proximity to Grovetown or whether the amount of affordable housing is increasing or decreasing in the community.

SPECIAL HOUSING NEEDS

Specific data sets on the number and percent of Grovetown residents requiring special housing accommodations is not readily available. The Georgia Department of Community Affairs has, however, identified the following information in regard to “special needs” populations in Columbia County:

- *AIDS Cases (1981-2000):* 142
- *Domestic Violence Victims:* 607 police actions in response to domestic violence reports.
- *Elderly Population – Aged 62+(2000):* 8863 (9.9% of population)
- *Disabled – any mental or physical disability(1990):* (19.6% of population)
- *Substance Abuse Treatment (2001):* 5307 (5.9% of population)

Information on migrant/seasonal workers within Columbia County was unavailable. There are currently no social service organizations based within Grovetown that provide for the housing needs of any of the populations identified within this section.

JOBS-HOUSING BALANCE

Chapter 3 illustrates that the majority of Grovetown residents commute outside of the city boundaries to work. Much of the out-migration of labor from Grovetown can be attributed to the fact that much of the city’s housing stock and residents are recent arrivals with established jobs in other parts of the metropolitan area. All trends suggest that the housing stock and population within the city will continue to increase at a rapid rate. As growth continues to envelope Grovetown, it is likely that some retail and office development will locate within the municipal limits to serve the city’s residents – thereby increasing the percentage of residents who may work within the community.

In addition to relocating jobs to areas within the city, it is necessary to examine whether the jobs that Grovetown residents will work are sufficient to allow them to remain within the community in the long-term.

Figure 4-L compares the growth of Grovetown housing costs with income growth. The Figure confirms information provided in this and prior chapters – that housing value and incomes are rising. When factoring inflation, the Figure illustrates that housing costs are rising at a steeper rate than incomes. Fortunately, the Figure does not show proportional increases in poverty rate and cost-burdened households.

Figure 4-L: Grovetown Housing/Income Comparison: Rate of Change (1990-2000)	
Category	Percent (%) Change 1990-2000
Median Property Value	+69.5%
Median Rent	+12.3%
Cost-Burdened Households (30 % - 49% Only)	+6.2%
Families Below the Poverty Level	+0.3%
Average Household Income\$	+6.6%
Median Household Income\$	+22.5%
Average Wage Per Job*\$	+3.9%
*Augusta-Aiken (GA-SC) MSA \$: Adjusted for Inflation	



ASSESSMENT

HOUSING TYPES AND MIX

Types of Housing Units/Household Type

As with the unincorporated portions of Columbia County, Grovetown's housing growth is focused primarily on single-family detached dwellings – the total number of which increased by over 100 percent between 1990 and 2000. A relatively low vacancy rate, combined with recent increases in the issuance of residential building permits, and preliminary and final subdivision plat approvals suggest that demand for these units remains high. Some recently approved developments will also accommodate duplexes and townhouses – suggesting that there may be an increasing market for slightly denser development.

The type of housing stock available in Grovetown appears to be meeting the needs of family households which increased as an overall percentage of total households between 1990 and 2000. Simply because the rate of residential construction has far outpaced the



Low-density single-family subdivisions characterize the vast majority of Grovetown's growth.

combined rate of increase in both family and non-family households, it is also reasonable to assume that the availability of housing stock is at least partially meeting the needs of non-family households – although much of this need may be being met by an increased number of manufactured housing units in the city.

While there appears to be an adequate number of dwelling units available for Grovetown residents, a

visual survey of the city illustrates that at least much of the manufactured housing stock within municipal limits is in poor condition. There are a number of large manufactured housing park tracts within the original city limits that appear to be prime candidates for redevelopment. Redevelopment of some manufactured housing parks into higher-density and/or mixed use development may improve the overall quality of the city's available housing stock by replacing deficient low-density dwelling units with safe, clean and affordable townhouses, duplexes and/or multi-family housing. Focusing these activities in the central portion of Grovetown may help to promote development of a more defined town center while not inhibiting the city's preferred single-family residential development pattern on the outskirts of the city. Targeted replacement of deficient low-density housing units with higher density development also provides the city with greater diversity in housing stock.

CONDITION AND OCCUPANCY

Age of Housing/Occupancy Characteristics

The vacancy rate of dwelling units in Grovetown in 2000 was slightly higher than unincorporated Columbia County and the state of Georgia. A steadily increasing pace of residential construction in Grovetown since that time however, suggests that there is not an oversupply of housing in the city. The data provided within this chapter does suggest that the pace of construction of single-family dwellings is similar to the rate of increase of owner-occupied housing units between 1990 and 2000. In contrast, there appears to be similarity in the total number of multi-family units and manufactured housing, with the total number of vacant and renter occupied housing units. This information supports the theory that the slightly higher rates of vacancy found in Grovetown (particularly in rental units) versus Columbia County and Augusta-Richmond County may be related to the aging supply of manufactured housing units. As previously suggested, targeted replacement of these manufactured housing units may help Grovetown diversify its housing stock while providing affordable housing choices to those individuals who may eventually provide labor for an anticipated increase in service related jobs within the city.

Replacement of existing housing should be tempered with attempts to retain at least some of the few historic residences remaining in the city. To complement or encourage future investment in historic homes, targeted redevelopment in the central portion of Grovetown should still allow for areas promoting new single-family residential development that complements these historic resources.

COST OF HOUSING

The rapid increase in median property value in Grovetown is the direct result of the construction of new “stick-built” single-family homes that can retain greater value than most pre-existing manufactured housing. In contrast, the suppressed growth in median rents further suggests that it is the limited supply of multi-family units combined with a large supply of deficient manufactured housing stock that results in a high rental vacancy rate – as opposed to unreasonably high rents. Significantly higher rents and lower rental vacancy rates in Columbia



Rents may be suppressed in Grovetown due to the existence of deteriorating housing stock.

County and Augusta-Richmond County suggest that there is a market for new rental housing stock in Grovetown – even if accompanied by higher rents.

COST-BURDENED HOUSEHOLDS

The percentage of cost-burdened households in Grovetown is similar to Columbia County, Augusta-Richmond County and the state of Georgia. While the provision of a more diverse housing supply may result in greater affordable housing choices in Grovetown, it can not guarantee a significant decrease in the percentage of cost-burdened households in the community. Many households, regardless of income level, find themselves in a cost-burdened situation as a result of their own choices. The number of cost-burdened households in Grovetown, in relation to the other communities addressed in **Figure 4-K**, should not affect current housing development trends.

In contrast, Columbia County data provided in **Figure 4-L** again supports the suggestion that Grovetown should consider targeted redevelopment in the central portion of the city to at least partially provide for affordable housing options. Many of the housing problems referenced in the Figure may be directly associated with deteriorated units within the municipal limits.

SPECIAL HOUSING NEEDS

There appears to be no significant population segment within the city of Grovetown that exhibits any special housing needs.

JOBS-HOUSING BALANCE

New housing in Grovetown is plentiful – particularly for those who are searching for units in which to be owner-occupants. Employment opportunities within the city for Grovetown’s new residents are not plentiful – resulting in the export of jobs. Naturally, employment opportunities, particularly within the service sector, are expected to increase as suburban development expands beyond the city toward Harlem and McDuffie County. While many of these service sector jobs will provide professional opportunities for wealthier residents of the city, there should also be a large number of supporting lower-wage service sector jobs as well. These anticipated jobs will be much easier to fill if the city promotes the development of housing stock that is accessible to a much wider cross-section of income levels.

INTRODUCTION

As Grovetown prospers, community leaders understand the need to mitigate the impacts of development on the natural landscape. Likewise, there is an acknowledgement that growth can incorporate the preservation of key historic properties and other cultural amenities. The natural and cultural resources element examines a variety of topics including: groundwater recharge areas, water supply watersheds and wetlands; soils, prime agricultural or forest land; scenic views or sites; historic structures and properties, archeological resources; etc. By identifying such resources, the community can consider environmental standards and targeted preservation to ensure that local growth does not compromise the health of regional water systems, air, and habitat diversity.

The purpose of this section is to inventory those natural resources that should be protected in order to promote the long-term health and well-being of Grovetown's residents; and, to inventory the city's cultural assets that enhance residents' quality of life and provide Grovetown with its own unique identity. This section also considers how new development will affect these resources and recommend ways to mitigate impacts through resource protection. The principal sources of information in this chapter are the Georgia Department of Natural Resources, the United States Department of Agriculture, the United States Fish and Wildlife Service and the dedicated volunteer staff of the Grovetown Museum.

Grovetown straddles 2 geological regions – the Piedmont and the Coastal Plain. These regions are separated by the “fall line,” a geological boundary running parallel with the Appalachian Mountains from Alabama to New York and historically representing the end of navigatable portions of rivers emptying into the Atlantic Ocean. As of 2005, the city of Grovetown encompassed an area of roughly 4.3 square miles with very little land remaining as undeveloped or open space.

(Note: In accordance with state planning standards, the maps within this chapter utilize the Grovetown city boundaries that are consistent with the U.S. Census Bureau's TIGER boundary files.)

ENVIRONMENTAL PLANNING CRITERIA

As part of the Georgia Planning Act of 1989, the Georgia Department of Natural Resources (DNR) developed the *Rules for Environmental Planning Criteria* for use by local communities. The *Criteria* establish recommended minimum planning standards for the protection of water supply watersheds, groundwater recharge areas, wetlands, river corridors and mountains. This chapter identifies those applicable resources that are found in Grovetown. Because there are no protected river corridors or protected mountains in close proximity to Grovetown, those specific items are not addressed by this plan.

Water Supply Watershed

According to *Savannah River Basin Management Plan (SRBMP)* (2001) produced by DNR, Grovetown lies within the Savannah River drainage basin. The surface waters

within each drainage basin throughout the state are further divided into “hydrological units” defined by the U.S. Geological Survey (also referred to in the *SRBMP* as “major watersheds”). Grovetown and all of the perennial streams within the municipal limits make up part of the Middle Savannah River hydrological unit (sub-basin). This plan makes note of these geographic and hydrological subdivisions so that a distinction can be made between them and “water supply watersheds” that require additional resource protection to ensure a safe supply of public drinking water.

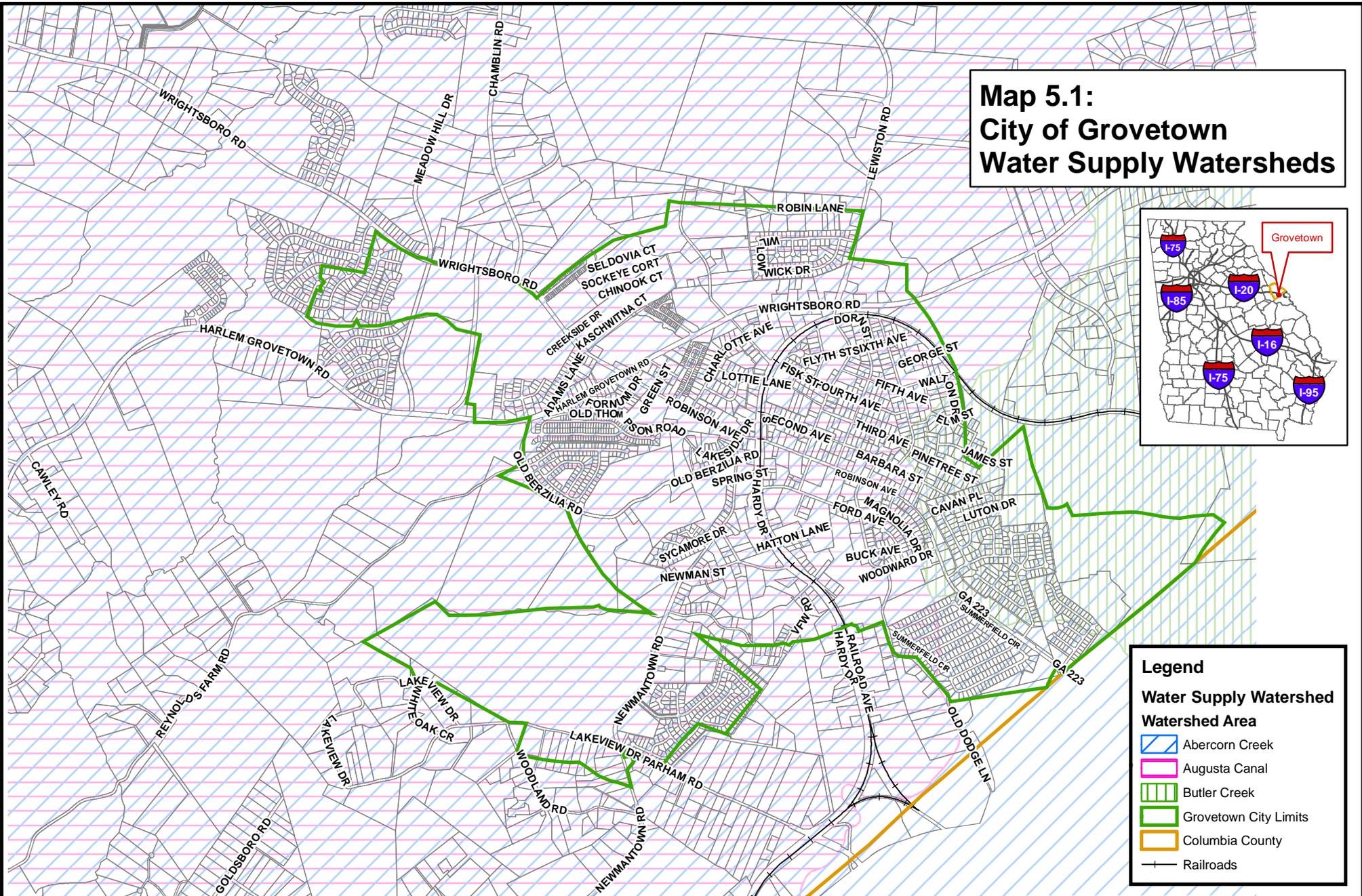
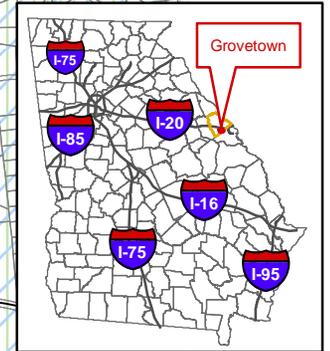
The *Criteria* define a water supply watershed as an area of land upstream from a governmentally owned public drinking water intake. Grovetown lies within the Butler Creek water supply watershed and the Augusta Canal/Abercorn Creek water supply watersheds (**Map 5.1**). Development activities in Grovetown should not affect the Butler Creek water supply watershed because Fort Gordon recently discontinued use of the creek as a drinking water supply – opting instead to partner with Richmond County for water. Grovetown’s development activities can have an effect on the quality of drinking water in the Augusta Canal/Abercorn Creek water supply watersheds. Columbia County’s water system is among the many jurisdictions located within this water supply watershed and with public water intakes downstream from Grovetown. As a customer of Columbia County’s water system, the City of Grovetown has a vested interest in maintaining water quality in the perennial streams within the municipal limits.

Protection of Grovetown’s water supply will help keep drinking water free of contamination from various pollution sources. By limiting the amount of pollution that infiltrates the water supply, utilities can reduce the cost of purification and ensure public health. There are a number of factors that determine the volume of water in a stream or other body of water, such as precipitation, land cover, slope, and soil type and absorption rate. Water that is not absorbed by the soil, detained on the surface by lakes or ponds; or used by vegetation, runs off the land as overflow or surface run-off. If too much impervious surface is developed within a water supply watershed, run-off can become contaminated through various non-point sources of pollution and can adversely impact the watershed.

In part to address the problem of run-off, the *Criteria* establish a recommended set of standards to protect surface water supplies including the use of buffer zones around streams and specifying allowable impervious surface densities within such watersheds. At more than 100 square miles in size, the Augusta Canal and Abercorn Creek water supply watersheds are considered “large drainage basins” and are subject to DNR’s “large watershed criteria.” Large watersheds are theoretically less vulnerable to contamination by land development. This theory has led DNR to recommend less stringent watershed protection criteria than to water supply watersheds of less than 100 square miles in size. For large water supply watersheds, minimum buffer criteria are not recommended for perennial stream corridors that are beyond a 7 mile radius from the boundary of a reservoir (although there are siting requirements for some land uses). The following are recommendations for water supply watersheds that are greater than 100 square miles and are within a 7 mile radius of a reservoir boundary:

- 150 foot buffer around reservoirs
- 100 foot buffer on each side of perennial streams within a 7 mile radius of the reservoir boundary

Map 5.1: City of Grovetown Water Supply Watersheds



Legend

Water Supply Watershed

Watershed Area

- Abercorn Creek
- Augusta Canal
- Butler Creek
- Grovetown City Limits
- Columbia County
- Railroads

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- 150-foot setback of impervious surfaces on each side of the perennial stream within a 7-mile radius of the reservoir boundary
- Septic tanks and septic drain fields should be prohibited from within impervious surface setbacks.

Groundwater Recharge Areas

Recharge areas are portions of the earth's surface where water infiltrates the ground to replenish an aquifer, which is any stratum or zone of rock beneath the surface of the earth capable of containing or producing water from a well. In order to avoid toxic and hazardous waste contamination to drinking water supplies, groundwater or aquifer recharge areas must be protected. While recharge takes place throughout Georgia's land area, the amount of recharge reaching underground aquifers varies from place to place and is dependent on geologic conditions.

Map 5.2 displays the location of the major aquifer recharge area in the vicinity of Grovetown. Located within the northern extent of the Carolina and Georgia Sand Hills Major Land Resource Area (MLRA - as defined by the U.S. Department of Agriculture), Grovetown's aquifer recharge areas are part of a cretaceous sand aquifer system consisting of inter-bedded sands and clay. Groundwater is found in the pores of the unconsolidated sandy layers of soil and shale. The recharge areas in the vicinity of Grovetown are dominated by these sandy soils which allow for moderate to high permeability. Thick soils, combined with shallow to moderate slopes, promote favorable conditions for development and pose greater risks to the health of recharge areas in the city.

Wetlands

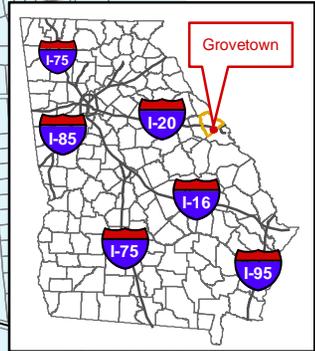
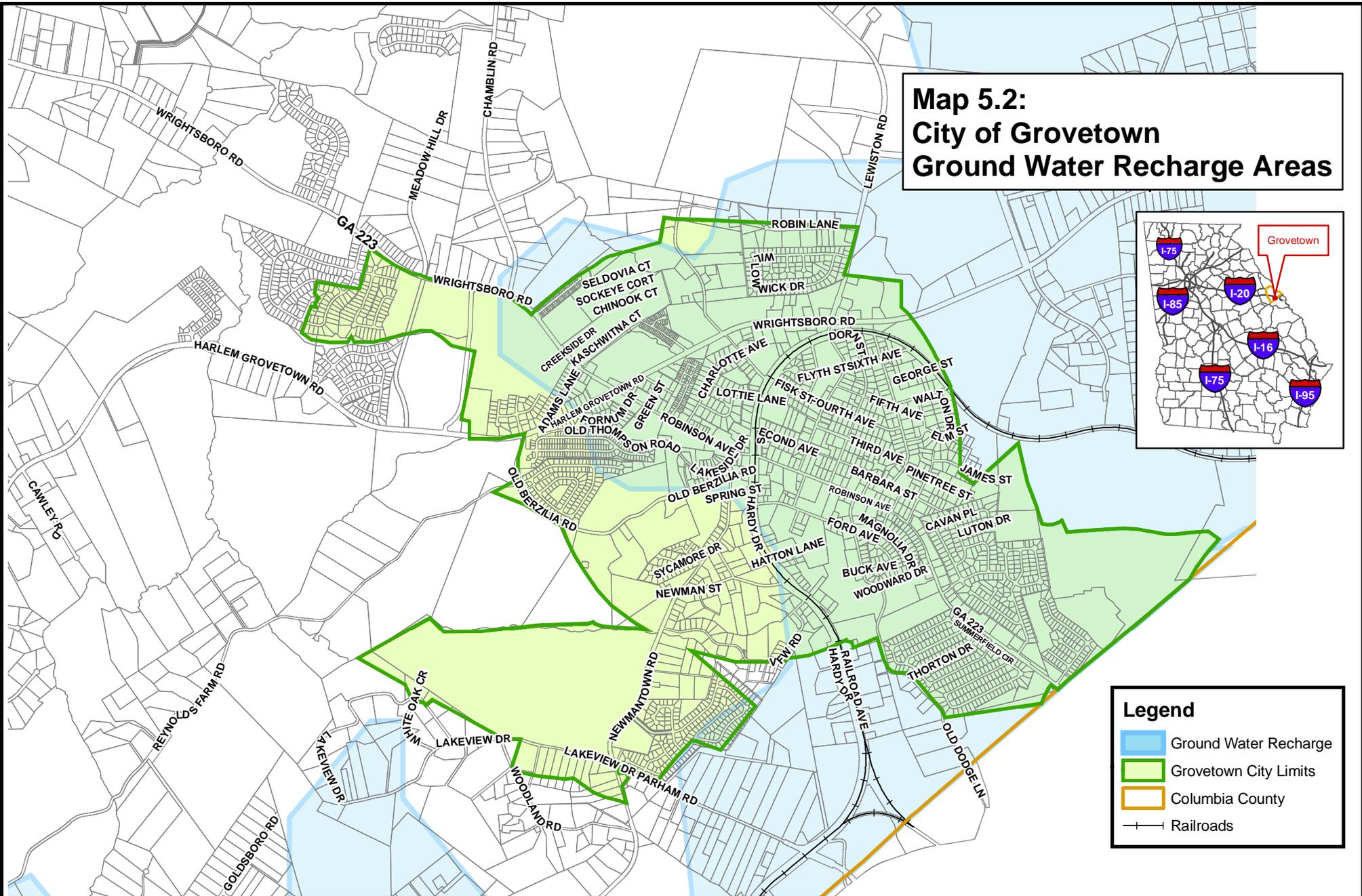
Wetlands serve as important fish and wildlife habitats and breeding grounds. They are also an integral factor in food chain production. Numerous plant and animal species have adapted to the special conditions of freshwater wetlands and cannot survive elsewhere.

Federal law defines freshwater wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Under natural conditions, wetlands help to maintain and enhance water quality by filtering out sediments and other non-point source pollutants from adjacent land uses.

Five categories of wetlands are identified in the *Criteria* as requiring protection through ordinances: open water, non-forested emergent wetlands, scrub/shrub wetlands, forested wetlands, and altered wetlands.

The wetlands present in Grovetown are displayed in **Map 5.3**. This map is based on the location of soil associations that contain many of the characteristics found in a wetland environment. Land uses in wetland areas should be limited to low impact uses, including timber production and harvesting, wildlife and fishery management, and recreation.

Map 5.2: City of Grovetown Ground Water Recharge Areas



Legend

- Ground Water Recharge
- Grovetown City Limits
- Columbia County
- Railroads

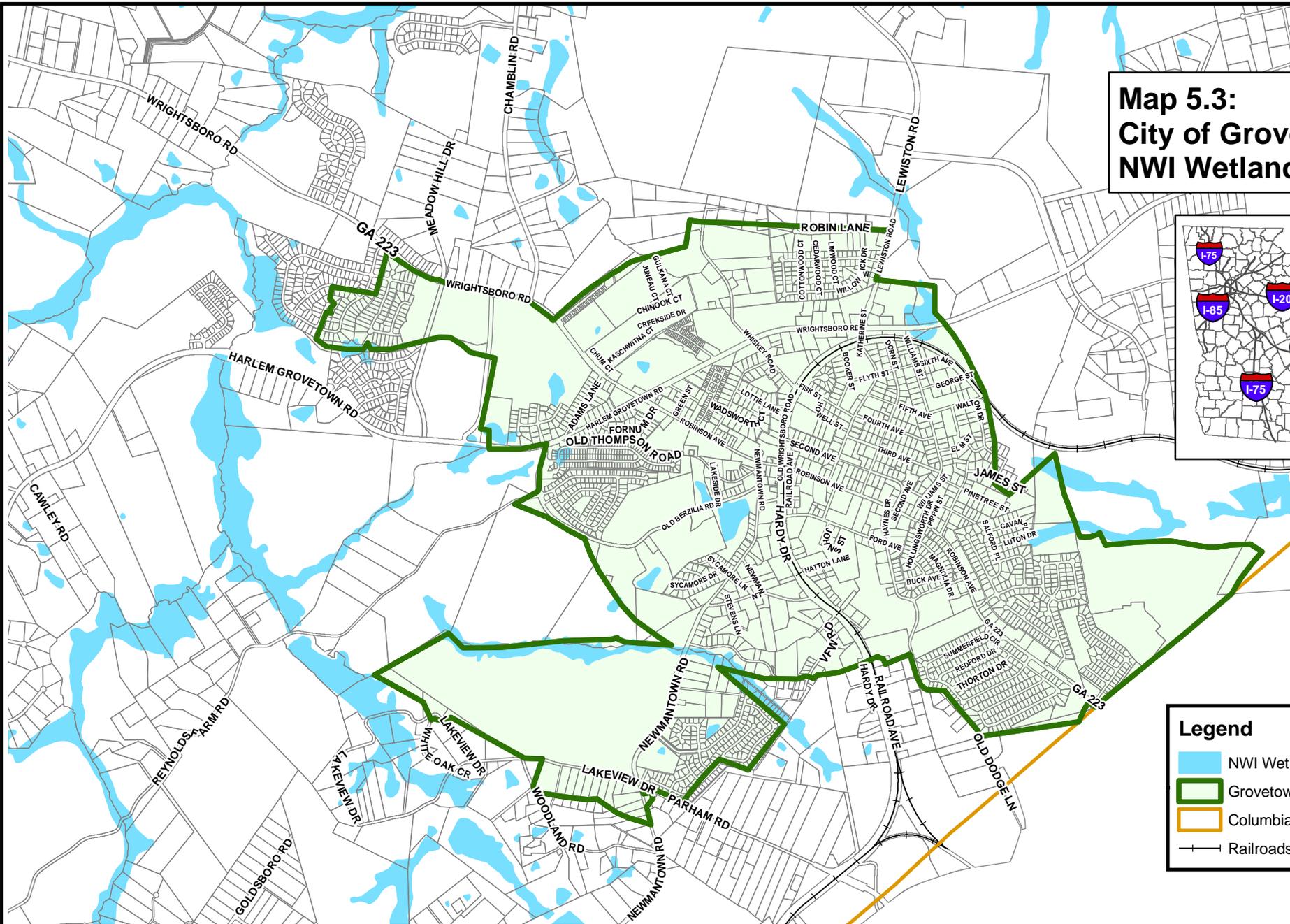
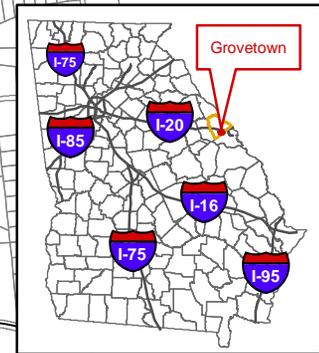
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Map 5.3: City of Grovetown NWI Wetlands



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- NWI Wetlands
- Grovetown City Limits
- Columbia County
- Railroads

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These land uses as well as others are covered in more detail under Section 404 of the federal Clean Water Act. Section 404 prohibits the discharge of dredging or fill material into the water bodies or wetlands of the United States unless a permit is granted. The United States Army Corps of Engineers (USACE) administers this program and determines if a section 404 permit should be issued by analyzing the project's impact on wetlands.

ADDITIONAL ENVIRONMENTALLY SENSITIVE AREAS

Flood Plains

Flood plains are areas of land that can periodically and temporarily be covered by overflowing streams and run-off from adjacent properties. These low-lying areas typically parallel perennial stream beds and swales. Floodplains serve three major purposes: natural water storage and conveyance, water quality maintenance, and groundwater recharge. These three purposes can be greatly inhibited when floodplains are misused or abused through improper and unsuitable land development. For example, if floodplains are filled in order to construct a building, then valuable water storage areas and recharge areas are lost. These activities can actually alter the shape of the flood plain and result in flooding in previously dry areas. Therefore, floodplain development is usually discouraged with exception of recreational facilities. Flood plains within Grovetown are illustrated in **Map 5.4**.

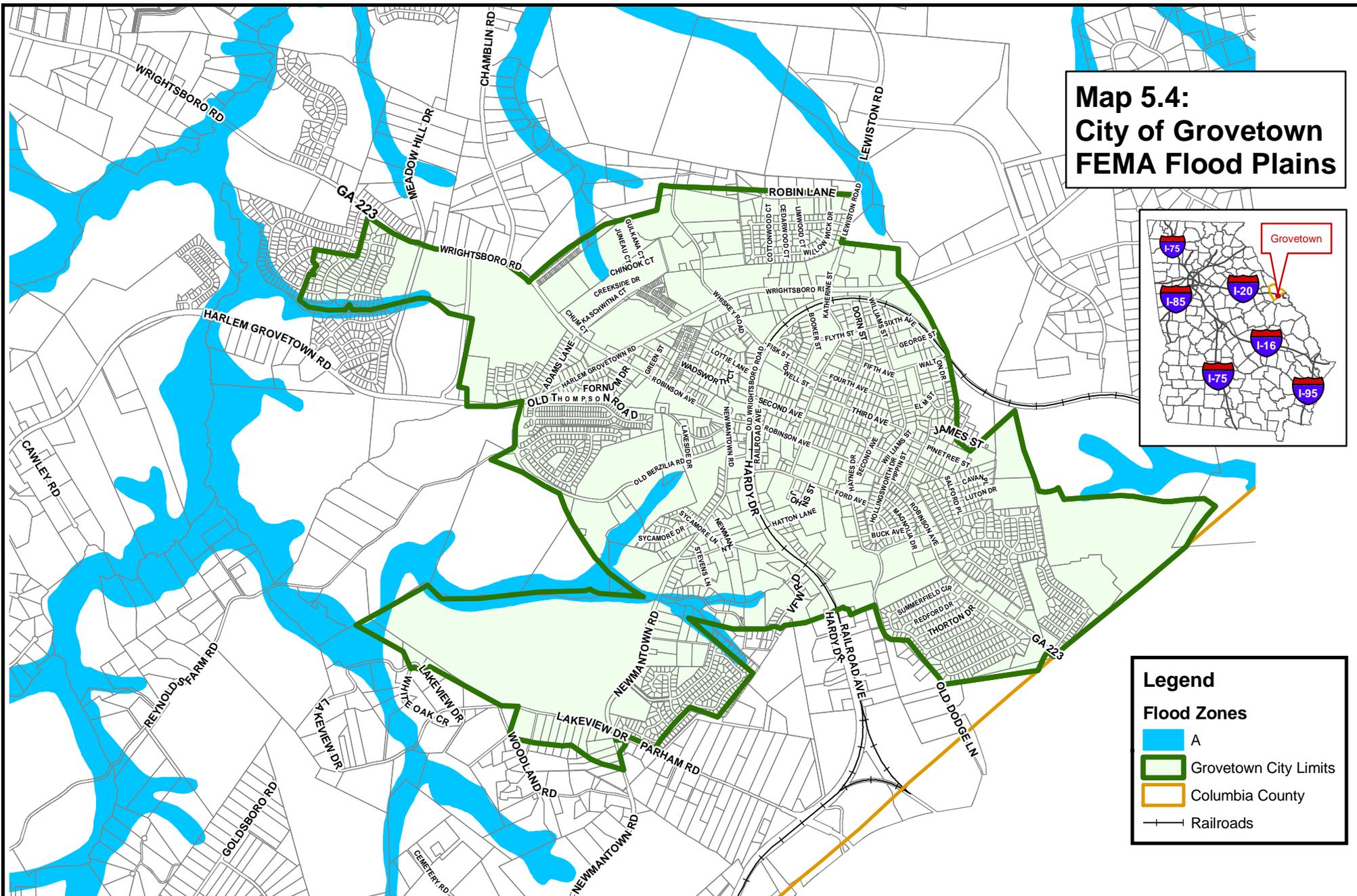
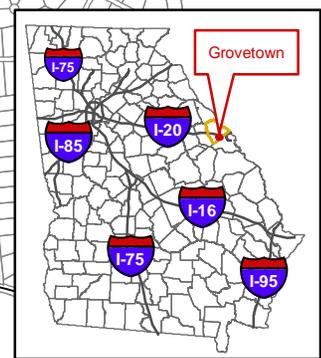
Grovetown participates in the federal government's National Flood Insurance Program (NFIP). NFIP allows property owners within participating communities to purchase federally backed flood insurance. In order for Grovetown property owners to be eligible for the program, the City adopted a flood plain management ordinance that regulates development activities within the flood plain in order to reduce flood risks to new and previously existing structures and facilities.

Soils

As previously mentioned, Grovetown is located within the northern extent of the Carolina and Georgia Sand Hills MLRA. The Carolina and Georgia Sand Hills MLRA actually forms a very narrow band between the Southern Piedmont MLRA and the Coastal Plain MLRA. As a result, the principal soil associations apparent in the vicinity of Grovetown (*Lakeland-Vaocluse-Orangeburg* and *Vaocluse-Lakeland-Orangeburg*) exhibit characteristics that are more typical of the Coastal Plain MLRA. As Grovetown has continued to annex land to the west, an increasing percentage of its land area is found within the Southern Piedmont MLRA. The *Cecil-Madison-Pacole*t soil association is found within those portions of Grovetown that are located in the Southern Piedmont MLRA.

Lakeland-Vaocluse-Orangeburg and *Vaocluse-Lakeland-Orangeburg* soils are found on uplands of the Carolina and Georgia Sand Hills MLRA and Coastal Plain MLRA that include fairly broad and flat ridge tops to slopes ranging up to 25 percent. These soils exhibit a sandy composition mixed with loam and clay. They exhibit good permeability

Map 5.4: City of Grovetown FEMA Flood Plains

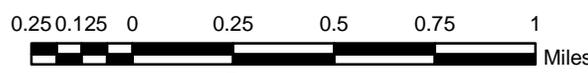


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Flood Zones

- A
- Grovetown City Limits
- Columbia County
- Railroads

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and drain well. Exposure of such soils on steeper slopes can create erosion problems if not properly contained.

Cecil-Madison-Pacolet soils are found on ridges and side slopes of the Piedmont uplands. This association consists of deep well-drained soils that are formed in felsic, igneous and metamorphic rocks. Surface layers consist principally of gravelly sandy loam.

Grovetown soil associations are illustrated on **Map 5.5**.

Plant/Animal Habitats

Growth and development in and around Grovetown will inevitably alter the natural landscape, reduce wildlife habitat, and affect animal and plant species diversity. One of the most reliable barometers to determine the level of impact that growth is having on animal and plant life is to measure the proximity of state and federally protected species to development activities. **Map 5.6** illustrates that Grovetown is located within the vicinity of no fewer than 6 plant species that do, or may in the future, warrant special protection. Grovetown is not, however located within close proximity to any state or federal lands that harbor critical species or habitat.

Federal Species Protection

The U.S. Fish and Wildlife Service administers the federal *Endangered Species Act (ESA, 1973)*. The *ESA* lists animal and plant species as either “threatened” or “protected.” All listed animal species and their habitats are protected from “take” – meaning they can not be harassed, harmed or captured. In addition, activities are prohibited that would create significant habitat modification or degradation that may inhibit or harm the animal’s natural behaviors. Listed plant species are not protected from “take”; but, it is illegal to collect or harm them on federal lands. In the vicinity of Grovetown, there is no federally protected plant or animal species. While some species of the Sweet Pitcherplant enjoy federal protection, the species located in close proximity to Grovetown does not.

State Species Protection

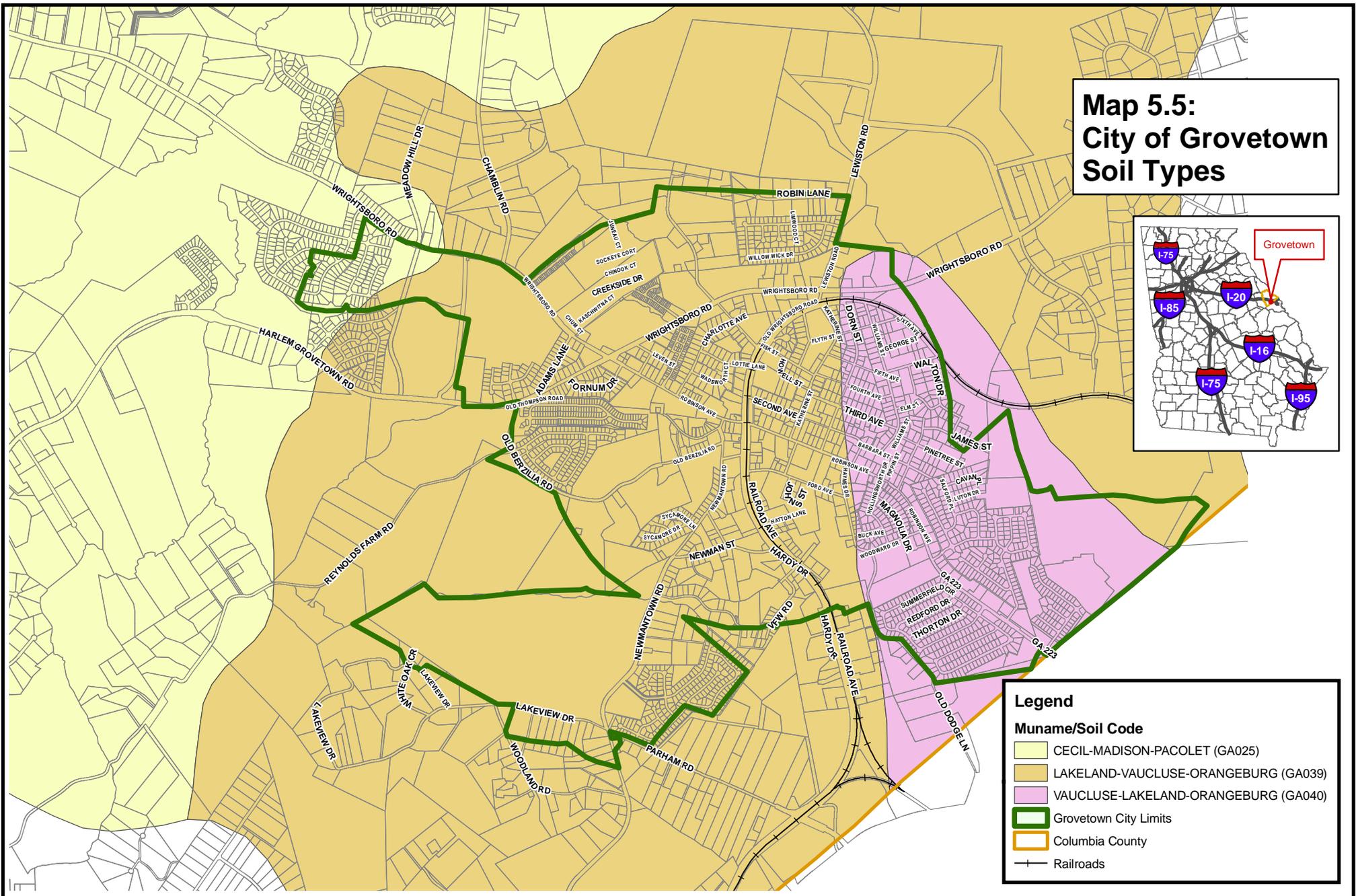
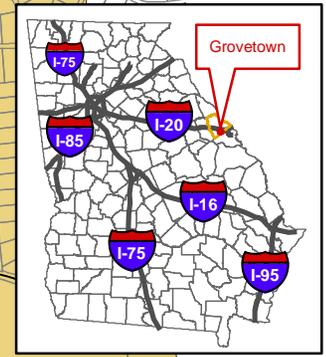
The Georgia Department of Natural Resources’ Wildlife Resources Division administers the state of Georgia’s *Endangered Wildlife Act (1973)* and *Wildflower Preservation Act (1973)*. These acts protect listed species habitat and prohibit the capture, killing, or selling of protected species only on state owned lands. There are no state protected animal species in the vicinity of Grovetown. **Figure 5-A** lists the plant species that are currently found on the state’s list of protected species.

Figure 5-A: Grovetown Vicinity, State Protected Plant Species	
Species (Common Name)	Status (Descriptions Below)
Atlantic White Cedar	Rare
Indian Olive	Threatened
Pink Ladyslipper	Unusual
Sweet Pitcherplant	Endangered

Source: Georgia Department of Natural Resources, Wildlife Resource Division
Endangered: In danger of extinction throughout all or parts of its range.
Rare: May not be endangered or threatened but which should be protected because of its scarcity.
Threatened: Likely to become endangered in the foreseeable future throughout all or parts of its range.
Unusual: Deserving special consideration such as plants that may be subject to commercial exploitation.



Map 5.5: City of Grovetown Soil Types



Legend

Muname/Soil Code

- CECIL-MADISON-PACOLET (GA025)
- LAKELAND-VAUCLUSE-ORANGEBURG (GA039)
- VAUCLUSE-LAKELAND-ORANGEBURG (GA040)
- Grovetown City Limits
- Columbia County
- Railroads

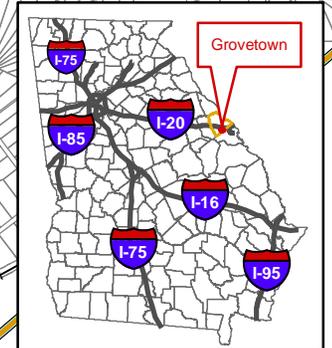
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Map 5.6: City of Grovetown Threatened and Endangered Species



Scientific Name-*Portulaca umbraticola* ssp. *coronata*
Common Name-Wingpod Purslane
Classification-Special Condition

Scientific Name-*Portulaca umbraticola* ssp. *coronata*
Common Name-Wingpod Purslane
Classification-Special Condition

Scientific Name-*Cypripedium acaule*
Common Name-Pink Ladyslipper
Classification-Unusual

Scientific Name-*Chamaecyparis thyoides*
Common Name-Atlantic White-cedar
Classification-Rare

Scientific Name-*Amorpha georgiana* var. *georgiana*
Common Name-Georgia Indigo-bush
Classification-Special Condition

Scientific Name-*Sarracenia rubra*
Common Name-Sweet Pitcherplant
Classification-Endangered

Scientific Name-*Cypripedium acaule*
Common Name-Pink Ladyslipper
Classification-Unusual

Scientific Name-*Nestronia umbellula*
Common Name-Indian Olive
Classification-Threatened

Legend

- Endangered_Species
- Grovetown City Limits
- Columbia County
- Railroads



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In addition to those species listed as protected by the state of Georgia, the Georgia Natural Heritage Program (GNHP) maintains a list of species of “special concern.” The special concern list includes federal and/or state protected animal and plant species; and, lists other rare or imperiled species or habitats that may not yet have official protection. The GNHP is the result of a partnership between DNR and the Nature Conservancy and is continually updating its inventory with the state-wide assistance of citizens. In addition to the species listed in **Figure 5-A**, the GNHP lists the Wingpod Purslane and Georgia Indigo Bush as plant species in the Grovetown vicinity that should be given special consideration.

ADDITIONAL SIGNIFICANT NATURAL RESOURCES

Scenic Areas

The study area for the *Grovetown Comprehensive Plan* is limited largely to the municipal limits of the city – with references made to adjacent portions of unincorporated Columbia County when a specific topic is of regional significance. In addition to the *Plan’s* limited geographic scope, most land within Grovetown has either been developed or cleared for development. These combined factors have contributed to the fact that no significant scenic views or areas have been identified within the municipal limits. A review of the *Columbia County Growth Management Plan (2005)* confirms that Grovetown is not within close proximity to any documented scenic views or sites in the unincorporated portions of the county.

Prime Agricultural/Forest Land

The vast majority of land within Grovetown has either been developed or cleared for development. There is no evidence of any significant stands of trees or prime agricultural plots.

Major Parks, Recreation or Conservation Areas

As referenced in the Community Facilities component of this document, Grovetown is making a considerable investment in recreational opportunities for its residents. A variety of active recreation options exist at Goodale and Liberty Park – with additional ball fields and ball courts planned, and a community center under construction. Continued development of the Euchee Creek Greenway not only provides Grovetown residents with an additional recreational amenity, it also represents the community’s principal natural resource conservation effort.

Continued protection of the Euchee Creek Greenway corridor is consistent with the goals of the *Columbia County Greenspace Program*. The county program has identified Euchee Creek as 1 of many priority “Floodplain Greenways” that should be protected for current residents and future generations. Recommended techniques to ensure the protection of the creek’s natural habitats and wetlands include the acquisition of adjacent lands to develop a 100 foot wide buffer from development activity.

CULTURAL RESOURCES

Developmental History

*(Note: All inventory numbers referenced in this section can be located in **Figure 5-B** and **Map 5.7**.)*

The history of Grovetown can be told through its cultural resources and those who built and occupied them. Many of these resources are still extant, but many have been lost to fire and development. The community of Grovetown grew from Old Grove Baptist Church, established in 1808 in Columbia County. James M. Atkinson, Georgia legislator, journalist, and the church’s minister advocated for the community to become incorporated. The City of “Groveton” was incorporated in 1881 by charter from the Georgia legislature. James M. Atkinson is buried in the present day Grove Baptist Church Cemetery in Grovetown. He is best remembered as the founder in 1882 of *The Columbia Sentinel* newspaper, forerunner of the *Columbia County News Times*.

Many residents of distinction and prominence have lived in or visited near Grovetown’s city limits. Paul Hamilton Hayne was one of Grovetown’s most literary and intellectual persons. It was because of his influence with U. S. Representative Alexander H. Stephens that Grovetown received postal service and was incorporated. Hayne moved with his family to a home (#21), near Grovetown after the Civil War having lost his fortune and home in Charleston, S.C. Known as the “Poet of the Pines” and Poet Laureate of the South, he wrote poetry and corresponded with the literary greats of the time. His best known poem, *Aspects of the Pines* was printed in high school literature books used in Columbia County through 1963. He wrote three volumes of poetry while living in the Grovetown area: *Legends and Lyrics* in 1872, *Mountains of Lovers* in 1875, and *Poems, Complete Edition* in 1882. Duke University holds most of Hayne’s papers today, and he is buried at Magnolia Cemetery in Augusta.

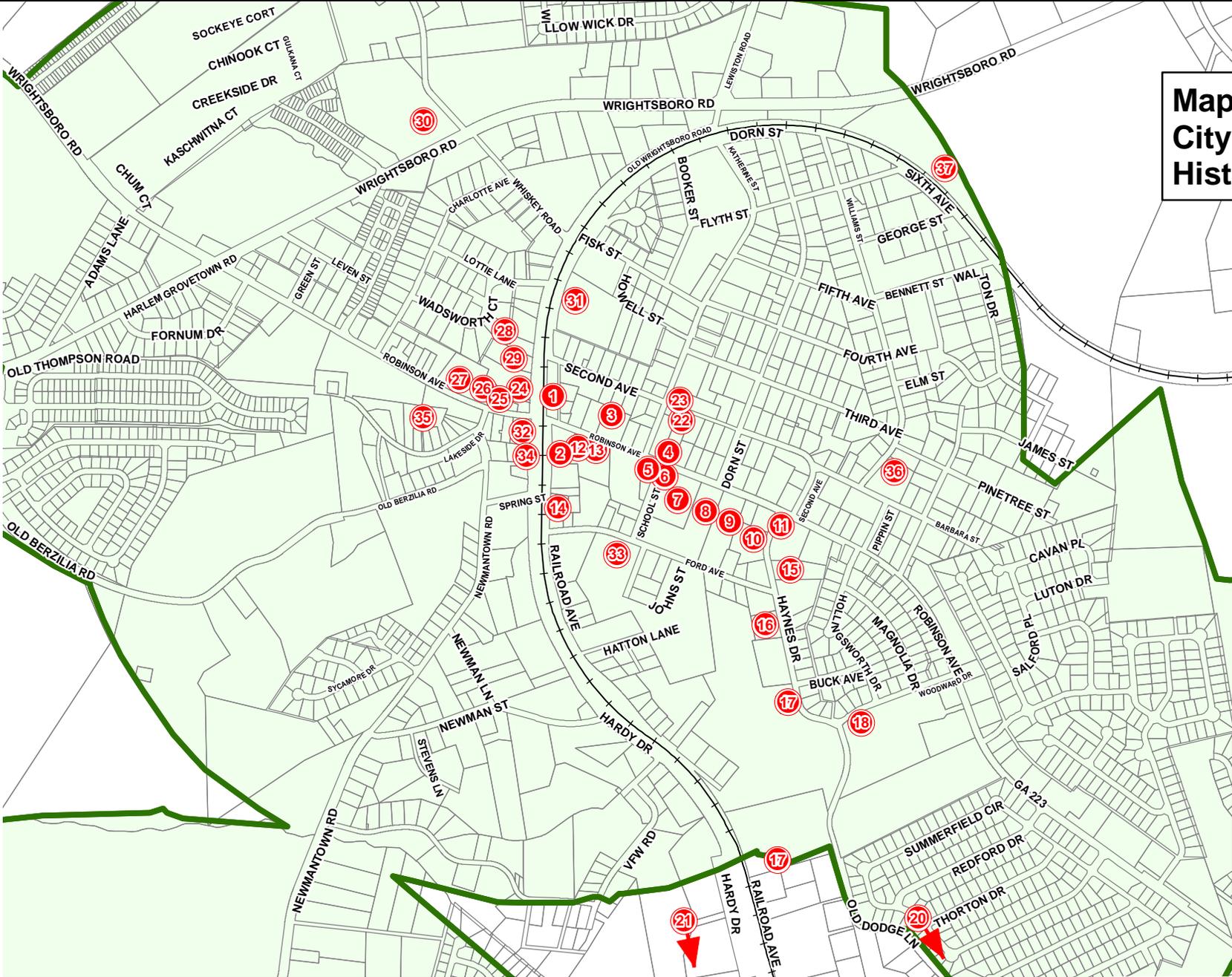
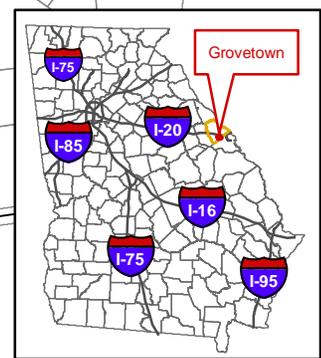
The Gothic-style Episcopal, Church of the Heavenly Rest (#14) was built in 1889 on land donated by Dr. Joseph Hatton, an early government leader and physician. The church was dedicated as a memorial to Paul Hamilton Hayne. Although it burned in the 1940’s, its design is well remembered. Its cornerstone was laid at the foot of Haynes’ grave.

Charles Clifford served as postmaster when U.S. Mail service was begun in Grovetown in 1877, and his residence is known today as the Charles Clifford House (#13). He served as postmaster until 1934 (57 years), and was believed to be one of the nation’s longest serving postmasters at the time. Clifford was also a railroad agent, town official, and managed a country store, Clifford’s Old Store (#2) from which the city’s first telephone service was connected in 1905.

Thomas Norvell and W.J. Heggie were competitors who operated a mercantile enterprise. Thomas Novell’s House (#6) is used today as the Grovetown United Methodist Parsonage.

Dr. Guy Baxley is well remembered in Grovetown for his generosity of treating patients unable to pay for his services. His home stands today (#5) on Robinson Avenue.

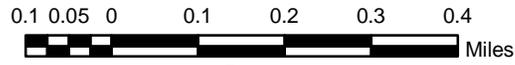
Map 5.7: City of Grovetown Historic Resources



Legend

- Historic Resources
- Grovetown City Limits
- Columbia County
- Railroads

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Believed to be the oldest and one of the finest houses in Grovetown is the former home of Joseph A. Hill (#18) built in 1866, a two-story, gabled-ell house type. The house, nicknamed the Eagle's Nest, is one of two remaining in Grovetown with an original attached kitchen and original brick chimneys and window hoods. Hill's friends were definitely the leaders of the day. Joseph E. Maxwell, whose name is mentioned in the book, *Children of Pride* by Robert Manson Myers, lived in Hill House with his son-in-law. Maxwell died in 1886 and is said to be buried in the rear yard.

From the 1880's up to 1930, Grovetown was considered a resort town. In 1887, James Tobin, first president of the Augusta Cotton Exchange built his summer home here (#9) as did his business partner, Stewart Phinizy, who owned Villa Marion (#8) until it burned in 1972. Both were cotton factors in Augusta. They resided in Grovetown with their families from June through September each year.

In the Grovetown Museum, there is a quote from the *Columbia Sentinel*, 1914, excerpted in part:

"This beautiful little town is situated on the Georgia Railroad, 15 miles west of Augusta, on an altitude of 471 feet above sea level. It has quite a large number of beautiful residences, in fact they would do credit to a town several times the size of Grovetown.

It is an enterprising little town, has four stores that do a splendid business, within the past two years two of these stores were destroyed by fire, but have been replaced one with a fine brick structure, two blacksmith and repair shops, four churches—Methodist, Baptist, Christian, and Episcopal, a splendid academy, one ginney, grist mill, planing mill, and other industries.

Quite a number of people from Augusta summer at this place, where it is said they can enjoy the fresh and balmy air, and be free from the dust and smoke of the city."

Robinson Avenue got its name from George O. Robinson who built his very large house in 1886 that later became the Rosland Hotel (#3). This hotel burned in 1979.

Directly adjacent to Grovetown, the John L. Dodge House (#20) c. 1912, was the winter home of this nationally known harness racing horse trainer. He would ship his horses by train to the stables located behind his house from November through April for almost 30 years. Dodge made his fortune as president of Bell and Company, chemists. In 1939, two of Dodge's horses won the harness trials in Aiken. Dodge's second wife was Elizabeth Taylor who continued her love of horses as a driver. Dodge died in 1940 and was buried in Lexington, Kentucky, his primary home.

The back stables were converted to a machine shop and later owners, the Dolan brothers and Paul Corley, experimented with making golf carts. This business was the catalyst for the world famous EZ GO Golf Car Corporation.

The Wienges House (#31) built 1910, is known for its owner being a major league baseball scout.

Grovetown's first depot was built in 1879 by the Georgia Railroad. It was replaced with a new Grovetown Depot (#1) that was a large structure worthy to be called a community landmark. The building was constructed in 1891 at a total cost of \$5,041.74 with one and a half stories on one end and the freight warehouse on the other end. The railroad depot was served by the Georgia Railroad until 1970, and was demolished in 1972.

In 1930, the last local train made its trip from Augusta, 15 miles away. Heretofore, people's lives were ordered by the train schedules, but now a bus would take them the short distance. The construction of Camp Gordon in 1942 revitalized the train depot for use with the transportation of troops and supplies coming and going for military operations. The name changed from Camp Gordon to Fort Gordon when it became a permanent Army base in 1956. Grovetown entered into a new era of growth brought about by World War II and the need for housing and development. Regular passenger trains were scheduled passing through Grovetown from Augusta to Atlanta until 1968; then, the trains became mixed with passenger and freight cars, but in 1983, Seaboard Rail System purchased the line and passenger service came to an end. Trains owned by CSX still pass through Grovetown today, but freight and passenger service are a memory.

The Grove Baptist Church Cemetery holds the graves of several well known citizens including: Oliver Hardy's uncle, Thomas E. Norvell, and his grandfather, Thomas B. Norvell, James M. Atkinson, Georgia legislator, founder of *The Columbia Sentinel*, minister, and one of Grovetown's founders, and W. J. Heggie, mercantile owner, mayor, and leader.

Near Grovetown, Dr. Roland Steiner made his home and as he collected thousands of Indian artifacts. From 1898-1902, Dr. Steiner gave the Smithsonian Institution 84,876 artifacts of which 63,000 were from Columbia County. The Yuchi Indians lived in the Grovetown vicinity. Dr. Stiner collected artifacts from the counties of Bartow, Burke, and Columbia near Burk Mountain and near Clarke's Hill Lake.

The commercial area of Grovetown to the locals was really a community all its own centered at the crossroads of Robinson Avenue and Old Wrightsboro Road around three well known mercantile country stores—S. F. Poole's (#24), Clifford's Old Store (#2) and, the Norvell Store (#32). Here Grovetown's citizens would gather to buy their supplies or just to gossip and trade stories. All of these stores have been torn down to make way for more modern development. The Georgia Lumber Company (#28) established in 1925 operated until 1940 as Grovetown's only true industry during that time. It was started by Dr. T. B. Lovelace from North Carolina.

The first white school in Grovetown known as the Hatton Schoolhouse was built in the 1870s on land donated by Grovetown physician, Dr. Joseph Hatton. Around the turn of the century, Hall's School and Jordan's Academy, (#27) next to the Grove Baptist Church, (#26) provided educational opportunities for children. Otis and Johnnie Johns, teachers from Jones County, moved to Grovetown, and began to push for improvements in education for this rural area. A new brick Grovetown Elementary School, (#33) with an auditorium and classrooms opened its doors in 1938, realizing the dream of Otis Johns, and on four acres of land donated by heirs of Dr. Joseph Hatton.

The first black schools in Grovetown before desegregation were affiliated with and funded by churches. Jerusalem, Steiner, Grove, Water Branch and Central schools were operated until the late 1960's when all students were integrated into public schools.

Grovetown's development from a small community to a bustling town and small city has come about over the last century. As a bedroom community to Fort Gordon, many of the older structures and cultural resources have given way for subdivisions and newer commercial development. As progress continues, however, the past remains in the form

NATURAL AND CULTURAL RESOURCES

of historic and cultural resources that allow Grovetown citizens to know where they came from so that they may be proud of their unique heritage.

Significant Cultural Resources

The following are significant cultural resources in the city of Grovetown – many of which were referenced in the previous section. The cultural resources can also be located on **Map 5.7**.

Figure 5-B: Grovetown Significant Cultural Resources	
Inventory Number	Resource
Rural (Farm)	
#20	No known resources within the city limits, however, #20, the John L. Dodge House, c. 1912, is significant to the development of Grovetown, located just outside the city limits, Mr. J. Carswell is the present owner.
Residential	
#9	James Tobin-Kennedy House, c. 1887, Robinson Avenue, owned by Susan Thrush
#13	Charles Clifford House (Pioneer Settler), c. 1878, Robinson Avenue, used as the Clifford Memorial Presbyterian Church Parsonage
#6	T. Norvell House (Pioneer Settler), c. 1880, Robinson Avenue, used as the United Methodist Church Parsonage
#5	Dr. Guy Baxley's House, c. 1880, Robinson Avenue
#10	Walton-Hawkridge-Watson & Matthews House, c. 1880s, NE corner of Robinson and Hayne Streets
#15	Ferdinand-Phinizy-Dill House, c. 1890s, Hayne Drive, owned by Mrs. Ginny Dill
#4	Gardner-Norman-Hill-Evans & Huffman House, c. 1900, Robinson Avenue
#19	Wienges House, c. 1910, Hayne Drive
#23	Jordan-Armstead-Goodale House, c. 1900, Katherine Street
#35	Vollatton-Rockefeller House, c. 1900, Old Thomson Road
#18	Joseph Hill House (Pioneer Settler), built 1866, known as "Eagle's Nest." Later, owned by the H. U. Woodward family.
#13	Old Grovetown Methodist Church Parsonage, moved to this location from next to Methodist house of worship
#16	Drummond House, Hayne Drive
#17	Old Methodist Parsonage, c. 1880s, Hayne Drive, moved to this site
#36	Bowdre-Phinizy House, Barbara Street
Institutional	
#33	Grovetown Elementary School, c. 1938
#26	Grove Baptist Church, built 1947-1954, dedicated in 1954, established as an offshoot of Kiokee Baptist Church in 1808.
#12	Clifford Memorial Presbyterian Church, built 1932, Robinson Avenue
#7	Grovetown United Methodist Church, c. 1925 (est 1881), Robinson Avenue
<i>Source: Mr. Charles Lord & the Grovetown Museum</i>	

Figure 5-C: Grovetown Community Landmarks of Historic, Cultural or Archeological Significance

Inventory Number	Resource
#1	Site of Georgia Railroad Depots: First Depot, built 1879, Robinson Avenue Second Depot, built 1891, closed 1970, demolished 1972, Old Wrightsboro Road
#22	Old Wooden Grovetown School location
#27	Old Jordan’s Academy Site
#25	Grovetown Museum, formerly McDonald/Fields House, c. 1890s, Robinson Avenue, house moved to this location
#3	Rosland Hotel, burned 1979
#21	Copse Hill, site of poet Paul Hamilton Hayne House (Pioneer settler)
#8	Site of Villa Marion, home of Stewart Phinizy and W.R. Cox family, Robinson Avenue, burned 1972
#14	Site of Episcopal Church, The Church of the Heavenly Rest and Memorial to poet Paul Hamilton Hayne
#22	Old Christian Church site
#2	Clifford’s Old Store, Robinson Avenue, operated 1880-1950
#24	S.F. Poole’s Grocery, Proprietors were the Brands, C.J. Adams and B. Jordan, operated, 1946-1985, demolished 1995. Replaced by Friendship Park.
#32	Norvell Store, Robinson Avenue, operated 1880s-1950
#28	Georgia Lumber Company site
#31	Fisk Pottery site
#37	Georgia Iron Works
#11	Walton Park (note marker), Robinson Avenue
#30	Goodale Park, Danny Goodale Memorial, Vietnam Casualty
#34	Old Grovetown Precinct Voting Booth
#29	New City Hall

Source: Mr. Charles Lord & the Grovetown Museum

ASSESSMENT

ENVIRONMENTAL PLANNING CRITERIA

Water Supply Watershed

Grovetown receives the majority of its drinking water from surface water sources. It is likely that the percentage of drinking water supplied by the City to its residents and businesses from these sources will significantly increase in the foreseeable future. With projected increases in Grovetown’s population and land area, the city’s development pattern will directly affect the quality and volume of storm water entering perennial streams that extend into adjacent jurisdictions. Potential impacts to downstream water quality will not only affect other jurisdictions that rely on surface drinking water intakes, it may directly affect the quality of water that is being supplied by Columbia County to Grovetown. In recognition of these shared cumulative impacts, Grovetown could examine current storm water and floodplain standards and consider implementing



Grovetown’s sewage treatment facility is designed to take advantage of local soils to slowly filter waste water in a manner that reduces impacts on surface and ground waters.

additional water supply watershed ordinance standards that meet or exceed the recommendations found in the DNR’s *Rules for Environmental Planning Criteria*.

Groundwater Recharge Areas

Grovetown’s location over an aquifer recharge area that has a high susceptibility to pollution also poses direct consequences to the health of the city’s residents. Thirty-five percent of the city’s public drinking

water supply still comes from 4 wells located in the city. Continued development throughout Grovetown and unincorporated Columbia County

obviously places these sources of groundwater at greater long-term risk of contamination. While the city has adopted required wellhead protection plans, it should also consider whether any or all of the recommendations in DNR’s *Rules for Environmental Planning Criteria* pertaining to groundwater recharge areas should be incorporated into city codes.

Wetlands

The vast majority of Grovetown’s wetlands lie within or in close proximity to floodplains. As with the recommendations contained in the water supply watershed and groundwater recharge area sections above, a thorough review of the city’s existing floodplain, storm water, and erosion and sedimentation control standards should take place. Additional wetlands protections – referencing DNR’s *Rules for Environmental Planning Criteria* –

should be considered to provide additional community-wide protection to sensitive wetland habitats.

ADDITIONAL ENVIRONMENTALLY SENSITIVE AREAS

Flood Plains

The steps that Grovetown has taken to address flood plain management are consistent with many communities across the country. Grovetown should simply monitor existing development standards to determine whether its current floodplain related provisions should be amended in the future to balance development and its impacts.

Soils

Continued implementation of sediment and erosion control measures can be augmented by additional stream side buffers and requirements for targeted open space reserves as part of development.

Plant/Animal Habitats

There is little evidence to confirm the presence of state protected plant species on parcels of land within or adjacent to Grovetown. Confirming the location of such species on any parcel of land that is projected for development would require a site survey prior to land clearance. Should Grovetown wish to pro-actively identify state protected species on a development tract, it should work with the Georgia Natural Heritage Program to determine what measures might best ensure the opportunity to protect critical species that could be affected by future development activity.

ADDITIONAL SIGNIFICANT NATURAL RESOURCES

Scenic Areas – Prime Agricultural/Forest Land – Major Parks, Recreation or Conservation Areas

Many people across the country are drawn to different regions in part because of the area’s natural beauty. Ironically, as more people are drawn to an area, natural spaces are replaced by the built environment. Even in areas of high growth, preservation of the natural landscape can enhance the daily experiences of full-time residents. Protection of the Euchee Creek corridor illustrates that Grovetown recognizes the value of



The Euchee Creek corridor is the best example of natural resource protection in Grovetown.

incorporating nature into the city. It is however, possible for all communities to do more.

Grovetown should consider methods of incorporating a greater percentage of common open space into new development – both residential and non-residential. Standards for cluster and low-impact development both serve to preserve open space while still allowing property owners to develop and market their properties. Properties adjacent to permanently protected areas can even result in greater profits to the developer. The city could even require a local land clearance permit that would identify portions of a development site that will remain undisturbed prior to construction activity. A local land clearance permit could also assist the city implementing existing environmental protection standards; or, new potential provisions such as a tree protection ordinance.

It is apparent that both Grovetown and Columbia County view Euchee Creek as a particularly important component of the region’s greenspace efforts. In recognition of its importance, Grovetown could propose required open space preservation along either side of the creek as part of new development. Density bonuses to developers on other portions of the site can serve as 1 way to offset the impact of open space requirements. Grovetown can also consider partnering with the Central Savannah River Land Trust to serve as stewards for protected open space within the city; or, partner with Columbia County to promote the formation of a new non-profit greenways organization that can oversee long-term open space acquisition, and maintain and manage associated amenities such as recreational trails. In addition to the city’s use of federal transportation enhancement grants to build Phase II and future sections of the Euchee Creek Greenway trail, the city can investigate the use of other open space funding through the Georgia Greenspace Program and Georgia Land Conservation Program.

CULTURAL RESOURCES

The most valuable cultural resource in Grovetown today is the Grovetown Museum, open to the public and funded by the City of Grovetown. This public building has an ever expanding collection of artifacts and memorabilia devoted to interpreting the history of Grovetown and the nearby vicinity.



The Grovetown Museum serves as the focal point of the city’s historic preservation efforts.

The museum building itself is the former McDonald/Fields House (See **Map 5.7, #25**) a one and a half story cottage moved to this site. A board of directors governs the museum, its content, and programs. A part time employee is funded by the City of Grovetown. The Museum was initially founded by Rosa Lee Owens and Charles Lord who designed the museum’s story line and who have worked to develop its exhibits since opening.

Charles Lord is a local historian and newspaper columnist. His in-depth

research of the area's history and architecture is a great asset to Grovetown. He has published several dozen articles for the local newspapers. His articles should be collected in a compendium volume to assist those interested in the history of Grovetown. As well, it would be an asset for the City of Grovetown to commission him to write a book on the history of Grovetown that would be invaluable for heritage tourism. His gift of writing and knowledge of the history of the area could work in Grovetown's favor to promote the City's rich history.

The museum has run out of room, and does not even have a conference table or place to meet and work on projects. If the City budget permits, Grovetown should consider purchasing the Hill-Woodward House for use as either an expanded museum space or as the City's premier historic house. This gabled-ell house has much history associated with it culturally, and it may be the earliest standing residence in Grovetown. It would provide room for archives storage and working space for heritage tourism projects.



The Hill-Woodward House is one of the finest historic homes remaining within the city of Grovetown.

In 1993, a historic resources survey was conducted for Columbia County which included the city of Grovetown. In this survey, about 25 historic properties were inventoried giving some information about the architecture of each building. The Georgia Department of Natural Resources, Historic Preservation Division, uses this inventory to identify historic properties in Georgia for planning purposes.



The site of the former Villa Marion anchors Grovetown's largest concentration of historic properties and could be incorporated into a revitalized center city.

The National Register of Historic Places (NR) is the nation's list of historic buildings, structures, sites, objects and districts worthy of recognition and preservation. Being listed in the NR provides formal recognition of a property's historical, architectural, or archaeological significance based on national standards. NR designation identifies significant historic properties that can be taken into account in a broad range of preservation and development activities. It also insures that these properties will be considered in the planning of state or federally assisted projects. NR listing does not place obligations on private property owners, nor does it place restrictions on the use, treatment, transfer, or disposition of private property. National Register

listing does not lead to public acquisition of property nor does it require public access to property.

At present, there are no historic properties in the city

of Grovetown listed in the National Register of Historic Places, however, Grovetown has a possible National Register eligible historic district along Robinson Avenue. To create a community sense of pride in its heritage, it is recommended that the City of Grovetown investigate nomination of eligible individual historic properties or districts to the National Register of Historic Places.

The Certified Local Government Program is a federal historic preservation program that links the DNR/Historic Preservation Division with the local government to protect historic resources. The City of Grovetown could adopt an ordinance based on the model historic preservation ordinance, appoint an historic preservation commission, and then, could designate historic properties for protection by design review. Since this program does govern exterior appearance of designated properties it may be a program the City should consider for encroachment of Grovetown's most significant historic and cultural resources. Such standards could be incorporated into a zoning overlay governing the design of new structures proposed for the "Grovetown city center" character area suggested in chapter 9. Work-live or mixed-use zoning regulations could also be applied to many of these structures that are located in redeveloping areas in order to provide flexibility in the use of the building while protecting its essential features and character.

INTRODUCTION

In order to promote community-wide economic development and improve the quality of life for a community’s residents, the effective maintenance of public facilities and services is crucial. Communities such as Grovetown which are experiencing new development and an increase in population are also faced with the challenge of expanding existing services to meet projected demand. Regardless of whether a community is or is not experiencing growth, effective local governments will maintain a comprehensive inventory of public services and constantly seek ways to improve and/or expand the level of service to existing and future residents.

This chapter analyzes the majority of Grovetown’s major community facilities to determine if adequate infrastructure and services exist or are planned to meet future needs. The adequacy of Grovetown’s water and sewer distribution and treatment facilities is reviewed as well as the city’s storm drainage system. Public safety services – including fire protection, E.M.S. and police are inventoried and analyzed. Parks and recreation opportunities in Grovetown are examined to determine whether adequate facilities exist and whether there is adequate community-wide access. Grovetown’s solid waste management system is also reviewed. The only major community facility not reviewed in this component is the transportation system. Grovetown’s transportation facilities are reviewed in Chapter 7 of the *Plan*.

The City of Grovetown served as the principal source of information for this chapter although some secondary sources were also consulted. Some of the parks and recreation figures in this chapter were prepared by referencing standards recommended by the National Recreation and Parks Association (NRPA).

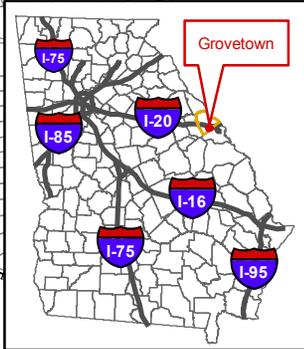
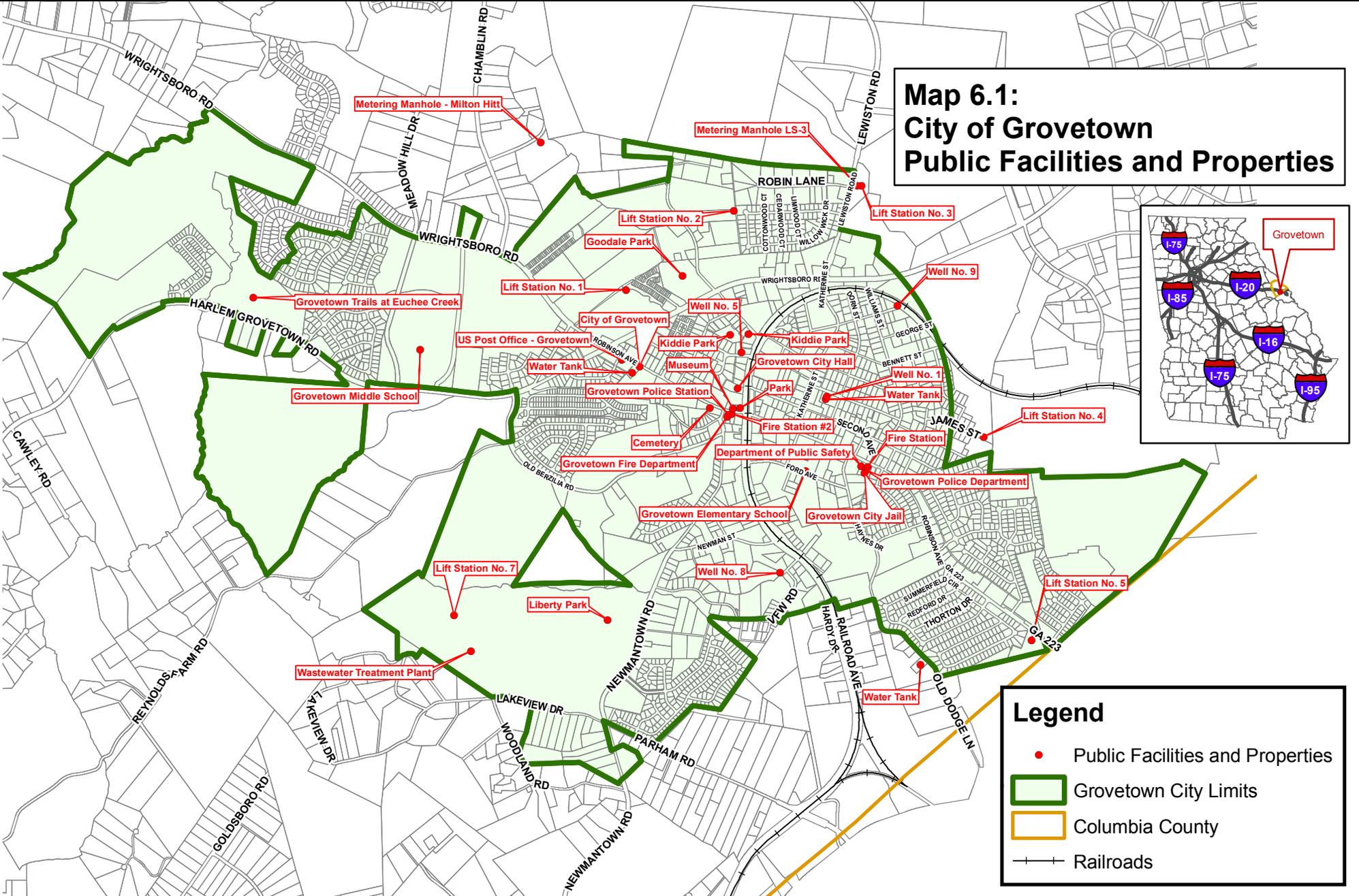
Many of the community facilities referenced throughout this chapter can also be found on **Map 6.1**.

WATER SUPPLY AND TREATMENT

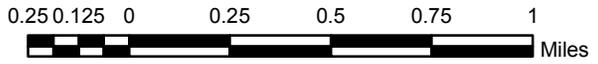
The rate of water consumption within Grovetown has predictably grown along with the city’s population. **Figure 6-A** shows that between 2003 and 2005 average daily water consumption increased by approximately 17.7 percent. During the same 3 year period, Grovetown’s population is estimated to have increased by 16.5 percent. This small discrepancy between the rates of change for water consumption and population suggests that the water consumption habits of Grovetown’s residents remains consistent. During this same time period, total system storage capacity has remained at 900,000 gallons located within 3 water tanks in the city (excluding water remaining in the lines throughout the city system).

Figure 6-A: Grovetown Annual Average Daily Water Consumption (2001-2005)			
	2003	2004	2005
Average daily consumption (Gallons)	583,964	682,654	687,540
Excess System Capacity (Gallons/Day)*	316,036	217,364	212,460
<i>Source: City of Grovetown * Based on storage capacity of 900,000 gallons</i>			

Map 6.1: City of Grovetown Public Facilities and Properties



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Continued growth, combined with consistent water consumption habits, has resulted in the need to access other public water systems in order to meet consumer demand. As illustrated in **Figure 6-B**, Columbia County’s water system is now the principal source of Grovetown’s water, accounting for roughly 65 percent of the city’s supply. Water supplied via Columbia County’s water system is treated at 1 of the system’s 2 treatment facilities; as is the water supplied by all 4 of the city’s wells.

Figure 6-B: Grovetown Water System (2005)		
Operating Authority(ies)		City of Grovetown
Water Usage/Consumption	Current Average Daily Consumption:	687,540 gal.
	Peak Average Daily Consumption (2000-2005)	766,666 gal.
System Capacity	Total System Capacity:	900,000 gal.
	Excess System Capacity:	212,460 gal.
Water Supply Source(s)	Primary Source(s) of Water Supply:	Columbia County Water System (65% of total) via 2 booster stations
	Secondary Source(s) of Water Supply:	4 Wells (35 % of total)
Storage and Treatment Facility(ies)	Storage Facilities	3 Water Tanks: 900,000 gal.
	Treatment Facilities:	4 Wells: On-Site Chlorine and Fluoride Treatment
Distribution Lines	Linear Mileage:	31 Miles
Customers		In Grovetown: 2919 Outside Grovetown: 11
<i>Source: City of Grovetown</i>		

In order to diversify its options while meeting continued demands, Grovetown continues to work with Columbia County and is seeking a new source of water by tapping into the Richmond County water system in the near future via a trunk line in the vicinity of Gordon Highway (US 278). City officials have determined that meeting growing water demand by digging new wells will not effectively meet the city’s needs. Based on population projections, it is also likely that Grovetown will require an additional water storage tank no later than 2010.

SEWAGE SYSTEM AND WASTE WATER TREATMENT

The challenges to maintaining adequate sewer system capacity in Grovetown are similar to those for supplying adequate water – increasing population has resulted in Grovetown needing to discharge into other sewer systems to provide an effective level of service. Grovetown’s daily sewer flows have increased by over 53 percent between 2003 and 2005. While **Figure 6-C** shows that Grovetown’s total sewer treatment capacity is limited to 580,000 daily gallons, the current average daily sewer flows of 940,233 mean that over 38 percent of Grovetown’s sewer is being treated at facilities operated by Columbia County.



Figure 6-C: Grovetown Sewage and Wastewater Treatment System (2005)		
Operating Authority(ies)		City of Grovetown
Usage	Current Average Daily Usage:	576,216 gal.
System Capacity	Total System Capacity:	580,000 gal.
	Excess System Capacity:	N/A (Excess daily flow discharged to Columbia County system.)
Treatment Facility(ies) & Collection Lines	Treatment Facility:	1 Treatment facility at 1500 Lakeview Drive (2 Metering Manholes discharging to Columbia County system.)
	Linear Mileage:	26 Miles
Customers		All properties within city limits except for 11 houses on Lakeview Drive and Woodland Drive remaining on septic.
<i>Source: City of Grovetown</i>		

Consistent with its policies to meet growing sewer treatment needs, Grovetown is working cooperatively with Richmond County to tap into its system via a metering manhole in the vicinity of Gordon Highway (US 278). In addition, Grovetown continues to seek approval from the Georgia Department of Natural Resources to increase the daily treatment capacity at its existing city-operated facility by receiving a waste water permit for an additional waste load allocation into Euchee Creek.

GENERAL FACILITIES AND SERVICES

Storm Water Management

The City of Grovetown maintains over 15 miles of storm water collection lines. While storm water collection is facilitated on the majority of Grovetown streets via open ditch sections, there is a desire to gradually convert open ditch street sections to curb and gutter. The City is acting on this policy by requiring curb and gutters for all new city streets. Recent street improvement projects (ex. Newmantown Road) also include the construction of curb, gutter and underground storm drainage lines.

Solid Waste Management

The collection of solid waste in Grovetown is handled by Advanced Disposal Systems under a contract with the City. With the pending closure of the Columbia County landfill, solid waste hauled by Advanced Disposal Systems is taken to the Augusta-Richmond County landfill via a company operated transfer station.

Consistent with the findings of the *Joint Columbia County Solid Waste Management Plan (2005)*, Grovetown has been proactive in promoting programs to reduce/stabilize waste tonnage generated from city properties. **Figure 6-D** shows that between 2002 and 2004, the tonnage of solid waste generated in Grovetown actually decreased by almost 10 percent – in spite of estimated gains in population during this same time period.



Figure 6-D: Grovetown Waste Generation Rates, 2002-2004

2002	2003	2004	2002-2004 Percent (%) Change
558 Tons	430 Tons	503 Tons	-9.8%

Source: Grovetown Department of Public Works

Grovetown’s ability to minimize any long-term gain in city generated solid waste can be attributed to the City-run yard waste collection and recycling programs. Yard waste in

Grovetown is collected by the Grovetown Public Works Department and taken to an inert landfill within municipal limits. Much of this yard waste is converted into mulch and provided to city residents and businesses. The City has recently purchased 45 acres directly adjacent to the existing inert landfill for expansion. Grovetown’s recycling program is available to all city residents and businesses and has been actively promoted by City Council. The recycling program is purported to have a high rate of participation.

Parks and Recreation

Parks data presented in this chapter includes National Recreation and Parks Association (NRPA) standards. A review of the NRPA standards reveals a range of recommended park acreages and facilities for communities based on multiple factors. Because application of the NRPA standards to individual communities allows for varying outcomes, the information provided in **Figures 6-F, 6-G and 6-H** of this chapter should be viewed merely as an interpretation of NRPA recommendations.

Communities can develop multiple types of recreation spaces to meet varying needs and interests. **Figure 6-E** shows the 6 park classifications defined by the NRPA. (*Note: Figure 6-E only includes the “general description” and “content” for each classification. NRPA park classifications typically address “population served,” “service area and accessibility,” acres and size range as well.*)

Figure 6-E: National Recreation and Parks Association, Parks Classifications

Playlots: Small areas intended primarily for the use of children up to early elementary grades. Most suited for apartments, townhouses and trailer parks. Includes play equipment, swings, slides, sandboxes and benches.
Neighborhood Playground: Designed to provide both active and passive short-term activities. Usually located adjacent to schools. Includes distinct play areas for preschool and school age children, shelter structures, open space, paved areas for court games, areas for field games.
Neighborhood Park: Landscaped natural park of limited size primarily for passive recreational needs of all ages but with designed active areas. Provides some scenic and aesthetic value. Should be located in the center of a multiple-family dwelling neighborhood or nearby site. Includes open lawn space, shrubbery, small picnic areas, drinking fountain, scenic paths or nature walks, areas for court games if not provided at a nearby recreation facility.
Community Playfield: Primarily an athletic complex that serves the recreational needs of the community. Usually 1 per community; however, if the community is cut by barriers or if sufficient acreage can not be obtained, then 2 are recommended. Includes athletic complex – lighted court and field games area, community center, swimming pool, lawn areas, adequate parking, potential picnic or play area for children. May be a portion of a major community park. Has high potential for recreational programming.
Major Community Park: A large natural area and/or landscaped area to provide urban dwellers escape from city congestion without traveling a large distance. Designed to accommodate a large number of people and a wide variety of activities. Provides for both active use and passive use. Can include a wide range of facilities such as play apparatus, bicycle trails, swimming facilities, picnic tables, paths, game courts, gardens and natural areas, pavilion, ample parking, sanitary facilities. May include multi-purpose trails internally or as part of a system.

Figure 6-E: National Recreation and Parks Association, Parks Classifications (Cont. Next Page)

Figure 6-E: National Recreation and Parks Association, Parks Classifications (Cont.)

Urban Greenspace or Open Space: Passive areas in landscaped or natural state in or near urban areas. May be planned for conversion to more intensive recreational use when needed. May provide recreational experiences, provide environmental quality, or act as buffers. Main recreational purpose is to provide a buffer from congestion and provide aesthetic experience. May also act as a land bank. May include natural lands, watersheds, forests, landscaped borders, parkways and boulevards, corner parks, medians, downtown aesthetic parks, plazas, malls, sanitary facilities. May provide bicycle, hiking and nature trails as a feature or as part of a larger system.

Source: National Recreation and Parks Association

Figure 6-F: Grovetown City Park Property by Classification and Acreage (2005)

Grovetown City Park Property	Park Classification*						Total (Acres)
	Playlots	Neighborhood Playground	Neighborhood Park	Community Playfield	Major Community Park	Open Space	
Kiddie Park	✓ 1 Acre						1
Friendship Park			✓ 0.5 Acres				.5
Goodale Park				✓ 12 Acres			12
Liberty Park					✓ 50 Acres		50
Grovetown Trails at Euchee Creek						✓ 44 Acres	44
Total (Acres)	1	0	0.5	12	50	44	107.5

Source: City of Grovetown, Parks and Recreation Department
 *Park classifications established by the National Recreation and Parks Association

Based on information provided by the City of Grovetown’s Parks and Recreation Department, the city’s 5 parks properties comprise a total of 107.5 acres. **Figure 6-F** categorizes Grovetown’s park properties by the NRPA park classification which best describes them.

Utilizing NRPA standards, **Figure 6-G** examines the similarities between the number and size of Grovetown park properties and hypothetical towns of 1,000 and 10,000 people. The Figure suggests that Grovetown is providing adequate community-wide park facilities such as community playfields (Goodale Park), major community parks (Liberty Park) and open space (Euchee Creek Greenway).

COMMUNITY FACILITIES

Figure 6-G: Grovetown City Park Property & National Recommended Standards (2005)							
	Playlots	Neighborhood Playground	Neighborhood Park	Community Playfield	Major Community Park	Open Space	Total Acres
Grovetown Parks (Total Acres)	1	0	0.5	12	50	44	107.5
NRPA* Minimum Acreage Recommendations (Per 1,000 people)	.2	2	2	1	5	1	11.2
NRPA* Minimum Acreage Recommendations (Per 7,000 people)	1.4	14	14	7	35	7	78.4
NRPA* Minimum Number of Facilities for City of 7,000 people (Note: Rounded up to Whole Number)	3 (1 accessible to 500 - 2500 people)	2 (1 within 1/3 mile of 1,000 - 5,000 people)	1 for up to 10,000 people	1 for entire community of up to 30,000	1 for between 40,000 and 100,000 people	1 Trail system per region	N/A
Source: City of Grovetown, Parks and Recreation Department; NRPA* (Some Calculations by: CSRA RDC) *National Recreation and Parks Association							

Figure 6-G also suggests that the city may need to consider the development of a greater amount of smaller playlots, neighborhood playgrounds and neighborhood parks. A key difference between the small and large park facilities is that the smaller facilities can be spread throughout the community to promote greater access to a larger population.

As with the previous Figure, **Figure 6-H** compares Grovetown's recreation facilities with NRPA recommendations. Except for the trails, all of Grovetown's recreation facilities listed in the Figure are located in Liberty Park or Goodale Park. Grovetown compares favorably to the NRPA recommendations. Future plans for additional basketball courts, tennis courts and a community center (under construction) will help Grovetown keep pace with population growth and industry recommended standards.

Figure 6-H: Grovetown Recreational Facilities & National Recommended Standards (2005)										
	Basketball Courts	Tennis Courts	Volleyball Courts	Baseball Fields	Football Fields	Soccer Fields	Softball Fields	Multi-Use Courts	Swimming Pools	Trails
Grovetown (Number)	1	2	0	3.5**	0	1	2	0	0	1
NRPA* Recommended (Minimum Number)	1 per 5000	1 per 2000	1 per 5000	1 per 5000	1 per 20,000	1 per 10,000	1 per 5000	1 per 10,000	1 per 20,000	1 trail system per region
NRPA* Minimum Number Applied to City of 7,000 people (Note: Rounded up to Whole Number)	2	4	2	2	1	1	2	1	1	1
Source: City of Grovetown, Parks and Recreation Department; NRPA* *National Recreation and Parks Association **3 Baseball Fields; 1 T-Ball Field										



Maintenance of many of Grovetown’s recreation facilities is the responsibility of Columbia County’s recreation department. This responsibility is the result of an agreement between the City and the County to allow Columbia County recreation leagues to utilize Grovetown park space. As a result of Columbia County’s operation of recreational leagues within the city limits, the City’s Parks and Recreation Department does not offer such activities.

Libraries

Library services for Grovetown residents are provided by the Columbia County Community and Leisure Services Division. The closest library to Grovetown is the Euchee Creek branch of the Columbia County Library – located to the northwest of the city. The Euchee Creek Library provides an inventory of 53,000 books, a collection of newspapers and magazines, videos and DVDs, children’s programs, a meeting room and public computer access. Two additional library branches are located in Evans and Harlem.

Schools

Grovetown public school students attend Grovetown Elementary School, Grovetown Middle School and Harlem High School. Student achievement at these facilities was discussed in Chapter 2.

All public schools attended by Grovetown students are operated by the Columbia County Board of Education (CCBOE). Grovetown Elementary School and Middle School are located within the municipal limits. Plans exist to replace the existing Grovetown Elementary School in the near future with a larger facility located off of Trudeau Trail – effectively consolidating the location of both the elementary and middle school sites. Grovetown is also home to the Columbia County Alternative School which provides individualized programs of instruction to meet the needs of at-risk students. This facility is available to students throughout the Columbia County school system.

While some CCBOE administrative functions are currently conducted out of the Grovetown Complex located on Johns Street, plans are to eventually move those functions to the main district offices in Evans. The move will make room for the expansion of the alternative school.

General Government Facilities

The City of Grovetown is divided into 7 departments employing a total of 69 employees. **Figure 6-I** provides a breakdown of City employment by department. While most departments indicate a preference for additional staffing, the City’s greatest apparent staffing need is for the administration department. In fact, the City has expressed an interest in hiring a full-time city administrator. Grovetown’s rapid

Figure 6-I: Grovetown Government Services: Employees by Department (2006)	
Administration	2
Parks and Recreation	5
Planning and Zoning	4
Public Safety	31
Public Works	13
Senior Center	2
Water and Sewer	12
Total	69
<i>Source: City of Grovetown</i>	



growth trend leaves little doubt that across-the-board staff increases may need to be considered in the future.

As illustrated in **Figure G-J**, Grovetown employees are scattered among 6 city-owned buildings (See **Map 6.1**). The Figure does not include the new recreation center now

Figure 6-J: Grovetown Government Services: Employees by City Building/Property (2006)*	
City Hall	12
Senior Center	2
Public Safety/Fire Station #1	31
Fire Station #2	**
Maintenance/Mechanic Shop	16
Sewer Plant	8
<i>Source: City of Grovetown</i> <i>*See Map ? for location of City properties.</i> <i>**Not staffed full-time.</i>	

under construction. Grovetown’s new city hall building provides ample space for the administrative, planning, public works and water and sewer employees who work there. The facility also includes a large city council chambers and conference room. The greatest facility need for Grovetown city government is the addition of substantial storage space for records – particularly to meet the needs of the public safety and public works departments. The space crunch being experienced by these 2 departments is also placing a strain on staff space at the public safety building/fire station #1 (Robinson Avenue) and the maintenance/mechanic shop located on Newmantown Road.

PUBLIC SAFETY

Fire Protection

Grovetown fire protection services are provided by the City’s public safety department. Staff, vehicles and equipment are inventoried in **Figure 6-K**. Firefighters are based at fire station #1 and many are cross-trained to provide some police services as well. Fire station #2 is located east of the Georgia Railroad and is used for vehicle and equipment storage but is not staffed.

Currently in Grovetown, there are a minimum of 2 employees on shift to provide fire protection services at any time. Overall staffing increases during daytime hours. The city reported no short-term need for additional staffing, in spite of projected population growth, for a few reasons. First, the public safety department’s service area was recently decreased as a result of

Figure 6-K: Grovetown Public Safety: Fire Protection/EMS (2006)	
Operating Authority(ies)	Fire: City of Grovetown EMS: Columbia County
Staff	Firefighters: 9 Cross-Trained (Full-Time): 5 Volunteer Firefighters: 10 EMT/Paramedics: 3
Vehicles	Rescue Truck: 1 Brush Truck: 1 Pumpers: 3 Aerial Truck (75’): 1 Tanker (1500 gal.): 1 Ambulance (County): 1
Special Equipment	Lighting/Generators
Station(s)	2: 306 E. Robinson Street; 105 W. Robinson Street
Service Area of Station(s)	Entire City limits
Insurance Rating	In City: 4 In County: 6-7
<i>Source: City of Grovetown, Department of Public Safety</i>	



action by Columbia County. The decreased service area eliminates Grovetown’s prior responsibility to provide fire protection for a much larger portion of unincorporated Columbia County. In addition, mutual aid agreements keep Grovetown’s current fire protection staffing needs low. Finally, the department has maximized existing staff by increasing the number of employees who are cross-trained to provide fire and police services. Currently, the most apparent need for Grovetown’s fire protection staff is increased opportunities and funding for training in order to improve the City’s ISO insurance rating.

Emergency Medical Services

EMS services are also referenced in **Figure 6-K**. Three of Grovetown’s public safety employees are trained as EMT/paramedics. EMS service; however, is provided by Columbia County. The County has an ambulance stationed at Grovetown fire station #1 to provide service to Grovetown and the southern portions of the county.

Figure 6-L: Grovetown Public Safety: Police (2006)

Operating Authority(ies)	City of Grovetown, Department of Public Safety
Staff	Communications Officers: 4 Detention Officers: 4 Public Safety Officers (Cross-Trained): 12 Certified Reserve Officers: 3 Auxiliary Officers: 3
Vehicles	Ford Crown Victorias: 12
Special Equipment	None
Station(s)	306 E. Robinson Street
Detention Facilities	2 Holding cells 2 Dorm type cells Inmate capacity: 36
<i>Source: City of Grovetown, Department of Public Safety</i>	

Police

Grovetown’s police services are provided by the City’s public safety department. Police staff, vehicles and facilities are inventoried in **Figure 6-L**. As expressed in the section on fire protection, the public safety department has maximized existing staff services by cross-training many

employees. Police services are also bolstered by the use of certified reserve officers and auxiliary officers who can fill in to provide basic police service as needed – allowing the full-time officers to focus on other priorities.

There are no apparent shortcomings in police vehicles or facilities at this time with the exception of storage space as noted in the “general government” portion of this chapter. Staffing levels are reported to be adequate to deal with the current

Figure 6-M: Grovetown Calls for Police Service (2002-2005)

	2002	2003	2004	2005	Rate (%) of Change (2002-2005)
Number (#) of Calls for Service	8704	9815	10,506	11,122	+27.8%
Grovetown Population*	6496	6662	6919	7762	+19.5%
<i>Source: Grovetown Department of Public Safety. *Estimate calculated by the CSRA RDC.</i>					

level of calls for police service; however, **Figure 6-M** shows that between 2002 and 2005 the number of calls has increased at a rate similar to estimated population increases. It is important to note, however that a “call for service” does not actually



mean that a crime was committed – merely that police assistance was requested for any number of a variety of situations.

Between 2002 and 2005, the total number of crimes reported by the City under the Uniform Crime Reporting System remained fairly steady. This discrepancy with actual calls for service may suggest that Grovetown residents are increasingly likely to call for police assistance for a greater number of real or perceived threats. In addition, police may be responding to more calls that are simply a product of a larger population – such as motor vehicle accidents.

ASSESSMENT**CONSISTENCY WITH SERVICE DELIVERY STRATEGY**

The Georgia Department of Community Affairs requires that all community facilities addressed in this chapter are reviewed for consistency with the current service delivery strategy. A review of facilities conducted during this planning process – including transportation – confirms that all Grovetown community facilities and services are being provided in accordance with the current Columbia County Service Delivery Strategy. Amendment of the service delivery strategy to address the potential Grovetown/Augusta-Richmond County partnerships to boost water supply and sewer capacity is not necessary because these services would be provided directly to the City of Grovetown as the client/customer.

WATER SUPPLY AND TREATMENT

To effectively supply adequate water for its growing population, Grovetown will not only need to consider other sources (such as the Augusta-Richmond County water system) but will eventually be required to expand storage capacity. In addition to continuing negotiations with Columbia and Augusta-Richmond County's, it may be possible to work with other jurisdictions – such as the City of Thomson – should their water systems be extended to within close proximity of Grovetown. In recognition that a continually growing population will only increase water demand, Grovetown should consider working with Augusta-Richmond County and Columbia County to promote water conservation and educate the public on how it can reduce average daily water consumption habits.

SEWAGE SYSTEM AND WASTE WATER TREATMENT

As with water resources, Grovetown will need to continue working cooperatively with other jurisdictions to ensure that sewage can continue to be discharged and treated. In anticipation of a potential increase in sewage fees charged by Columbia County, Grovetown should continue working with Augusta-Richmond County to develop an alternative partnership to accommodate future increases in sewage flow.

GENERAL FACILITIES AND SERVICES**Storm Water Management**

The City of Grovetown's Public Works Department has acknowledged that there are multiple areas within the city where inadequate storm water systems – particularly on open-ditch section roads – create drainage problems. Open ditches fill with silt and are difficult and expensive to maintain. The City will continue to address this problem over time by incorporating underground storm drainage systems in future street

improvement projects. Grovetown already requires that curb and gutter be included on all new street segments.

Storm drainage problem, however, extend beyond the street. Increased storm water is the direct result of the gradual increase in impervious surface areas within the city as a result of new development. Regardless of whether street segments incorporate underground drainage with a curb and gutter system, or open ditches – more development leads to more impervious surface area and more runoff. To reduce this impact, the city should consider revisions to its land development ordinances that allow for less impervious surfaces as part of new development. In addition, the city can consider increasing requirements for tree preservation or the planting of new canopy trees throughout a development site after development. A mature tree canopy is an effective way to significantly reduce the amount of storm water runoff generated by a development site.

Increased volumes of water, especially water channeled directly to streams via a curb and gutter system, can also result in increased velocity of discharge - threatening streams with silt and/or erosion. The City could consider “low-impact” development alternatives that allow storm water to flow through filtration, detention and/or retention systems that allow for more natural treatment of runoff. These engineered systems are more reliant on topography, soils and natural vegetation – as opposed to hard structures - to slow the amount and speed of storm water runoff before it reaches stream channels.

Solid Waste Management

Grovetown continues to exhibit a commitment to reducing solid waste disposal through the active provision and promotion of household and yard waste recycling programs. A continued commitment to these programs is recommended.

Parks and Recreation

Grovetown currently meets most nationally recommended standards for the provision of park space and recreational opportunities. With a population expected to increase exponentially over the long-term, a similar increase in the amount of park acreage and active recreation facilities may be extremely difficult to achieve. In attempting to meet future demand, continued development and expansion of existing park

space (especially centrally located Goodale Park and Liberty Park) is the recommended approach to address the



Projected growth rates in Grovetown may make it difficult to keep up with demand for recreation space. Requiring private recreation space as part of new development may help Grovetown keep up with community demand.

population's active recreation needs and the needs of organized recreational leagues.

In addition, Grovetown should focus on greater park accessibility through the development of smaller neighborhood related facilities such as playgrounds, tot lots, community greens, etc. While Goodale and Liberty Parks are centrally located, the sites are fairly isolated as a result of limited pedestrian and bicycle access. Most users must access these parks by driving in their automobiles. As targeted areas in central Grovetown are redeveloped smaller neighborhood accessible park spaces could be incorporated into the developments. The city could also consider meeting future active and passive park space demands by requiring new developments that exceed a certain threshold to incorporate private park spaces or open space into their developments. Requiring the incorporation of small park areas into new development is a way of letting growth pay for itself – similar to requiring new streets, sidewalks, storm water systems and other community facilities. In addition, this approach allows the community to meet recreational demand and nationally recommended standards while focusing public dollars on the further development of large existing community-wide parks.

Libraries

The Euchee Creek Library provides Grovetown area residents with all the services that are typically associated with a modern library facility. As with other forms of recreation in and around Grovetown, accessibility to the library may be limited as the result of a rural location accessible only by automobile.

Schools

CCBOE plans for a new Grovetown Elementary School are a clear acknowledgment of the need for larger and improved facilities in the Grovetown Area. Planned expansion of the Columbia County Alternative School – in spite of the loss of CCBOE administrative functions from within the city – show a commitment to improving school services for the entire community.

Should the CCBOE facility relocations/expansions result in the potential sale of any of the school property on Ford Avenue and Johns Street, Grovetown should coordinate with the CCBOE to promote new development that is consistent with the land development policies proposed in this plan.

General Government Facilities

With the need for across-the-board staff increases in the future to provide services to a growing population, it is difficult to determine which city department truly has the greatest personnel needs. To help determine which potential staff and facility needs the city should address, it may be necessary for Grovetown to hire a full-time administrator. A professional city administrator will be able to effectively prioritize municipal needs, create more efficient administrative procedures and ensure the timely implementation of the City Council policies.

Grovetown's new city hall building currently provides adequate space for those departments which it houses. While expansion of city hall will be necessary in the future, there are more immediate facility needs at the public safety building on Robinson



The new Grovetown City Hall meets some of the city government's space needs. Additional space will, however, be needed in the immediate future to keep up with records storage and a growing staff.

Avenue and the public works building on Newmantown Road. These facilities are already deficient in staff and records space. Immediate expansion of these buildings, the renovation of another city-owned property (senior center); or, the construction of a new building should be considered to relieve these existing pressures.

PUBLIC SAFETY

Fire

Protection/Emergency Medical Services/Police

While the greatest current need for Grovetown fire protection services is further training for staff, projected population increases will undoubtedly result in future demands for more staff, equipment and vehicles. Grovetown should consider supplementing local revenue which goes to fund fire protection and emergency services operations with the U.S. Department of Homeland Security's *Assistance to Firefighters Grants*.

Consistent increases in the number of Police calls for service also indicate that future staff, equipment and vehicles will be needed in Grovetown in the foreseeable future. While the city of Grovetown can not apply for the program directly (must apply through the State of Georgia), the most likely financial supplement to police services is the U.S. Department of Justice's *Justice Assistance Grant* program.

As previously mentioned, all branches of the Grovetown Department of Public Safety and Municipal Court are inhibited by a lack of office space – particularly a lack of space for record-keeping. Additional building space needs must be addressed in the immediate future.

INTRODUCTION

Provision of an efficient transportation system in and around Grovetown is crucial to maintain economic growth and improve the quality of life for the city's residents. Many people think of transportation solely in terms of roads and streets that allow them to commute in their cars between home, work, recreation and shopping. Efficient transportation systems actually focus on the movement of people and goods – rather than vehicles - through the use of multiple means. As a result, this component of the *Grovetown Comprehensive Plan* addresses streets, pedestrian facilities, bicycle facilities, public transportation, parking, railroads, freight, etc. Only by considering all modes of transportation can Grovetown prepare to meet the future needs of its citizens and businesses.

This chapter analyzes the city's street network including existing conditions, levels of service and potential deficiencies. Pedestrian, bicycle and public transportation systems are also reviewed to see where potential system deficiencies can be addressed to provide Grovetown residents with additional travel options. Parking and freight (including trucking, rail and aviation) will be examined to determine their effects on economic development potential in the city. Finally, the transportation/land use connection will be examined to determine how future land use decisions can balance the capacity of the transportation network with projected travel demand. The data provided in this chapter is not limited to the municipal boundaries of Grovetown. Transportation facilities in adjacent portions of unincorporated Columbia County are also reviewed due to their ability to impact the growth and development of Grovetown.

The principal sources of information for this chapter are the Georgia Department of Transportation (GDOT) and the United States Department of Transportation's Federal Highway Administration (FHWA). Other regional and federal organizations also serve as sources of information including: the Federal Aviation Administration, Federal Rail Administration, Surface Transportation Board and the Augusta Regional Transportation Study (ARTS).

STREET NETWORK

The most obvious component of many communities' transportation networks are streets. Because the vast majority of Americans rely on automobiles as their principal source of transportation, maintaining or improving the efficiency of the street network is the most significant transportation concern of a majority of local governments. Grovetown is a perfect example of this trend – with over 79 percent of all workers commuting alone via motor vehicle in 2000. In total, almost 94 percent of all Grovetown workers commuted to work via a motor vehicle (alone or carpool) in 2000. These facts emphasize the need to focus significant energy toward maintaining Grovetown's street network.

Existing Street Network

Roadways are classified by the FHWA based on their function within the local highway network and, according to their geographic location within urban or rural areas. While individual states have the discretion to make variations to the FHWA functional

classification guidelines, the *Georgia Statewide Transportation Plan* states that “...roads in Georgia have been classified according to functional use in accordance with guidelines developed by the FHWA” (Sec.4-1). Grovetown’s location within the western edge of the Augusta urban area means that the functional classification its streets are defined according to the following hierarchy (**Figure 7-A**):

Figure 7-A: Grovetown Roads: Functional System Characteristics	
Urban Principal Arterials:	Includes interstates, freeways and principal arterials with limited or no access control. Serves the major centers of activity of an urban area, the highest traffic volume, the longest trips, and the highest proportion of total urban area travel.
Urban Minor Arterials:	Includes all arterials not classified as principal and contains facilities that place more emphasis on land access and offer a lower level of traffic mobility. May carry local bus routes and provide intra-community continuity – but does not penetrate identifiable neighborhoods.
Urban Collectors:	Provides land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. May penetrate residential neighborhoods to collect and distribute local traffic to and from the arterial system. In central business (and similar) districts, the collector system may be comprised of the majority of the street grid.
Urban Local Streets:	Serves primarily to provide direct access to abutting land and access to higher order systems. Offers low-level mobility and “through-traffic” movement is usually discouraged.
Rural Minor Arterial*:	Provide links between cities and larger towns; and, should provide for relatively high overall travel speeds with minimum interference to through movement.
Rural Major Collector**:	Provide links to traffic generators not served by the arterial system including small towns, consolidated schools, shipping points, county parks, mining and agriculture.
<i>Source: U.S. Department of Transportation, Federal Highway Administration, “FHWA Functional Classification Guidelines.”</i> <i>*Currently applies only to Old Wrightsboro Road (SR 223) west of Chamblin Road.</i> <i>**Currently applies only to Harlem-Grovetown Road west of Reynolds Farm Road.</i>	

As illustrated on **Map 7.1**, most streets within Grovetown are classified as urban local streets. Obvious exceptions are Robinson Avenue and Wrightsboro Road (urban principal arterials) and Horizon South Parkway (urban minor arterial). There are no identified collector level streets within the urbanized area of Grovetown (per GDOT maps) – although streets such as Newmantown Road, Hardy Street, Katherine Street and Trudeau Trail provide a collector level function.

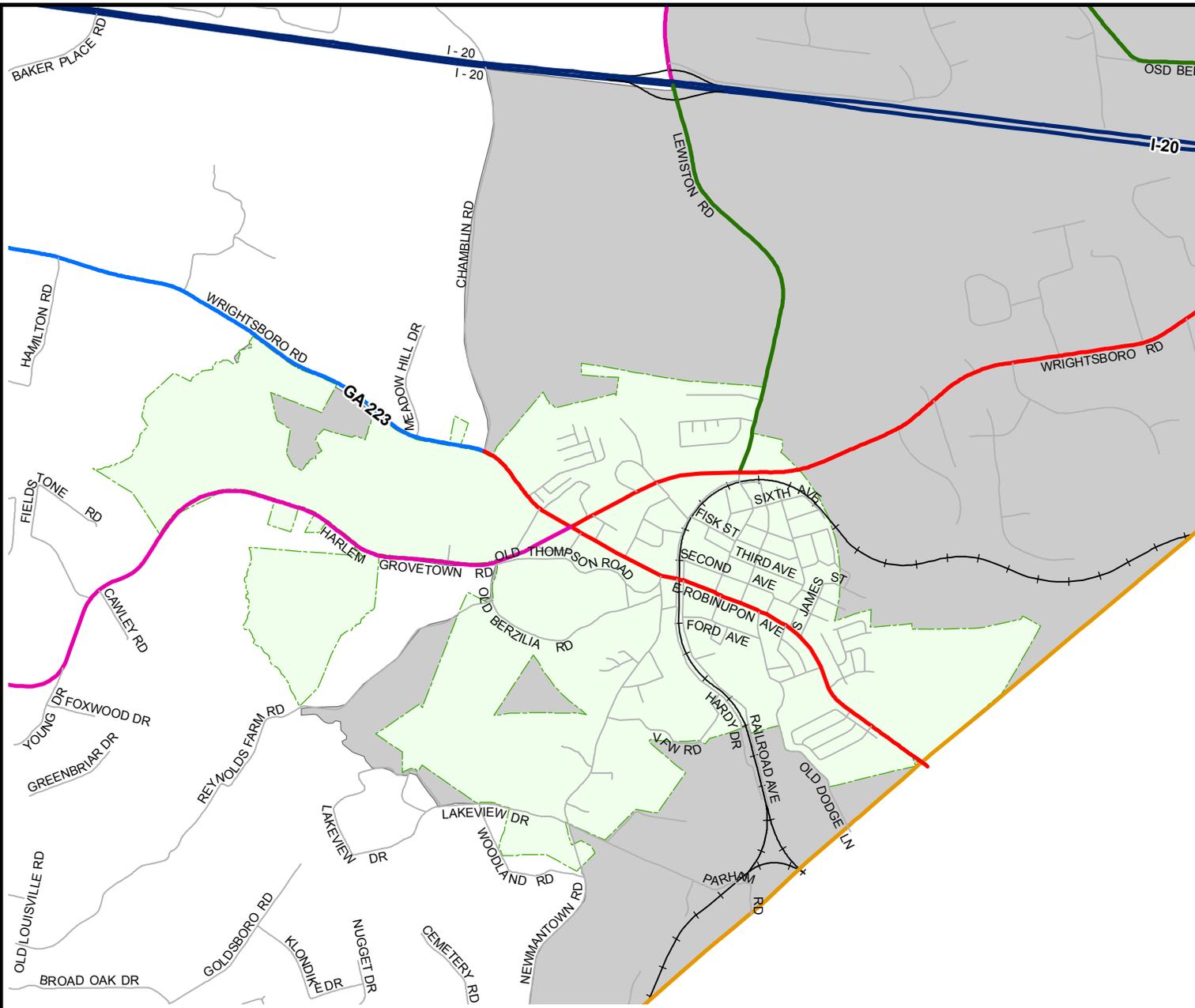
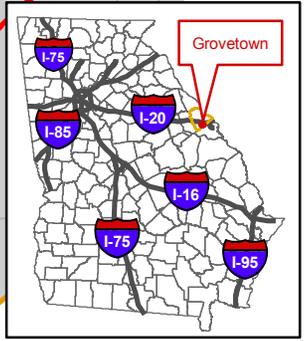
Road miles within the municipal limits of Grovetown have increased noticeably due to new residential development and an active annexation policy. **Figure 7-B** illustrates that the total mileage of roads within Grovetown increased by over 21 percent between 1997

Figure 7-B: Grovetown Road Mileage (1997-2003)			
Route Type	Total Mileage (1997)	Total Mileage (2003)	Percent % Change 1997-2003
State Route	2.5	3.8	+52.0
County Road	2.2	1.9	-13.6
City Street	16.2	19.5	+20.4
Total	20.9	25.3	+21.1
<i>Source: Georgia Department of Transportation, Office of Transportation Data, “400 Series Reports.”</i>			

and 2003. While state highways show the highest percentage of change in terms of total mileage (52 percent), state and county highways make up a small portion of Grovetown’s overall street network. The increase of state highway mileage is attributable to the



Map 7.1: City of Grovetown Street Network



Legend

Functional Class

- Urban Interstate Principal Arterial
- Rural Minor Arterial
- Rural Major Collector
- Urban Street/Local Road
- Urban Principal Arterial
- Urban Minor Arterial
- Ramp
- Railroads
- Augusta Urban Area Boundary
- Grovetown City Limits
- Columbia County

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annexation of adjacent properties by the city, and to the designation of a portion of Wrightsboro Road to a state highway (SR 388). The designation of Wrightsboro Road as a state highway resulted in a corresponding decrease in county road mileage during this same period. Unpaved roads were not addressed separately in **Figure 7-B** because they account for only 6 percent of Grovetown’s overall 2003 road network – a decrease from 1997.

Traffic Volumes

While Grovetown’s road network has expanded over time, so too have the number of vehicle miles driven by residents and workers living in Grovetown and in surrounding communities. **Figure 7-C** compares the growth of Grovetown’s road network with the growth of motor vehicle trips on the network. The Figure measures Grovetown traffic in “vehicle miles traveled” (VMT). VMT is defined as a measurement of total miles traveled by all vehicles for a specific time period in a defined area. In **Figure 7-C**, the total VMT is measured for a 24 hour period on Grovetown’s entire road network.

Figure 7-C: Grovetown Traffic Volumes (1997-2003)						
Route Type	Total Road Mileage (1997)	Daily VMT* (1997)	Total Road Mileage (2003)	Daily VMT* (2003)	Percent % Change of Total Road Mileage 1997-2003	Percent % Change of Daily VMT* 1997-2003
State Route	2.5	16589.9	3.8	28643.5	+52.0	+72.7
County Road	2.2	4839.8	1.9	6955.1	-13.6	+43.7
City Street	16.2	13081.5	19.5	23619.2	+20.4	+80.6
Total	20.9	34510.3	25.3	59217.8	+21.1	+71.6

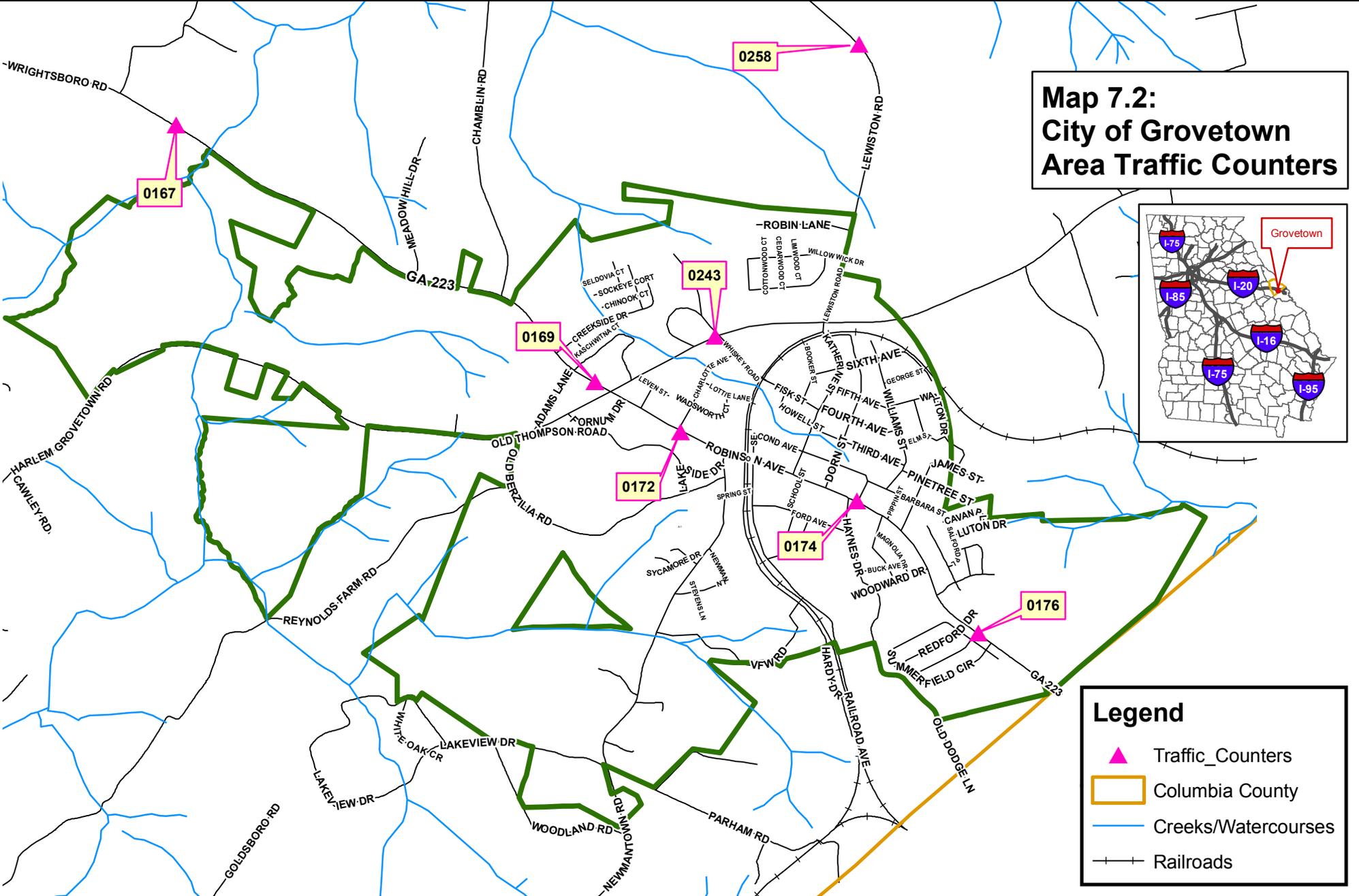
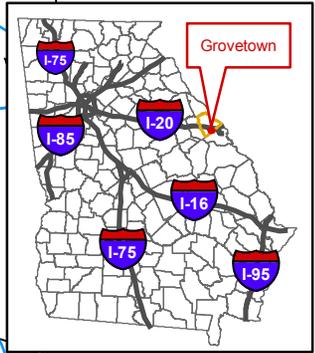
Source: Georgia Department of Transportation, Office of Transportation Data, “400 Series Reports.”
**Vehicle Miles Traveled.*

Figure 7-C illustrates that while surface mileage of roads within Grovetown increased at over 21 percent between 1997 and 2003, daily VMT grew more rapidly – increasing roughly 71 percent. Although only making up 3.8 miles of Grovetown’s total road network, state routes continue to account for the largest proportion of Grovetown’s vehicle mileage. Between 1997 and 2003 state routes consistently accounted for 48 percent of Grovetown’s total VMT. Daily VMT on city streets remained high in Grovetown, accounting for 40 percent of the VMT in 2003. The total daily VMT on Grovetown’s street network increased over 80 percent during the 6 year period measured in **Figure 7-C**.

A closer examination of major thoroughfares within, and adjacent to Grovetown illustrates similar increases in traffic volumes. **Figure 7-D** shows the changes in annual average daily traffic (AADT) on specific segments of Grovetown thoroughfares utilizing traffic count information collected by the GDOT. The information in the table combines GDOT estimates with counts of traffic traveling in both directions on a specific street segment. (**Note:** When reviewing the information in **Figure 7-D**, it is important to cross-reference **Map 7.2** to find the location of each traffic counter on the applicable road segment.)



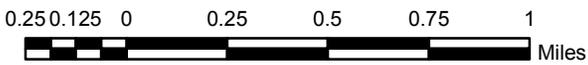
Map 7.2: City of Grovetown Area Traffic Counters



Legend

-  Traffic_Counters
-  Columbia County
-  Creeks/Watercourses
-  Railroads

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Figure 7-D: Grovetown Traffic Counts – Major Thoroughfares (1999-2004) (See Map 7.2)

Traffic Counter (See Map 7.2)	Street	1999 AADT*	2000 AADT*	2001 AADT*	2002 AADT*	2003 AADT*	2004 AADT*	Percent % Change of AADT 1999-2004
#0167	Wrightsboro Road	4095	4186	4318	4604	4409	4618	+12.8
#0169	Wrightsboro Road	6285	5600	5325	6390	5792	6876	+9.4
#0172	Robinson Avenue	4948	4840	5427	5158	5125	6134	+24.0
#0174	Robinson Avenue	5741	5060	6303	7444	7342	6010	+4.7
#0176	Robinson Avenue	6646	7586	7821	6748	6984	6902	+3.9
#0243	Wrightsboro Road	9142	9300	9675	9698	11036	11600	+26.9
#0258	Horizon South Parkway	8830	8900	9386	8542	8549	10664	+20.1

*Source: Georgia Department of Transportation, Office of Transportation Data, "Annual Traffic Counts." *Annual Average Daily Traffic.*

The Figure shows that the segment of Wrightsboro Road located between Horizon South Parkway and Harlem-Grovetown Road had not only the highest traffic volume in 1999 and 2004; but, also had the most dramatic increase of traffic volume during the time period – increasing by almost 27 percent. By 2004, Horizon South Parkway shows the second highest traffic volume of streets in the vicinity of Grovetown with 10664 AADT. These numbers contrast with the more modest traffic volume increases on Robinson Avenue (east of Hardy Street) suggesting that a rapidly increasing percentage of Grovetown’s overall motor vehicle trips are originating or terminating in the high-growth areas of Columbia County to the north and northeast.

Figure 7-E: Level of Service Characteristics

Level of Service	Description
A	Free flow with low volumes and high speeds.
B	Reasonably free flow, but speeds beginning to be restricted by traffic conditions.
C	In stable flow zone, but most drivers are restricted in the freedom to select their own speeds.
D	Approaching unstable flow; drivers have little freedom to select their own speeds.
E	Unstable flow; may be short stoppages
F	Unacceptable congestion; stop-and-go; forced flow.

Source: U.S. Department of Transportation, Federal Highway Administration, "Flexibility in Highway Design." Adapted from the AASHTO Green Book.

Level of Service

The primary method for analyzing the operational efficiency of a community’s road network is by measuring the Level of Service (LOS) of the major thoroughfares within the network. According to the Transportation Research Board’s *Highway Capacity Manual*, LOS is a measure of highway congestion describing operational conditions of a roadway in

terms of average speed, travel time, maneuverability, and traffic interruptions. **Figure 7-E** provides a description of the 6 LOS categories.



Figure 7-F: Level of Service by Highway and Area Type				
Highway Type	Type of Area and Appropriate Level of Service			
	Rural Level	Rural Rolling	Rural Mountainous	Urban and Suburban
Freeway	B	B	C	C
Arterial	B	B	C	C
Collector	C	C	D	D
Local	D	D	D	D

Source: U.S. Department of Transportation, Federal Highway Administration, "Flexibility in Highway Design." Adapted from the AASHTO Green Book.

It is important to note that descriptions in **Figure 7-E** focus solely on the freedom of drivers to travel between destinations with as little interference as possible. Because communities are typically comprised of multiple street types, land uses and development intensities, a LOS of A is not necessarily the most appropriate level of traffic flow within certain areas of

Grovetown. For instance, the high unrestricted speeds permitted by a LOS A street are not appropriate for a residential neighborhood or central business district. **Figure 7-F** identifies the FHWA’s recommended LOS for highway types based on location. The Figure actually recommends that a LOS of C is more appropriate for the major thoroughfares within an urban/suburban locale such as Grovetown.

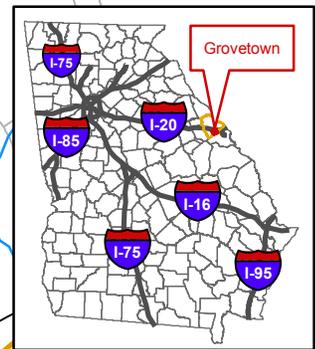
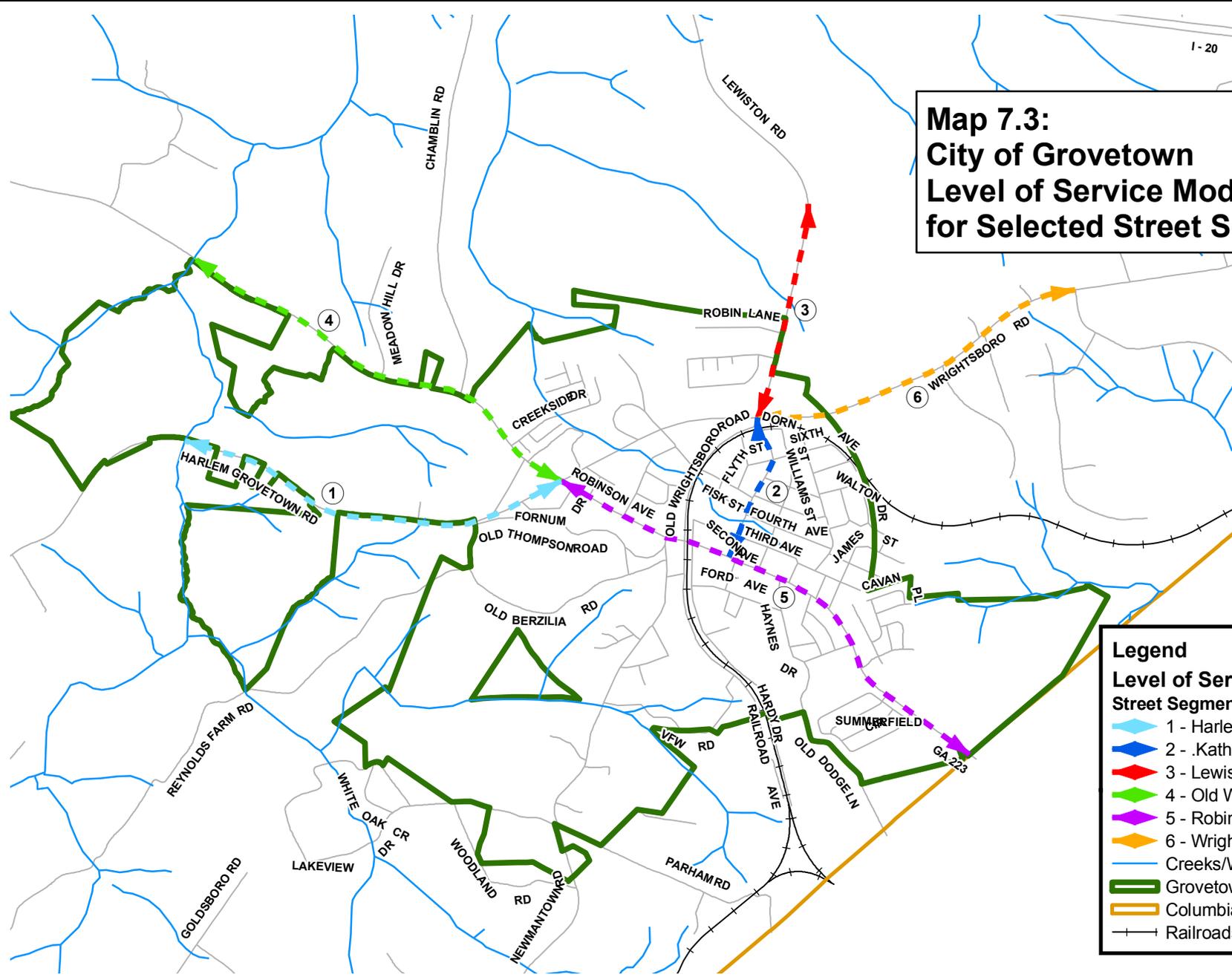
Based on GDOT traffic modeling, the major thoroughfares within and adjacent to Grovetown are generally operating at between a LOS of B and D. **Figure 7-G** shows the most recently measured LOS for 7 road segments in the vicinity of Grovetown. The Figure also predicts the LOS for each of the road segments in the year 2030. The Figure makes a distinction between roads that were modeled by assuming that no additional lane capacity is added, and roads that are projected to be widened during the intervening time period. It is quite clear from the model that portions of Horizon South Parkway and Wrightsboro Road are nearing or are already at LOS levels that are not ideal. Even with planned road widening projects, projected increases of motor vehicle traffic on these thoroughfares are predicted to keep Wrightsboro Road and Horizon South Parkway at inefficient operating levels. (*Note: When reviewing the information in **Figure 7-G**, cross-reference **Map 7.3** to find the location of each applicable road segment.*)

Figure 7-G: Grovetown Streets by Level of Service (See Map 7.3)				
Street	Street Segment Number # (See Map 7.3)	Functional Classification and Recommended Level of Service	Level of Service (2002)	Projected Level of Service (2030)
Horizon South Parkway	1	Urban Minor Arterial (C)	D	D*
Robinson Avenue	2	Urban Principal Arterial (C)	B	C#
Old Wrightsboro Road	3	Urban Principal Arterial (C) & Rural Minor Arterial (B)	D	D#
Wrightsboro Road	4	Urban Principal Arterial (C)	B	C*
Wrightsboro Road	5	Urban Principal Arterial (C)	C	D*
Harlem-Grovetown Road	6	Rural Major Collector (C)	B	C#
Katherine Street	7	Urban Collector (D)	B	C#

Source: Georgia Department of Transportation, Office of Planning
**Assumes widening to 4 lanes. #Assumes no additional capacity.*



Map 7.3: City of Grovetown Level of Service Modeling for Selected Street Segments (2002)



Legend

Level of Service, 2002

Street Segment

- 1 - Harlem-Grovetown Road (LOS B)
- 2 - Katherine Street (LOS B)
- 3 - Lewiston Road (LOS D)
- 4 - Old Wrightsboro Road (LOS D)
- 5 - Robinson Street (LOS B)
- 6 - Wrightsboro Road (LOS B)

- Creeks/Watercourses
- Grovetown City Limits
- Columbia County
- Railroads

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The only significant short-term street project identified by the ARTS *Transportation Improvement Program (TIP)* (FY 2006-2008) to improve traffic access to and from Grovetown is the improvement to the Horizon South Parkway overpass at I-20. The ARTS *Augusta Regional Long-Range Transportation Plan* has recently been updated to include the proposed widening of Wrightsboro Road (Jimmie Dyess Parkway to Robinson Avenue) and Horizon South Parkway (Columbia Rd. to Wrightsboro Rd.) to 4 lanes, but no funding has yet been designated. These projects are projected to be completed by 2025 and have been factored into the model provided in **Figure 7-G**.

Motor Vehicle Accidents

Increased traffic volume on Grovetown’s roadways unfortunately translates into a gradual increase in motor vehicle accidents. Motor vehicle accident data compiled by the Georgia Department of Motor Vehicle Safety between 1996 and 2003 shows that the total number of motor vehicle crashes in Columbia County increased 33 percent - from a 1996 total of 2427 accidents to 3222 accidents in 2003. During this same period, the rate of Columbia County motor vehicle crashes (per 10,000 licensed drivers) fluctuated. In 2003, the rate of motor vehicle crashes was 387.3 as opposed to 393.0 in 1996.

More recent data provided by the Grovetown Department of Public Safety illustrates that the monthly number of motor vehicle accidents on city streets between January 2005 and April 2006 continues to fluctuate. Over the reported 6 month period, Grovetown averaged 13 motor vehicle accidents per month – a total of 208 reported motor vehicle accidents. Of these, a total of 156 (75 percent) occurred at or near intersections.

Figure 7-H: Grovetown Motor Vehicle Accidents by Street (Jan. 2005 – April, 2006)

Street	Total Number # of Accidents
Wrightsboro Road	92
Robinson Avenue	39
Horizon South Parkway	36
Katherine Street	22
Harlem-Grovetown Road	19

Source: Grovetown Department of Public Safety

Figure 7-I: Grovetown Motor Vehicle Accidents by Intersection (Jan. 2005 – April, 2006)

Intersection	Total Number # of Accidents
Wrightsboro Road/Horizon South Parkway/Katherine Street	34
Wrightsboro Road/Mt. Pleasant	14
Wrightsboro Road/Whiskey Road	10
Wrightsboro Road/Robinson Avenue	7
Robinson Avenue/Katherine Street	5

Source: Grovetown Department of Public Safety

Figure 7-H lists the 5 city streets where the highest number of motor vehicle accidents were reported between January, 2005 and April, 2006. **Figure 7-I** lists the intersections with the most frequent incidences of reported motor vehicle accidents. Grovetown’s highest volume arterial streets account for the majority of motor vehicle accidents within the city. While the signalized Wrightsboro Road/Horizon South Parkway/Katherine Street intersection had the highest number of reported motor vehicle accidents at 34, less than 20 percent of Grovetown’s overall traffic accidents occurred at the city’s 2 signalized intersections during the study period.

Signalization and Signage

There are only 2 signalized intersections within the city of Grovetown. The signals are located at the intersection of Horizon South Parkway and Wrightsboro Road, and the intersection of Robinson Avenue and Wrightsboro Road. Both “at-grade” railroad crossings within Grovetown include lights and traffic gates which activate when a train is approaching. All other intersections with identified arterial and collector streets are posted with stop signs.

Bridges

GDOT oversees the bi-annual inspection of all bridges located on federal, state, county and city roads. The Department also oversees the bi-annual inspection of all other drainage structures on interstates and state highways only. For purposes of inspection and maintenance by GDOT, a bridge generally includes: bridges and culverts that are longer than 20 feet in length. Drainage structures typically include: those remaining structures that may allow for drainage under the roadway but are less than 20 feet in length.

Drainage structures inspected by GDOT are done so according to standards established by the Department. Communities that require assistance to rehabilitate locally owned and maintained drainage structures may request funding assistance from GDOT. While some drainage structures may exist within or adjacent to the city of Grovetown, they have not been inventoried as part of the *Grovetown Comprehensive Plan*.

GDOT’s bi-annual inspections of bridges are required by the FHWA. Bridge inspections are based on sufficiency ratings which take into account a variety of factors including: condition of major structural components, volume of traffic, load rating, type of design clearance, alignment of approach, etc. Bridges with a rating of 75 or better are deemed “sufficient.”

Bridges rated between 50 and 75 are classified as “structurally deficient” while bridges rated less than 50 are “functionally obsolete.” **Figure 7-J** identifies bridges in close proximity to Grovetown incorporating their most recent sufficiency ratings.

Figure 7-J: Sufficiency Rating of Bridges in Grovetown Vicinity (2006)

Bridge (By GDOT Inventory Number)	Location	Rating	Classification
#073-0018-0	SR 223 (at Euchee Creek)	50.03	Structurally Deficient
#073-5016-0	Harlem-Grovetown Road (at Euchee Creek)	98.5	Sufficient
#073-5017-0	Parham Road (at Georgia Railroad)	98.62	Sufficient

Source: Georgia Department of Transportation.

The recently constructed bridge south of Grovetown which allows traffic to cross over the Georgia Railroad has a near perfect sufficiency rating. Even the culvert on Harlem-Grovetown Road crossing Euchee Creek retains a sufficiency rating of over 98. While the Euchee Creek bridge on SR 223 (Old Wrightsboro Road) received a rating of only 50, funding for right-of-way acquisition has been designated by the ARTS *TIP* to allow for future widening and improvement. Funding has not yet been identified for actual construction of the bridge improvement. As previously noted however, the Interstate 20

overpass at Horizon South Parkway is slated for upcoming improvements with funding for construction in FY 2007 of the *TIP*.

PEDESTRIAN FACILITIES

A survey of Grovetown streets by the City's Public Works Department shows that roughly 48 percent of all road mileage within the city includes a sidewalk on at least one side of the street (See **Map 7.4**). Of the 12.2 miles of Grovetown streets incorporating sidewalks, 66 percent (8.08 miles) include sidewalks on both sides of the street. Roughly 4.12 miles of Grovetown streets incorporate sidewalks on one side of the street. Much of the sidewalk mileage is located on low volume local streets contained within new residential subdivisions. This condition is a result of Grovetown land development regulations which require the provision of sidewalks in new residential subdivisions. Large portions of arterial streets remain void of sidewalks, although the city is considering provisions to require new non-residential development to incorporate sidewalks on their portion of street frontage. There are no signalized pedestrian crosswalks within the city limits, but more recent street improvement projects (ex. Newmantown Road) have incorporated improved pedestrian facilities such as handicapped ramps and marked crosswalks at street intersections.

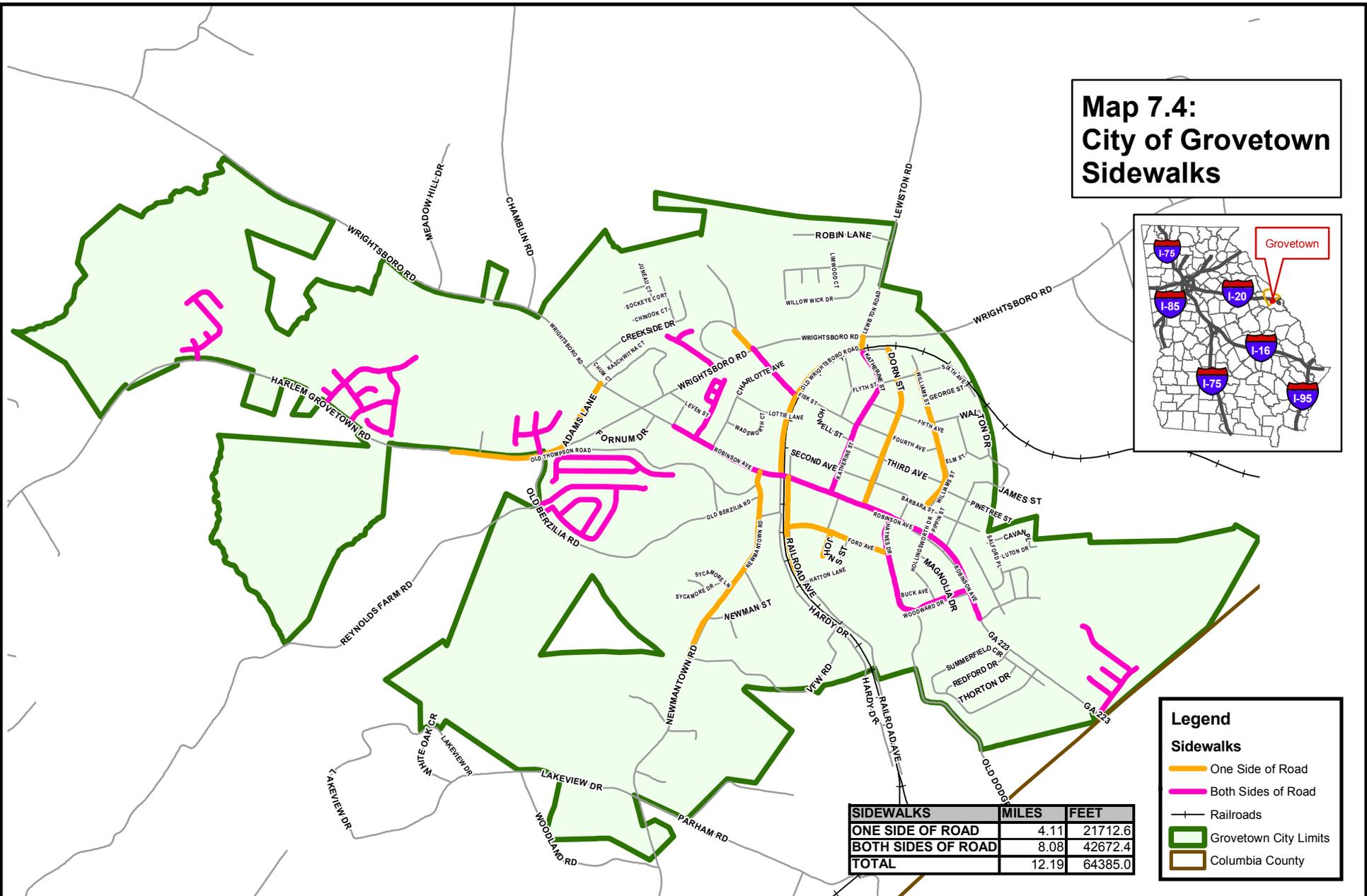
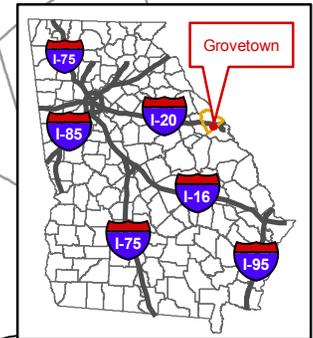
Grovetown sidewalks are generally 4 feet in width, and directly abutting or within 6 feet of the curb or street pavement. One exception is the wider multi-use path on the north side of Harlem-Grovetown Road linking a few residential subdivisions to Grovetown Middle School. There are plans to extend this path further west to the Euchee Creek Greenway. The Euchee Creek Greenway has also been recently extended to a total length of 1.33 miles and could provide an additional transportation option for Grovetown residents if extended further and linked to adjacent developments.

BICYCLE FACILITIES

A portion of the Georgia Statewide Bicycle Route system passes through Grovetown. The "Augusta Link" originates in Augusta and travels through Grovetown on Wrightsboro Road. At the Robinson Avenue intersection, the Augusta Link bicycle route continues west on Old Wrightsboro Road (SR 223) toward Thomson. Although this bicycle route passes through Grovetown, high volume and high speed traffic combined with a lack of shoulders makes the use of this route by inexperienced cyclists unfeasible.

The city of Grovetown does not currently have any designated on-street bicycle facilities within its municipal limits. The provision of bicycle parking facilities such as bike racks is also not required by city ordinance. The ARTS *Regional Bicycle and Pedestrian Plan* recommends bicycle projects for portions of Wrightsboro Road (S. Belair Road to west side of Grovetown) and Horizon South Parkway (Wrightsboro Road north to Columbia Road). The *Plan* recommends that "Share the Road" signage be posted on Wrightsboro Road. The *Plan* recommends the construction of designated bicycle lanes on Horizon South Parkway. There is currently no timeframe or funding proposed for the implementation of these specific bicycle projects. Implementation may occur during

**Map 7.4:
City of Grovetown
Sidewalks**



Legend

Sidewalks

- One Side of Road
- Both Sides of Road
- Railroads
- Grovetown City Limits
- Columbia County

SIDEWALKS	MILES	FEET
ONE SIDE OF ROAD	4.11	21712.6
BOTH SIDES OF ROAD	8.08	42672.4
TOTAL	12.19	64385.0



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planned widening of both street segments; but, such activities are not projected to be completed until 2025.

Currently, the most inviting bicycling option for Grovetown residents is the 1.33 mile Euchee Creek Greenway. This multi-use path is utilized primarily for recreational cycling, walking and jogging but has the potential to be incorporated into a larger bicycle network. The greenway extends from just north of Harlem-Grovetown Road to the rear of the Euchee Creek subdivision but does not currently provide linkages to an extended non-motorized transportation system. There are plans to extend it further north to Wrightsboro Road.

PUBLIC TRANSPORTATION

Grovetown residents are served by the Columbia County Rural Public Transit system. This van service is available by appointment (24 hour notice required) and can provide customers with access to facilities within all of Columbia County and all portions of Richmond County north of Gordon Highway. Transportation is provided to and from the following locations:

- Education facilities
- Employment centers
- Shopping facilities
- Medical facilities
- Recreational facilities
- General places of business

The Columbia County Rural Public Transit system is operated Monday through Friday from 8:00 AM to 5:00 PM. Wheel chair clients must be ambulatory or be escorted. There are no current plans to expand service.

Augusta-Richmond County operates a transit system that includes one bus line extending into Columbia County, but it is not located in close proximity to Grovetown.

PARKING

The city of Grovetown's land development regulations contain off-street parking requirements for new development. Lacking a traditional central business district, Grovetown's on-street parking was previously limited to local residential streets in historic neighborhoods and new subdivisions. Because of public safety concerns resulting from residents parking on both sides of residential streets, the City Council recently passed an ordinance eliminating on-street parking throughout the city limits.

RAILROADS

The city of Grovetown is bisected by CSX Transportation's Atlanta to Augusta mainline (the "Georgia Railroad"). CSX is defined by the federal Surface Transportation Board as a Class 1 Railroad, meaning that its average annual operating revenue meets or exceeds 255.9 million dollars. The rail line running through Grovetown serves only freight operations and is defined as a "mainline" because it serves a large number of trains conveying a high volume of tonnage between major markets (terminals). The Augusta-Aiken MSA is a particular beneficiary of the railroad's mainline status because Augusta is home to a CSX *Transflo* bulk transfer terminal which allows for rail/truck transfers of freight.

According to the *Georgia Freight Rail Plan*, the 47 mile segment of the Atlanta to Augusta mainline, which includes Grovetown, carried approximately 13.5 million gross ton miles per mile of track in 1998. Roughly 15 trains pass through Grovetown on a daily basis – a gradual increase since 1998. While trains are passing through Grovetown, motor vehicle traffic at 2 "at-grade" street crossings is blocked. Grovetown's at-grade vehicular rail crossings are located at Robinson Avenue and Katherine Street – near the intersection with Wrightsboro Road. The *Georgia Statewide Freight Plan* suggests that rail tonnage is expected to double throughout the state of Georgia by 2035.

While Grovetown was originally established as a summer haven for wealthy Augusta residents traveling to summer homes by rail, the city is not currently served by passenger rail. The Georgia Rail Passenger Program proposes intercity passenger rail service between Augusta and Atlanta in the long-term; however, such service has not been listed as a priority or been provided funding.

TRUCKING, PORT FACILITIES AND AVIATION

Trucking

Freight traffic on roads in the Grovetown vicinity is based largely on deliveries to and from manufacturing and warehousing facilities in the Horizon South Industrial Park. Commercial deliveries along Wrightsboro Road are also frequent. Mobility of these vehicles can be difficult due to restrictions in street dimensions at the Horizon South Parkway overpass at Interstate 20. The limited size of the overpass and the lack of signalization at the exit ramps can create safety hazards that may involve freight vehicles. Scheduled improvements to the overpass identified in the ARTS *TIP* should reduce the difficulties currently experienced at this intersection.

Truck traffic within Grovetown is restricted by city ordinance. Except for local deliveries, commercial trucks may be prohibited from traveling streets within the city when posted (currently posted streets are: Katherine Street and Dorn Street.) While it is not uncommon to find truck traffic on Wrightsboro Road and Horizon South Parkway, much of this traffic stays north of Grovetown between Wrightsboro Road and Interstate 20.

Port Facilities

The closest port facility to Grovetown is located in Savannah. There is no apparent and direct economic impact of truck/port, or rail/port transfers originating or terminating in Grovetown.

Aviation

There is no public use airport located within Grovetown or unincorporated Columbia County. The *Georgia Aviation Systems Plan* does not recommend that an airport facility be located in Columbia County. Regardless, Grovetown is within the service area of 3 public airports:

- Augusta Regional Airport at Bush Field (Level III)
- Augusta-Daniel Field (Level I)
- Thomson-McDuffie County Regional Airport (Level III)

When categorizing airports by “level”, the Federal Aviation Administration typically considers runway length, facilities and traffic count. Level I airports include runway lengths of at least 4000 feet. Level III airports include at least 1 runway of 5500 feet or more. As a result, Level III facilities can accommodate a much wider variety of aircraft, providing greater economic potential for surrounding communities.

Grovetown’s central location to all 3 facilities provides options for travelers who may be visiting Grovetown for business or pleasure. According to the *System Plan*, all 3 airports are projected to see increased activity through 2020 - including increases in aircraft that are based at each facility, and annual aircraft take-offs and landings. As a result, the *System Plan* suggests that all 3 airports provide additional facilities and services commensurate with their roles in the state-wide aviation system.

The vast majority of take-offs and landings at all 3 airports is comprised of passenger traffic. The total value of air freight currently being handled at Augusta Regional Airport a Bush Field is negligible and expected to account for roughly 2,000,000 million dollars by 2035.

TRANSPORTATION/LAND USE CONNECTION

Grovetown’s land development pattern is characterized by low-density residential land uses. Low-density single-family development consumes land at a greater rate than most other land uses and requires the construction of more miles of public streets and other infrastructure. All new development in Grovetown is required to have access to a public street; but, because all non-residential land uses in the city have typically located on existing state or county highways, the city’s land development regulations only include dimensional design standards for local residential streets. Except for recently constructed Trudeau Trail, linking Old Wrightsboro Road and Harlem-Grovetown Road with Grovetown Middle School and a proposed elementary school, most new Grovetown streets are connected solely to existing state highways and are not designed to carry high traffic volumes.

While single-family residences are the principal land use in Grovetown, there are indications that retail development in Grovetown may increase. Commercial growth in Grovetown is being channeled, through the zoning process, to Wrightsboro Road – promoting the formation of a contemporary commercial corridor. Together, the single-family growth and conversion of Wrightsboro Road to a commercial corridor result in a land use pattern that automobile-dependant and significantly increases motor vehicle trips. In addition, industrial properties adjacent to Grovetown are situated so that most individuals must rely on motor vehicles to access local manufacturing and warehouse properties.

The older central portion of Grovetown is also developed at a fairly low-density. It does however, exhibit a much greater degree of interconnectivity between streets and property. This development pattern may be helping to offset some increases in motor vehicle trips as suggested by AADT rates on Robinson Avenue that are increasing at a much slower pace than other major Grovetown thoroughfares (See **Figure 7-D**).

As Grovetown has provided more recreational opportunities, the City has also exhibited a commitment to providing linkages between these facilities and residential areas. Recent improvements to Newmantown Road (near Liberty Park), have included sidewalks. There are also long-term plans to link Grovetown Middle School and the Euchee Creek Greenway with sidewalks along Harlem-Grovetown Road.

ASSESSMENT**STREET NETWORK****Existing Street Network/Traffic Volumes/Level of Service**

As with surrounding unincorporated Columbia County, Grovetown's growth pattern is projected to remain defined by low-density residential development. Such a development pattern ensures that traffic volumes will continue to increase on existing arterial streets. In recognition of this fact, the ARTS *Transportation Improvement Program (TIP)* proposes long-term road widening projects to Horizon South Parkway and Wrightsboro Road – both of which are urban arterial thoroughfares. Even with the incorporation of these long-term improvements, traffic flow efficiency on both thoroughfares is actually expected to decrease over time. The projections contained in **Figure 7-G** support the theory that traffic congestion can not be addressed by solely adding lane capacity to existing streets.

To help offset projected decreases in the efficiency of traffic flow on Horizon South Parkway and Wrightsboro Road, Grovetown should continue to coordinate with Georgia DOT, Columbia County and ARTS to incorporate access management measures into the designs of planned widening projects. By working with these jurisdictions to create and adopt access management standards that promote greater separation of driveways, cross-access easement requirements, traffic control medians, etc.; long-term functional efficiency of both streets may be improved.

In addition, Grovetown can also pro-actively address projected decreases in traffic flow efficiency by promoting greater interconnectivity between streets and developments. By creating these linkages, some future traffic can be channeled off of existing state highways. Greater interconnectivity of streets disperses traffic more effectively by giving drivers multiple route options. Grovetown can work with other jurisdictions to create a major thoroughfare plan for the area - defining potential routes for future collector and arterial streets. The major thoroughfare plan could include an "official map" providing local jurisdictions with the right to purchase and reserve future road corridors as new development occurs. By also developing and adopting street design standards for collector and arterial streets within the municipal limits, Grovetown would have the ability to require that such streets be built as surrounding properties are developed.

Consistent with the concept of a more pedestrian oriented town center district, long-term improvements to Katherine Street and portions of Robinson Avenue should focus more on restricting traffic speeds. Redesigns of portions of these street segments could be considered which are more urban in nature. Urban street segments could incorporate designated on-street parking lanes, wider sidewalks, curb extensions, bike lanes and marked and signalized pedestrian crosswalks. Only by creating conditions that slow motor vehicle speeds, can Grovetown create a town center district that has a more intense development pattern and is pedestrian-friendly (See Chapter 9 for additional details.)

Motor Vehicle Accidents

As with most communities, the vast majority of motor vehicle accidents in Grovetown occur on or near the thoroughfares with the greatest traffic volume. In Grovetown, these accidents are occurring primarily on a 2 lane urban principal arterial (Wrightsboro Road) which is rapidly developing as the city's main commercial corridor. Roughly only a third of these accidents occur at the two 2 signalized intersections on the thoroughfare.

The most efficient way for the city to limit motor vehicle accidents on Wrightsboro Road and other major thoroughfares is to manage access to adjacent properties – and thus, control the number of turning motions in and out of private property and side streets. In the short term, access can be managed by partnering with GDOT to develop an ordinance that controls the spacing of curb-cuts to adjacent properties and requires cross-access easement agreements for vehicular traffic. In the long-term, access management can also be incorporated into the Wrightsboro Road and Horizon South Parkway road widening projects proposed by the ARTS *TIP*. By incorporating traffic control medians with acceleration and deceleration lanes, these projected road widening projects can channel motor vehicle flow to specific access points along the roadway. The safety benefits to controlling access on major thoroughfares are further enhanced by the corresponding increase in the roadways' functional capacity and the use of traffic control medians as landscaping features. As referenced in **Figure 6-E**, parkways and landscaped medians are also considered a suitable urban greenspace by the National Recreation and Parks Association.

Signalization and Signage

No specific deficiencies were identified when reviewing signalization and traffic control signage throughout Grovetown. Most traffic in Grovetown is channeled to arterial streets directly from multiple adjacent local streets making the task of determining the appropriate location of future traffic signals somewhat difficult.

Should Grovetown develop a standard and policy for construction of new collector streets, the spacing of such facilities should be adequate to allow for new signalization where they intersect arterial or other collector streets. Grovetown could also consider working with GDOT to signalize intersections on Robinson Avenue where it passes through the older portion of the city. Signalization of Robinson at this location may be necessary to safely promote increased pedestrian traffic at Newmantown Road, and a higher-density urbanized town center in the vicinity of Katherine and Hardy Streets.

Bridges

Other than the bridge on SR 223 crossing Euchee Creek, there are few apparent deficiencies to bridges and drainage structures in the Grovetown vicinity. Close coordination of Grovetown staff with GDOT engineers regarding the date and results of biannual bridge and drainage structure inspections will enable Grovetown to act promptly on potential future deficiencies. Active coordination with Columbia County and continued participation in the ARTS technical and policy committees will enable Grovetown to proactively seek the means to correct potential problems to facilities within or adjacent to the city.

PEDESTRIAN FACILITIES

Pedestrian facilities such as sidewalks and walkways are a fairly easy way for a community to develop a transportation system not solely reliant on motor vehicles. Road segments including sidewalks are a reminder that streets are intended to convey people – not vehicles. Not only do such facilities provide Grovetown residents with a viable transportation alternative; but, they provide pathways on which people can exercise and experience the outdoors.

Grovetown has been very proactive in developing a pedestrian system by requiring sidewalks as part of new development. Grovetown is also fortunate to have an existing sidewalk network on the majority of major street segments in the older central portion of the city. Recent improvements to Newmantown Road, with sidewalks on one side of the street and well-marked crosswalks at intersections, illustrate that Grovetown officials are committed to improving the pedestrian environment in the city. Like most communities; however, there are gaps in the pedestrian system which can decrease its feasibility as a transportation option. The sidewalk system in most new subdivisions ends at the entrances to the developments. Retail corridors such as Wrightsboro Road lack pedestrian accessibility from other parts of town. Many of these limitations can be addressed when street



Pedestrian facilities are being incorporated into street improvement projects throughout Grovetown.

improvements are planned within the city – but funding for such improvements has not been identified in the ARTS *TIP*. In the short-term, Grovetown’s pedestrian network can be increased by incorporating basic changes in its land development regulations such as: requiring new development to build sidewalks on their portion of street frontage; and, requiring “walkway” connections (pedestrian paths not located in a street right-of-way) between residential developments and adjacent land uses such as parks, schools or major shopping destinations.

Pedestrian networks can also be improved through changes in basic design features. Sidewalks of 5 feet in width, rather than 4 feet, allow 2 people to walk comfortably beside each other. Revising street design standards to move sidewalks at least 6 feet away from curbs decreases design conflicts where sidewalks cross driveway approaches, provides room for tree plantings and provides pedestrians with a greater feeling of safety – particularly on higher-volume streets. Painting motor vehicle stop bars and pedestrian crossings on the street pavement at intersections can also provides drivers with a better understanding that they are in a pedestrian environment. Mid-block crosswalks can also be enhanced by incorporating traffic calming devices in the pavement such as speed

tables or rumble strips and/or strategically installing “Yield to Pedestrian” signage at key locations.

BICYCLE FACILITIES

The communities best prepared to deal with increasing traffic congestion are those which invest in non-motorized elements of their transportation system. Gradual investment in on-street and off-street bicycle facilities increases a community’s quality of life by providing residents with more than one transportation option. As more retail and office uses follow population trends and locate in Grovetown, local residents will have more options to work and shop within the city. Under Grovetown’s current development pattern, these increasing “internal” trips will need to be accommodated almost entirely by motor vehicles.

Grovetown has taken the first step in creating a viable bicycle network by developing the Euchee Creek Greenway. A greenway trail is a prime tool to introduce a community to recreational cycling. Additional extension of the trail between streets and subdivisions will also give Grovetown residents the option of using the trail for trips between neighborhoods. The city can accommodate such activity by working with homeowners associations in developments bordering the trail to create linkages to the trail from neighborhood streets. The city’s land development regulations can also be revised to require new developments which border the existing trail (or planned sections) to provide pathways between the trail and the development and, to designate greenway easements.

The city could also further revise land development regulations to include requirements for bike lanes on new targeted collector level streets; and, include bike lanes in future road improvement projects. The relatively low traffic volume and speeds on collector streets makes bike traffic suitable and provides the basic facilities to encourage novice bike riders to consider some trips (to neighbors, parks, schools, convenience store, etc.) as bicycle commuting opportunities. There is even time to alter the planned widening of Wrightsboro Road to incorporate bicycle lane rather than “Share the Road” signs. While such a position may require that the ARTS *Regional Bicycle and Pedestrian Plan* be revised, Grovetown’s continued overall support for the *Plan* will help ensure that potential bike routes on collector streets can eventually connect into on-street facilities providing bicycle access to the greater region.

A bicycle network also requires facilities for cyclists when they arrive at a destination. Many communities require the provision of bicycle racks as part of new development through their zoning ordinances. Others communities initially promote bicycle parking by providing bicycle racks at properties owned by the local jurisdiction.

PUBLIC TRANSPORTATION

While Grovetown residents have access to Columbia County’s transit system, limited services result in logistical challenges for persons interested in utilizing public transportation. It is possible that, because of system overlap, Grovetown residents using the Columbia County Rural Public Transit system may be able to access the Augusta

public transit system to provide additional travel options within the City; but, this option does not ease the logistical burden of using public transportation.

Statistics in the *Georgia Statewide Transportation Plan* illustrate that road construction and maintenance will not be able to keep pace with projected vehicle miles traveled. The result is that increased traffic congestion in Grovetown and statewide is almost guaranteed. Recognition of projected increases in traffic congestion, combined with the current lack of viable public transit options, may indicate that Grovetown should consider discussing ways to increase transit options with local public transit service providers. Options could range from increased hours for existing services, to the establishment of new targeted transit services such as express commuter buses.

PARKING

Grovetown's parking needs are currently addressed via off-street parking requirements contained in its zoning regulations. There is no indication at this time that continued application of these standards will fail to address future parking needs on non-residential properties within the city. Particular attention should be paid, however, to off-street parking lot design standards for non-residential development. As larger non-residential developments are constructed to meet the needs of Grovetown's rapidly growing population, greater traffic volume will increase on-site congestion and motor vehicle/pedestrian conflicts. Grovetown can pro-actively address these pending issues by considering potential revisions to its parking lot design standards such as: increasing driveway throat lengths, spacing of access points, traffic control islands and medians, and on-site pedestrian walkways between parking areas and buildings.

Grovetown's recent prohibition of on-street parking ensures unobstructed traffic flow of emergency and service vehicles throughout the entire city. This complete prohibition does have the potential to create unintended consequences – particularly in residential subdivisions. The lack of any on-street parking on local residential streets increases the width of travel lanes and can encourage higher speeds in neighborhoods. Instances of front yard parking can also increase for residents with multiple vehicles or in instances where there are large gatherings. Additionally, should Grovetown wish to develop areas in the future according to a more traditional building pattern – such as a downtown business district or neo-traditional subdivision – parking needs will have to be addressed partially through the provision of on-street parking.

After evaluating the effects of the city's on-street parking prohibition, Grovetown can choose to gradually allow on-street parking in a more controlled fashion. In residential areas, many communities allow parking on one side of the street (often times on the side of the street in which sidewalks are constructed to provide an additional buffer for pedestrians). The City can also coordinate with the U.S. Postal Service to reduce or eliminate the number of developments with rural route mailboxes – relying instead on mailboxes or mail slots at the front door. Whether for contemporary subdivisions or traditional style developments, alternative street standards can be created that accommodate on-street parking and emergency access.

RAILROADS

Grovetown benefits indirectly by increased use of the CSX rail line that bisects the city and the *Transflo* facility located in Augusta. Increased use of these facilities translates into potential jobs for residents of the entire Augusta-Aiken MSA. Unfortunately, Grovetown is most directly impacted by the noise, traffic delays and potential disruption of emergency response which can occur when freight trains pass at-grade street crossings. These issues are compounded by the fact that Grovetown’s population growth has also resulted in higher traffic volumes on city streets and state highways.

Increases in both rail freight and motor vehicle volumes are not likely to subside in the foreseeable future. Alleviating the rail/motor vehicle conflict may best be accomplished through facility improvements. It may be necessary to consider intersection realignments or the conversion of at-grade street crossings to above or below-grade crossings. Noise abatement may be accomplished by working with CSX to establish “quiet zones” at existing at-grade crossings. Quiet zones alter at-grade crossings to mitigate the need for passing trains to sound their horns when approaching. Rules for the establishment of quiet zones are maintained by the Federal Railroad Administration.



The Georgia Railroad bisects downtown Grovetown at Robinson Avenue.

While the inclusion of passenger rail service on existing rail lines has the potential to increase train traffic through Grovetown, such a scenario is unlikely in the short-term. There is no funding for the establishment of an Augusta to Atlanta intercity passenger rail line – nor is funding likely in the near future. Even if passenger rail service is established between Atlanta and Augusta there is no guarantee that it would be located within existing CSX rights-of-way (although that is currently the most cost-effective approach). There is also no guarantee that Grovetown would be directly served by passenger rail through the construction of a depot within the city limits.

TRUCKING, PORT FACILITIES AND AVIATION*Trucking*

Except for the current inconveniences to truck traffic at the Horizon South Parkway/Interstate 20 overpass, freight traffic appears to be relatively uninhibited in the Grovetown vicinity. While the overpass is located in unincorporated Columbia County,

scheduled upgrades will improve the viability of freight activities in Horizon South Industrial Park – benefiting both Columbia County and Grovetown. Grovetown should continue to support and encourage the timely completion of the overpass project by actively participating in the ARTS planning process.

While the city of Grovetown has an ordinance in place restricting truck traffic to arterial streets, violations are not an infrequent occurrence. While most violations simply pose a nuisance to the community, some violations – particularly on streets crossing the Georgia Railroad – can pose a safety hazard. Additional efforts should be considered to improve truckers’ awareness of the local truck ordinance. A solution could be to post new signage at critical intersections (such as the Wrightsboro Road/Katherine Street/Hardy Street intersection) notifying drivers of truck restrictions and/or hazards to oversized trucks a rail crossings. The appropriate signage solution can be identified through consultation with the GDOT and the FHWA’s *Manual on Uniform Traffic Control Devices*.

Port Facilities

There is no apparent and direct correlation between Grovetown and coastal port facilities requiring action by the city.

Aviation

Grovetown is located in close proximity to 3 public use airports providing a range of aviation services to the CSRA region. Further development of all 3 facilities is recommended by the Georgia Aviation Systems Plan to increase the effectiveness of each airport’s services. With no projected capacity deficiencies at any of the 3 accessible airports, travelers to and from Grovetown – whether flying commercial, chartered or personal aircraft – will continue to benefit from competitive options. Because of demand /capacity ratios which are projected to remain low for the foreseeable future, Grovetown’s airport options appear adequate.

TRANSPORTATION/LAND USE CONNECTION

Rapid residential growth in Grovetown has resulted in immediate increases in City tax revenues. These increases have enabled the City to continue the expansion of public services and infrastructure to meet the immediate needs of new residents and businesses. Development patterns that are predominantly dependant on low-density residential growth however, risk creating infrastructure networks that are difficult to maintain over extended periods of time – particularly transportation systems. When homes are constructed further apart, it is necessary to extend streets, curb and gutter and sidewalks additional distances. Although most of these initial costs will be paid by the developer or new residents, it will ultimately be the responsibility of the local jurisdiction to provide for long-term maintenance.

Even though it is likely that new retail and office uses will locate within Grovetown, locating these uses along highly traveled thoroughfares, with few linkages to adjacent residential streets limits accessibility to most individuals other than those who choose to

drive. While provision of facilities in non-residential areas that promote bicycle and pedestrian accessibility is certainly advisable (and promoted in this plan), the sheer distances that exist as a result of low-density development discourage most residents from commuting or conducting errands in anything other than their automobiles. All of these trips create more wear and tear on the street system and increase maintenance needs. Because maintenance of the city street network is inevitable, Grovetown should consider ways that it can supplement its maintenance budget so that long-term needs can be met with less concern about future valuation of property.

As referenced in Chapter 9, Grovetown should also consider designating areas where higher-density redevelopment can occur. Lacking a traditional downtown, portions of the central part of Grovetown are actually developed at a lower density than many of the city's new residential subdivisions. Multiple street connections provide links to large central city tracts that are currently being used for mobile home parks. Many of these properties exhibit significant conditions of blight. Redevelopment of these areas to higher densities and/or a mix of uses is possible largely through the use of the central city's interconnected street grid. While some additional street connections and upgrades may be necessary to promote such redevelopment activity, the resulting long-term comparison of revenues vs. expenditures is likely to exhibit fewer demands on city services and infrastructure.

INTRODUCTION

Successful implementation of the *Grovetown Comprehensive Plan* is largely dependant on maintaining and/or enhancing the relationships that the city has with other government entities. The intergovernmental coordination component of the *Plan* provides Grovetown with the opportunity to inventory existing multi-jurisdictional agreements and policies, and the localized policies of adjacent jurisdictions. An assessment of these agreements and policies ensures that successful *Plan* implementation is achieved in concert with the objectives of other governments and entities.

ADJACENT LOCAL GOVERNMENTS

Columbia County

Grovetown is located within and almost entirely surrounded by Columbia County. As a result, the city and county coordinate on a wide range of topics relating to infrastructure, growth and development. Continuing cooperation between these 2 jurisdictions is evidenced by a recently updated joint Service Delivery Strategy (SDS). The SDS was updated concurrently with the *Columbia County Growth Management Plan* and ensures adequate delivery of public services to citizens of Columbia County, Grovetown and Harlem.

Augusta-Richmond County

Grovetown is also directly adjacent to Augusta-Richmond County. Grovetown's current and planned growth patterns have resulted in the need to find additional sources of public drinking water and outlets for waste water discharge. Augusta-Richmond County is amenable to finding additional customers for its water and sewage systems. Working cooperatively with Augusta-Richmond County on water and sewer projects benefits Grovetown by allowing for additional residential growth. In light of Augusta-Richmond County's estimated loss of population, water and sewer agreements with Grovetown provide the consolidated city with additional revenue for the maintenance of its existing infrastructure.

SPECIAL AUTHORITIES AND DISTRICTS

Columbia County Solid Waste Management Authority

Grovetown is a member of the Columbia County Solid Waste Management Authority (SWMA) and is represented on the Board. The SWMA oversees solid waste disposal activities at the Columbia County Landfill. The landfill has reached capacity and is slated to close in 2006.

SCHOOL BOARD

Columbia County Board of Education

All public schools attended by Grovetown students are operated by the Columbia County Board of Education (CCBOE). Currently, all portions of Columbia County south of Interstate 20 – including Grovetown, lie within School Board District #4. District #4 is proposed to be expanded to also include rural areas in the western and northern portion of the county. This change would also result in the creation of a Board Chairman position elected by a county-wide vote. Proposed legislation creating this change is anticipated to take effect in 2007. The CCBOE keeps local communities informed of events through their Community Relations Department

Grovetown currently keeps the CCBOE informed of growth patterns by providing the administration with copies of approved preliminary subdivision plats.

DEVELOPMENT AUTHORITIES AND DISTRICTS

Development Authority of Columbia County

Previously identified in the *Plan* as an economic resource for Grovetown, the Development Authority of Columbia County is the only independent development authority that directly impacts the city of Grovetown. As noted, the organization's primary mission is to recruit new businesses to Columbia County and to provide the necessary assistance to existing businesses in order to retain them, assist with relocation or expand. The Authority works in cooperation with the Columbia County Board of Commissioners and Chamber of Commerce to market local site selection and expansion opportunities to existing or prospective Columbia County businesses.

FEDERAL, STATE AND REGIONAL PROGRAMS

Augusta Regional Transportation Study (ARTS) Metropolitan Planning Organization

The City of Grovetown is a member of the Augusta Regional Transportation Study (ARTS) Metropolitan Planning Organization. ARTS coordinates the transportation planning policies of the local governments located within the urbanized portions of the Augusta-Aiken metropolitan area. Through participation on the ARTS policy committee and technical committee, the City is able to identify and promote transportation policies and facility improvements that will benefit Grovetown and surrounding portions of Columbia County while enhancing the overall economic well-being of the region.

Central Savannah River Area Regional Development Center

Grovetown is also a member of the Central Savannah River Area Regional Development Center (CSRA RDC) and benefits from access to planning, grant writing and aging programs. Grovetown is also kept aware of Developments of Regional Impact (DRI) by

the CSRA RDC staff in accordance with procedures established by the Georgia Department of Community Affairs.

Fort Gordon Military Reservation, U.S. Department of Defense

Located on the northern border of Fort Gordon, Grovetown's economic well-being is closely tied to the activities within the Fort. Grovetown was represented on both the Policy Committee and Technical Committee of the Fort *Gordon Joint Land Use Study (2005)* which addresses the need to avoid land uses on private properties in close proximity to the Fort that can disrupt its mission. Recommendations contained within the *Study* will be considered when developing the city's future development map and the goals and objectives of other portions of this plan.

ASSESSMENT**ADJACENT LOCAL GOVERNMENTS****Columbia County/Augusta-Richmond County**

The joint SDS between Grovetown and Columbia County has facilitated new growth in both jurisdictions. Grovetown's potential water and sewer arrangements with Augusta-Richmond County may lead to future mutually beneficial agreements between both jurisdictions.

SPECIAL AUTHORITIES AND DISTRICTS**Columbia County Solid Waste Management Authority**

The impending closure of the Columbia County Landfill will leave the SWMA with little remaining responsibility. While the SWMA may remain largely inactive, it will still have a role to play in making sure that the landfill site does not deteriorate over time and create pollution problems in adjacent groundwater and streams. The SWMA may also need to take a more active role in solid waste disposal in the future, should an additional solid waste facility be needed within Columbia County.

SCHOOL BOARD**Columbia County Board of Education**

It is imperative that the CCBOE be able to anticipate the location and rate of population growth throughout all jurisdictions in Columbia County. To assist the CCBOE in being pro-active in anticipating community-wide growth, Grovetown can provide them with additional development information. The city should consider making direct contact with the CCBOE for any anticipated development activity ranging from amendments to the future development map, to notices of residential rezonings, to preliminary plats prior to City Council approval. Providing input prior to development activities allows the CCBOE the opportunity to work with the Grovetown City Council and Planning Commission before potential conflicts occur.

DEVELOPMENT AUTHORITIES AND DISTRICTS**Development Authority of Columbia County**

Grovetown should consider the preparation of an annual report that it can provide to agencies such as the Development Authority of Columbia County that summarize development activity in the city including residential building permits, infrastructure improvements and business licenses. Provision of this information reminds the

Development Authority of the positive business climate within Grovetown as they consider the marketing of development sites.

FEDERAL, STATE AND REGIONAL PROGRAMS

Augusta Regional Transportation Study (ARTS) Metropolitan Planning Organization

Continued cooperation with the ARTS is essential to developing a transportation system that provides ease of access to and from Grovetown. While the development of a major thoroughfare plan and official map would require Grovetown to work in cooperation with Columbia County, coordination with the ARTS will be necessary as well.

Central Savannah River Area Regional Development Center

A variety of planning, grant writing and other local government services are available to Grovetown through the use of their Regional Development Center.

Fort Gordon Military Reservation, U.S. Department of Defense

Grovetown should continually consult the recommendations contained within the *Fort Gordon Joint Land Use Study* when considering annexation and other development activities.

INTRODUCTION

Development patterns and the use of land are the most obvious manifestation of all demographic information provided in previous chapters of this plan. The built form that property takes – in contrast to the natural setting remaining on other pieces of property – is inextricably tied to a variety of factors ranging from population change, to location of infrastructure, to job creation, environmental limitations, etc.

This chapter reviews the current land use pattern in Grovetown and compares it to the information and projections formulated in previous chapters. By making these comparisons, the *Grovetown Comprehensive Plan* formulates a preliminary land use and development plan to meet the future economic, social, physical and environmental needs of the city. The land use and development plan proposed in this chapter takes the form of preliminary recommended “character areas.” This format provides Grovetown with a framework for making development decisions that are complementary to long-term goals. The format also allows adequate flexibility for Grovetown to alter development strategies according to unanticipated changes in conditions, while avoiding the emergence of inefficient development patterns.

Unlike previous chapters, this chapter does not contain an “Assessment” section. Assessment of land use in Grovetown is summarized within the section addressing preliminary recommended character areas.

LAND USE CATEGORIES

The Georgia Department of Community Affairs’ (DCA) “Standards and Procedures for Local Comprehensive Planning” includes a list of standard land use categories. The broadly defined land use categories contained in the list establish the parameters under which each local jurisdiction should classify existing parcels. The following section provides an overview of the land use categories Grovetown has opted to utilize in order to inventory current land uses. A breakdown of current land uses in Grovetown is contained in **Figure 9-A** and **Map 9.1**.

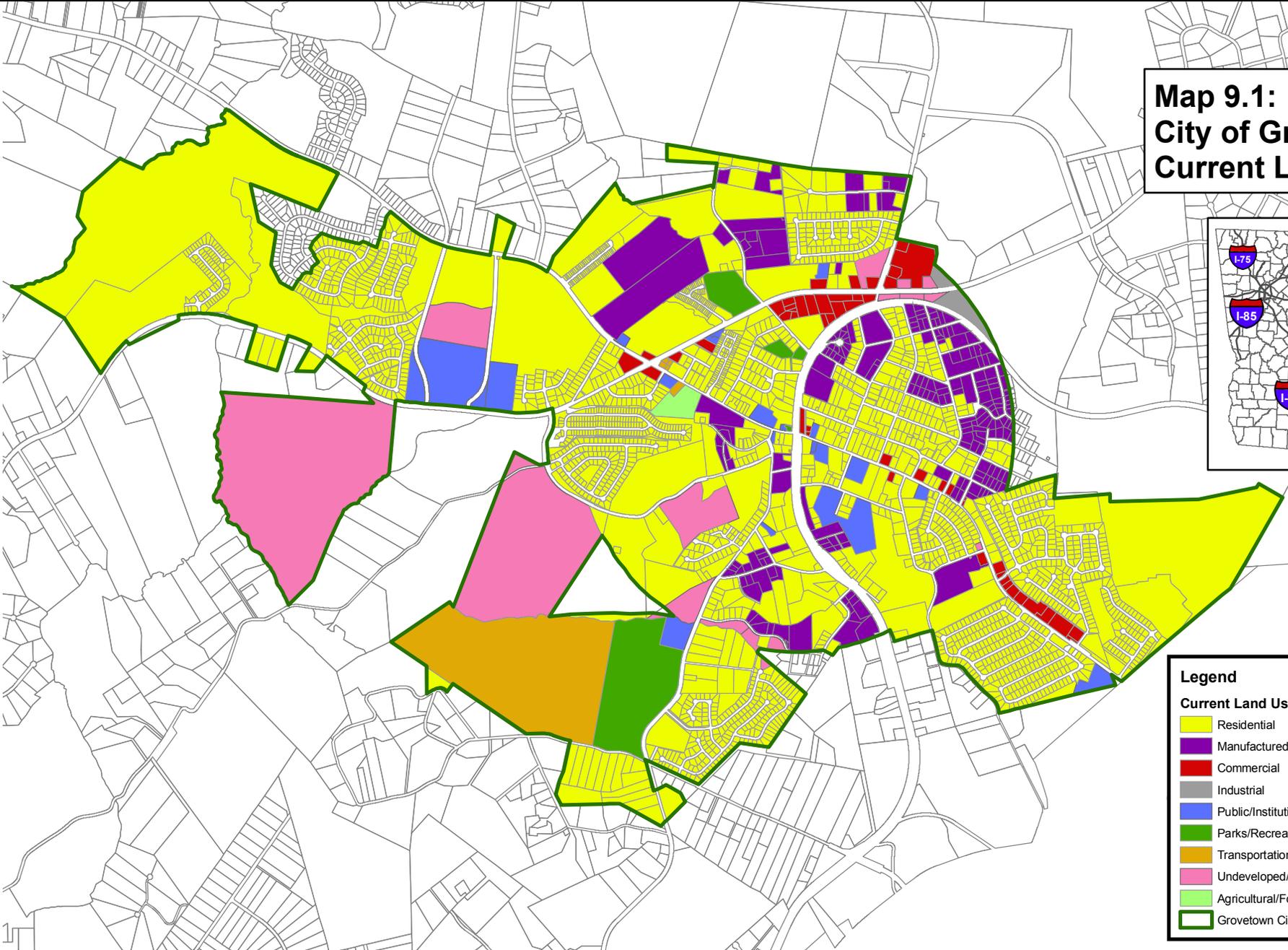
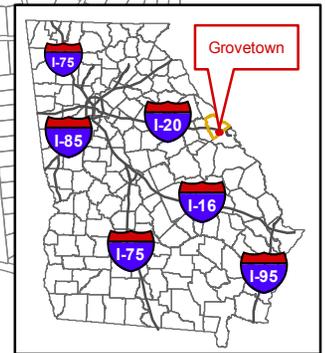
Residential

The vast majority of residential property in Grovetown is composed of single-family detached homes – although there has been some duplex and townhouse development in more recent years. Due to the fact that the vast majority of existing residential development in Grovetown is low-density single-family and two-family development, residential properties are grouped into only 2 sub-categories:

General Residential

General residential development includes all permanent residential development ranging from single-family detached to multi-family structures regardless of density.

Map 9.1: City of Grovetown Current Land Use



Legend

Current Land Use

- Residential
- Manufactured Housing
- Commercial
- Industrial
- Public/Institutional
- Parks/Recreation/Conservation
- Transportation/Communication/Utilities
- Undeveloped/Vacant
- Agricultural/Forestry
- Grovetown City Limits

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Manufactured Housing

Manufactured housing includes all mobile homes or trailers that precede or meet the current definition of manufactured housing as defined by the National Manufactured Housing Construction and Safety Standards Act of 1974, as amended (42 U.S.C. 5401-5445). This sub-category has been applied to all parcels containing at least 1 manufactured housing unit.

Commercial

Includes: All land dedicated to non-industrial business uses including retail sales, offices and general services.

Industrial

Includes: Manufacturing facilities, processing plants, factories, warehousing and wholesale trade, mining or mineral extraction, etc.

Public/Institutional

Includes: Government and institutional uses such as city halls, government building complexes, police and fire stations, libraries, prisons and post offices, schools, military installations, etc. Also includes private facilities such as colleges, churches, cemeteries, hospitals, etc. Some public facilities such as utility or recreational properties are classified in other more appropriate categories.

Transportation/Communication/Utilities

Includes: Major transportation routes, public transit stations, power generation plants, railroad facilities, radio towers, telephone switching stations, airports, etc.

Park/Recreation/Conservation

Includes: Land dedicated for active or passive recreational uses. These public or privately owned properties may include playgrounds, parks, nature preserves, wildlife management areas, national forests, golf courses, recreations centers, etc.

Agriculture/Forestry

Includes: Land dedicated to farming such as fields, lots, pastures, farmsteads, specialty farms, livestock production, etc; and, large-scale agriculture operations, commercial timber or pulpwood harvesting.

Undeveloped/Vacant

Includes: Lots or tracts of land that are served by typical urban public services (water, sewer, etc.) but have not yet been developed for a specific use or were developed for a specific use that has since been abandoned.

Mixed Use

There are a few examples where properties in Grovetown have been developed according to a unified plan; but, are still divided into single-use tracts of land. There is no example in Grovetown where uses were mixed on single tracts of land; or, within single structures. As a result, this category is omitted from the current land use map.

CURRENT LAND USE

Considering all but the “mixed use” land use category referenced in the previous section, **Map 9.1** illustrates the breakdown of current land uses in Grovetown according to individual parcel. It should be noted that many of the large “undeveloped/vacant” properties identified on the map (particularly on the western edge of town) have been approved for new single-family residential development but had not yet begun construction as of the adoption of the *Plan*.

Figure 9-A shows that over 73 percent of all property in Grovetown is used either for general residential or manufactured housing. Over 13 percent of Grovetown land is classified as undeveloped, although many of these properties are being converted to low-density single-family residential use as well. Most of

Figure 9-A: Grovetown Current Land Use Distribution (2006)		
Land Use Category	Acres	Percentage
General Residential	1745.9	64.1%
Manufactured Housing	242.0	8.9%
Commercial	53.6	2.0%
Industrial	10.0	0.4%
Public/Institutional	85.5	3.1%
Transportation/Communication/Utilities	143.6	5.3%
Parks/Recreation/Conservation	77.5	2.8%
Agricultural/Forestry	8.3	0.3%
Undeveloped/Vacant	359.4	13.2%
Total	2725.7	100.0%
<i>Source: City of Grovetown, CSRA RDC</i>		

Grovetown’s remaining land is included in categories that typically include large amounts of community facilities and infrastructure. Less than 2.5 percent of all Grovetown land is currently utilized for retail, office or industrial businesses.

Grovetown’s zoning map reflects a similar breakdown of residentially zoned property versus non-residentially zoned property. While there is a slightly higher percentage of land zoned for commercial use, most of it is confined to small stretches of Wrightsboro Road and Robinson Avenue. Recent rezoning to commercial districts along these corridors suggest that demand for more supporting office and retail is starting to increase within the city.

AREAS REQUIRING SPECIAL ATTENTION

In preparing the *Community Assessment* portion of the *Grovetown Comprehensive Plan*, it is necessary to evaluate existing land development patterns to determine if any areas within the city should be given special attention. By reviewing prior chapters of

this document and comparing the information contained within each to knowledge gained from public meetings, interviews and field research, clear land use characteristics emerge.

The “areas requiring special attention” listed in this section are compiled under headings contained in the “Standards and Procedures for Local Comprehensive Planning.” The supporting descriptions in this section are brief because they summarize the analysis and assessment made throughout preceding chapters. In addition, all areas described in this section are also incorporated into preliminary character area recommendations.

Areas of Significant Natural or Cultural Resources

- *Euchee Creek.* Grovetown’s most obvious commitment to natural resource protection. Steps should be taken to preserve the creek corridor as additional tracts are annexed by the city and developed.
- *Robinson Avenue Historic Homes.* Very few pre-WWII structures remain in Grovetown. Most remaining historic properties are clustered along Robinson Avenue in the central part of the city. Redevelopment of this area should include measures to incorporate and protect remaining historic structures.

Areas Where Rapid Development or Change of Land Use is Likely

- *Wrightsboro Road.* A burgeoning commercial corridor. Measures should be taken to ensure that new development along the corridor incorporates a variety of features to improve function and aesthetics such as: access management standards, landscaping, bicycle/pedestrian features, signage, etc.
- *Western Grovetown.* Low-density single-family development continues to spread west along Harlem-Grovetown Road and Old Wrightsboro Road from the original city boundaries. Development standards should promote street layouts that provide greater interconnectivity between developments and arterial roads.

Areas Where Development May Outpace Community Resources and Services

- *Western Grovetown.* Low-density single-family development continues to spread west along Harlem-Grovetown Road and Old Wrightsboro Road from the original city boundaries. Traffic is funneled directly to pre-existing arterial streets, police calls for service continue to increase, little pedestrian connectivity to older portions of the city exists and additional sources of water and outlets for sewage discharge are being sought.

Areas in Need of Redevelopment

- *Central Grovetown.* Grovetown lacks a defined center city district and many properties in the central portion of the city include deteriorating housing stock – particularly mobile home parks. Efforts should be made to target streetscape improvements along portions of Robinson Avenue and develop design guidelines for adjacent properties to promote the development of a downtown district.

Property acquisition in adjacent central city neighborhoods could lead to redevelopment of underutilized residential properties.

Large Abandoned Structures or Sites

- None apparent.

Areas with Significant Infill Opportunity

- See previous “Areas in Need of Redevelopment” sub-section.

Areas with Significant Disinvestment

- *Mobile Home Parks.* Spread throughout much of central Grovetown, living conditions in many of these units appear substandard. Any redevelopment effort targeting these areas should include measures to provide transitional housing for any individuals who could be temporarily displaced.

RECOMMENDED CHARACTER AREAS

Knowledge gained from data and information displayed throughout all this and preceding chapters can be translated into a preliminary future development scenario for Grovetown. This preliminary scenario is presented in the form of “character areas” as recommended by the “Standards and Procedures for Local Comprehensive Planning.” Character areas not only identify existing and future land uses that may be appropriate for a particular area, they can highlight a variety of other factors such as: the form, function and style of new development; existing features that should be incorporated into future development scenarios; and, relationships to adjacent development. In short, a character area addresses not only *WHAT* a piece of land should be used for; but, also *HOW* that land should be used.

Preliminary character areas that are referenced in this chapter can be found on **Map 9.2**. The recommended preliminary character areas in this chapter were revised following additional public input. Final character area recommendations can be found in Chapter 11.

CHARACTER AREA INTERPRETATION

While the preliminary character area recommendations in this chapter were subject to change, please make note of the following character area features:

Boundaries

General Characteristics

Unlike a parcel-specific future land use map, boundaries on a character area map are conceptual and may cross parcel lines. The character area boundaries in this document are intended to represent an approximation of character area location. This flexibility allows the governing body charged with implementing the plan to make decisions based on changing conditions while reducing the need to continually update the future development map. As a result, it is possible to assume that small parcels located directly adjacent to 1 or more character areas may be permitted by the local government to develop according to the parameters of the adjacent area rather than the area in which it is located. Such an action should be taken sparingly and the decision should only be made if the local government can show that it is consistent with the recommendations provided in all other sections of the *Grovetown Comprehensive Plan*. For the most part however, tracts should develop according to the parameters established in the specific character area in which it is located. Grovetown is strongly encouraged to initiate amendments to their future development map whenever they intend to promote a development pattern in an area that is contrary to the adopted map.

Annexations

In recognition of Grovetown’s recent and active annexation activities, one should assume that in most instances character areas represented on **Map 9.2** would merely be extended to adjacent parcels as they are annexed. Grovetown may also opt to create new

character areas that are more appropriate for annexed land. Regardless, Grovetown should amend their future development as they annex adjacent parcels.

Boundary Revisions

The character area boundaries illustrated in **Map 9.2** are preliminary and will be adjusted as a result of public input during the preparation of the *Community Agenda* document (Chapter 11).

Industrial Land

With consideration to Grovetown's limited land area, none of the recommended character areas highlighted in this chapter incorporate industrial uses. The lack of character areas incorporating industrial land uses is due in large part to the location of large industrial tracts adjacent to the northern edge of the city within the Horizon South Industrial Park. It is reasonable to assume that potential future annexations to the north and northeast of the city may best be utilized for industrial purposes. Should this scenario develop, Grovetown should amend their comprehensive plan document in order to develop a character area that is better suited for this distinct land use.

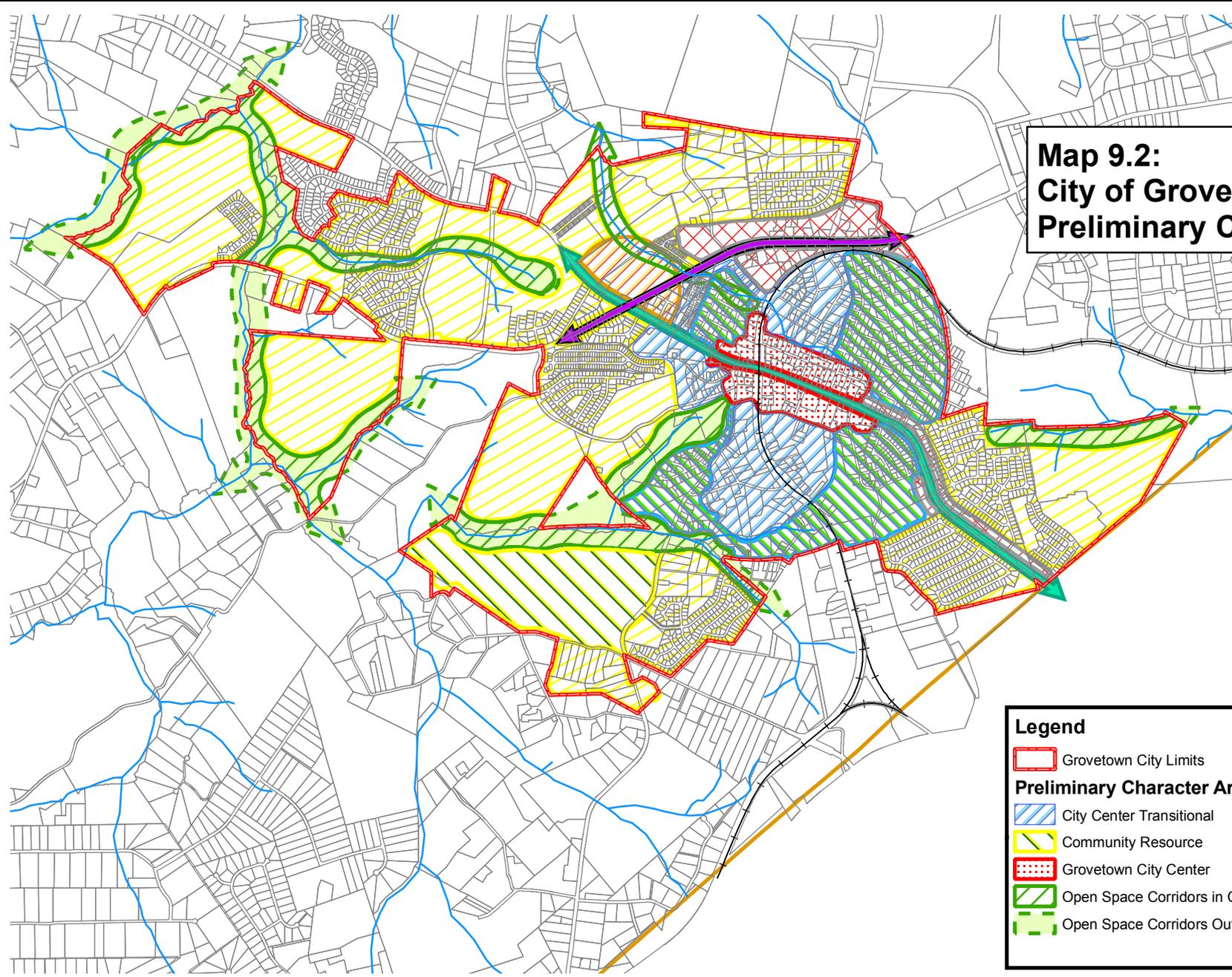
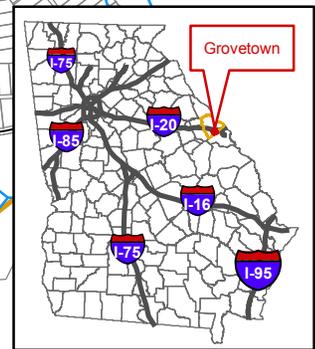
Relation to Columbia County

A review of the *Columbia County Growth Management Plan* reveals that the preliminary recommended character areas in this *Community Assessment* document are consistent with the recommendations for adjacent areas of unincorporated Columbia County. When proposing character areas for parcels subject to future annexations, Grovetown should consider the recommendations of the *Columbia County Growth Management Plan* regarding the "Grovetown Area" character area.

Implementation

Recommended techniques for the implementation of character areas were formulated during preparation of the *Community Agenda* (Chapter 11).

Map 9.2: City of Grovetown Preliminary Character Areas



Legend

Grovetown City Limits	Parkway Commercial
Preliminary Character Areas	Regional Commercial
City Center Transitional	Residential Infill
Community Resource	Roberson Parkway
Grovetown City Center	Suburban Residential
Open Space Corridors in City	Wrightsboro Parkway
Open Space Corridors Outline	Columbia County
	Railroads

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(PRELIMINARY) CHARACTER AREA: CENTER CITY TRANSITIONAL

GENERAL DESCRIPTION:

Developed areas within and in close proximity to the central part of the city. Intended to promote a mixture of housing types at medium to high densities while preserving single-family residential character on streets where it is already the predominant land use. Development should be subject to form-based building and site features to promote a traditional development character. Supports some targeted office and retail uses if located directly adjacent to commercial corridors or the city center.

EXISTING CHARACTER:

- Range of housing styles including multi-family, duplex, single-family and manufactured housing.
- Contains some older undeveloped areas and areas of low-density that are now surrounded by higher density housing.
- Greater degree of street interconnectivity than surrounding portions of the city.
- Limited infill.
- Principally narrow streets with open-ditch sections.
- Mature landscaping.

DEVELOPMENT PATTERN RECOMMENDATIONS (PRELIMINARY):

- Higher-density single-family housing (via smaller lots and townhouses) on development tracts or through infill.
- Targeted acquisition of large parcels.
- Multi-family on some targeted large tracts.
- Single-family residential infill on streets where it is already the predominant land use.
- Allow targeted small-scale office and retail at intersections of collector and arterial streets.
- All residential development should incorporate street extensions where applicable to promote street grid interconnectivity.
- Urban street segments extending from city center that incorporate sidewalks, on-street parking and street trees.
- Incorporate design guidelines.
- Minimum percentage of affordable housing units on redevelopment sites.
- Incorporate neighborhood parks or play lots into redevelopment sites.



The center city transitional area currently exhibits the city's greatest variety of housing types and densities.



Areas within the center city transitional character area can be targeted for a variety of well-designed housing types.

(PRELIMINARY) CHARACTER AREA: COMMUNITY RESOURCE

GENERAL DESCRIPTION:

Development intended to be limited to public facilities that are incorporated into natural landscaped areas and are located to serve as extensions of open space corridors.

EXISTING CHARACTER:

- Area combines public facilities and open space preservation.
- Location of Grovetown’s sewage treatment facility but also incorporating park land, open fields and stands of trees.

DEVELOPMENT PATTERN RECOMMENDATIONS (PRELIMINARY):

- Reserve for public use.
- Promote ways to develop the site in a manner that mixes public uses with other community facilities.
- Retain portions of the site as woodlands.
- Leave a buffer around the majority of the site and where adjacent to open space corridors.



The community resource character area includes a wide range of public facilities from Liberty Park to the sewage treatment facility (pictured).



Grovetown’s community resource area should continue to mix public facilities, public use areas and areas of natural landscape.

(PRELIMINARY) CHARACTER AREA: GROVETOWN CITY CENTER

GENERAL DESCRIPTION:

Historic central portion of Grovetown flanking Robinson Avenue and the Georgia Railroad. To be redeveloped to create a downtown character for the city by promoting mixed use buildings incorporating traditional design features and supporting streetscape design.

EXISTING CHARACTER:

- Principal location of community buildings including churches and government offices.
- Largest concentration of historic structures in the city.
- Street grid extending north and south from Robinson Avenue.
- Some low-density residential.
- Limited neighborhood commercial services.
- Bisected by Georgia Railroad.
- Mature trees.

DEVELOPMENT PATTERN RECOMMENDATIONS (PRELIMINARY):

- Mixed-use buildings.
- Buildings close to the street via build-to-lines (vs. setbacks).
- Street-facing building orientation and pedestrian access.
- Neo-traditional design features.
- Incentives to preserve historic homes including allowing non-residential uses.
- Parking on sides and rear of buildings.
- Minimum percentage of each development site with street frontage faced by buildings.
- Wide urban sidewalks (curb to building) with street trees and furniture.
- Public way-finding signage.
- Pedestrian scale lighting and buried utilities.
- Traffic calming and pedestrian crosswalks.
- Intersecting streets with on-street parking.
- Increased building density.
- Office, retail, residential and institutional uses.



Institutional uses including churches and government buildings are clustered in center city Grovetown.



Small downtowns located on high volume highways can be transformed to promote a traditional urban form.

(PRELIMINARY) CHARACTER AREA: OPEN SPACE CORRIDOR

GENERAL DESCRIPTION:

Linear areas dominated by perennial streams, swales, floodplains and wetlands. Intended to provide a buffer between all types of development and sensitive environmental areas while providing open space, and recreational and alternative transportation opportunities. Not intended for development beyond providing for public facility and recreation/non-motorized transportation corridors. Area overlays portions of abutting character areas

EXISTING CHARACTER:

- Sensitive environmental areas including floodplains and wetlands.
- Some adjacent development – primarily new residential subdivisions.
- Development encroachment in rapidly growing areas such as Harlem-Grovetown Road and Old Wrightsboro Road.
- Best examples of undisturbed natural habitats in the city.

DEVELOPMENT PATTERN RECOMMENDATIONS (PRELIMINARY):

- Promote preservation of corridors’ natural features.
- Retain native vegetation.
- Promote passive activities and development (trails, benches, picnic tables, outdoor classrooms, etc.)
- Create linkages to and between adjacent development and properties for bicycle-pedestrian access.
- Develop as a bicycle and pedestrian corridor.
- Required buffer areas and/or trail easements.



Euchee Creek Greenway is a prime example of natural resource protection in an open space corridor.



Opportunities exist to link existing facilities to other parts of the city through the creative application of open space corridors.

(PRELIMINARY) CHARACTER AREA: PARKWAY COMMERCIAL

GENERAL DESCRIPTION:

Office and retail areas flanking portions of Robinson Avenue and Wrightsboro Road that focus on local community services located in smaller buildings and development tracts than would be found in the “regional commercial” character area. Incorporates on-site access management features, pedestrian enhancements, and uniform building, site, landscaping and sign standards in order to improve function and aesthetics.

EXISTING CHARACTER:

- Mix of vacant sites and small-scale retail development.
- Increasing number of small strip-centers.
- Multiple curb cuts on main thoroughfares.
- Limited landscaping features and signage of variable sizes and shapes.
- Large areas of reflective and impervious surfaces.
- No unifying building elements across sites.
- Increasing amount of neighborhood serving retail.

DEVELOPMENT PATTERN RECOMMENDATIONS (PRELIMINARY):

- Small-scale office and retail development (buildings and parcels).
- Maximum building square footages.
- Shallow depth of commercial zoning.
- Controlled vehicular access via curb spacing and cross-access easements.
- On-site pedestrian and bicycle features.
- Uniform design standards for buildings, landscaping and signage.
- No off-premise signs.
- Stringent lighting requirements.



Recent commercial development on Wrightsboro Road.



Uniform design features and mixed materials can result in commercial development

(PRELIMINARY) CHARACTER AREA: REGIONAL COMMERCIAL

GENERAL DESCRIPTION:

Intersection of major thoroughfares intended for the development of large-scale commercial uses to serve surrounding areas of the city and unincorporated portions of Columbia County. Like the “parkway commercial” character areas, area incorporates on-site access management features, pedestrian enhancements, and uniform building, site, landscaping and sign standards in order to improve function and aesthetics.

EXISTING CHARACTER:

- Mix of existing uses and vacant sites apparent.
- Some area serving commercial existing at the intersection of Wrightsboro Road and Harlem-Grovetown Road.
- Low-density residential developing in close proximity.
- Opportunity to serve as a western gateway into the city.

DEVELOPMENT PATTERN RECOMMENDATIONS (PRELIMINARY):

- Large-scale office and retail development (buildings and parcels).
- Controlled vehicular access via curb spacing and cross-access easements.
- On-site pedestrian and bicycle features.
- Uniform design standards for buildings, landscaping and signage – including outparcels.
- No off-premise signs.
- Stringent lighting requirements.
- Bicycle and pedestrian connections directly to adjacent residential developments and streets.
- Perimeter buffering.



A large commercial tract at the intersection of Wrightsboro Road, Robinson Avenue and Harlem-Grovetown Road.



Design standards, landscaping and access management features can make improve the function and aesthetics of regional commercial destinations.

(PRELIMINARY) CHARACTER AREA: RESIDENTIAL INFILL

GENERAL DESCRIPTION:

Developed and undeveloped portions of the central area of the city that should continue to support low to medium density residential uses including single-family, duplexes and townhouses while incorporating form-base building and site design features. Development of varying residential housing types should be focused on promoting different uses by street – rather than a lot-by-lot basis. Infill opportunities on single lots should focus on single-family residential while duplex and townhouse development should be targeted to new street segments – particularly areas that are directly adjacent to the ‘Grovetown city center’ and ‘center city transitional’ areas.

EXISTING CHARACTER:

- Range of housing styles including duplex, single-family and manufactured housing.
- Contains some older undeveloped areas.
- Greater degree of street interconnectivity than surrounding portions of the city.
- Limited infill.
- Principally narrow streets with open-ditch sections.
- Mature landscaping.

DEVELOPMENT PATTERN RECOMMENDATIONS (PRELIMINARY):

- Single-family infill according to design guidelines.
- Additional housing types (duplex and townhouses) on some blocks according to design guidelines – not mixed between single-family lots.
- Extension of street grid system including sidewalks and street trees.
- Rehabilitation program for existing single-family houses.



The residential infill and center city transitional character areas contain underutilized tracts close to center city that are candidates for redevelopment.



Form-based design guidelines can promote a preferred development pattern by focusing on basic building dimensions and site layout rather than decorative features and materials that can increase costs.

(PRELIMINARY) CHARACTER AREA: ROBINSON PARKWAY

GENERAL DESCRIPTION:

Public street segment that should incorporate elements such as access management controls, bicycle and pedestrian enhancements, targeted traffic calming, landscaping, street trees and private and public sign standards in order to improve function and aesthetics and provide a community-wide identity. Enhancements should be incorporated on different segments of the parkway in a manner that supports specific design and function objectives of the flanking character areas.

EXISTING CHARACTER:

- Two-lane state highway.
- Bisection of historic center of town.
- Flanked by a range of uses including residential, commercial and institutional.
- Sidewalks along most segments of the street – close to travel lanes.
- Above-ground utilities.
- Varying segments of open-ditch and underground storm drainage.
- No on-street parking.
- New signage for pedestrian crosswalks.
- Crosses Georgia Railroad.
- Large number of intersecting streets.

DEVELOPMENT PATTERN RECOMMENDATIONS (PRELIMINARY):

- Manage vehicular access via traffic control median, spacing of driveways and cross-access easements.
- On and off-street pedestrian and bicycle features.
- Traffic calming in Grovetown city center character area.
- Pedestrian scale street lights and buried utilities.
- Uniform signage – no off-premise signs.
- Uniform street numbering system for easy recognition by emergency responders.
- Street trees.
- Wide urban sidewalks (curb to building) in Grovetown city center character area.



Robinson Avenue looking south east from Hardy Street.



On-street parking, wide sidewalks and pedestrian-scale lighting are just a few of the features that can be incorporated into urban streetscapes.

(PRELIMINARY) CHARACTER AREA: SUBURBAN RESIDENTIAL

GENERAL DESCRIPTION:

Developed and undeveloped areas of the city intended for low to moderate density residential land uses including single-family dwellings, duplexes and townhouses; and small-scale non-residential uses that are directly associated with and support residents. The area allows for flexibility in residential building design, but encourages street block and lot arrangements that promote interconnectivity between tracts.

EXISTING CHARACTER:

- Primarily residential.
- New single-family subdivisions (principally single-family detached and single-family attached).
- Some older single-family subdivisions.
- Large vacant tracts zoned for low-density residential.
- Street system self-contained – principal access via existing arterial streets.
- Sidewalks within newer development.
- Few landscape/streetscape features incorporated into new development.

DEVELOPMENT PATTERN RECOMMENDATIONS (PRELIMINARY):

- Low to moderate density housing options (single-family, duplex, townhouses).
- Varying housing types contained within separate development tracts or streets.
- Promote variety of architectural styles.
- Street linkages between arterials and adjacent development tracts.
- Collector street standards for large developments and in targeted areas.
- Bicycle and pedestrian features with direct linkages to greenways and community facilities.
- Self-contained neighborhood parks or recreation space.



Single-family residential development in Grovetown, Georgia.



New low-density residential development can take many forms.

(PRELIMINARY) CHARACTER AREA: WRIGHTSBORO PARKWAY

GENERAL DESCRIPTION:

Public street segment that should incorporate elements such as access management controls, bicycle and pedestrian enhancements, landscaping, street trees and private and public sign standards in order to improve function and aesthetics and provide a community-wide identity.

EXISTING CHARACTER:

- Two-lane state highway slated for long-term widening.
- Above ground utilities.
- Most segments flanked by new retail and office uses.
- Multiple curb cuts in close proximity.
- New residential development with single access onto the highway.
- Transitions into Harlem-Grovetown Road and rural character at western end.

DEVELOPMENT PATTERN RECOMMENDATIONS (PRELIMINARY):

- Widen to a landscaped boulevard with landscaped median and street trees.
- Manage vehicular access via traffic control median, spacing of driveways and cross-access easements.
- On and off-street pedestrian and bicycle features.
- Pedestrian scale street lights and buried utilities.
- Uniform signage – no off-premise signs.
- Uniform street numbering system for easy recognition by emergency responders.



Wrightsboro Road, west of Horizon South Parkway.



Design standards and access management features on commercial corridors does not typically inhibit development potential.

PURPOSE

The Georgia Department of Community Affairs’ “Standards and Procedures for Local Comprehensive Planning” establish state-wide planning goals. These goals are accompanied by a list of ‘Quality Community Objectives” that elaborate on the state-wide goals through consideration of local and regional growth and development issues. As part of the *Community Assessment* (Chapters 1 – 10), Grovetown has evaluated its current policies, activities and development patterns for consistency with the Quality Community Objectives.

Factoring in the data and recommendations contained in prior chapters, a comparison of Grovetown’s current status with the Quality Community Objectives reveals additional issues and opportunities for the city to consider. **The “issues and opportunities” associated with some of the objectives in the consistency review below are not intended to be an all-inclusive list.** In some instances, the issues and opportunities expand on prior recommendations made throughout other portions of the *Community Assessment*. In other instances, suggestions in this chapter may simply duplicate prior recommendations. Regardless, all issues and opportunities contained in the chapter were considered further during preparation of the *Community Agenda* (Chapter 11).

QUALITY COMMUNITY OBJECTIVES

Regional Identity

Objective: Regions should promote and preserve an “identity,” defined in terms of traditional regional architecture, common economic linkages that bind the region together, or other shared characteristics.

Status: Grovetown continues to investment in Friendship Park at the intersection of Robinson Avenue and Hardy Street – promoting the tie between the city and the military. The City also provides support for the Grovetown Museum whose exhibits include multiple displays and artifacts related to adjacent Fort Gordon. The City’s focus on these community resources will help ensure long-term recognition of the role that the military has played in the development of the City and the regional economy.

Issues and Opportunities: While expanding on the area’s close association with Fort Gordon, Grovetown can also consider highlighting historic structures and properties that explain the area’s rural heritage.

Growth Preparedness

Objective: Each community should identify and put in place the prerequisites for the type of growth it seeks to achieve. These may include housing and infrastructure (roads, water, sewer and telecommunications) to support new growth, appropriate training of the workforce, ordinances to direct growth as desired, or leadership responding to growth opportunities.

Status: Grovetown continues to make incremental improvements to its land development regulations and code enforcement procedures. The City recently hired additional building inspectors to keep pace with residential growth. Efforts are being

made to identify additional water sources and means to discharge waste water. The City recently adopted regulations to ensure consistency with the Georgia Department of Natural Resource's (DNR) erosion and sedimentation programs.

Issues and Opportunities: Current development standards do not promote street interconnectivity – funneling all vehicle trips to existing state highways. Revisions to street standards and design can reduce potential future traffic congestion by increasing interconnectivity, and decrease storm water run-off via the use of wider parkways and street trees. Growth focused primarily on residential development – and resulting increases in infrastructure – will require increases in funding for long-term maintenance.

Appropriate Businesses

Objective: The businesses and industries encouraged to develop or expand in a community should be suitable for the community in terms of job skills required, linkages to other economic activities in the region, impact on the resources of the area, and future prospects for expansion and creation of higher-skill job opportunities.

Status: Grovetown has benefited from its proximity to the Horizon South Industrial Park and the manufacturing/warehousing jobs that it supplies to the area. The City is actively recruiting additional service sector employers to locate within the city to stem the export of labor and leakage of consumer dollars from the city due to a lack of alternatives within the municipal limits.

Issues and Opportunities: Grovetown can work independently, or with the assistance of the Chamber of Commerce, to develop a marketing plan highlighting community data and property to entice business investment in the city. The City can host prospective commercial investors to highlight investment opportunities within the municipal limits.

Educational Opportunities

Objective: Educational and training opportunities should be readily available in each community – to permit community residents to improve their job skills, adapt to technological advances, or to pursue entrepreneurial advances.

Status: A new and larger elementary school is planned for the city of Grovetown within the next few years. An additional campus of Augusta Technical College is planned for an area of Columbia County in close proximity to Grovetown.

Issues and Opportunities: Continued dialogue with Augusta Technical College may result in the school locating workforce development programs within their planned Columbia County campus that will benefit major employers in the Horizon South Industrial Park.

Employment Options

Objective: A range of job types should be provided in each community to meet the diverse needs of the local workforce.

Status: Active recruitment of service sector employers will provide Grovetown residents of varying income levels with expanded access to jobs.

Issues and Opportunities: Additional service and retail employment options in Grovetown must be matched with a variety of safe and convenient housing options within the municipal limits for potential employees.

Heritage Preservation

Objective: The traditional character of the community should be maintained through preserving and revitalizing historic areas of the community, encouraging new development that is compatible with the traditional features of the community, and protecting other scenic or natural features that are important to defining the community's character.

Status: Lacking a traditional downtown commercial district that is characteristic of many older cities, Grovetown's role in the preservation of historic structures and properties has been limited. Without a readily identifiable historic "core," historic residential structures in the older portions of the City go unrecognized by the majority of the city's residents – particularly the large proportion of new residents that have arrived in the city since 1990. Grovetown's development of the Grovetown Museum – and the displays highlighting the city's history - is the first step in creating community awareness for the need to preserve the city's remaining resources.

Issue and Opportunities: Investment in existing historic residential structures can be promoted via live-work or mixed-use zoning standards to increase the economic potential of the properties. The allowance of non-residential uses can be directly tied to exterior design guidelines. The city can investigate the possibility of National Register designation for some structures – either through individual listing, a geographic district or the creation of a Multiple Property Submission document.

Open Space Preservation

Objective: New development should be designed to minimize the amount of land consumed, and open space should be set aside from development for use as public parks or as greenbelt/wildlife corridors.

Status: Grovetown's open space preservation activities revolve around the development of the Euchee Creek Greenway and the recreation trail that it contains. The city does not require the reservation of open space as part of new development.

Issue and Opportunities: Grovetown can develop conservation subdivision standards which allow smaller lot sizes in exchange for greater amounts of open space. The city can consider the adoption of minimum open space requirements for developments exceeding a certain threshold.

Environmental Protection

Objective: Air quality and environmentally sensitive areas should be protected from the negative impacts of development. Environmentally sensitive areas deserve special protection, particularly when they are important for maintaining traditional character or quality of life of the community or region. Whenever possible, the natural terrain, drainage, and vegetation of an area should be preserved.

Status: Grovetown has adopted erosion and sedimentation ordinances, wellhead protection standards and a flood plain management ordinance. The city does not have a water supply watershed ordinance, groundwater recharge ordinance or wetland protection ordinance.

Issues and Opportunities: Much of Grovetown lies on a groundwater recharge area; yet, the City does not have a groundwater recharge ordinance. To promote environmental protection in concert with new development, Grovetown should investigate

recommended environmental protection ordinances produced by DNR and determine whether any portion of these ordinances should be incorporated into existing land development standards. The city can show further commitment to environmental protection through the adoption of a tree preservation/planting ordinance or standards to promote low-impact development in areas adjacent to perennial streams.

Regional Cooperation

Objective: Regional cooperation should be encouraged in setting priorities, identifying shared needs, and finding collaborative solutions, particularly where it is critical to the success of a venture, such as protection of shared natural resources.

Status: Many of the previous chapters in the *Community Assessment* (Chapters 1 – 9) identify opportunities for Grovetown to work with other jurisdictions in order to promote economic development, orderly growth and resource protection.

Issues and Opportunities: One primary opportunity for regional cooperation would be the development of a major thoroughfare plan (in partnership with Columbia County and ARTS).

Transportation Alternatives

Objective: Alternatives to transportation by automobile, including mass transit, bicycle routes and pedestrian facilities, should be made available in each community. Greater use of alternate transportation should be encouraged.

Status: Grovetown is incorporating sidewalks and pedestrian crosswalks into street improvement projects. Sidewalks are also now required on all new streets. Gaps in the sidewalk system are most prevalent in non-residential areas. Bicycling options are limited to local residential streets with low traffic volumes; and, the Euchee Creek Greenway.

Issues and Opportunities: As Wrightsboro Road and portions of Robinson Avenue continue to develop as commercial corridors, Grovetown can require that new development incorporate sidewalks along their applicable portion of road frontage, and additional on-site pedestrian features. Lacking a city-wide bicycle system, a city bicycle and pedestrian plan can be developed to generate specific strategies for developing a bicycle system and enhancing the pedestrian system.

Regional Solutions

Objective: Regional solutions to needs shared by more than one local jurisdiction are preferable to separate local approaches, particularly where this will result in greater efficiency and less cost to the taxpayer.

Status: To address development needs, Grovetown works directly with adjacent local jurisdictions to ensure provision of necessary services. Grovetown may not be actively represented in all regional agencies – potentially missing out on additional development opportunities.

Issues and Opportunities: Faced with identical development issues, Grovetown must actively engage with Columbia County to ensure the long-term sustainability of its public infrastructure and environmentally sensitive areas.

Housing Opportunities

Objective: Quality housing and a range of housing size, cost, and density should be provided in each community, to make it possible for all who work in the community to also live in the community.

Status: Grovetown's housing stock is defined by single-family and other low-density housing choices. Recent housing development has significantly increased the median property value in the city. Remaining affordable housing options revolve largely around manufactured housing stock – much of which is in an increasingly deteriorated state. Few multi-family housing options exist within the city.

Issues and Opportunities: To provide additional safe and affordable housing options within the city, areas in the central part of the city that contain dilapidated housing stock can be targeted for redevelopment of higher-intensity residential uses. A housing authority may be created to ensure that redevelopment of targeted properties does not result in displacement of residents.

Traditional Neighborhood

Objective: Traditional neighborhood development patterns should be encouraged, including use of more human scale development, mixing of uses within easy walking distance of one another, and facilitating pedestrian activity.

Status: Grovetown does not have any standards or incentives to promote traditional development patterns that are compact and promote a mixture of uses.

Issues and Opportunities: Consider development of a traditional neighborhood development district and/or mixed-use development district.

Infill Development

Objective: Communities should maximize the use of existing infrastructure and minimize the conversion of undeveloped land at the urban periphery by encouraging development or redevelopment of sites closer to the downtown or traditional urban core of the community.

Status: Grovetown's older center includes multiple tracts of land that are currently utilized as mobile home parks – many of which contain a high percentage of units that are in a deteriorated condition. The city lacks the resources to purchase these properties for potential redevelopment; and, lacks development standards that can promote mixed-use development or development in a denser traditional pattern.

Issues and Opportunities: Promoting infill redevelopment can be inhibited by uncooperative property owners of deteriorating property. Consider more pro-active dangerous and vacant building standards that increase the ability to demolish or remove dilapidated buildings. Investigate the possibility of drafting a redevelopment plan and identify funding sources that may assist the city with property acquisition.

Sense of Place

Objective: Traditional downtown areas should be maintained as the focal point of the community or, for newer areas where it is not possible, the development of activity centers that serve as community focal points should be encouraged. These community

focal points should be attractive, mixed use, pedestrian-friendly places where people choose to gather for shopping, dining, socializing and entertainment.

Status: While Grovetown lacks a traditional downtown, many properties in the central portion of the city are prime candidates for redevelopment. City hall, Friendship Park and the Grovetown Museum create a focal point at Robinson Avenue and Hardy Street. The existence of a grid pattern of streets in the vicinity of Robinson Avenue, Hardy Street and Katherine Street provides the basic building blocks for redevelopment that can take an urban form.

Issues and Opportunities: Operations at city-owned properties located at the intersection of Robinson Avenue and Newmantown Road can be relocated and/or consolidated with city hall. The properties could be sold for private development subject to traditional development design standards. These properties can serve as the impetus for further traditional redevelopment along portions of Robinson Avenue.