CITY OF FOREST ACRES

Comprehensive Plan

Mayor
Frank Brunson

Mayor Pro Tem
Curt Rye

City Council
Ginger Dukes
Roy Powell
Shell Suber

Planning Commission
Joe Gentry
Jack Cantey
Ralph Bailey
John Boylston
Beronica Whisnant
Ellis Creel
Will Dillard

City Administrator
Shaun Greenwood

Assistant City Administrator/Finance Director
Andy Smith

Planning Assistance
Central Midlands Council of Governments
Table of Contents

List of Tables .................................................................................................................................................. v
List of Figures ................................................................................................................................................. vi

1. Introduction ............................................................................................................................................... 1
   1.1. Purpose and Scope ............................................................................................................................. 1
   1.2. Planning Process ................................................................................................................................. 1
   1.3. Vision and Guiding Principles ............................................................................................................. 2
   1.4. Key Recommendations ....................................................................................................................... 3
   1.5. Organization and Content .................................................................................................................. 3

2. Population ................................................................................................................................................. 5
   2.1. Introduction ........................................................................................................................................ 5
   2.2. Inventory ............................................................................................................................................ 5
      2.2.1. Population Change ...................................................................................................................... 5
      2.2.2. Demographic Characteristics ....................................................................................................... 6
      2.2.3. Income and Educational Characteristics ...................................................................................... 9
   2.3. Goals, Objectives, and Strategies ..................................................................................................... 11

3. Economic Development .......................................................................................................................... 12
   3.1. Introduction ...................................................................................................................................... 12
   3.2. Inventory .......................................................................................................................................... 12
   3.3. Goals, Objectives, and Strategies ..................................................................................................... 14

4. Natural Resources ................................................................................................................................... 16
   4.1. Introduction ...................................................................................................................................... 16
   4.2. Inventory .......................................................................................................................................... 16
      4.2.1. Physical Setting .......................................................................................................................... 16
      4.2.2. Climate ...................................................................................................................................... 16
         4.2.2.1. Climate Adaptation and Resilience ..................................................................................... 16
         4.2.2.2. Air Quality ........................................................................................................................... 17
      4.2.3. Vegetation ................................................................................................................................. 19
      4.2.4. Water Resources ....................................................................................................................... 19
         4.2.4.1. Waterbodies ....................................................................................................................... 19
4.2.4.2. Watersheds ........................................................................................................................ 20
4.2.4.3. Water Quality ..................................................................................................................... 20
4.2.5. Environmentally Sensitive Areas .......................................................................................... 22
4.2.6. Natural Hazards ..................................................................................................................... 23
4.3. Goals, Objectives, and Strategies ............................................................................................ 26
5. Historic and Cultural Resources ................................................................................................. 28
5.1. Introduction ............................................................................................................................... 28
5.2. Inventory .................................................................................................................................... 28
5.2.1. Historic Background ............................................................................................................. 28
5.2.2. Historic Sites ......................................................................................................................... 29
5.3. Goals, Objectives, and Strategies ............................................................................................ 30
6. Community Facilities .................................................................................................................... 31
6.1. Introduction ............................................................................................................................... 31
6.2. Inventory .................................................................................................................................... 31
6.2.1. Water System ....................................................................................................................... 31
6.2.2. Sanitary Sewer System ......................................................................................................... 31
6.2.3. Solid Waste .......................................................................................................................... 33
6.2.4. Stormwater Management ..................................................................................................... 33
6.2.5. Police, Fire, and Emergency Medical Services (EMS) .......................................................... 33
6.2.6. Recreation ............................................................................................................................ 34
6.2.7. Educational and Library Facilities ........................................................................................ 34
6.2.8. Government Buildings ........................................................................................................ 36
6.3. Goals, Objectives, and Strategies ............................................................................................ 37
7. Housing ......................................................................................................................................... 39
7.1. Introduction ............................................................................................................................... 39
7.2. Inventory .................................................................................................................................... 39
7.3. Goals, Objectives, and Strategies ............................................................................................ 43
8. Land Use ....................................................................................................................................... 45
8.1. Introduction ............................................................................................................................... 45
8.2. Inventory .................................................................................................................................... 45
8.2.1. Existing Land Use .................................................................................................................. 45
8.2.2. Zoning .................................................................................................................................... 47
List of Tables

Table 1 - Racial Characteristics. ..................................................................................................................... 7
Table 2 - Median Family Income Characteristics. .......................................................................................... 9
Table 3 - City of Forest Acres Population in Poverty. ...................................................................................... 9
Table 4 - Educational Attainment of Forest Acres. ....................................................................................... 10
Table 5 - Population 16 and Older in the Forest Acres Workforce. ............................................................. 12
Table 6 - Type of Employers in Forest Acres. ............................................................................................... 13
Table 7 - Short-term and long-term health effects of air pollution. ............................................................ 17
Table 8 - City of Forest Acres 303(d) impaired water bodies list ............................................................. 20
Table 9 – Dissolved oxygen TMDL calculation for selected streams near the City of Forest Acres. .......... 21
Table 10 – Fecal coliform TMDL calculation for selected streams near the City of Forest Acres. .......... 21
Table 11 – City of Forest Acres endangered species list .............................................................................. 22
Table 12 – City of Forest Acres migratory bird species ............................................................................ 22
Table 13 - Natural Hazard Impact Summary for Richland County. ............................................................. 23
Table 14 - Housing units and residential building permits issued in Forest Acres by year ...................... 39
Table 15 - New building construction permits (residential or commercial) in Forest Acres by year .......... 39
Table 16 - Value of Owner-occupied housing units in Forest Acres for 2015 ............................................. 40
Table 17 - Median Income and Housing Cost Comparison ........................................................................ 41
Table 18 - Land Use and Land Cover distribution for the City of Forest Acres. ........................................... 45
Table 19 - Annual Average Daily Traffic Counts for state roads in Forest Acres. ..................................... 55
# List of Figures

Figure 1 - Population change in Forest Acres from 1970 to 2014. ................................................................. 5  
Figure 2 - Population by Age and Gender......................................................................................................... 6  
Figure 3 - 2040 population projections within and around Forest Acres. ...................................................... 8  
Figure 4 - Ozone Design Values from 1998 to 2015 in the Central Midlands Region. ................................. 18  
Figure 5 - Streams and Waterbodies within and around the City of Forest Acres. ....................................... 19  
Figure 6 - TMDL and 303d locations in and around Forest Acres. ................................................................. 21  
Figure 7 - Comprehensive risk profile of Forest Acres.................................................................................. 24  
Figure 8 - Socially vulnerable Census tracts in Forest Acres. .......................................................................... 25  
Figure 9 - Comprehensive natural hazard vulnerability for Forest Acres. ................................................... 25  
Figure 10 - Antique buildings and areas within Forest Acres.......................................................................... 29  
Figure 11 - Water Distribution System in and around Forest Acres. .............................................................. 32  
Figure 12 - Sanitary Sewer System in and around Forest Acres. ................................................................... 32  
Figure 13 - Police and Fire Stations located in and around the City of Forest Acres ..................................... 34  
Figure 14 - Parks in and around Forest Acres. ............................................................................................... 35  
Figure 15 - Schools in and around Forest Acres. ........................................................................................... 35  
Figure 16 - Distribution of residential and commercial building permits in Forest Acres by year. .......... 40  
Figure 17 - Land Use and Land Cover distribution map for the City of Forest Acres. ................................. 46  
Figure 18 - City of Forest Acres Zoning Map................................................................................................. 48  
Figure 19 - Future Land Use Map for the City of Forest Acres. .................................................................... 49  
Figure 20 - Highway Facilities in and around Forest Acres. ......................................................................... 55  
Figure 21 - Weekly Comet Bus Routes and Bus Stops in and around Forest Acres. .................................... 56  
Figure 22 - Bike Lanes and Rail Lines in and around Forest Acres. .............................................................. 58
This page intentionally left blank
1. Introduction

1.1. Purpose and Scope

The City of Forest Acres Comprehensive Plan (hereafter also referred to as the “Plan”) was developed as a general policy guide for the City of Forest Acres (hereafter also known as “the City” or “Forest Acres”). It is an informational document that presents existing conditions and development trends. It is a planning document that relates these conditions to a set of short, medium, and long term goals to plan the development and growth of the City. These goals reflect how the City should grow over the next ten years in order to maintain and enhance the current quality of life of Forest Acres. The goal of this Plan is to present guidelines and procedures that will serve as a tool for making informed decisions about economic and land development, infrastructure and housing improvements, transportation needs, and protecting and sustainably utilizing both natural and cultural resources.

The City of Forest Acres is located in the northeastern boundary of the City of Columbia, encompassing an area of 4.8 square miles. Forest Acres is bordered by the City of Columbia on its south and western boundaries. Fort Jackson is adjacent to its eastern boundaries while the Town of Arcadia Lakes is adjacent to its northern boundary. South Carolina Highways 12 and 16 (known as Forest Dr. and Trenholm Rd., respectively, within City boundaries) intersect within Forest Acres, and the City is primarily built along those corridors.

1.2. Planning Process

The Local Government Comprehensive Planning Enabling Act of 1994 (SC Code Title 6, Chapter 29) establishes the requirements and process to create a comprehensive plan for municipal governments. The 1994 Act allows the creation of a planning commission to guide the physical, social, and economic development of its corresponding jurisdiction. This planning commission has the authority to:

- Create and revise zoning ordinances
- Regulate land development
- Create an official map of the municipality
- Create and revise landscaping ordinances
- Submit a priority listing of capital improvement programs
- Recommend policy and procedures to implement comprehensive plan elements

The City planning commission selected the Central Midlands Council of Governments (CMCOG) to revise, update, and improve the 2009 City of Forest Acres Comprehensive Plan. The City planning commission will provide guidance, planning priorities, and local knowledge to the CMCOG. The CMCOG will update information on the City’s resources and development trends, provide planning recommendations to encourage positive growth based on available resources, organize stakeholder meetings, and present reports to import the process of the City planning commission.
When the Plan, with its individual elements and revisions, is complete, it must be adopted by the local government through the following process:

- The planning commission must present a resolution recommending the plan to the local governing body. This resolution must be recorded in the official minutes of the planning commission. The plan must be forwarded to the local governing body.
- A public hearing must be held at least 30 days after publishing a notice or advertisement in a general circulation newspaper in the community.
- The local governing body must adopt the plan through an ordinance.

Because of the dynamic nature of the economy and other factors that can impact a city, town or region, it is important to periodically review and make changes to the comprehensive plan. State law requires that the plan be re-evaluated at least every five years to reflect changes in the growth or direction of development taking place in the community. This can be done all at once or incrementally (i.e., element by element). Every ten years, however, the planning commission must prepare and recommend a new plan to the governing body. According to this schedule the plan that follows will need to be re-examined and updated between 2021 and 2022. A new plan will need to be prepared in 2026.

1.3. Vision and Guiding Principles

The City of Forest Acres has engaged in various planning exercises and public outreach initiatives that have served to develop a broad-based consensus on future directions for the city. Taken together, these studies provide a strong framework and vision from which to develop the existing conditions inventory and key policy recommendations that make up the comprehensive plan. The studies reviewed for this purpose include:

- City of Forest Acres Comprehensive Plan (2009)
- Zoning Ordinance of the City of Forest Acres (Adopted December 1999; Revised June 2015)
- City of Forest Acres | Forest Drive Corridor Study (2015)

Based on the information presented in these documents as well as through discussions with the Forest Acres Planning Commission, a vision statement and guiding principles were developed to provide the City with a healthy and positive roadmap for how to grow and develop in coming years.

Vision

The City of Forest Acres will provide for the sustainable integration of new growth and development that is in harmony with the existing character and quality of life in our community. In order to realize this vision, the comprehensive plan will adhere to the following guiding principles.
Guiding Principles

- Promote compact, mixed use, and sustainable development
- Support a diverse and resilient economic base
- Create a range of housing opportunities for residents of all ages and incomes
- Provide a variety of transportation options
- Preserve our natural and cultural heritage
- Engage with businesses, citizens, and service organizations
- Facilitate intergovernmental cooperation and coordination

1.4. Key Recommendations

As a means for realizing the overall vision for growth and development discussed above, this document sets forth a number of policy recommendations and action strategies that are presented at the end of each chapter and in a summary implementation matrix contained in Appendix A.

1.5. Organization and Content

According to the Local Government Comprehensive Planning Enabling Act of 1994, the Plan will present the resource inventory and development recommendations for the following nine topics:

- **Population**: includes information related to growth and development trends, along with demographic characteristics such as age, race, sex, income, poverty, and educational attainment.
- **Economic Development**: includes information on labor force characteristics, employee distribution by type, and consumer expenditures and gross sale characteristics.
- **Natural Resources**: presents key environmental characteristics that reflect conservation and mitigation priorities as well as physical limitations to future development.
- **Historic and Cultural Resources**: includes an inventory of key historic and cultural locations, unique commercial, residential, natural or scenic resources, and any other features or facilities relating to cultural aspects in the community.
- **Community Facilities**: presents information on fire and police protection, medical services, water and sewer infrastructure, parks and recreational resources, and government and educational facilities.
- **Housing**: includes information on the location, type, age, condition, and affordability of housing as well as occupancy and ownership characteristics.
- **Land Use**: includes an analysis of existing and future land use, development capacity, neighborhood and city center development plans, annexation priorities, and zoning and land development ordinances.
- **Transportation**: includes an inventory of the current transportation infrastructure of the City, including roadway type, traffic characteristics, transit options, and availability of bike and pedestrian facilities. It also discusses the regional transportation system and local, regional, state, and federal transportation planning process.
- **Priority Investments**: this element is intended to help prioritize and allocate funding for infrastructure improvement projects identified in the other elements of the comprehensive plan.
The City of Forest Acres Comprehensive Plan underwent a design update. The digital version of the Plan contains hyperlinks, allowing readers to jump to sections and information of interest. The Plan is better edited to present the comprehensive planning requirements of the 1994 Act. Each chapter will present information on one of the aforementioned topics, including existing conditions along with relevant maps, tables, figures. Chapters conclude with a list of goals, objectives, and implementable strategies that reflect the City’s needs and priorities as identified through the analysis of existing conditions and discussion with the planning commission and the public participation process.
2. Population

2.1. Introduction

The population element of the Comprehensive Plan describes how the city’s population and demographic characteristics have changed over the past several decades. Unless otherwise noted, these data were acquired from the U.S. Census Bureau American Community Survey (ACS). In contrast with the decennial census, the ACS is a rolling survey that samples 5 percent of the population every year. While the margin of error for the yearly ACS is higher than in a decennial census, the Census Bureau utilizes these data to generate more accurate five year estimates. The most recent population data for the region comes from the 2010 – 2014 ACS five year estimates, and this dataset is the one utilized in this document. Statistics will be presented on a variety of household characteristics including:

- Population Change
- Age Distributions
- Demographic Trends
- Income Characteristics
- Poverty Levels
- Educational Attainment

2.2. Inventory

2.2.1. Population Change

At its incorporation in 1935, the City was largely rural and sparsely populated (343 citizens in 1940). There were significant housing and population increases following World War II. Between 1950 and 1960 the increases slowed to 19 percent but boomed again the 1960 – 1970 decade. The latter was triggered in part by the following factors: (1) several large annexations; (2) construction of multi-family housing; and (3) growth of retail/commercial areas.

![Figure 1 - Population change in Forest Acres from 1970 to 2014.](image)
The growth between 1960 and 1970 showed a 77 percent increase followed by a decline between 1970 and 1980 (Figure 1). The 2010 Census showed a slight population decrease of 2.1 percent. The 2014 ACS estimates a slight increase of 1.6 percent in the City’s population, or a total of around 10,533 residents.

Forest Acres is a mature community with little remaining undeveloped land that would significantly add to the population base if developed. Geographic size limitations imposed by political boundaries will influence the growth in Forest Acres in the future. Large scale growth is dependent on the annexation of adjacent unincorporated areas or merging of political entities. Redevelopment of existing residential areas is anticipated during the next twenty years with a boost in demand for homes on smaller lots, and the creation of long term care or assisted living facilities as the “baby boom” generation ages.

The character of the City is expected to remain the same through the next two decades; however, change can be anticipated through annexations and redevelopment of underutilized land uses. Annexation of “doughnut holes” – where Forest Acres has encircled unincorporated areas of Richland County -- could increase the City’s population and reduce duplication of public services. At present, the City’s policy of annexation is that it should be strictly voluntary but this has led to individual lot annexations, which may not be in the community’s best interest. With recent property tax reforms, municipal taxes may not be the impediment to annexation that they once were, and the City is investigating a campaign to annex the many unincorporated enclave areas.

### 2.2.2. Demographic Characteristics

![Figure 2 - Population by Age and Gender.](image-url)
As of the 2014 ACS, the population of the City of Forest Acres stands at an estimated 10,533 citizens. As shown in the population pyramid (Figure 2), which illustrates age and gender distributions in the area, the population is classified as stable. While there are slight differences by gender and age groups, no age group has significantly more or less amount of people compared to the rest. The working population, between the ages of 20 and 64, makes up around 56.7 percent of the population of the City. The non-workforce population, 19 years old and younger and older than 65 years old, make up 22.8 percent and 20.4 percent of the City’s population, respectively. The pyramid also shows a slightly higher female population, with 53.7 percent of the population being female and 46.3 percent being male.

### Table 1 - Racial Characteristics.

<table>
<thead>
<tr>
<th>Race</th>
<th>2000 Census</th>
<th>2010 Census</th>
<th>2014 ACS</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>8,538</td>
<td>7,732</td>
<td>7,636</td>
</tr>
<tr>
<td>Black or African American</td>
<td>1,639</td>
<td>1,983</td>
<td>2,341</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>20</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Asian</td>
<td>123</td>
<td>151</td>
<td>232</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander</td>
<td>1</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>268¹</td>
<td>313</td>
<td>126</td>
</tr>
<tr>
<td>Some other race</td>
<td>108</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Two or more races</td>
<td>129</td>
<td>151</td>
<td>173</td>
</tr>
</tbody>
</table>

As illustrated in Table 1, as of 2014 the estimated racial make-up of the City of Forest Acres is majority White (72.5 percent) and Black or African American (22.2 percent). This is followed by approximately a 5.2 percent minority of different races. The White population has been steadily decreasing since the 2000 Census, while the Black population has been concomitantly increasing.

The Hispanic population has slowly increased since the 2000 census, being around 2.5 percent. The population dipped significantly for the 2014 ACS, at around 1 percent. While dramatic, it is important to recognize the possibility of a significant Hispanic population undercount in the Census². Additionally, for the 2000 Census the “Hispanic or Latino” category is not mutually exclusive with other categories. Survey respondents could identify as “White” or “Black or African American” while also identifying as “Hispanic or Latino”. On the ACS and 2010 Census, the “Hispanic or Latino” category was tracked separately from other racial categories, affecting the final estimate of the Hispanic population in the City. It is recommended that these data be verified through other local sources to acquire more accurate numbers.

It should also be noted that while the growth of the local Hispanic population in Forest Acres is not as significant as in other areas of the county, local knowledge of business development and employment patterns does suggest that actual population figures may be higher than indicated in these tables, though no statistical data currently exists to provide evidence of this trend.

¹ For the 2000 Census the “Hispanic or Latino” category is not mutually exclusive with other categories.
² South Carolina Budget and Control Board
While as of Plan writing no long range population projections exist specifically for the City of Forest Acres, CMCOG maintains 30 year population projections for Richland County at the Traffic Analysis Zone (TAZ) level of geography. TAZs are an intermediate geographic zone of analysis that are based on Census Block boundaries and can be aggregated to form Census Tracts. These population projections are useful for getting a general sense of what the population is expected to be in a particular area of a county.

In the case of Forest Acres, long range projections are particularly important because the City is in the heart of the City of Columbia metropolitan area, one of the most densely populated and fastest growing areas of the Central Midlands Region. City officials need to be aware of what the population trends are in surrounding areas because this growth can impact demand for public services and key infrastructure investments (e.g. traffic flow improvements on Forest Drive). Population projections estimate the population to triple to around 36,000 within and around the City area (as shown in Figure 3).

![Figure 3 - 2040 population projections within and around Forest Acres.](image)
2.2.3. Income and Educational Characteristics

According to ACS 2014 estimates the current median household income for Forest Acres is $51,974, as seen in Table 2. This is a decrease of around $4,000 from the 2010 Census. This trend differs by Census household type, or the median family, married-couple family, and non-family household incomes. Based on household type, there was an increase from a low of around $1,000 (in nonfamily households) to a high of around $11,000 (in married-couple families). Forest Acres has the fourth highest median household income of the eight Richland County municipalities and has approximately $3,300 higher median income than the County itself.

This trend comes about from a change in population demographics. Estimates show slight percentage increases of the population in the household income categories of $100,000 and more. This increase in higher income population contributes to a slight increase in mean household income from $73,244 on the 2010 Census to the 2014 estimate of around $74,235. There was a similar increase in the population with an income of $14,999 and less, which may have contributed to the aforementioned decrease in median household income.

Concerning poverty, most recent estimates found around 14 percent of the population of the City are below poverty level (as shown in Table 3). This level is defined as $23,850 for a family of four, according to 2014 calculations. Doubling the poverty level threshold to 200 percent (or $47,700 for a family of four), around 27 percent of the population of the City lives close to poverty.

<table>
<thead>
<tr>
<th>Income</th>
<th>Households</th>
<th>Families</th>
<th>Married-couple families</th>
<th>Nonfamily households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Owner-occupied units</td>
<td>4,921</td>
<td>2,674</td>
<td>1,905</td>
<td>2,247</td>
</tr>
<tr>
<td>Less than $10,000</td>
<td>6.9%</td>
<td>3.4%</td>
<td>1.4%</td>
<td>11.1%</td>
</tr>
<tr>
<td>$10,000 to $14,999</td>
<td>6.0%</td>
<td>5.9%</td>
<td>0.3%</td>
<td>7.5%</td>
</tr>
<tr>
<td>$15,000 to $24,999</td>
<td>8.9%</td>
<td>5.2%</td>
<td>1.0%</td>
<td>13.8%</td>
</tr>
<tr>
<td>$25,000 to $34,999</td>
<td>11.7%</td>
<td>6.3%</td>
<td>4.3%</td>
<td>17.8%</td>
</tr>
<tr>
<td>$35,000 to $49,999</td>
<td>14.8%</td>
<td>12.2%</td>
<td>11.6%</td>
<td>17.6%</td>
</tr>
<tr>
<td>$50,000 to $74,999</td>
<td>13.3%</td>
<td>13.0%</td>
<td>12.1%</td>
<td>13.1%</td>
</tr>
<tr>
<td>$75,000 to $99,999</td>
<td>11.7%</td>
<td>14.9%</td>
<td>19.2%</td>
<td>7.9%</td>
</tr>
<tr>
<td>$100,000 to $149,999</td>
<td>17.5%</td>
<td>24.8%</td>
<td>30.1%</td>
<td>8.4%</td>
</tr>
<tr>
<td>$150,000 to $199,999</td>
<td>4.5%</td>
<td>6.6%</td>
<td>9.2%</td>
<td>1.8%</td>
</tr>
<tr>
<td>$200,000 or more</td>
<td>4.7%</td>
<td>7.7%</td>
<td>10.9%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Median Income</td>
<td>$51,974</td>
<td>$83,068</td>
<td>$100,296</td>
<td>$34,914</td>
</tr>
</tbody>
</table>

Table 3 - City of Forest Acres Population in Poverty.

<table>
<thead>
<tr>
<th>All Individuals below:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>50 percent of poverty level</td>
<td>959</td>
</tr>
<tr>
<td>125 percent of poverty level</td>
<td>2,001</td>
</tr>
<tr>
<td>150 percent of poverty level</td>
<td>2,247</td>
</tr>
<tr>
<td>185 percent of poverty level</td>
<td>2,512</td>
</tr>
<tr>
<td>200 percent of poverty level</td>
<td>2,845</td>
</tr>
</tbody>
</table>
Another important measure of assessing the population in need is by looking at the distribution of Low and Moderate Income (LMI) persons in the community. LMI is one measure used by the US Department of Housing and Urban Development (HUD) to determine eligibility for receiving Community Development Block Grant (CDBG) funding. An area is determined to be eligible if at least 51 percent of the residents are considered to be LMI.

According to the 2016 estimates produced by HUD, households of four members must earn $24,300 or less to qualify as LMI. Based on this value, the population of Forest Acres is around 22 percent LMI, one of the lowest in the County. The entire City falls within the 25-50 percent category. While this is good for the City, indicating a generally good quality of life for most residents, it also means that the City is extremely limited in what types of projects are eligible for CDBG funding.

<table>
<thead>
<tr>
<th>Table 4 - Educational Attainment of Forest Acres.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Population 18 to 24 years</td>
</tr>
<tr>
<td>Less than high school graduate</td>
</tr>
<tr>
<td>High school graduate (includes equivalency)</td>
</tr>
<tr>
<td>Some college or associate’s degree</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
</tr>
<tr>
<td>Population 25 years and over</td>
</tr>
<tr>
<td>Less than 9th grade</td>
</tr>
<tr>
<td>9th to 12th grade, no diploma</td>
</tr>
<tr>
<td>High school graduate (includes equivalency)</td>
</tr>
<tr>
<td>Some college, no degree</td>
</tr>
<tr>
<td>Associate’s degree</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
</tr>
<tr>
<td>Graduate or professional degree</td>
</tr>
<tr>
<td>Percent high school graduate or higher</td>
</tr>
<tr>
<td>Percent bachelor’s degree or higher</td>
</tr>
</tbody>
</table>

The educational attainment of residents in Forest Acres has been steadily increasing in the past decades. As shown in Table 4, the percentage of residents 25 and older with less than 9th grade education has decreased from 1.4 percent in the 2010 Census to 0.6 percent. The level of educational attainment is higher than both Richland County and State of South Carolina estimates: about 96 percent of residents have a high school degree or higher (State average: 85.0 percent; Richland County average: 89.6 percent). In the same population group, 56.1 percent of the City has a bachelor’s degree or higher (State average: 25.3 percent; Richland County average: 36.2 percent). Males in the City tend to have a higher proportion of graduate or professional degrees than females.
2.3. Goals, Objectives, and Strategies

Goals
- Preserve and enhance the small-town charm of the City of Forest Acres amidst the strong growth of the midlands region.
- Promote healthy population growth within the confines of Forest Acres municipal limits.

Objectives
- Encourage sound development policies that promote mixed use, higher density residential areas that offer a wide range of housing options, provide pedestrian accessibility, and entice commercial development.
- Absorb regional population growth by marketing the favorable location of the City as an alternative to the higher density, auto dependent residential development occurring in nearby areas of Forest Acres.
- Pursue alternative annexation policies.

Strategies
- Update zoning ordinance and subdivision regulations to reflect the future land use map presented in the Land Use element of the Comprehensive Plan.
- Work with the Chamber of Commerce to market the City for its small-town character and high quality of life and proximity to points of interest in the region.
- Conduct a fringe area study to help refine short, medium, and long-term annexation priorities.
- Survey the City for potential locations that fit high density residential developments.
- Promote infill, mixed use developments in Richland Mall and other areas as suggested in the Land Use element of the comprehensive plan.
3. Economic Development

3.1. Introduction

The economic development element of the comprehensive plan presents existing labor force characteristics and provides an analysis of the City’s economic base with an inventory of employment trends by place of work and industry type.

3.2. Inventory

The Columbia Metropolitan Statistical Area (MSA) economy significantly influences the economy of Forest Acres. Being within the Columbia MSA, many residents are probably employed outside of City limits (e.g. state government, the University of South Carolina, medical and other professional sectors). As shown in Table 4, this is a highly educated workforce. This also seems applicable to the more mobile, younger, college-age employees found working in the City’s many stores and restaurants.

According to 2014 estimates, Forest Acres has a resident active labor force of 5,024 (as shown Table 5). Around 52.4 percent of residents work in management, business, science, and art occupations. The second highest workforce in the City, sales and office occupations, constitute 23.9 percent of residents.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>2014 ACS</th>
<th>2010 Census</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civilian employed population 16 years and over</td>
<td>5,024</td>
<td>5,077</td>
</tr>
<tr>
<td>Management, business, science, and arts occupations</td>
<td>2,633</td>
<td>2,560</td>
</tr>
<tr>
<td>Service occupations</td>
<td>751</td>
<td>547</td>
</tr>
<tr>
<td>Sales and office occupations</td>
<td>1,204</td>
<td>1,502</td>
</tr>
<tr>
<td>Natural resources, construction, and maintenance occupations</td>
<td>276</td>
<td>179</td>
</tr>
<tr>
<td>Production, transportation, and material moving occupations</td>
<td>160</td>
<td>289</td>
</tr>
<tr>
<td>Unemployed</td>
<td>519</td>
<td>274</td>
</tr>
</tbody>
</table>

These estimates show the unemployment rate is at 8.6 percent, which is higher than the 5.1 percent unemployment rate of 2010. That said, there was also an increase to the workforce since that time (from 5,351 to 5,543). While the reasons for this increase in unemployment require further research, this number is on par with the unemployment rates of the City of Columbia (11.7 percent in 2014) and Richland County (10.4 percent in 2014).

The biggest employer in the City is the customer service call center belonging to PricewaterhouseCoopers. Located in Richland Mall this 24/7 operation has around 1,200 employees. Other significant employers include the City’s public schools, the Forest Acres City government, Trader Joe’s, and Nelson Mullins law firm.
Economic trends in Forest Acres are positive. Local economic activity is characterized by retail and service sector commerce. According to the most recent data from the Department of Revenue, the Forest Acres gross sales estimates for 2014 was $231,363,312.

Water and sewer availability is no impediment to business development within the Forest Acres municipal limits (as seen in chapter 6. COMMUNITY FACILITIES). These utilities are also available in the adjacent jurisdictions of the City of Columbia, Arcadia Lakes, and unincorporated Richland County. The proximity of Fort Jackson also has an important impact on the economy of Forest Acres. Fort Jackson military families support the housing market of Forest Acres, and are an economic boon to the local retail and service outlets in the City. Events held in Fort Jackson (e.g. boot camp graduation ceremonies) also attract out-of-state tourism and provide an economic boon both within and around the Forest Acres municipal limits.

According to 2015 estimates provided by Infogroup, there are 313 employers in Forest Acres that hire five or more employees (Table 6). Based on the North American Industry Classification System (NAICS) employment categories, the highest type of employment in Forest Acres is general sales or services (e.g. restaurants and retail sellers). This is followed by education, public administration, health care, and other institutions. Accommodations and food service employers, which include wholesale agriculture and the forestry industry, are the third biggest employer in the City.

<table>
<thead>
<tr>
<th>Type of Employment</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodations and food service</td>
<td>49</td>
</tr>
<tr>
<td>Arts, entertainment, and recreation</td>
<td>10</td>
</tr>
<tr>
<td>Construction-related businesses</td>
<td>9</td>
</tr>
<tr>
<td>Education, public administration, health care, and other institutions</td>
<td>93</td>
</tr>
<tr>
<td>General sales or services</td>
<td>139</td>
</tr>
<tr>
<td>Manufacturing and wholesale trade</td>
<td>5</td>
</tr>
<tr>
<td>Transportation, communication, information, and utilities</td>
<td>8</td>
</tr>
</tbody>
</table>
3.3. Goals, Objectives, and Strategies

Goals
- Create opportunities for economic growth by growing existing businesses and providing incentives for the recruitment of new industries.

Objectives
- Explore commercial opportunities for attracting young populations to the Forest Acres area.
- Develop the institutional framework for supporting local and regional economic development initiatives.
- Continue to work towards identifying and improving quality of life issues relevant to the recruitment of industries to the City (e.g., traffic congestion, schools, recreational opportunities, utility infrastructure).

Strategies
- Recruit a diverse employment base that includes both large and small employers.
- Create an economic development plan to identify strengths, weaknesses, opportunities, and threats within the local economy. This plan could include the following:
  - A detailed market analysis of the area to identify commercial and industrial opportunities as well as regional retail leakages.
  - A peer community review of economic development activities in similar neighboring communities (in and out of state).
  - A commercial building stock survey to assess status of condition and building tenure and ownership.
  - An inventory of redevelopment opportunities within the City center and mixed use districts.
- Encourage infill development and revitalization of downtown and avoid encroachment of new development into areas that lack the necessary public facilities, services, and infrastructure.
- Encourage and facilitate waste recycling and renewable energy use among business and industry.
- Encourage and promote the efficient design and operation of industrial and commercial facilities and production processes.
- Encourage and promote the location of jobs near existing workforce housing, the development of shared parking facilities and alternative transportation systems, and the linkage of job sites with convenient, affordable transit service.
- Delineate special districts to assist in achieving economic development and land use goals and develop marketing plans and targeted economic incentives to encourage private investment in designated redevelopment areas.
- Develop detailed land inventories in key areas to identify vacant, under-utilized, and available commercial properties.
- Amend local ordinances to provide for home-based businesses, while protecting and complementing existing communities and neighborhoods.
- Actively assess the potential of local waste streams and recruit employers who can incorporate what would normally be considered unwanted waste and pollutant by-products into viable components of their production processes and end products.
• Collaborate with local, regional, state and federal agencies to create incentives for “job/housing opportunity zones,” to promote housing in job-rich areas and jobs in housing-rich areas.
• Locate public facilities and services so that they further enhance job creation opportunities.
• Require future commercial areas to foster pedestrian circulation through the land use entitlement process and/or business regulation.
• Make energy conservation information available through the business licensing and building permit processes.
• Partner with state experts and local utilities to conduct energy audits for commercial and industrial facilities.
• Conduct surveys and compile a database of existing waste streams and potential users to serve as a basis for focused economic marketing and recruitment.
• Identify and support industry that reduce pollution through fuel efficiency and fuel type choices.
• Involve local business and industry representatives on local air quality coalition.
• Consider potential environmental justice issues in reviewing impacts.
• Provide a mechanism to create opportunities for mixed-use development that allows the integration of retail, office, institutional and residential uses for the purpose of reducing costs of infrastructure construction and maximizing the use of land.
• Encourage employment centers that are nonpolluting or extremely low-polluting and do not draw large numbers of vehicles in proximity to residential uses.
• Utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
• Support use of automated equipment for facilities to control heating and air conditioning.
• Promote and support programs to reduce greenhouse gas emissions.
• Implement programs to encourage green buildings in the private sector.
• Incentivize the use of SNAP/EBT and other nutritional supplement programs in farmer markets.
4. Natural Resources

4.1. Introduction

This section discusses the various natural resources located in the City of Forest Acres. These include the geographic extent of features such as climate, water resources, topography, soils, land cover, endangered species, environmentally sensitive areas and the distribution of natural hazard events and their effect in the municipality. Knowledge of these resources is a valuable tool in sustainably developing the City.

4.2. Inventory
  4.2.1. Physical Setting

The concept of the ecoregion will be utilized to describe the general environmental properties of Forest Acres. Ecoregions are areas of relative similarity in the type, quality and quantity of environmental and ecological resources. These regions may be greatly generalized (encompassing multiple states) or subdivided and differentiated based on the spatial distribution of soil, geology and ecology. The current system utilized by the United States Environmental Protection Agency (EPA) has four levels of ecoregions. These levels go from Level I (highest and more generalized) to Level IV (lowest and more differentiated).

According to the EPA, Forest Acres is located in the Sandhills Level IV Ecoregion. The Sandhills Ecoregion, itself part of the Southeastern Plains Level III Ecoregion, is noted for its rolling hills composed of Cretaceous-age marine sands and clays, covered in places with Tertiary-age sands. Elevation in this region varies from 100ft to 720ft above sea level, with a local relief profile of 100ft to 300ft. The City has a similar relief profile, from a low of 170ft in the southeast to a high of 310ft in the northeast.

4.2.2. Climate

Climate is the long term weather trends in a given area. Weather may change daily, but climate is usually measured in 30-year cycles based on prevailing temperature and precipitation patterns. Therefore, while weather over a given year may go through extremes events, the information in this section presents weather trends over long periods of time.

Annual precipitation in Forest Acres ranges from a low average of 44 inches to a high of 48 inches. Precipitation is evenly distributed throughout the year. Mean annual temperature for the City varies seasonally. During winter months, it ranges between a low of 30°F to a high of 52°F. Summer months mean temperature range between a low of 68°F and a high of 90°F. This becomes important in determining the growing season, as this weather allows between 215 and 240 frost free days in a year.

4.2.2.1. Climate Adaptation and Resilience

Climate change is the variation of global or regional climate patterns. Climate change can be a natural cycle in long term climate dynamics, taking place over millennia. According to the Southern Regional Climate
Center, Columbia (the closest climate reporting station to Forest Acres), had the warmest winter on record in 2015. Every winter from 2001 to 2015 were deemed warmer than the 20th century average.

Implementing best management practices that mitigate the effects of climate change will lower the economic and personal impact of these events in the future. FEMA is promoting climate change resilience through its Hazard Mitigation Assistance (HMA) grants. These grants provide economic incentives to utilize green spaces and low impact developments to mitigate the effects of climate change.

4.2.2.2. Air Quality

The Clean Air Act requires the EPA to monitor and regulate air quality. This in turn requires each state to implement and enforce the air quality standards set forth by the EPA. As of plan writing the EPA monitors six primary standards that are harmful to human health:

- Sulfur dioxide (SO$_2$)
- Carbon monoxide (CO)
- Particulate matter (PM)
- Ozone (O$_3$)
- Lead (Pb)
- Nitrogen dioxide (NO$_2$)

Air pollution can also have detrimental effects on plants and ecosystems. These effects include:

- interfering with the ability of plants to produce and store food, making them more susceptible to certain diseases, insects, other pollutants, competition, and harsh weather
- damaging the leaves of trees and other plants
- reducing forest growth and crop yields, potentially impacting species diversity in ecosystems

There are multiple sources of air pollution, both natural and anthropogenic. Natural sources of air pollution, for example, are emitted from sources such as wildfires. Agriculture areas may be producing air pollution from farm equipment and dust, while urban areas’ air pollution comes from such sources as dust at construction sites and cars. Industries and power plants also emit air pollution, and so do mobile sources such as cars, lawnmowers, and airplanes.

Air quality impacts human health, the economy, and the environment. Air pollution causes a variety of effects on human health, and is associated with respiratory and cardiovascular effects as well as life-threatening diseases (see Table 7).

<table>
<thead>
<tr>
<th>Short-term health effects</th>
<th>Long-term health effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes, nose, and throat irritation</td>
<td>Chronic respiratory disease</td>
</tr>
<tr>
<td>Upper respiratory infections such</td>
<td>Lung cancer</td>
</tr>
<tr>
<td>Headaches</td>
<td>Heart disease</td>
</tr>
<tr>
<td>Nausea</td>
<td>Damage to lungs, brain, and nerves</td>
</tr>
<tr>
<td>Allergic reactions</td>
<td>Birth defects</td>
</tr>
<tr>
<td>Worsen asthma and emphysema</td>
<td>Skin cancer</td>
</tr>
<tr>
<td>Aggravate existing heart disease</td>
<td>Cataracts</td>
</tr>
</tbody>
</table>

Table 7 - Short-term and long-term health effects of air pollution.
Since air pollution has negative effects on human health it also impacts the economy through lost work and school days, and increased healthcare costs. Agricultural crops and commercial forest yields are also damaged, which results in lost revenue for these economic sectors and increased prices for consumers. Air pollution reduces visibility, interfering with aviation. Air pollution may also damage our built environment such as buildings, monuments, and statues.

In addition to these direct impacts, an area not meeting EPA standards could be designated as a nonattainment area. If the area were to be so designated in the future then additional limitations could be placed on existing and new businesses, the latter of which may choose not to locate in the area due to expensive pollution control methods and higher operational costs. If the State fails to develop or follow an improvement plan, federal highway funding could be withheld. Additionally, the regulatory process to be re-designated to attainment status is very costly and could last several years.

![Figure 4 - Ozone Design Values from 1998 to 2015 in the Central Midlands Region.](image)

EPA air quality standards have become stricter in recent decades. Thankfully, according to data from the Department of Health and Environmental Control (DHEC), the State of South Carolina has kept in line with most contaminants of concern emission limits for more than a decade. As Figure 4 shows, levels of ozone have steadily decreased in the Richland County for the past decade. This reduction also applies to other air pollutants such as particulate matter, sulfur dioxide, and nitrogen dioxide. The reduction has been attributed to technological improvements in emissions control for power plants and automotive vehicles.

Maintaining and improving these levels is still important, as long term exposure to these contaminants may cause health issues. Programs such as Breathe Better and the Palmetto State Clean Fuels Coalition promote
methods of limiting air pollution and improve respiratory health of residents. As of plan writing no institution or business in Forest Acres participates in any air quality management program.

4.2.3. Vegetation

According to an analysis of USDA Ecoregions in the area, Longleaf pine forest tends to dominate undisturbed areas. But logging activities and fire suppression practices has favored shortleaf-loblolly pine and mixed oak-pine forests in human-influenced locations. Other vegetation present in this type of ecoregion includes red maples, poplars and a variety of evergreen shrubs.

4.2.4. Water Resources
4.2.4.1. Waterbodies

The City lies about 4 miles east of the Broad river, with access to Lake Murray and the Saluda and Congaree rivers within 10 miles of City limits. Tributaries that drain into these larger waterbodies, such as Gills Creek, Jackson Creek and Pen Branch intersect the City limits. Notable lakes within City limits include Forest Lake, Rocky Ford Lake, Spring Lake and Cary Lake (Figure 5).

Figure 5 - Streams and Waterbodies within and around the City of Forest Acres.
4.2.4.2. Watersheds

Watersheds, or drainage basins, are areas where surface water drains to a single point in a lower elevation. Topography delineates the boundaries of watersheds, acting like a funnel and guiding water towards streams. The United States Geological Service (USGS) utilizes a watershed classification system, based on topography and size, whereas watersheds are progressively nested within each other. Forest Acres is within the Gills Creek watershed, which itself lies within the larger multi-county Saluda sub-basin.

4.2.4.3. Water Quality

The quality of the aforementioned water bodies is an important issue, as these serve as recreation locations and important ecosystems for flora and fauna. DHEC maintains a list of impaired water bodies that fall within the guidelines of Section 303(d) of the Clean Water Act. The 303(d) list tracks water bodies that need further investigation to determine what efforts and best management practices are required to bring them to EPA water quality standards.

As of 2014, DHEC identified several streams around the City were considered impaired under the Environmental Protection Agency 303(d) program. The station at Forest Lake Dam was considered impaired for excessive mercury, which affects fishing activities in the area.

<table>
<thead>
<tr>
<th>Station</th>
<th>Location</th>
<th>Impaired for</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-068</td>
<td>Forest Lake Dam</td>
<td>Mercury</td>
</tr>
<tr>
<td>RS-09323</td>
<td>Lightwood Knot Branch</td>
<td>Biological (Macroinvertebrate)</td>
</tr>
</tbody>
</table>

When considering how to improve water quality, a Total Maximum Daily Load (TMDL) analysis may be performed to determine the level of impairment and better target pollution control efforts. A TMDL is a calculation of the pollutant amount a water body can carry before considered unfit for use by EPA water quality standards. A TMDL can be developed for each pollutant of interest in a water body (e.g. dissolved oxygen, fecal coliform, turbidity, etc.). Pollutants may come from multiple sources, be it a point source with a clear cause or a non-point source, which is the accumulation of ambient pollutants in the area.

Non-point sources in particular are a significant issue, as mitigating their effects may involve widespread behavioral or technological changes. Some significant culprits of non-point source contamination are agricultural practices (e.g. pesticide and fertilizer use) and urban land use (e.g. stormwater runoff carrying pollutants to streams on impervious surfaces). These contaminants may travel long distances and affect water bodies downstream, or eventually contaminate groundwater sources.

DHEC identified two stations near the boundaries of Forest Acres that have calculated TMDL’s. One station was selected for dissolved oxygen deficiency (Table 9), and another for fecal coliform analysis (Table 10). These stations may be seen in Figure 6.
Dissolved oxygen is a measure of how much oxygen is in a body of water and is typically measured in mg/L. Available dissolved oxygen affects activities related to aquatic life. Fecal coliform are a bacteria group that generally originate in the gastrointestinal systems of warm blooded animals. While fecal coliform may not be harmful in itself, high quantities could reflect the presence of water-borne pathogens. Fecal coliform amounts for selected streams are presented as Colony Forming Units (cfu) per 100 milliliters (ml), which are derived to daily amounts (Table 10).

<table>
<thead>
<tr>
<th>Station</th>
<th>Location</th>
<th>Dissolved oxygen TMDL (lb/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-048</td>
<td>Gills Creek/September 2009</td>
<td>10.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Station</th>
<th>Location</th>
<th>Fecal Coliform TMDL (cfu/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-001</td>
<td>Gills Creek/September 2009</td>
<td>$2.13 \times 10^{12}$</td>
</tr>
</tbody>
</table>
4.2.5. Environmentally Sensitive Areas

The United States Fish and Wildlife service (USFWS) maintains an inventory of sensitive environmental resources in the area within and around City limits. This inventory identified 2.8 acres of freshwater emergent wetland, 75.4 acres of freshwater forest/shrub wetlands, 39.2 acres of freshwater ponds and 259.2 acres of lake that are considered environmentally sensitive resources. To aid in protecting these water resources, a 50 foot creek buffer ordinance was adopted by the City in June 2015.

<table>
<thead>
<tr>
<th>Species</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red-cockaded Woodpecker (<em>Picoides borealis</em>)</td>
<td>Endangered</td>
</tr>
<tr>
<td>Wood Stork (<em>Mycteria americana</em>)</td>
<td>Threatened</td>
</tr>
<tr>
<td>Carolina Heelsplitter (<em>Lasmigona decorata</em>)</td>
<td>Endangered</td>
</tr>
<tr>
<td>Shortnose Sturgeon (<em>Acipenser brevirostrum</em>)</td>
<td>Endangered</td>
</tr>
<tr>
<td>Canby’s Dropwort (<em>Oxypolis canbyi</em>)</td>
<td>Endangered</td>
</tr>
<tr>
<td>Rough-leaved Loosestrife (<em>Lysimachia asperulaefolia</em>)</td>
<td>Endangered</td>
</tr>
<tr>
<td>Smooth Coneflower (<em>Echinacea laevigata</em>)</td>
<td>Endangered</td>
</tr>
</tbody>
</table>

The USFWS identified 7 endangered species within the area of the City of Forest Acres (Table 11). Additionally, 21 migratory bird species utilize the area in their travels (Table 12). Altering the environment these species utilize could endanger their long term survival. It is important to mitigate the impact of any future activities on these vulnerable species.

<table>
<thead>
<tr>
<th>Species</th>
<th>Migratory Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Bittern (<em>Botaurus lentiginosus</em>)</td>
<td>Wintering</td>
</tr>
<tr>
<td>American Kestrel (<em>Falco sparverius paulus</em>)</td>
<td>Year-round</td>
</tr>
<tr>
<td>Bachman’s Sparrow (<em>Aimophila aestivalis</em>)</td>
<td>Year-round</td>
</tr>
<tr>
<td>Bald Eagle (<em>Haliaeetus leucocephalus</em>)</td>
<td>Year-round</td>
</tr>
<tr>
<td>Brown-headed Nuthatch (<em>Sitta pusilla</em>)</td>
<td>Year-round</td>
</tr>
<tr>
<td>Chuck-will’s widow (<em>Caprimulgus carolinensis</em>)</td>
<td>Breeding</td>
</tr>
<tr>
<td>Fox Sparrow (<em>Passerella iliaca</em>)</td>
<td>Wintering</td>
</tr>
<tr>
<td>Kentucky Warbler (<em>Oporornis formosus</em>)</td>
<td>Breeding</td>
</tr>
<tr>
<td>Least Bittern (<em>Ixobrychus exilis</em>)</td>
<td>Breeding</td>
</tr>
<tr>
<td>Loggerhead Shrike (<em>Lanius ludovicianus</em>)</td>
<td>Year-round</td>
</tr>
<tr>
<td>Painted Bunting (<em>Passerina ciris</em>)</td>
<td>Breeding</td>
</tr>
<tr>
<td>Peregrine Falcon (<em>Falco peregrinus</em>)</td>
<td>Breeding</td>
</tr>
<tr>
<td>Prairie Warbler (<em>Dendroica discolor</em>)</td>
<td>Wintering</td>
</tr>
<tr>
<td>Prothonotary Warbler (<em>Protonotaria citrea</em>)</td>
<td>Breeding</td>
</tr>
<tr>
<td>Red-headed Woodpecker (<em>Melanerpes erythrocephalus</em>)</td>
<td>Breeding</td>
</tr>
<tr>
<td>Rusty Blackbird (<em>Euphagus carolinus</em>)</td>
<td>Wintering</td>
</tr>
<tr>
<td>Sedge Wren (<em>Cistothorus platensis</em>)</td>
<td>Migrating</td>
</tr>
<tr>
<td>Short-eared Owl (<em>Asio flammaeus</em>)</td>
<td>Wintering</td>
</tr>
<tr>
<td>Swainson’s Warbler (<em>Limnothlypis swainsonii</em>)</td>
<td>Breeding</td>
</tr>
<tr>
<td>Wood Thrush (<em>Hylocichla mustelina</em>)</td>
<td>Breeding</td>
</tr>
<tr>
<td>Worm Eating Warbler (<em>Helmitheros vermivorum</em>)</td>
<td>Breeding</td>
</tr>
</tbody>
</table>
4.2.6. Natural Hazards

The City of Forest Acres experiences an array of natural hazards. The most recent hazard and vulnerability analysis for Forest Acres was made at the county level (see the 2016 update of the All Natural Hazard Risk Assessment and Hazard Mitigation Plan for the Central Midlands Region of South Carolina). Therefore most of the statistical and narrative information for hazard risk and vulnerability will come from Richland County natural hazard and vulnerability analysis, unless otherwise noted.

Prior to the 2015 flash flood disaster, hurricanes posed the highest risk to Forest Acres. Flood damage used to rank fairly low—even behind tornadoes—although flash flooding is a very frequent occurrence (every 6 months). Heat and drought pose serious threats to the City that are difficult to capture in loss figures or maps since their impacts tend to be underreported. While thunderstorm, lightning, wind, and hail damage are non-catastrophic, their cumulative impact and high frequency is still significant.

The Gills Creek watershed was one of the hardest hit in the state during the 2015 flood. On October 4th 2015 a NOAA stream gage located in Gills Creek set a new precipitation record when it registered 21.5 inches of rain before failing. Cary Lake Dam failed, sending water down Gills Creek which overtopped the dams in Spring Lake and Forest Lake. On October 5th two dams at Rockyford Lake failed, sending more water onto Gills Creek. By then the water level reduced enough to not have much impact. As of plan writing, restoration has begun at most of sites where dam failures occurred.

Table 13 - Natural Hazard Impact Summary for Richland County.

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Direct Losses (Property and Crop)</th>
<th>Direct Injuries and Fatalities</th>
<th># of Loss-Causing Events (# of Events)</th>
<th>Frequency</th>
<th>Recurrence Interval (in years)</th>
<th>Future Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flooding⁵</td>
<td>$3,611,182</td>
<td>3</td>
<td>89(103)*</td>
<td>191%</td>
<td>0.5</td>
<td>▲</td>
</tr>
<tr>
<td>Hurricane</td>
<td>$96,540,101</td>
<td>31</td>
<td>8(12)</td>
<td>22%</td>
<td>4.6</td>
<td>▲</td>
</tr>
<tr>
<td>Tornadoes</td>
<td>$25,402,320</td>
<td>21</td>
<td>15(34)</td>
<td>62%</td>
<td>1.6</td>
<td>▲</td>
</tr>
<tr>
<td>Thunderstorm</td>
<td>$1,685,500</td>
<td>9</td>
<td>48(62)</td>
<td>113%</td>
<td>0.9</td>
<td>▲</td>
</tr>
<tr>
<td>Lightning</td>
<td>$6,400,734</td>
<td>62</td>
<td>64(278,105)</td>
<td>1030019%*</td>
<td>several times/day</td>
<td>▲</td>
</tr>
<tr>
<td>Wind</td>
<td>$12,909,454</td>
<td>8</td>
<td>181(469)</td>
<td>853%</td>
<td>0.12</td>
<td>▲</td>
</tr>
<tr>
<td>Hail</td>
<td>$1,576,679</td>
<td>7</td>
<td>64(242)</td>
<td>440%</td>
<td>0.2</td>
<td>▲</td>
</tr>
<tr>
<td>Fog</td>
<td>n/av</td>
<td>n/av</td>
<td>n/av</td>
<td>&gt;8%*</td>
<td>&gt;12.6 days</td>
<td>◄►</td>
</tr>
<tr>
<td>Winter Storm⁴</td>
<td>$10,093,420</td>
<td>1</td>
<td>28(45)</td>
<td>53%</td>
<td>1.9</td>
<td>▼</td>
</tr>
<tr>
<td>Cold</td>
<td>$16,925,275</td>
<td>4</td>
<td>31(31)</td>
<td>56%</td>
<td>1.7</td>
<td>▼</td>
</tr>
<tr>
<td>Heat</td>
<td>$21,263,066</td>
<td>6</td>
<td>13(13)</td>
<td>24%</td>
<td>4.2</td>
<td>▲</td>
</tr>
</tbody>
</table>

³ excludes 2015 flood losses
⁴ excludes 2004 ice storm losses
*daily frequency/recurrence calculations instead of years
▲ indicates that future increase in occurrence and/or impacts is likely
▼ indicates that future decrease in occurrence and/or impacts is likely
◄► indicates either that future changes cannot be determined or no expected change in future occurrence or impacts
<table>
<thead>
<tr>
<th></th>
<th>Direct Losses (Property and Crop)</th>
<th>Direct Injuries and Fatalities</th>
<th># of Loss-Causing Events (# of Events)</th>
<th>Frequency</th>
<th>Recurrence Interval (in years)</th>
<th>Future Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drought</td>
<td>$24,345,640</td>
<td>0</td>
<td>17(17)</td>
<td>31%</td>
<td>3.2</td>
<td>▲</td>
</tr>
<tr>
<td>Wildfire</td>
<td>$366,633</td>
<td>0</td>
<td>3(1,996)</td>
<td>23%*</td>
<td>4.4 days</td>
<td>▲</td>
</tr>
<tr>
<td>Earthquake</td>
<td>0</td>
<td>0</td>
<td>0(3)</td>
<td>3%</td>
<td>39</td>
<td>◄►</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$221,057,697</td>
<td>149</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When overlaying the risk from all hazards, the City of Forest Acres has Low to Moderate hazard risk (Figure 7). This translates to around 25 to 30 hazard events per hexagonal area in the map (each hexagon is approximately 924 acres or 1.5 square miles).

Figure 7 - Comprehensive risk profile of Forest Acres.

Figure 8 presents socially vulnerable Census tracts in and around Forest Acres. Based on the analysis of multiple socioeconomic variables, Forest Acres has medium social vulnerability to natural hazards. This influences how well the City is prepared for, responds to, or recovers from a natural hazard. When combining vulnerability information across all 15 hazard types (Figure 9), the City itself has an overall medium hazard risk and vulnerability.
Figure 8 - Socially vulnerable Census tracts in Forest Acres.

Figure 9 - Comprehensive natural hazard vulnerability for Forest Acres.
4.3. Goals, Objectives, and Strategies

Goals
- Preserve and protect natural resources, critical habitats, and ecosystems necessary to support the health of both residents and species.
- Encourage sustainable land use practices based on the natural landscape of Forest Acres.

Objectives
- Encourage the use of watershed based planning principles to protect riparian areas and contribute to the improvement of water quality within and around the City of Forest Acres.
- Promote the use of green spaces in and around the City of Forest Acres for cultural and recreation purposes.
- Encourage the use of green infrastructure and low impact development techniques such as conservation design regulations and infill development to help protect sensitive environmental resources and improve air quality.
- Educate citizens on the use and maintenance of natural resources.
- Reduce the impact of impervious surfaces and habitat fragmentation.

Strategies
- Work with SC DHEC to monitor the quality of water sources in and around Forest Acres.
- Inventory and document unique and sensitive natural resources (e.g., tree allies, unique wetlands, unique topographic features, unique waterways, flora and/or fauna habitats).
- Work with local civic and neighborhood groups to plant or replace trees in public areas, maintain existing trees and vegetation, and distribute educational information on how to properly plant and care for trees and other vegetation.
- Generate a local database of water quality data to assist in making planning and development decisions that could potential impact water bodies in the City of Forest Acres.
- Work with municipal planning staff, the planning commission, water quality stakeholder groups, and the public to identify priority conservation areas for inclusion in future zoning and land use plans, guiding conservation minded design in the City of Forest Acres.
- Establish educational signage in areas with key natural resources, providing informational material on how to better maintain and utilize them.
- Create an inventory of areas or infrastructure that can be improved to limit the impacts of impervious surfaces on water quality in and around the City of Forest Acres.
- Revise landscaping ordinance to require that landscaping provide shading and reduce ambient air temperatures in the summer.
- Pursue a comprehensive reform of the Forest Acres tree protection ordinance to align it with American Forests’ recommendation that a city east of the Mississippi River should adopt/meet the goal to achieve/maintain a city-wide canopy cover of 40 percent.
- Ensure appropriate and needed resources are provided to local parks to properly maintain existing open spaces, including care for trees and other vegetation.
- Work with regional air quality coalitions to implement voluntary measures to improve air quality such as tree planting initiatives, and education and awareness activities.
• Incorporate alternative fuels into the City’s fleet.
• Encourage small and large landowners to manage their land by the planting of native plant species and the removal of invasive species.
• Provide air and water quality information through the City’s website.
• Involve environmental groups, the business community, special interests and the public in the formulation and implementation of programs that effectively reduce airborne pollutants.
• Promote and participate with regional and local agencies, both public and private, to protect and improve environmental quality.
• Participate in the regional air quality coalition.
• Encourage community involvement and public-private partnerships to reduce and respond to air quality issues.
• Coordinate with other agencies, other local governments, and State and federal agencies to develop and promote programs to improve air quality.
• Explore locations ideal for the development of pocket parks.
• Enforce creek buffer ordinance.
• Promote and participate in the development of the Gills Creek Greenway.
• Explore locations for the development of a nature interpretive center.
5. Historic and Cultural Resources

5.1. Introduction

In 1785 the state South Carolina offered land at ten dollars for 100 acres. At this time Thomas Taylor became the owner of all the land where present day Forest Acres is situated. Many notable South Carolina families built antebellum homes in the Quinine Hills area, as this area was relatively mosquito free due to its high ground elevation, making it attractive to those seeking to avoid the threat of malaria. The water from springs flowing in this area was also reputed to have medicinal benefits.

The City of Forest Acres was incorporated in 1935 partly to facilitate installation of potable water with federal funding available through the Works Progress Administration (WPA). Later, the City purchased water wholesale from Columbia and retailed it to residents, which helped spur development. The original area of incorporation was two square miles with the municipal limits forming an irregular rectangle that mostly paralleled Forest Drive. The northern and southern boundaries were one half mile on each side of Forest Drive, from Columbia to Fort Jackson (then known as Camp Jackson). The eastern boundary was established a thousand feet beyond Gills Creek with a line drawn due north/south. The western boundary was then established two miles to the west, parallel to the eastern boundary.

Today, Forest Acres is approximately 4.8 square miles in area, with the increase in area having resulted from mostly residential annexations since the original incorporation. The largest individual annexation occurred in 1967, when the existing City of Ravenwood, the Wheeler property, the Satchelford Elementary School area, and other contiguous properties were annexed.

5.2. Inventory

5.2.1. Historic Background

Although settled in the 18th century, there are no structures or locations included on the National Register of Historic Places located in the City of Forest Acres. However, Bethel United Methodist Church is of historical significance since it has existed on its present site since the 1850’s. A survey of the Forest Acres area by the SC Department of Archives and History has found no designated historical sites within the immediate area.

There are no museums, performing art centers, or other specifically cultural venues in Forest Acres, but several important such facilities are only minutes away in the City of Columbia. Serving the greater Columbia area are the Columbia Museum of Art, The State Museum, Edventure Children’s Museum, and several lesser similar locales. The performing arts are accommodated at the Koger Center, the Carolina Coliseum, Township Auditorium, and at several smaller venues located throughout the City. The University of South Carolina strongly influences arts and music in the area.
Forest Acres is adjacent to the Decker Blvd International Corridor. This two-mile-long road located northeast of the City intersects North Trenholm Road. The area is characterized by a range of ethnic shopping and dining opportunities.

5.2.2. Historic Sites

There are no official Forest Acres sites in the National Register of Historic Places. That said, the City contains 26 structures that date back to the mid-20th century. As seen in Figure 10, these structures are located around the Forest Lake area, and in the residential area around Gamewell Drive. Most of these locations are residential houses. Points of interest include the Springlake Road Bridge, and the Bethel United Methodist Church Cemetery.

Figure 10 - Antique buildings and areas within Forest Acres (Source: SHPO).
5.3. Goals, Objectives, and Strategies

Goals
- Preserve and protect cultural resources
- Promote the history of the City of Forest Acres

Objective
- Identify historical resources and areas in the City of Forest Acres
- Market the history of the City of Forest Acres to promote tourism

Strategy
- Partner with SHPO to survey and inventory historical buildings and areas within municipal boundaries of the City of Forest Acres
6. Community Facilities

6.1. Introduction

The community facilities element of the comprehensive plan relates to the infrastructure necessary to provide adequate services that support the growth and development, health, safety and welfare of the City. These infrastructures include: Water and Sewer Facilities, Solid Waste Disposal, Storm Water Drainage, Police and Fire Protection, Emergency Medical Services, Recreation, and Education. It is important to note that because many of these facilities are not within the sole jurisdiction or responsibility of the City, interagency cooperation, coordination and participation is essential. The adequate provision of public services will require Forest Acres to continue working with other local governments, such as Richland County, the City of Columbia, and private entities, such as health care and solid waste disposal providers.

6.2. Inventory

6.2.1. Water System

Water utility service for Forest Acres is owned, operated, and maintained by the City of Columbia. They process water from two facilities, the Broad River Diversion Canal and Lake Murray, with an average output of 60 million gallons a day. The combined capacity of both facilities exceeds 100 million gallons a day, and water towers throughout the region provide additional capacity. A 24 inch diameter pipe that runs underneath Forest Drive serves as one of the main water distribution nodes in the City (Figure 11).

6.2.2. Sanitary Sewer System

Wastewater management services for the City are provided primarily by the East Richland County Public Service District, with some areas serviced by the City of Columbia. As seen in Figure 12, the sanitary sewer infrastructure extends in and around the boundaries of the City. Since the last plan update East Richland County Public Service District has made collection system improvements for portions of Forest Acres and is evaluating prospects for extra capacity.
Figure 11 - Water Distribution System in and around Forest Acres.

Figure 12 - Sanitary Sewer System in and around Forest Acres.
6.2.3. Solid Waste

The City of Forest Acres provides weekly solid waste and recycling collection services to residents. The City also collects yard debris and appliances. A Special Needs Collection Service is also provided to residents unable to access the curbside collection service. Due to the “doughnut holes” that are located within City boundaries, the solid waste pickup services of the jurisdictions of Richland County and the City of Columbia also pass through Forest Acres.

6.2.4. Stormwater Management

Stormwater is handled by a combination of naturally occurring and man-made drainage, making ultimate outfall to the Congaree River. Primarily through inflow and infiltration, heavy rain events overload the sanitary sewer system, discharging both stormwater and untreated wastewater into streams. Forest Acres is part of the Richland Countywide Stormwater Consortium. The Consortium partners with local interest groups, industries, jurisdictions, Municipal Separate Storm/Sewer Systems (MS4’s), and individuals to inform and educate communities about water quality and the effects of stormwater in the environment. The City was a co-permittee with Richland County’s stormwater plan at its inception. A new MS4 permit was issued to Richland County on July 1st, 2016.

6.2.5. Police, Fire, and Emergency Medical Services (EMS)

The City of Forest Acres provides direct police services to City residents, and provides such additional services as a victim assistance program, safety training programs in a variety of topics, fingerprinting, and property checks. There is also a neighborhood watch program in various neighborhoods throughout the City.

Firefighting services in Forest Acres are provided by the City of Columbia. Richland County and City of Columbia have a mutual support agreement for fire protection services. Therefore, any fire station in Richland County may provide aid in case of an emergency. While there are no fire stations within Forest Acres, there are 7 fire stations located within 2 miles of City limits (Figure 13).

There are no Emergency Medical Services located within the City. The closest hospitals to Forest Acres are Providence Hospital, the Palmetto Health Richland, and Palmetto Health Baptist facilities located less than 3 miles of City limits in the City of Columbia. Additionally, there are 200 medical services within a 10-mile radius of the City. These include care and hospice facilities, rehabilitation services, and ambulatory surgery clinics.
6.2.6. Recreation

Figure 14 shows parks located within and around City limits. Within the City, Richland County Recreation Commission maintains Forest Lake Park and Trenholm Park, and its administrative offices are located near City limits. Other parks of interest within City limits are Citadel, Pinetree, Idalia and Quinine Hill Parks.

6.2.7. Educational and Library Facilities

The City of Forest Acres lies between Richland County School Districts 1 and 2. This provides Forest Acres residents access from 48 (School District 2) to 138 (School District 1) schools, depending on which part of the City they reside in. Within the city’s corporate limits there are 11 schools, 4 of them private and the rest public. Forest Lake Elementary and Dent Middle School have the distinction of being designated as magnet schools. Brockman Elementary and Jubilee Academy feature Montessori programs covering pre-kinder through 6th grade (Figure 15). These schools provide education from pre-kindergarten through 12th grade.
These schools serve around 1,800 students within an area around Forest Acres. The SC Department of Education has awarded “Gold” level General Performance Awards to Brockman Elementary, Crayton Middle School, Satchel Ford Road Elementary and A C Flora High School. Additionally, Brockman Elementary and Crayton Middle School have the distinction of having been “Gold” level “Closing the Achievement Gap” Award winners.
Richland County runs the John Hughes Cooper Library in Trenholm Road, reopened in July late spring 2017 after significant renovation. Forest Acres residents may utilize the services of any Richland County library for free. This includes free check out of books, movies, and video games, ancestry record search, internet access, limited free printing, and periodic community events.

6.2.8. Government Buildings

The City Hall of Forest Acres administers public services to the nearly 10,500 residents of the City. There are various County and State administrative buildings sited within City boundaries. These include Richland County School District 2 and the South Carolina Division of Labor. Forest Acres also has easy access to Richland County administrative buildings located in downtown City of Columbia and on nearby Decker Boulevard.
6.3. Goals, Objectives, and Strategies

Goals
- Provide the highest quality of services, meet and maintain high quality of life standards, ensure fiscal responsibility, and encourage sustainable growth and development practices.

Objectives
- Encourage a high level of communication and cooperation between all levels of municipal government, service providers, neighboring jurisdictions, state and regional entities, and the general public.
- Encourage the adoption and implementation of green infrastructure best management practices for all public facilities and programs.

Strategies
- Plant trees in City parks and right-of-ways and encourage the planting of shade trees on private property annually.
- Promote alternative means of transportation by encouraging employees to rideshare, use public transit, and walk or bike to work. This can be done through the distribution of information on transit, organizing carpools and ridesharing, providing bicycle racks and lockers, and incorporating pedestrian and bicycle-friendly design into the building grounds. Jurisdictions may offer incentives for carpooling, walking or bicycling such as extra leave time or gift certificates.
- Locate new buildings or facilities near transit, bicycle, and pedestrian facilities to encourage the use of alternative modes of travel.
- Locate facilities in close proximity, or co-locate them, to other related uses, along with adequate pathways, to decrease vehicular travel between facilities.
- Locate governmental and quasi-governmental organizations that impact the development of a community to complement the long-term development plans and should include:
  a. Local jurisdiction planners in meetings with the facility planners and developers to ensure compliance with local comprehensive plan and ordinances;
  b. Initiating a formal review and comment process for local jurisdictions on proposed school or other government sites and designs;
  c. Ensuring coordination between local planners and school district officials or other government officials on site design and linkages to existing transportation networks to encourage walking and biking opportunities; and
  d. Preparing transportation cost-benefit analyses of proposed school/government sites to strengthen the decision-making process.
- Explore relocation options for City Hall, prioritizing alternatives that co-locate the building with a park or recreation facility.
- Establish a policy to incorporate as many green building opportunities into new public buildings as is feasible.
- Implement a fleet management information system. By closely tracking maintenance schedules, fuel consumption, mileage, fuel costs and other related information, the fleet manager can identify potential problems and develop timely solutions to reduce costs and fuel consumption.
• Assign vehicles appropriate to the task. Smaller, more efficient vehicles should be used whenever possible, reserving larger, more powerful vehicles for more appropriate uses.

• Purchase fuel-efficient and appropriately-sized vehicles. By carefully analyzing vehicle needs, fleet managers can “down-size” the fleet – substituting smaller and often less expensive, but less energy-efficient, vehicles for more energy-efficient vehicles when making new purchases.

• Practice preventative maintenance. Routine practices such as keeping tires properly inflated and providing regular tune-ups will measurably improve fuel efficiency.

• Encourage staff drivers to adopt fuel-efficient driving techniques.

• Explore use of alternative fuel vehicles, making the City fleet diesel free and eventually emissions free. This can help to promote awareness of alternative fuel use within the greater community.

• Develop local or regional greenway plan in conjunction with utility providers that increase connectivity between greenspaces and bikeways through the use of utility and rail corridors.

• Require neighborhood parks and community centers near concentrations of residential areas to include pedestrian walkways and bicycle paths to encourage non-motorized travel.

• Encourage local transit agencies to promote ridership through careful planning of routes, headways, origins and destinations, types of vehicles.

• Communicate with East Richland County Public Service District to monitor, repair, and rehabilitate the collection system to reduce infiltration and overflow issues.

• Communicate with the City of Columbia to monitor, repair, and rehabilitate the water distribution system in the City and reduce issues with insufficient flow.
7. Housing

7.1. Introduction

The housing element of the comprehensive plan provides an analysis of the city’s housing stock in terms of type, distribution, age, condition, occupancy, and its ability to accommodate existing and future population growth. Housing affordability issues are addressed in compliance with the SC Priority Investment act. This includes an analysis of the City’s income to housing cost ratio as well as a policy analysis of regulations that may be prohibitive to the provision of affordable housing.

7.2. Inventory

Between 2010 and 2015 the total number of housing units in Forest Acres increased by 350 (Table 14). This increase in housing units has been a steady trend since the 2000 Census. The City has garnered an estimated 9 percent growth in housing units since then, from 5,232 housing units in the year 2000 to an estimated 5,726 housing units according to 2015 CMCOG data. Of the total number of housing units, the City issued a total of 69 residential building permits in the time period of 2010 to 2015.

Table 14 - Housing units and residential building permits issued in Forest Acres by year from 2010 to 2015.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing Units</td>
<td>5,376</td>
<td>5,486</td>
<td>5,538</td>
<td>5,629</td>
<td>5,663</td>
<td>5,726</td>
</tr>
<tr>
<td>Residential Building Permits Issued by City of Forest Acres</td>
<td>10</td>
<td>2</td>
<td>12</td>
<td>16</td>
<td>22</td>
<td>7</td>
</tr>
</tbody>
</table>

The ratio of renters to owners in the City changed significantly from the 2000 Census, due to an increase in the percentage of renters in the City. Of the 5,726 housing units in the City 3,653 are owner occupied and 1,584 are renter occupied. An additional 421 residential units became renter occupied since the last Census. Current estimates show a rental vacancy rate of around 10%, compared to around 17% in the 2010 Census. The homeowner vacancy rate has increased concomitantly in the same period, from around 3% in the 2010 Census up to around 7% according to most recent estimates.

Table 15 - New building construction permits (residential or commercial) in Forest Acres by year from 2010 to 2015.

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Permits Issued</td>
<td>13</td>
<td>4</td>
<td>20</td>
<td>16</td>
<td>22</td>
<td>36</td>
</tr>
<tr>
<td>Total Value (in Dollars)</td>
<td>$4,114,105</td>
<td>$1,517,000</td>
<td>$5,708,889</td>
<td>$3,575,590</td>
<td>$5,224,554</td>
<td>$9,838,051</td>
</tr>
</tbody>
</table>

Figure 16 shows the distribution of building permits within the City in the period preceding the plan update. The presented building permits are for new construction, be it residential or commercial. Most of this new development is concentrated in the areas adjacent to Trenholm Rd. and Forest Dr. The quantity and value
of these buildings remained steady since the last planned update. The most recent data, from 2015, showed a significant increase in both building permit value and quantity (as shown in Table 15).

While residential and commercial construction seems to progress at a steady rate, the most apparent change to housing trends remains the increase in the amount of renters in the City. Based on the development history of Forest Acres, the majority of housing was built prior to 1970. Long term maintenance of these older houses will become a concern as the rate of renters increases.

Table 16 - Value of Owner-occupied housing units in Forest Acres for 2015.

<table>
<thead>
<tr>
<th>Value</th>
<th>Housing Units</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Owner-occupied units</td>
<td>3653</td>
<td>100</td>
</tr>
<tr>
<td>Less than $50,000</td>
<td>80</td>
<td>2.2</td>
</tr>
<tr>
<td>$50,000 to $99,999</td>
<td>220</td>
<td>6.0</td>
</tr>
<tr>
<td>$100,000 to $149,999</td>
<td>425</td>
<td>11.6</td>
</tr>
<tr>
<td>$150,000 to $199,999</td>
<td>911</td>
<td>24.9</td>
</tr>
<tr>
<td>$200,000 to $249,999</td>
<td>775</td>
<td>21.2</td>
</tr>
<tr>
<td>Value</td>
<td>Housing Units</td>
<td>Percentage</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>$250,000 to $299,999</td>
<td>357</td>
<td>9.8</td>
</tr>
<tr>
<td>$300,000 to $399,999</td>
<td>308</td>
<td>8.4</td>
</tr>
<tr>
<td>$400,000 to $499,999</td>
<td>167</td>
<td>4.6</td>
</tr>
<tr>
<td>$500,000 to $749,999</td>
<td>194</td>
<td>5.3</td>
</tr>
<tr>
<td>$750,000 to $999,999</td>
<td>127</td>
<td>3.5</td>
</tr>
<tr>
<td>$1,000,000 or more</td>
<td>89</td>
<td>2.4</td>
</tr>
</tbody>
</table>

| Median Value (dollars) | $212,258 |
| Average Value (dollars)| $281,928 |

While the amount of homeowners in the City has decreased since 2000, the value of owner-occupied housing units has increased (Table 16). Median housing value has increased by around $31,000 in the City, from $181,000 in the 2010 Census to around $212,000 according to CMCOG data. This may be due to a significant increase in housing units valued at $500,000 or more. Additionally, housing units valued at less than $150,000 have steadily decreased in the same time period. The number of vacant units has remained steady since 2010 till 2015, from 507 to an estimated 541.

While this reflects a positive growth in the socioeconomic status of Forest Acres, it may present an issue for Low and Moderate Income populations. According to the US Department of Housing and Urban Development (HUD) “affordable housing” is defined as housing that does not require renters to pay more than 30 percent and homeowners to pay more than 28 percent of their median monthly income on housing expenses.

<table>
<thead>
<tr>
<th>Median Income</th>
<th>Monthly Income</th>
<th>30% Housing Cost for Renters</th>
<th>28% Housing Cost for Homeowners</th>
<th>Affordable Mortgage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2014 ACS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Income</td>
<td>$51,974</td>
<td>$4,331</td>
<td>$1,299</td>
<td>$1,213</td>
</tr>
<tr>
<td>Moderate (80% of Median)</td>
<td>$41,579</td>
<td>$3,465</td>
<td>$1,039</td>
<td>$970</td>
</tr>
<tr>
<td>Low (50% of Median)</td>
<td>$25,987</td>
<td>$2,166</td>
<td>$650</td>
<td>$606</td>
</tr>
<tr>
<td>Very Low (30% of Median)</td>
<td>$15,592</td>
<td>$1,299.35</td>
<td>$390</td>
<td>$364</td>
</tr>
<tr>
<td><strong>2010 Census</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Income</td>
<td>$55,958</td>
<td>$4,663</td>
<td>$1,399</td>
<td>$1,306</td>
</tr>
<tr>
<td>Moderate (80% of Median)</td>
<td>$44,766</td>
<td>$3,731</td>
<td>$1,119</td>
<td>$1,045</td>
</tr>
<tr>
<td>Low (50% of Median)</td>
<td>$27,979</td>
<td>$2,332</td>
<td>$699</td>
<td>$653</td>
</tr>
<tr>
<td>Very Low (30% of Median)</td>
<td>$16,787</td>
<td>$1,399</td>
<td>$420</td>
<td>$392</td>
</tr>
</tbody>
</table>

| 5 Estimated affordable mortgage amounts assume a 30 year fixed rate mortgage at 3.875 percent interest, with 2016 rates for property taxes, home insurance, and private mortgage insurance. |
Based on this definition, general affordable housing thresholds for the City of Forest Acres may be determined by analyzing median household income data from the 2010 Census and 2014 estimates. Table 17 illustrates these thresholds, including the annual and monthly median income figures, the 30 percent and 28 percent housing cost, and an estimated mortgage amount for moderate, low, and very low-income groups. These groups are delineated based on incomes that are 80 percent, 50 percent, and 30 percent of the City’s median income for Low and Moderate-Income families (as defined by HUD).

Median home values for 2016 are around $172,000 dollars which indicates affordability for people in the moderate-income brackets and above. Unfortunately, those residents in the Low and Very Low-income brackets will find it difficult to afford homes at, above, and slightly below the median value. This also applies when utilizing the 2014 median home value, which was around $163,000.

Assessing the affordability of rental housing is also important because, as discussed earlier, the number of renters has increased since the previous comprehensive plan update and this trend is expected to continue into the future both locally and nationwide as a result of the economic recession. Based on the Central Midlands Multi-Family and Condominium Survey, the average monthly rent for the Forest Acres area was around $1,250 in 2016, which means that only residents in the median income bracket may comfortably afford to enter the rental market at this average monthly rate. While rental values were lower in 2014 (around $1,160), affordability was still an issue then even for moderate income families.

The latest median home values show a housing market recovery from the 2008 recession. Before the recession, median home value was around $176,000 and dipped as low as $156,000 in 2013. Barring significant changes to these trends, pre-recession values are expected to return in the coming years.

Because Forest Acres represents a comparatively affluent housing market area, there tends to be substantial barriers to affordable housing for the less affluent residents of the community. That said, attracting low income families may be seen as an investment to diversify economic opportunities available in the City. Increasing multi-family housing options within the City would have a positive impact on this population as well as for more affluent residents seeking alternatives to expensive detached single family residential developments.

According to the Central Midlands Multi-Family Rental and Condominium Survey, the Forest Acres area has 10 multi-family housing complexes containing approximately 1,130 units. None of these complexes are considered assisted housing developments. Most of this housing is marketed towards moderate income or higher renters, thus presenting even more limitations for lower income residents to find affordable housing in a City with comparatively high housing costs. This illustrates one of the primary obstacles to affordable housing (i.e. a lack of subsidized housing opportunities in the market area).
7.3. Goals, Objectives, and Strategies

Goals
- To provide a range of affordable housing that also minimizes or mitigates environmental impacts.

Objectives
- Encourage ways to improve environmental quality through low impact developments, a full spectrum of housing, and alternative modes of transportation.
- Encourage environmental quality as a design and development component of residential areas.

Strategies
- Accommodate the full spectrum of housing for all neighborhoods by permitting a range of building types compatible with the neighborhood setting.
- Increase residential densities around public transit stations and corridors.
- New residential subdivisions shall be designed to encourage “walkable” neighborhoods with pedestrian walkways and bicycle paths to facilitate pedestrian travel.
- Encourage “walkable neighborhoods” by siting parks and community centers near residential areas.
- Fully use existing infrastructure before adding new infrastructure.
- Develop incentives for mixed-use development.
- Revise zoning ordinances to allow mixed-use development in appropriate areas.
- Work with realtors and development community to educate the public on the advantages of higher density development.
- Permit a variety of housing, services, workplaces, and civic institutions in neighborhood settings. Strive to locate such a mix of uses within a five-minute walk of any residence.
- Encourage housing in/near large-scale commercial developments.
- Encourage affordable housing near large employers.
- Apply maximum density standards where appropriate.
- Encourage job creation in job-poor areas as a means of reducing vehicle miles traveled.
- Encourage employment centers that are nonpolluting or extremely low-polluting and do not draw large numbers of vehicles in proximity to residential uses.
- For high density and mixed-use developments, project proponents should consult with local transit agencies, and incorporate all appropriate and feasible transit amenities into the plans.
- Adopt and implement zoning codes that encourage home-based businesses, telecommuting programs, and community centers.
- Work with neighborhood councils and citizens to determine how infill and redevelopment sites can be utilized to benefit every section of the City of Forest Acres.
- Along with adopting and enforcing State building and energy codes, develop local requirements to ensure energy-efficient construction and site development.
- Revise landscaping ordinance to require that landscaping provide shading and reduce ambient air temperatures in the summer.
• Encourage energy-efficient building through incentives for utilizing natural site design, maximizing the use of daylighting, designing to make use of daylight and solar heat gain, solar or other alternative energies, insulation, and other energy conservation practices.
• Offer free recycling for older refrigerators and freezers and rebates for high-efficiency air conditions and Energy Start® appliances.
• Partner with civic groups and local utility providers to educate the public on the benefits of energy-efficient construction and site design, and promote the use of energy-efficient appliances.
• Seek funding for programs such as weatherization, upgrade opportunities to energy-efficient heating and cooling units and appliances, and other energy conservation measures.
• Limit encroachment of incompatible land use into single family neighborhoods.
8. Land Use

8.1. Introduction

The land use element of the Plan presents an inventory of existing land use and land cover, a description of current zoning practices, a future land use concept, and a goals and objectives section. The land use element to the comprehensive plan largely reflects and integrates the concepts presented in the other chapters of this document. Many existing conditions and future policy considerations related to population, housing, natural and cultural resources, community facilities, and transportation, have a direct impact on how land is, can, and should be used within the City.

Land cover is the natural physiographic and ecological features present in a landscape. It is typically defined as the unaltered biophysical cover on the earth’s surface. Land use, in contrast, refers to the utilization and possible alteration of land cover for various socioeconomic purposes. Land cover guides the kind of land use in an area, but socio-economic and political factors tend to determine what kind of land use takes place. Land use and land cover information for this chapter was created by analyzing the United States Department of Agriculture (USDA) 2011 National Land Cover Database (NLCD).

Land use and land cover classifications, such as forest land cover or urban land use, can have significant impacts on planning. For example, large areas of impervious surfaces, typically related with urban land use, can increase flooding risk by decreasing the rate of water infiltration. On the other hand, forest land cover can help with reducing flooding risk by serving as a buffer between urbanized areas. Certain classifications, along with other geographical features, may help or hinder the implementation of planning strategies.

8.2. Inventory
8.2.1. Existing Land Use

<table>
<thead>
<tr>
<th>Land Use and Land Cover Type</th>
<th>Land Use and Land Cover Area (Acres/Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Water</td>
<td>221.50 (7.1%)</td>
</tr>
<tr>
<td>Urban; Open Space</td>
<td>816.19 (26.0%)</td>
</tr>
<tr>
<td>Urban; Low Intensity</td>
<td>1050.37 (33.5%)</td>
</tr>
<tr>
<td>Urban; Med. Intensity</td>
<td>439.67 (14.0%)</td>
</tr>
<tr>
<td>Urban; High Intensity</td>
<td>144.78 (4.6%)</td>
</tr>
<tr>
<td>Deciduous Forest</td>
<td>38.25 (1.2%)</td>
</tr>
<tr>
<td>Evergreen Forest</td>
<td>303.57 (9.7%)</td>
</tr>
<tr>
<td>Mixed Forest</td>
<td>4.45 (0.1%)</td>
</tr>
<tr>
<td>Shrub/Scrub</td>
<td>2.22 (0.1%)</td>
</tr>
<tr>
<td>Grassland/Herbaceous</td>
<td>16.23 (0.5%)</td>
</tr>
<tr>
<td>Pasture/Hay</td>
<td>4.00 (0.1%)</td>
</tr>
<tr>
<td>Cultivated Crops</td>
<td>4.45 (0.1%)</td>
</tr>
<tr>
<td>Woody Wetlands</td>
<td>80.73 (2.6%)</td>
</tr>
<tr>
<td>Emergent Herbaceous Wetlands</td>
<td>8.23 (0.3%)</td>
</tr>
</tbody>
</table>
Figure 17 shows the spatial distribution of land use and land cover within the City of Forest Acres. According to land use and land cover imagery from the USDA, the City of Forest Acres contains approximately 4.8 square miles (or around 3,702 acres) of land within its municipal limits. Around 454 acres or 14 percent of available land, in particular around the lakes within City limits, are interspersed patches of forest and wetland (Table 18). Most of the forested area within City limits is classified as “Evergreen Forest”, with City parks significantly contributing to the amount of available green space.

The majority of land, around 2,451 acres or 78 percent, is categorized as urban. Most of this urban land is classified as “Open Space” or “Low Intensity Urban Development”. These categories consist of uses such as roads, small parking lots, and undeveloped open lots (for the former) and single family residential developments or small commercial businesses (for the latter). Larger urban developments, (i.e. medium and high intensity urban development) such as larger commercial developments, large parking lots, schools, and multi-family housing, are concentrated around Forest Drive, Trenholm Road, and near state and county roads.
8.2.2. Zoning

The City of Forest Acres Zoning Ordinance, adopted in the mid 1980’s and revised in 2015, has the stated purpose of guiding City development in accordance with existing and future needs and to promote the public health, safety, morals, convenience, order, appearance, prosperity, and general welfare of the community. The ordinance identifies four general permitted land use categories that include residential, commercial, light manufacturing, and planned unit developments. These four categories are further broken down by density and intensity requirements into the following thirteen subcategories:

- **R1** Low-Density Residential (Single-Family): conventionally built detached house intended for the occupancy of one family.
- **R-1a** Low-Density Residential (Single-Family): same as R1, but requiring smaller minimum lot sizes
- **R-2** Medium Density Residential (Two-Family and Single family): provides a slightly higher population density of single and two-family dwellings, while still maintaining the quiet residential nature of the area.
- **R-3** High-Density Residential (Multifamily, Two-Family and Single-Family): provides space for medium population density through the use of single, two, and multi-family dwellings.
- **P-1** Public or Semipublic: establishes a public area for religious, recreational, or governmental institutions.
- **P-2** Institutional: similar to P-1, but may be located in semi-public areas and allows for education institutions as long as they are located near the residential areas they serve.
- **C-1** Office and Limited Commercial: meant to develop and reserve land for business, office, institutional specified public, semipublic, and residential purposes.
- **C-2** Neighborhood Commercial: provides space for small shopping areas primarily designed to serve nearby residential areas.
- **C-2a** Service Commercial Districts: provides space for hotels and small businesses that primarily serve nearby residential areas.
- **C-3** General Commercial: promotes concentrated development of retail establishments that serve both residents and the larger market area.
- **C-4** Concentrated Commercial District: same as C-3, with additional provisions for limited warehousing, vehicular sales, and overnight accommodations.
- **C-5** Commercial Enterprise/Redevelopment Zone: provides for large scale mix commercial, residential, and governmental development. Usually located on a major street and must contain a minimum site area of 5 contiguous acres, and a minimum developed area of 250,000 square feet.
- **PDD** Planned Development District: encourages innovative mixed-use development characterized by unified site design.

Figure 18 shows the zoning code distribution across all Forest Acres parcels. The majority of parcels are classified as R-1, or single family low density residential development. Zoning codes that support higher density commercial or residential activities are concentrated around Forest Drive and Trenholm Road. There is a pocket of higher density residential and light commercial zoning development around the intersection of Covenant Road and Bethel Church Road. State Highway 1, adjacent to City limits in the northwest, is also a corridor of commercial activity.
8.2.3. Future Land Use

The future land use map (Figure 19) is intended to illustrate a more generalized, built-out scenario of growth that will likely occur if expected land use and growth patterns continue under the guidance of currently adopted zoning ordinances. This information is meant to guide future land use decisions and is not intended to be mandatory. This takes into consideration possible annexation opportunities.

The map combines the 2040 population projections (from Chapter 2.2.2. Demographic Characteristics) with parcel level land use data of unincorporated Richland County areas adjacent to Forest Acres municipal limits. The land use data is generalized to four categories: commercial, public use, residential, and rural/vacant. Only currently unincorporated parcels adjacent to Forest Acres municipal limits, and therefore possible to be annexed, are included.

Areas expected to grow by more than one thousand residents are highlighted in the map, one of which is located in a mostly residential zone near downtown Forest Acres. Other areas expected to grow significantly in population size are located northeast of City municipal limits. These areas contain mostly
single family residential developments, and their population is expected to more than triple in size by 2040. Working towards annexing these locations northeast of City municipal limits would not only increase the population and taxation base, but also open up additional locations for annexation.

Figure 19 - Future Land Use Map for the City of Forest Acres.
While mostly residential, Decker Boulevard is located in this area, which is an established commercial corridor expected to increase in utilization as population grows. Additional commercial and cultural venues are interspersed throughout this area. Annexing towards this location, as opportunity allows, also gives additional access to I-20 and I-77.

Another difference of note is the inclusion of mixed use developments in sections of the City. The highlighted locations either have the capability of supporting mixed use developments, or already have a land use combination that is conducive to mixed use development. By allowing or harnessing both residential and commercial uses within these areas the City would be able to increase residential density, provide a stable customer base for local retail businesses, and promote the development of a more compact, pedestrian friendly community.

The map also includes the proposed mixed used development in the former site of the Cardinal Newman High School. The 12.5-acre property was rezoned mid-2016 for mixed use. In June 2016, Forest Acres entered into an agreement with Richland and Fairfield Counties to designate the site as a multi-county business park (known as the “Forest Acres Business Park”). This would offset some of the initial infrastructure and technology development cost by allowing other jurisdictions to invest in the development of the property in exchange for being able to collect a portion of its future tax revenue. The proposed development, designed by Charleston-based firm The Beach Company, would house 282 apartments, 16 townhomes, a 2,000-square foot leasing office, and more than 52,000 square feet of retail and office space.
8.3. Goals, Objectives, and Strategies

Goals
• Establish land use patterns that reduce the number and length of motor vehicle trips and promote alternative modes of travel.
• Ensure that land use patterns and decisions support and encourage the development of a sustainable community that places a priority on improving environmental quality.

Objectives
• Promote and encourage low-impact development, including mixed uses, infill, redevelopment, and cluster and compact development and other Smart Growth concepts.
• Promote and encourage full utilization of existing infrastructure.
• Consider cumulative environmental quality impacts from both existing and new projects when making siting decisions.

Strategies
• Amend Comprehensive Plan and Zoning Ordinance to add transitional neighborhood commercial areas
• Separate, buffer, and protect sensitive receptors from significant sources of pollution to the greatest extent possible.
• Identify opportunities for infill development and redevelopment throughout the City.
• Work with residents and neighborhood groups to determine how infill and redevelopment sites can be utilized to benefit every section of Forest Acres.
• Amend land use regulations and develop incentives (e.g. tax incentives or feed reductions) to encourage or require cluster, mixed-use, compact, or other low-impact development (LID).
• Revise zoning and development regulations, approval processes, and capital planning priorities to make infill, redevelopment, cluster, mixed-use, compact or other LID development as easy as possible and as a permitted use whenever possible.
• In its efforts to promote appropriate infill development and redevelopment, evaluate the 2007 South Carolina Priority Investment Act. This law allows local governments to identify “priority investment zones” in which they can eliminate non-essential regulations and use market based incentives to encourage traditional neighborhood development.
• Set urban service areas or urban growth boundary.
• Allow home occupations.
• Allow accessory housing units.
• Encourage housing in/near large-scale commercial developments and include pedestrian/bike routes to access the commercial development.
• Encourage affordable housing near large employers and include pedestrian/bike routes to access the larger employer development.
• Apply maximum density standards where appropriate.
• Design guidelines for mixed-use, infill, redevelopment, cluster, and compact developments.
• Promote “Job/Housing Opportunity Zones” and incentives to support housing in job-rich areas and jobs in housing-rich areas.
• Require future commercial areas to foster pedestrian circulation through the land use entitlement process and/or business regulation.
• Support mixed-use land use patterns, but avoid placing residential and other sensitive receptors in close proximity to businesses that emit toxic air contaminants to the greatest extent possible.
• Encourage community centers that promote community self-sufficiency and containment and discourage automobile dependency.
• Ensure land development regulations adequately protect natural resources in urban and suburban areas of Forest Acres.
• Encourage urban farming, especially at non-contaminated vacant properties.
• Revise land development regulations to focus on compatible mixing of building types. Buildings must reflect rather than be foreign to the neighborhood scale.
• Encourage employment centers that are nonpolluting or extremely low-polluting and do not draw large numbers of vehicles in proximity to residential uses.
• New residential subdivisions shall be designed to encourage “walkable” neighborhoods with pedestrian walkways and bicycle paths to facilitate pedestrian travel.
• Increase residential and commercial densities around bus transit stations and closer to places of work and play.
• Actively participate in decisions on the siting or expansion of facilities or land uses (e.g. freeway expansions), to ensure the inclusion of air quality mitigation measures.
• For planned high density and mixed use developments, project proponents should consult with local transit agencies and incorporate all appropriate and feasible transit amenities into the plans.
• Encourage through the land use entitlement process or business regulation, design of commercial and residential areas to foster pedestrian circulation.
• Adopt and implement zoning codes that encourage community centers, telecommuting programs, and home-based businesses.
• Encourage “walkable neighborhoods” by siting parks and community centers near residential areas.
• Revise existing regulations or develop new design standards to require (or encourage) the designation of open space within all new developments.
• Amend local zoning ordinances and building codes to allow for and/or require adequate space for recycling and access to pick up for recyclables in new commercial buildings.
• In multi-family developments, include space for recycling containers near trash bins or enclosures for residents to deposit recyclables.
• Work with realtors and development community to educate the public on the advantages of higher density development.
• Engage existing neighborhoods in more detailed design studies to examine specifically how growth can improve quality of life.
• Provide a productive environment for review of new development projects that includes citizen involvement early in the process.
• Protect property owner’s right to raise fowl in the City through land development regulations, without constituting a nuisance or public health hazard.
• Amend the zoning code to include definitions for specific food retail types (e.g. large grocery store, neighborhood market), and increase access to fresh food by allowing small grocery stores as a permitted use in all the City’s commercial zoning district.
• Adopt cart or mobile food vendor ordinances to allow fresh produce vending.
• Create a mobile food vendor ordinance to control the location and operation of mobile food vendors.
• Provide opportunities for community gardens and local food production.
9. Transportation

9.1. Introduction

The transportation element of the comprehensive plan inventories and analyzes issues impacting the local transportation network. The South Carolina Priority Investment Act, which amended the comprehensive planning act to require a separate transportation element, stipulates that this analysis be multi-modal in nature and therefore include a comprehensive needs assessment of road improvement projects, new alignments, transit service, and bike and pedestrian facilities. This element also must be developed in accordance with the land use element to ensure compatibility and coordination between transportation priorities and existing and future land use policies.

A road network inventory generally begins with identifying the different types of facilities serving the local jurisdiction and ends with an assessment of the operational characteristics of those facilities (e.g., congestion, connectivity and accessibility issues). South Carolina Department Of Transportation (SCDOT) uses a functional classification system to describe the state’s road network and to determine optimal operational characteristics which is often expressed in terms of existing and projected level of service.

The SCDOT functional classification system generally consists of the three following categories: Freeways and expressways, which are intended to provide maximum mobility and limited land access; principal and minor arterials, which are intended to provide slightly less mobility and slightly more land access; and major and minor collectors, which are intended to provide maximum land access and optimal connectivity to the arterial and freeway system. Local roads on the other hand, are generally not maintained by SCDOT and provide maximum local access to businesses, neighborhoods and residences.

9.2. Inventory

9.2.1. Highway Facilities

Due to its location within the Columbia MSA, the City of Forest Acres is adequately served by each of these facility types (Figure 20). Forest Acres is connected to the larger regional network by Interstate 77 on the east and Interstate 20 on the north. Both are 6 lane freeways that provide easy access to the Columbia MSA, the rest of the South Carolina, and adjacent states. Locally, State Route 12 and 16 meet in Forest Acres. These are highly transited 4 lane principal roads with a center turn lane. They eventually connect to State Route 1 and 76, respectively, giving access to Fort Jackson, City of Columbia, and Lower Richland County.

Since 2009, traffic growth patterns for major roads in Forest Acres slowed greatly. The recession of 2008 – 2012, the lack of redevelopment of Richland Mall, and the increase in bus ridership have all contributed to this pattern. Only Beltline Boulevard was operating at level “C” or 90 percent of capacity in 2015 (Table 19).

Based on the latest (2015) traffic data published by SCDOT for Forest Drive in the vicinity of Trenholm Road (Count Stations 211, 213, 319, 321) as many as 27,500 vehicles per day utilize this corridor. A general traffic
study of the corridor was performed by others as part of an overall corridor study for Forest Drive in 2014. The results of this study indicated that the level of service (LOS) for the Forest Drive at Trenholm Road intersection is currently rated as D (AM) to E (PM) on a scale from A to F. This indicates frequent vehicle stops and delays. Although the City of Forest Acres itself is near 100% buildout in terms of expected traffic growth, the function of Forest Drive as a commuter route into and out of the greater Columbia area, as well as continued local development and redevelopment, points to continued traffic growth and use of this intersection over the next several years (Dennis Corporation; Right Turn Bays Evaluation, March 2017).

The redevelopment of Cardinal Newman High School site into a commercial and residential site and potential Richland Mall redevelopment would increase the traffic on both Forest Drive and Beltline Boulevard.

Table 19 - Annual Average Daily Traffic Counts for state roads in Forest Acres.

<table>
<thead>
<tr>
<th>Forecasts By Linear Regression</th>
<th>Road Capacity</th>
</tr>
</thead>
</table>

Figure 20 - Highway Facilities in and around Forest Acres.
9.2.2. Transit Facilities

The Central Midlands Regional Transit Authority (CMRTA) operates The Comet (Figure 21), providing four bus routes in and through Forest Acres. Route 88 Crosstown connects Devine Street to Forest Drive and to St. Andrews and Columbiana Mall (Harbison). Forest Drive has three routes: Fort Jackson (#5) serves civilians who work at Fort Jackson; Forest Drive/Decker Boulevard (#15) covers most of Forest Drive, Percival Road and Decker Boulevard to Columbia Mall; Lower Richland (#47) travels Forest Drive to Beltline Boulevard and south to Devine Street/Garners Ferry Road.

![Figure 21 - Weekly Comet Bus Routes and Bus Stops in and around Forest Acres.](image-url)
Greyhound Bus and Southeastern Stages operate a depot at 710 Buckner Road off I-20 between N Main Street - US 21 and Fairfield Road - US 321. Daily service is provided by Comet routes #30 and #31 with connections to the downtown Columbia hub on Laurel at Sumter Streets. Megabus operates from the same downtown Comet hub.

Columbia to Charlotte Shuttle provides house to Charlotte Airport terminal service daily via minivans, vans and buses. With no parking hassles in either Columbia or Charlotte Airport, this service offers an alternative to Columbia Metropolitan Airport in Cayce.

The Amtrak Station at 850 Pulaski Street near Huger Street just south of Gervais Street offers the “Silver Star”, a train that travels between Washington/New York/Boston and Ft Lauderdale/Miami, respectively. There is one northbound and one southbound connector between midnight and 6am daily. Figure 22 shows the location of rail lines that pass through or near Forest Acres city limits.

A Columbia to Charlotte train route is being studied by SCDOT and would be an alternative to driving or flying to Charlotte. The Columbia Area Transportation Study (COATS) staff is assisting in this analysis. A regional multimodal transportation center could co-locate all train, intercity bus services and a Comet hub in one location. It will offer bicycle and pedestrian access along with taxi and Uber parking.
9.2.3. Bike and Pedestrian Facilities

Currently there are bike lanes installed in Trenholm Road and parts of Beltline Boulevard. A half-mile stretch that intersects Forest Drive is all that is missing to connect the Beltline Boulevard bike lanes that run through the City (Figure 22). There are multiple proposals for bike lanes and green ways in most major roads in and around the City. This includes Percival Road, Two Notch Road, and Decker Boulevard.

9.2.4. Future Transportation Improvements

Forest Drive Corridor Study
The Forest Drive Corridor Study, completed in 2015, provides recommendations on improving traffic management, roadway aesthetics, and the management of corridor projects. The strategies made in the Forest Drive Corridor Study are also recommended for Beltline Boulevard, Trenholm Road and Decker Boulevard. Among its recommendations are:

- Inter-parcel connectivity (i.e. connect commercial parking lots where possible)
- Access management (e.g. add concrete medians to restrict left turns, driveway consolidation on major roads, planted medians)
- Intersection improvements (e.g. re-align roads for better sight distances, better turn lanes and pedestrian access)
- Signal optimization (i.e. install adaptive traffic signal system)
- Transit improvements (e.g. add bus pullouts, install bus shelters and bus benches)
- Pedestrian improvements (e.g. install new crosswalks at major intersections)
- Streetscaping (e.g. overhead utility relocation)
- Speed reductions and enforcement
- Land use and regulatory control (i.e. monitor and enforce zoning rules)

The Forest Drive Corridor Study provides a list of suggestions that when applied to Beltline Boulevard, Trenholm Road and Decker Boulevard would meet many of the needs of the City. Continued improvements to the Comet routes with amenities (including DART service disabled community) and through service to Fort Jackson will move people, instead of cars and trucks, in the community. Trails, bikeways and additional sidewalks to destinations (schools, parks, stores, church, etc.) will also provide alternatives to the automobile.

On August 2016 SCDOT announced plans to install an adaptive signaling system on Forest Drive. The $800,000 project would improve traffic flow utilizing real-time traffic modeling technology. This system will be installed in 20 intersections throughout Forest Drive, from Providence Hospital to I-77, and it is expected to be finished by the end of 2017. Upon completion, Forest Acres would become the second jurisdiction in the state to have such a system.

**Richland County One Cent Sales Tax**

No road widening or intersections improvements projects are programmed in the Richland County One Cent Sales Tax Referendum. Included is a Bikeways project on Decker Boulevard (S-131) between Percival Road (SC 12) and Two Notch Road (US 1). The Decker Boulevard/Woodfield Park Master Plan includes a Pedestrian Connector between Trenholm Road (S-33) and Decker Boulevard. This connector is to be developed south of Dent Middle School and Decker Boulevard, with planned streetscaping of underground utilities between Trenholm Road and Brookfield Road (S-827).

**USDOT**

---

6 The Boudreaux Group/ Landplan Group South /Toole Design Group
Two transportation bills have passed since the previous comprehensive plan update: MAP 21\textsuperscript{7} in 2012, and the FAST Act\textsuperscript{8} in 2015. Any new transportation projects now require justification with performance based measures, such as impact analyses of congestion, safety, air pollution and other environmental concerns.

**Impact of Future Developments**

Developing transportation trends and technology have the potential to impact how residents travel in and around Forest Acres. Uber and Lyft, alternatives to the traditional taxi service, currently have license to provide services in South Carolina. Autonomous Vehicles (or Driverless Vehicles) are expected to hit the market by the end of the decade, and become more prevalent in the 2020’s. Services that provide home grocery delivery are already in the Columbia area (including Forest Acres), with the potential to change driving habits in the City. Telecommuting and an aging population provide opportunity to alter typical rush hour driving patterns in both the morning (7:30AM - 9AM) and evening (4:30PM - 6PM).

\textsuperscript{7} Moving Ahead for Progress in the 21st Century Act - PL 112-141
\textsuperscript{8} Fixing America’s Surface Transportation Act - PL 114-94
9.3. Goals, Objectives, and Strategies

Goals
- To provide a safe and efficient multi-modal transportation system that provides adequate bike, pedestrian, and transit facilities in harmony with its natural surroundings.

Objectives
- Support increased access to public transportation, to decrease automobile dependency and decrease air pollution.
- Promote and design a walkable and bikeable Forest Acres.
- Integrate complete street and green street concepts into the local road network to create safe and sustainable transportation facilities that are pedestrian, bike, and transit friendly.
- Make complete streets/green streets practices a routine part of everyday City operations.

Strategies
- Identify and develop non-motorized transportation corridors.
- Preserve transportation corridors with the potential of high demand or of regional significance for future expansion to meet project demand.
- When siting public transit routes and stops consider the highest levels of traffic congestion, proximity to residential and employment centers, safety, and ease of use.
- Encourage Transit-Oriented Development (TOD) where moderate and high-density housing is concentrated in mixed-use, walkable developments that are centered on transit stations or stops. TOD’s include higher density at the core but assume low-density development such as single-family detached housing, low-intensity employment uses, and large community parks a quarter mile beyond the center.
- Establish transit overlay zones where densities are required to be higher within a quarter-mile walk from fixed-route transit.
- Provide incentives for development of higher density housing near transit stops.
- Design stations and stops away from traffic, with convenient and safe pedestrian access.
- Encourage local transit agencies to promote ridership though careful planning of routes, headways, origins and destinations, types of vehicles.
- Encourage special event center operators to advertise and offer discount parking incentives to carpooling patrons, with four or more persons per vehicle for on-site parking.
- Ensure that development projects and zoning codes create the maximum opportunity for the use of bicycles as an alternative work transportation mode.
- Revise design criteria to include secure bicycle parking at destinations.
- Construct sidewalks, greenways, and bicycle paths/lanes.
- Design new roads and retrofit existing roads to accommodate multi-modal transportation.
- Incorporate bicycle paths into developments and when possible, have those paths physically separated from roadways, and clearly marked by striping and signage when located adjacent to automobile travel lanes.
- Require new residential subdivisions to be designed to encourage “walkable” neighborhoods with pedestrian walkways and bicycle paths to facilitate pedestrian travel.
• Require future commercial areas to foster pedestrian circulation through the land use entitlement process and/or business regulation.
• Require neighborhood parks and community centers near concentrations of residential areas to include pedestrian walkways and bicycle paths to encourage non-motorized travel.
• Monitor traffic and congestion to determine when and where the City needs new transportation facilities to achieve increased mobility efficiency.
• Optimize the timing of existing traffic signals and install advanced control equipment.
• Promote and implement a connected street pattern.
• Design safe and efficient vehicle access to commercial land uses from arterial streets to ensure efficient vehicular ingress and egress.
• Revise zoning ordinance to avoid excessive parking requirements by having realistic parking needs for specific categories of use, including the use of public transit and carpooling in parking requirements and design and landscape to encourage pedestrian travel.
• Encourage a network of alternative fuel facilities.
• When considering changes to existing roadways, include design options for bicycle lanes and/or paths that are clearly marked.
• Include bicycle access at bridges and intersections, where needed.
• Eliminate rumble strips and speed bumps that cross lanes and shoulders.
• In new roadways, use gutter pans that are less than 18 inches wide.
• Ensure that joints and utility box covers are flush with the pavement.
• Require storm drains to be flush with pavement and designed to avoid entrapping bicycle wheels.
• Develop a recycling program for restaurant and residential grease waste to convert to biodiesel.
• Manage the City’s transportation fleet to achieve the best alternate fuel fleet mix possible.
• Partner with the local public transit entity to have free or reduced pricing for City employees.
• Participate in Clean Cities.
• Adopt incentives, regulations, and/or procedures to reduce paved road dust emissions through targeted street sweeping of roads subject to high traffic levels and silt loadings.
• Encourage the development of inter-parcel connectivity in viable commercial areas.
• Revise zoning ordinance to make streets walking, biking, bussing, and driving friendly and to accommodate their use. Some options include:
  a. Providing direct connections
  b. clearly delineating pedestrian and bicycle paths
  c. narrower street widths, where appropriate
  d. on-street parking
  e. Less disruptive placement of off-street parking
  f. Pedestrian protection at intersections
  g. Convenient and safe locations for transit stops
  h. More attractive sidewalk designs and landscaping to include landscape “buffer” areas between streets and sidewalks and using both sides of the street
  i. Incorporating shorter blocks within perimeters of 1,300 to 1,800 feet encourage pedestrian activity by shrinking the perceived distance between destinations.
j. Providing amenities (trash and recycling bins, benches, information kiosk, drinking fountains, decorative landscaping, and trees)

k. Minimizing the number of points where pedestrians and vehicles must cross paths

l. Providing adequate lighting

m. Providing for police and fire access

n. Installing crosswalks at intersections

o. Installing pedestrian signal indicators where appropriate that are responsive to the pedestrian and provide adequate crossing time

p. Minimizing crossing distances at intersections

q. Installing medians at multi-lane intersections

r. Minimizing curb cuts

s. Discouraging cul-de-sacs and other dead-end streets, but, when they are allowed, the addition of continuous, non-vehicular connections between streets for pedestrian and bicycle travel should be used
10. Priority Investment

10.1 Introduction

The Priority Investment Act was signed into law by Governor Sanford on May 23, 2007. The law amends the Local Government Comprehensive Planning Enabling Act of 1994 with the intention of improving the planning and multi-jurisdictional coordination of public infrastructure decisions and to encourage the development of affordable housing and traditional neighborhood design. To accomplish these goals, the act amends the housing element with new requirements related to affordable housing, and adds two new elements. These include a separate multi-modal transportation element that focuses on facility improvements, and a priority investment element, which requires local governments to assess the availability of public funds for infrastructure improvements and to prioritize these improvements for expenditure over the course of the next ten years. The act also gives local governments the flexibility of designating specific “priority investment” areas within their jurisdiction that will promote and direct growth where existing or planned infrastructure can support higher intensities of development. Local governments are also encouraged to use a wide range of market based incentives to foster public and private investment in projects within these priority investment areas that meet affordable housing, design and density requirements, and financial planning goals of the Priority Investment Act.

10.2. Inventory

10.2.1. Revenues and Expenditures

The Priority Investment Element (PIE) is intended to help prioritize and allocate funding for infrastructure improvement projects identified in the other elements of the Comprehensive Plan based on projected revenues for the next 10 years. One approach being utilized by other jurisdictions is to tie the PIE with a 5-year Capital Improvement Program (CIP) as a way to schedule improvements based on available financial resources. Linking the CIP process to the priority investment process essentially extends the scope of the CIP to 10 years in the future, helps guide the CIP based on the direction set forth in the Comprehensive Plan, and allows for the programming and prioritization of longer term projects based on projected fiscal resources.

Existing Funding Sources

For the Fiscal Year ending June 30, 2015 the City of Forest Acres had total revenue of $7,116,998, originating from the following sources:

- Property taxes: $1,100,589
- Local option sales taxes: $1,392,414
- Hospitality taxes: $932,281
- Intergovernmental taxes: $254,529
- Licenses and permits: $3,066,625
- Fines and forfeits: $286,247
- Charges for services: $6,362
- Miscellaneous: $77,951
In terms of future funding, the City will most likely utilize these same financial resources. Short term priority planning projects the city will likely pursue include the economic development plan and the open space/bike and pedestrian plan. These projects, if initiated, will be funded through the city’s general fund or possible grant funding.

10.2.2. Intergovernmental Coordination

In order to effectively manage growth and development the Priority Investment Act requires local governments to coordinate with adjacent relevant jurisdictions and agencies before recommending projects for public expenditure. In order to facilitate this process, the act encourages local governments to maintain a list of these jurisdictions and agencies so that they can be effectively included major development decisions. This list includes the following public and private stakeholders:

**Local Governments**
- Lexington County
- Richland County
- Newberry County
- Fairfield County

**Utility Providers**
- City of Columbia
- Richland County Utilities
- South Carolina Electric and Gas
- East Richland County Public Service District

**State Agencies**
- South Carolina Department of Health and Environmental Control (DHEC)
- South Carolina Department of Commerce (SCDOC)
- South Carolina Department of Transportation (SCDOT)

**Regional Agencies**
- Central Midlands Council of Governments (CMCOG)
- Columbia Area Transportation Study (COATS)
- Central Midlands Regional Transit Authority (CMRTA)

**School Districts**
- Richland-Lexington School District
- Two/Richland District One

10.2.3. Priority Investment Zones

The Priority Investment Act (PIA) allows local governments to use market-based incentives to encourage the development of traditional neighborhood designs and affordable housing in designated priority investment areas. Priority Investment areas for the City of Forest Acres include the “Mixed Use” areas in Richland Mall, the former Cardinal Newman school site, and the locations adjacent to Trenholm park (as shown on the future land use map). These areas have been identified in an effort to encourage new mixed use residential development close to the central business district. By designating these as Priority Investment Areas, Forest Acres would gain considerable flexibility in using market based incentives to encourage development in these locations.
10.3. Goals, Objectives, and Strategies

The following Goals, Objectives, and Strategies are intended to help the City work towards identifying, prioritizing and budgeting for the long term implementation of infrastructure improvement projects listed and discussed in the previous chapters of this document. They include strategies that will assist Forest Acres in local and regional coordination efforts, developing and maintaining a CIP and PIE, and designating official priority investment areas that provide focus for future public and private investment.

Goals
- Participate in an ongoing dialogue with all relevant public and private entities and neighboring jurisdictions in order to facilitate better communication and coordination in the planning and implementation of public infrastructure projects.
- Identify appropriate funding mechanisms for public infrastructure projects.
- Encourage public and private investment in key areas of the City in order to achieve the goals, objectives, and strategies outlined in other elements of the comprehensive plan.

Objectives
- Develop and maintain a Capital Improvement Plan (CIP) for managing the provision of services and infrastructure improvements in relationship to projected revenues and funding streams.
- Ensure the Priority Investment Element of the Comprehensive Plan is revised so that it is coordinated with the CIP to effectively make recommendations for infrastructure improvements based on available resources.
- Encourage public and private investment that benefits the planned and suggested mixed use areas throughout the City, enhancing its ability to foster and maintain economic vitality.

Strategies
- Provide written notification to all relevant parties of major development proposals and infrastructure improvement projects that might impact their service areas or jurisdictions.
- Identify and meet with primary points of contact in relevant agencies and jurisdictions to discuss adopting procedures for opening and maintaining lines of communication.
- Maintain an official contact database for dissemination of written notifications.
- Include in written notifications information on scheduled public meetings and/or other public comment opportunities such as Council Meetings or internet surveys.
- Solicit comments from governing bodies of neighboring jurisdictions by regularly attending their public meetings.
- Conduct a peer community review in order to assess appropriate procedures for developing and maintaining a CIP.
- Develop and adopt a CIP, CIP maintenance/administrative program, and review/update schedule for ensuring concurrence with new and relevant information, legislation, projects and policies.
- Develop an administrative process and policy for effectively coordinating the development and maintenance of the CIP and Priority Investment Element of the Comprehensive Plan between appropriate staff, departments, and agencies.
• Revise the Priority Investment Element of the Comprehensive Plan to reflect the CIP so that it can be incorporated into the next review/update of the Comprehensive Plan.
• Use market based incentives to encourage investment in the planned and suggested mixed use developments to increase commercial, office, and service employment opportunities.
• Implement strategies pertaining to increasing commercial/retail opportunities, and promoting historic preservation as outlined in the economic development and historical and cultural resources elements of the comprehensive plan.
• Implement strategies pertaining to increasing opportunities for light industrial and technology oriented employment outlined in the economic development element of the Plan.
• Implement a streamlined development review process for mixed use and environmentally sustainable low impact development proposals for the site.
• Partner with local service clubs and organizations to set and accomplish goals.
• Provide an opportunity for comment by relevant parties for major development proposals and infrastructure improvement projects.
• Develop a plan to actively assist in filling vacant properties.