

HANAHAN COMPREHENSIVE PLAN 2012



VOLUME II: EXISTING CONDITIONS



SWEETGRASS BASKETS



LOCAL WILDLIFE



GOOSE CREEK RESERVOIR

"The future is not some place we are going to, but one we are creating. The paths are not to be found, but made, and the activity of making them, changes both the maker and the destination."

- John Schaar

VOLUME 2: TABLE OF CONTENTS

POPULATION ELEMENT.....	Page 1
Growth Comparisons	Page 1
Population Density.....	Page 2
Demographic Characteristics.....	Page 2
Diversity.....	Page 3
Educational Profile.....	Page 3
Household Growth.....	Page 4
Household Characteristics	Page 5
Income Trends and Characteristics	Page 6
Future Projections	Page 8
HOUSING ELEMENT	Page 9
Housing Supply.....	Page 9
Age of Housing.....	Page 9
Housing Occupancy.....	Page 10
Diversity of Housing Types.....	Page 12
Housing Affordability.....	Page 14
Fair Housing.....	Page 15
Future Projections	Page 16
ECONOMIC ELEMENT.....	Page 17
Economic Base	Page 17
Yeamans Hall Road Commercial District Improvement Plan.....	Page 18
Income Levels.....	Page 20
Workforce Characteristics.....	Page 22
Unemployment Rates	Page 24
Employment by Occupation	Page 25
Employment by Industry	Page 26
Place of Work and Commuting Patterns.....	Page 27
Economic Development Resources.....	Page 28
Future Projections	Page 29
COMMUNITY FACILITIES ELEMENT	Page 30
Public Facilities	Page 30
Educational Facilities	Page 30
Recreational Facilities.....	Page 32



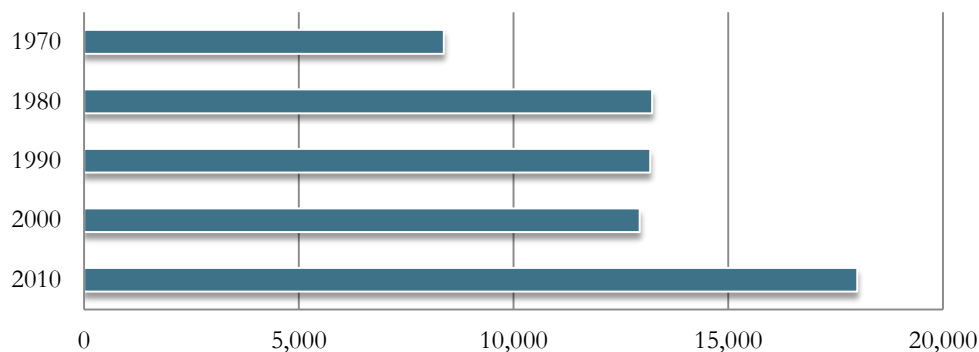
Health and Safety.....	Page 35
Solid Waste Management	Page 35
Police Protection.....	Page 35
Fire Protection and Emergency Services	Page 36
Social Services	Page 36
Emergency Preparedness.....	Page 37
Public Infrastructure	Page 41
Water Supply and Treatment.....	Page 41
Sewerage System and Wastewater Treatment	Page 41
Stormwater.....	Page 43
Impact Fees	Page 43
NATURAL RESOURCES ELEMENT.....	Page 44
Climate	Page 44
Land.....	Page 45
Hydrology	Page 49
Endangered Species	Page 53
Environmental Hazards	Page 54
CULTURAL RESOURCES ELEMENT	Page 55
Area History	Page 55
Historic Structures & Sites.....	Page 58
Historic Markers	Page 60
Places of Worship.....	Page 60
Natural and Scenic Resources	Page 60
Community Organizations and Events.....	Page 61
EXISTING LAND USE ELEMENT.....	Page 62
Existing Land Use Divisions	Page 62
Existing Land Use Map.....	Page 65
Yeamans Hall Road Commercial District Improvement Plan.....	Page 67
Charleston Air Force Base Compatibility Zones	Page 69
TRANSPORTATION ELEMENT	Page 71
Existing Transportation Systems	Page 71
Road Networks	Page 71
Traffic Volumes and Capacity	Page 72
Complete Streets.....	Page 75
Bicycle and Pedestrian Facilities.....	Page 75

Existing and Proposed Bike / Pedestrian Facilities Map.....	Page 76
Travel Demand Management / Mobility Management.....	Page 77
Public Transit	Page 77
Rail Service.....	Page 80
Seaport Facilities	Page 81
Airport Facilities	Page 81
Planned / Approved Transportation Projects.....	Page 82
Ongoing Studies	Page 82
PRIORITY INVESTMENT ELEMENT.....	Page 83
Enabling Legislation.....	Page 83
Priority Investment Areas	Page 83

POPULATION¹

In 1970, Hanahan's resident population was recorded as 8,376 persons. The City's most significant population increase occurred during the decade that followed, when the total population increased nearly sixty percent (60%) to 13,224. Between 1980 and 2000 the City actually saw a slight decline in population (2.2%), which was not consistent with the growth trends being seen throughout the rest of the Region. Over the last decade, however, the City has seen its population increase nearly forty percent (39.1%), showing a population of 17,997 according to the 2010 U.S. Census Bureau.

FIGURE P1: HANAHAN POPULATION TRENDS

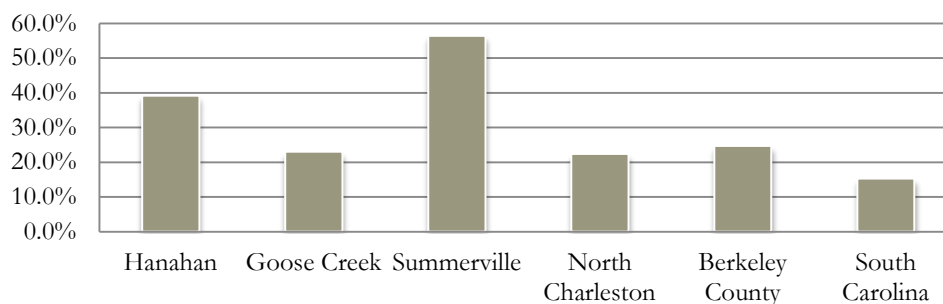


GROWTH COMPARISONS

Hanahan is the second largest municipality in Berkeley County behind Goose Creek, the sixth largest municipality in the Berkeley-Charleston-Dorchester Region, and the 22nd largest municipality in the State of South Carolina. The City's rate of population growth from 2000 to 2010 (39.1%) has outpaced that of all adjacent municipalities including Berkeley County (24.7%) and South Carolina (15.3%), during the same time period, with the only exception being Summerville.

Compared to surrounding municipalities, Hanahan's population growth rate falls between the growth rate for the Town of Summerville (56.4%) and the Cities of Goose Creek (23.0%) and North Charleston (22.4%).

FIGURE P2: GROWTH COMPARISON 2000-2010



¹ Unless otherwise noted, the Source of all charts and tables are the U.S. Census Bureau.

POPULATION DENSITY

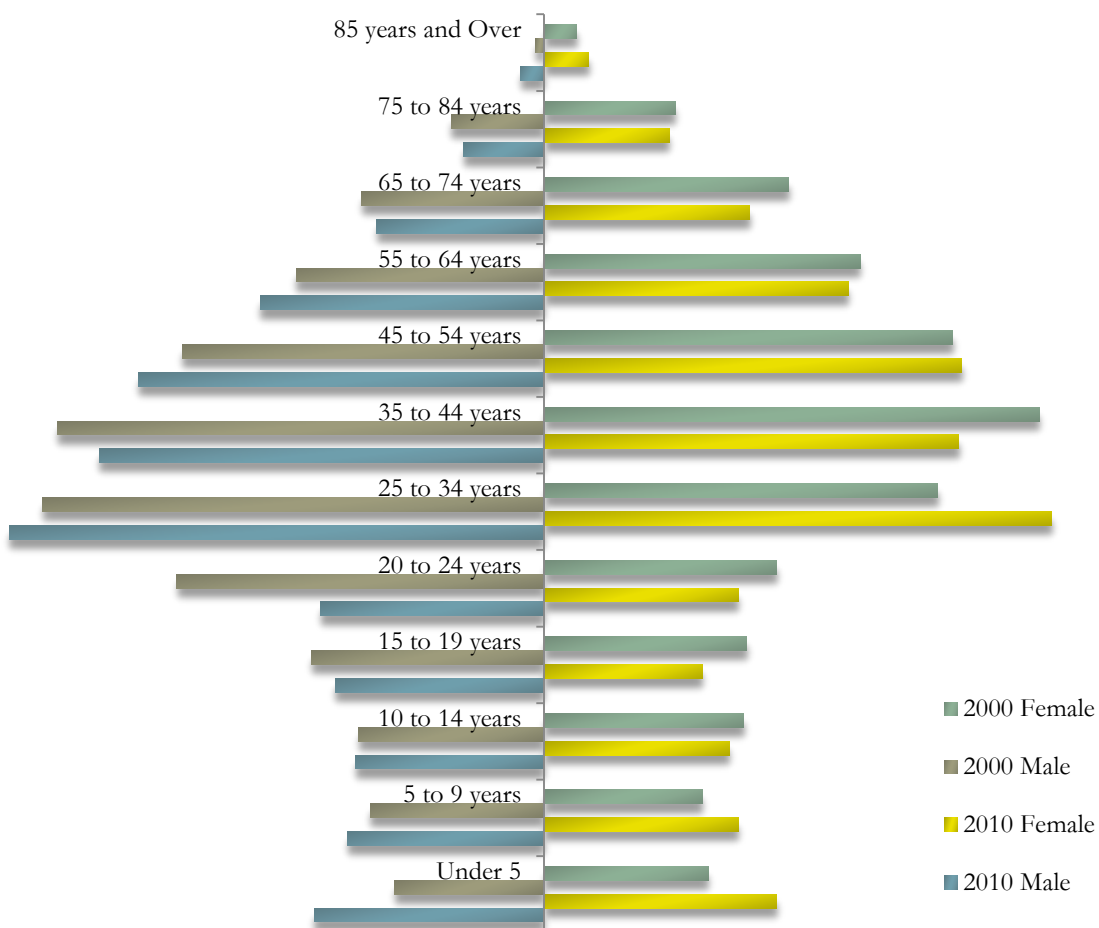
In addition to indicating the average concentration of residents in a given area, population density suggests how urbanized or developed the area is, and the level of resources required to adequately support that population. As might be expected, the distribution of population and associated density has changed over the last decade, with the most significant increases seen in the areas in and around Tanner Plantation, a 650-acre master planned development just west of North Rhett Avenue in northeast Hanahan; as well as in the Eagle Landing and Otranto Subdivisions, located in northwest Hanahan to the east of Rivers Avenue.

DEMOGRAPHIC CHARACTERISTICS

Hanahan's population is slightly younger than that of the State, but comparable to Berkeley County's. The State of South Carolina's median age in 2010 was 37.8 years of age, while Berkeley County's was 34.1 years. The median age was 34.2 for Hanahan's population, a slight decline in age from the 2000 U.S. Census report for the City's population with a median age of 35.1 years.

It is more telling to look at the proportion of residents within age groups than the median age. While there is not a significant difference in the proportion of males and females within the total population, the Population by Age chart below indicates population growth has occurred predominately in the 25 to 34 age group.

FIGURE P3: POPULATION BY AGE



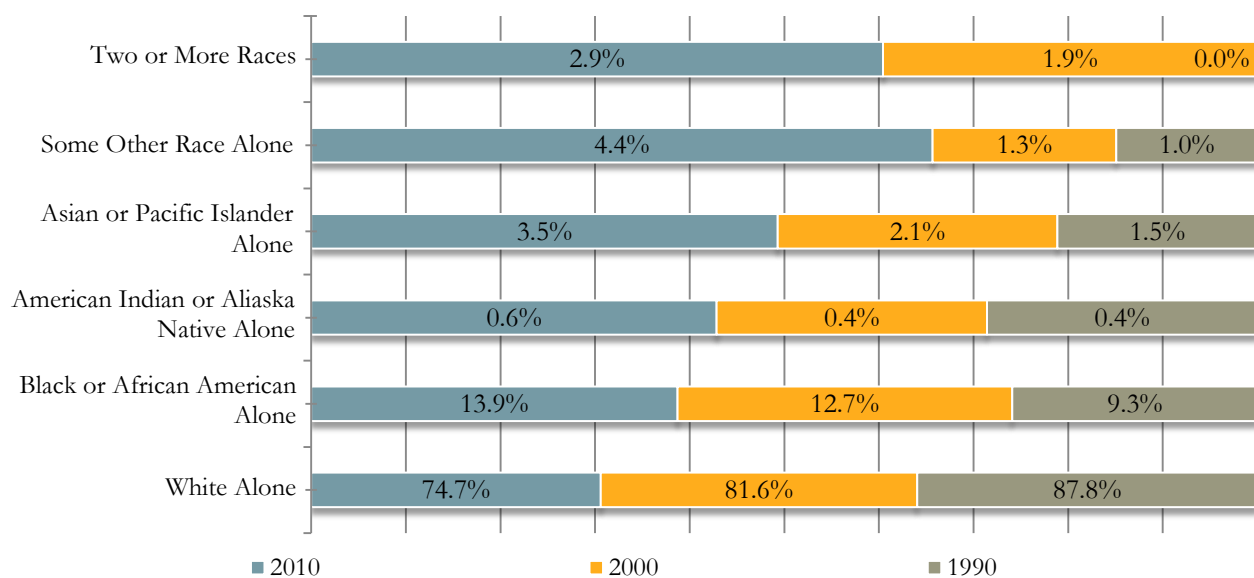
DIVERSITY

Hanahan's cultural diversity can be assessed by looking at its racial composition. As illustrated by Figure P4, while the majority of residents are still reported as white (75%), over the last two decades this percentage steadily decreased (-15%). Concurrently, those reported as Black or African American saw a steady increase of nearly fifty percent (49.5%).

Of even more significance is the increases seen in those reported as Some Other Race (340% increase) or Two or More Races (290% increase) over the same time period.

The Census Bureau measures the Hispanic or Latino population separately from race, as these individuals may be of any race. According to the 2010 Census, 1,638 (9%) of Hanahan residents identified themselves as Hispanic or Latino (of any race), up significantly from 2000 Census (3.2%).

FIGURE P4: HANAHAN DIVERSITY 1990-2010



EDUCATIONAL PROFILE

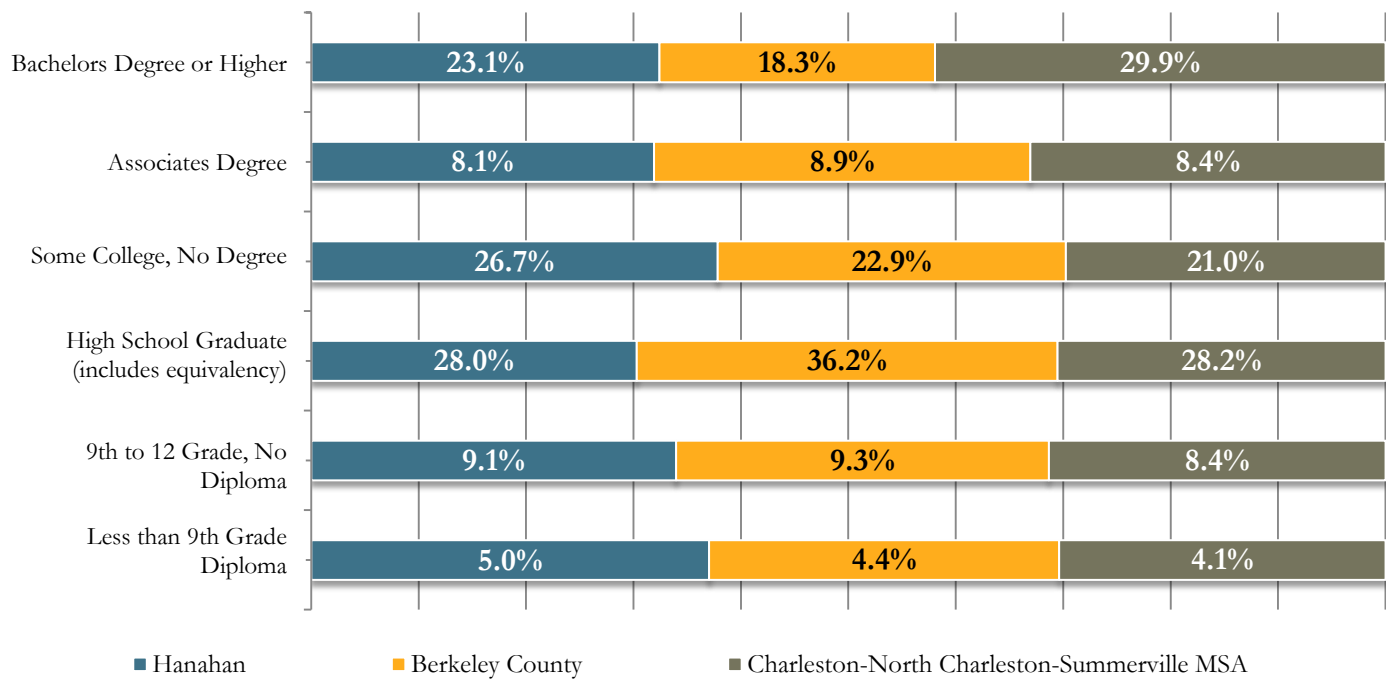
The US Census Bureau defines educational attainment as the highest level of education completed in terms of the highest degree or the highest level of schooling completed by an individual. Not only are higher levels of education closely associated with higher average earnings, but unemployment decreases with additional educational attainment as well. Therefore, educational attainment is clearly a significant element for most people throughout their life-span, as raising the educational levels of all groups will lead to higher incomes, which is beneficial to the individual and community as a whole.

Figure P5 below illustrates educational attainment of Hanahan residents, 25 years of age and older, in comparison to those residing in Berkeley County and the Charleston-North Charleston-Summerville MSA. Nearly eighty six percent (85.8%) of Hanahan residents at least 25 years or older had at least completed high school, a slight increase (1.54%) from 2000.

More telling is that twenty three percent (23.1%) of the population had a Bachelor's Degree or higher in 2010, a significant increase (13.8%) from 2000. When compared to Berkeley County, Hanahan residents were twenty six percent (26.2%) **more** likely to have a Bachelor's Degree or higher, but twenty nine percent (29.4%) **less** likely to have a Bachelor's Degree or higher when compared to the Charleston-North Charleston-Summerville MSA.

Another thirty three percent (32.8%) of the City's population ages 18-24 is currently enrolled in college, indicating a need for increased employment opportunities for when the majority of those currently enrolled complete receive a degree.

FIGURE P5: EDUCATIONAL ATTAINMENT - 2010



HOUSEHOLD GROWTH

The U.S. Census Bureau defines a “household” as “all the people who occupy a housing unit as their usual place of residence”. According to the US Census Bureau, the number of households in Hanahan has increased by forty three percent (43.2%) from 4,952 households in 1980, to 7,092 in 2010.

Hanahan's household growth is closely tied to the City's population trends over the last few decades. As Hanahan's population saw a decline from 1990 to 2000, there was minimal growth in households.

From 2000 to 2010, however, there was a thirty five percent (35.3%) growth in households; simultaneously with Hanahan's population increase of nearly forty percent (39.1%).



HOUSEHOLD CHARACTERISTICS

To better understand both current and future needs regarding housing types in the City, it is important to look at the characteristics of current households and their inhabitants.

As defined by the Census Bureau, a household consists of all people who occupy a housing unit, and can include both related family members and all the unrelated people, if any, such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit, or a group of unrelated people sharing a housing unit such as partners or roomers, is also counted as a household. The count of households does exclude group quarters, however. There are two major categories of households, "family" and "non-family".

From 1980 to 2000, Hanahan's average household size saw a steady decline from 2.67 to 2.34 persons/household, as indicated in Table P1 below. This trend appears to have reversed, however, as of 2010, when Hanahan saw an average household size of 2.52 members.

TABLE P1: HANAHAN HOUSEHOLD CHARACTERISTICS

	1980	1990	2000	2010
TOTAL HOUSEHOLDS	4,952	5,065	5,243	7,092
Average household size	2.67	2.57	2.34	2.52
TOTAL FAMILIES	3,619	3,593	3,339	4,740
Average family size	3.14	2.98	2.84	3.00
Households with own children under 18 years	40.1%	33.3%	43.8%	47.0%
NON-FAMILY HOUSEHOLDS	26.9%	29.1%	36.3%	33.2%
Householder living alone	16.4%	21.2%	27.7%	25.6%
65 years and over	3.3%	5.0%	7.4%	7.1%

Sources: 1980-2010 US Census

A family household includes a householder and one or more people living in the same household who are related to the householder by birth, marriage, or adoption. Sixty seven percent (66.8%) of Hanahan's households are family households, with forty seven percent (47.0%) of all family households having one or more of their own children under the age of eighteen (18) years. This number increased approximately seven percent (7.3%) over the last decade, while the average family size increased by nearly the same (5.6%) percent over the same time period.

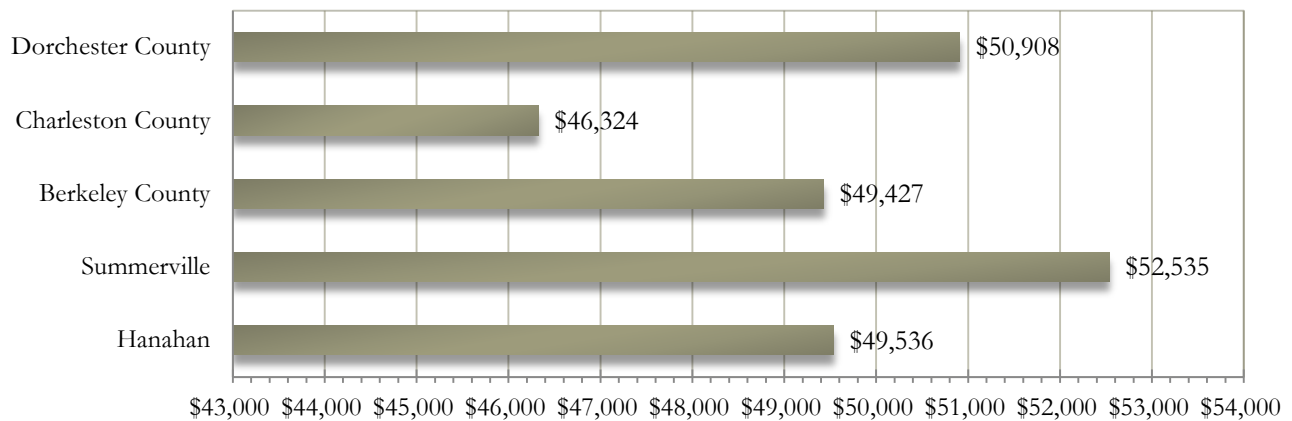
While the number of non-family households steadily increased from 1980 to 2000, the last decade saw a decrease (8.5%) in this number, as non-family households constitute slightly more than thirty three percent (33.2%) of the total households in 2010. Of total households, more than twenty five percent (25.6%) are single occupant households, and more than seven percent (7.1%) are inhabited by persons over 65 years of age.

These household characteristics might be an indication that single persons living in Hanahan during the 1990's, decided to stay as they married and started families in the past decade. Should the trend of increasing family households and decreasing non-family and single occupant households continue, housing needs will most certainly change. This will be discussed more in length in the Housing Element.

INCOME TRENDS AND CHARACTERISTICS

Households within the City of Hanahan have slightly higher incomes than those in Charleston County, and Berkeley County, but lower incomes when compared to Summerville and Dorchester County.

FIGURE P6: 2010 MEDIAN HOUSEHOLD INCOME - COMPARISON



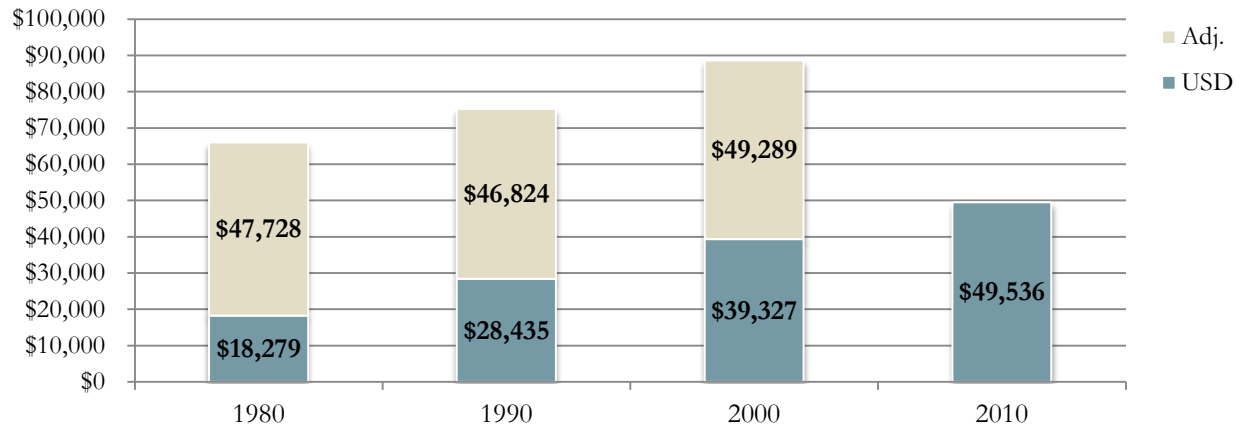
As seen in Table P2, the Median Household Income in Hanahan has risen steadily over the last several decades, increasing more than one hundred and seventy percent (171.0%) since 1980. In the past ten years, the Median Household Income has increased twenty six percent (26.0%), for an average of 2.6% each year. During the same time period (2000-2010) the National Consumer Price Index annual average increase ranged from 1.6 to 3.4 indicating that most households in Hanahan are able to keep up with increasing costs of living.

TABLE P2: HANAHAN MEDIAN HOUSEHOLD INCOME TRENDS

Year	1980	1990	2000	2010
Income	\$18,279	\$28,435	\$39,327	\$49,536

As illustrated in Figure P7 (on the next page), when median household income figures are adjusted for inflation, with the exception of a slight dip in 1990, incomes have slightly increased over the last three decades.

FIGURE P7: ADJUSTED MEDIAN HOUSEHOLD INCOME, 1980-2010



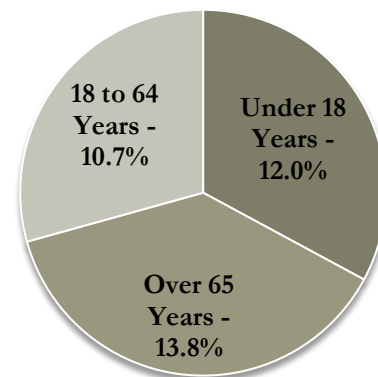
Conversely, there are residents of Hanahan that live below poverty level. The US Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who lives in poverty. If a family's total income is less than the family size threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using Consumer Price Index (CPI-U).

An important component of evaluating the poverty rate of a particular community is the number of children and elderly affected, as they are considered to be our vulnerable population.

Children living below the poverty line are at risk for health and development problems because of the cost of good nutrition, healthcare, and other necessary items.

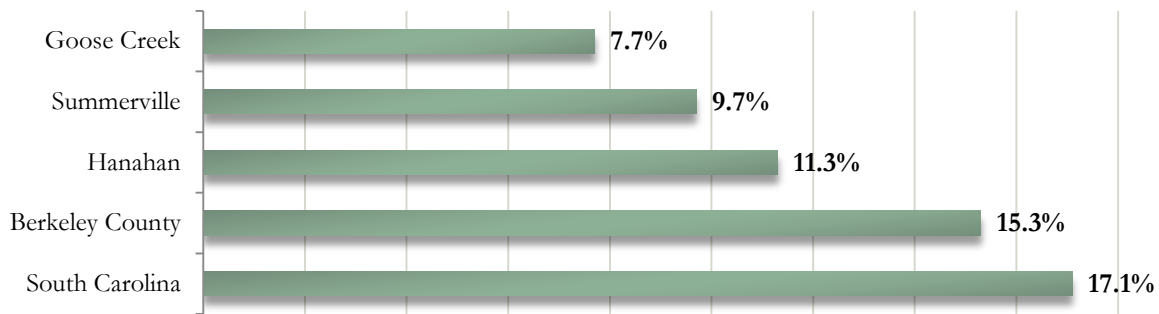
The US Census Bureau reports that in 2010, slightly more than eleven percent (11.3%), or 1,881 residents of Hanahan lived below the threshold for poverty. It is important to note that this is a slight decline from the 2000 census, when fourteen percent (14.1%) of the City's population (12,937 persons) was reported as living in poverty. The graph to the left depicts how these residents are distributed relevant to the total population of Hanahan residents in three age groups. This is encouraging, given the current economic situation nationally.

FIGURE P8: HANAHAN CHILDREN & SENIORS LIVING IN POVERTY LEVEL, 2010



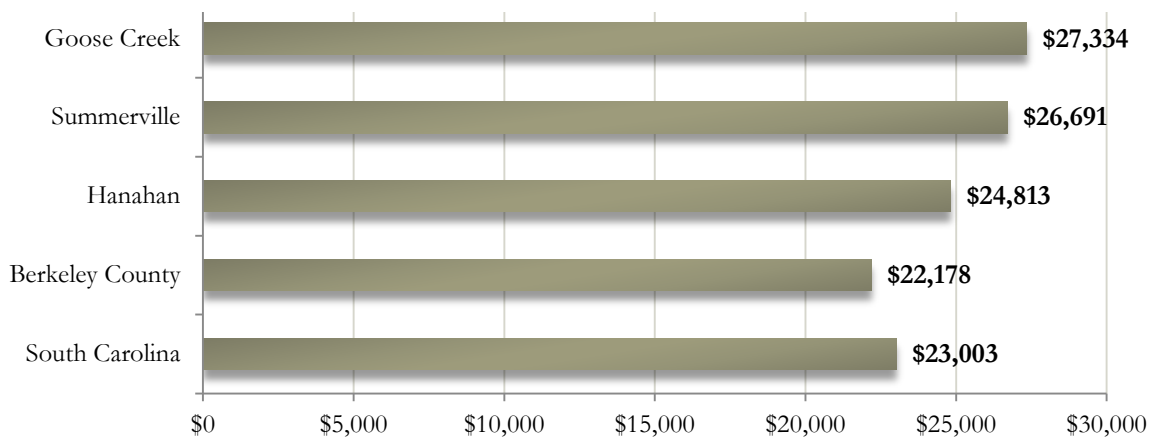
When comparing poverty levels to other jurisdictions, Hanahan has less population in poverty than both Berkeley County (15.3%) and the State (17.1%), but slightly more than the Town of Summerville (9.7%) and the City of Goose Creek (7.7%).

FIGURE P9: POPULATION BELOW POVERTY LEVEL BY JURISDICTION - 2010



This is only reinforced when comparing per capita income amongst those same jurisdictions. As illustrated below, Hanahan has a lower per capita income than Goose Creek and Summerville, but a slightly higher per capita income than Berkeley County and the rest of the State.

FIGURE P10: COMPARISON OF PER CAPITA INCOME - 2010



FUTURE PROJECTIONS

Population projections are compiled by the SC Budget and Control Board, Office of Research & Statistics, based on past trends. Berkeley County's population is projected to increase to 225,010 residents by the year 2035, at an average rate of 1.06 percent annually. Likewise, the BCD Region is projected to have a population of 835,534, which makes up 14.6 percent of the statewide 2035 population projection of 5,722,720 (an average rate of 1.03% annually). In comparison, Hanahan is projected to increase its population by thirty five percent (35.0%) during the same time period, adding another 6,300 to its current population (an average rate of 1.40% annually). Much of this expected growth in population can be attributed to previously approved developments, including multi-family units in Bowen Village and single-family housing in Charleston Oaks, being built to capacity.

HOUSING¹

Housing is not only a basic human need; it is a fundamental building block in the development of strong communities. Every community and neighborhood needs a healthy mix of housing sizes, types and prices, affordable at the wages of the jobs nearby. Therefore, housing options should include a wide range of opportunities for people at different life stages, income levels, and social and physical needs.

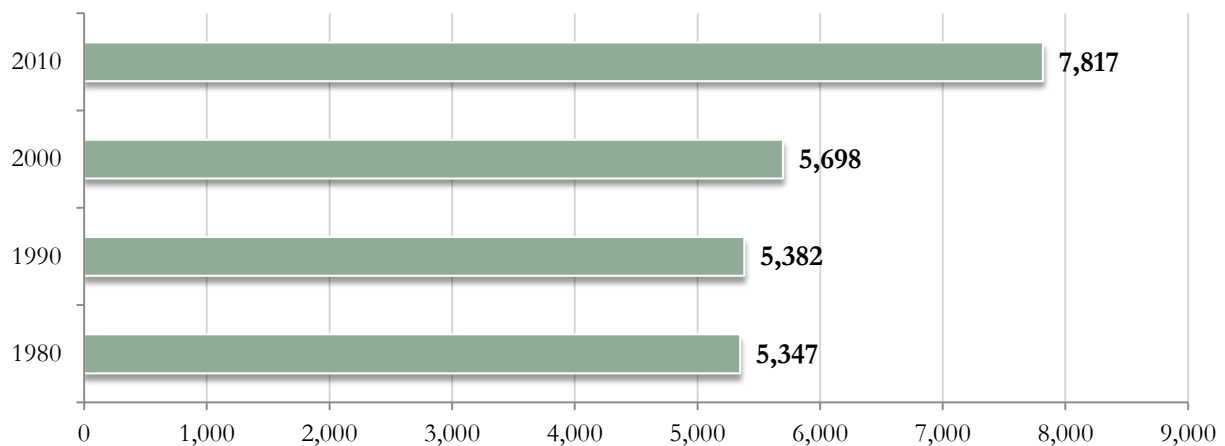
The lack of available housing drives up the cost of housing, particularly if other attributes of the community are attractive to new economic investment. Diversity of housing types determines the range of population groups that choose, or have an option, to live within a community. Affordability is a strong consideration of prospective employers who will be relocating a workforce to the area and the range of salaries required to live there.

The housing element of the comprehensive plan will provide an overview of the quantity, characteristics, and condition of the housing that currently exists in Hanahan, which in turn will help to determine how much new housing and housing types are needed to meet future demand.

HOUSING SUPPLY

According to the 2010 Census, Hanahan had 7,817 housing units. As illustrated in Figure H1, from 1980 to 2000, Hanahan saw minimal growth (6.6%) in its housing stock. Over the last decade, however, housing increased approximately thirty seven percent (37.2%), which is consistent with the population growth (39.1%) seen during the same time period.

FIGURE H1: HANAHAN HOUSING STOCK



AGE OF HOUSING

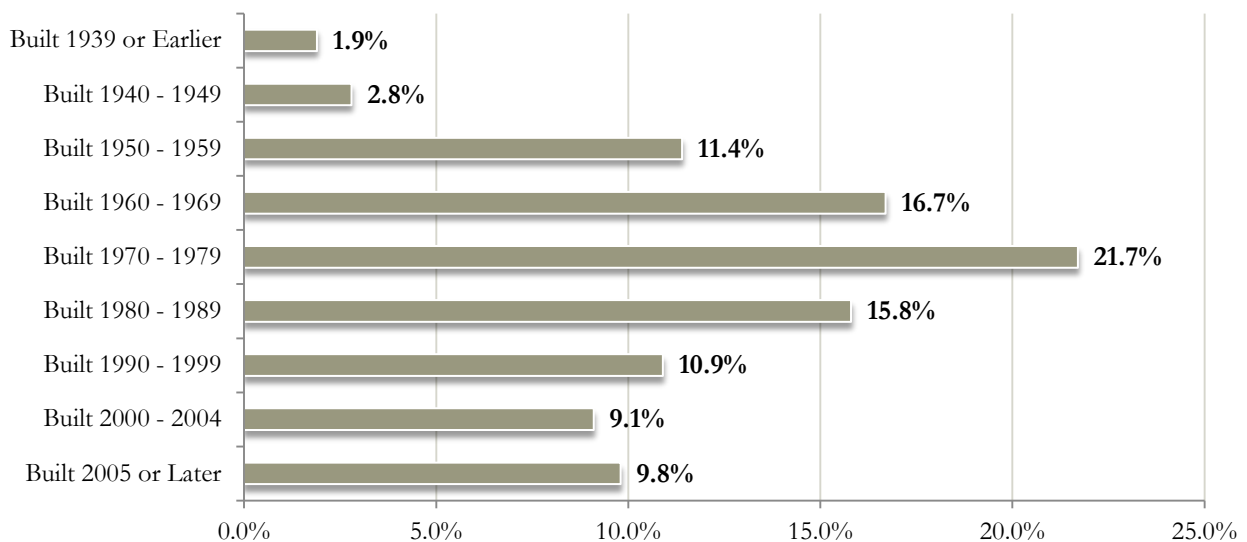
Age of housing is important since older housing stock is more likely to be substandard. Contrary to what would be expected from the latest construction boom that began in 2000, the majority of housing units in Hanahan were constructed prior to 1990, with the largest percentage (21.7%) constructed in the 1970's.

¹ Unless otherwise noted, the Source of all charts and tables are the U.S Census Bureau.

Another seventeen percent (16.7%) was constructed in the 1960's, and sixteen percent (15.8%) during the 1980's. As shown in Figure H2, an insignificant proportion (4.7%) was constructed prior to 1950.

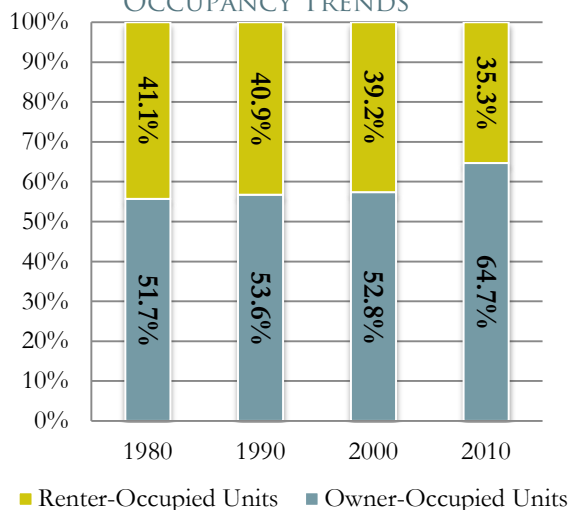
Common problems associated with older housing include outdated heating systems, inadequate plumbing, poor electrical systems, inadequate insulation, structural decay, and a lack of appropriate health and safety systems. Fortunately, more than ninety nine percent (99.5%) of occupied units in Hanahan have complete facilities (plumbing and kitchen). When looking at home heating fuels, seventy one percent (70.9%) have electricity, while nearly twenty nine percent (28.7%) have utility gas. A very small percentage (0.3%) used bottled, tank or propane gas. When comparing owner- vs. renter-occupied units, slightly more owner-occupied units (less than 1%) have more complete facilities than renter-occupied units.

FIGURE H2: AGE OF HOUSING



HOUSING OCCUPANCY

FIGURE H3: HANAHAN HOUSING OCCUPANCY TRENDS



Housing occupancy is an important indicator of the economic stability of a community, and a higher rate of owner occupancy typically indicates investment in the community. According to the 2010 Census, over ninety percent (7,092 units) of the total 7,817 housing units in Hanahan were occupied and approximately 725 (9.3%) were vacant. The proportion of rental units making up the total housing stock declined more than fourteen percent (14.1%) over the last few decades, as illustrated in Figure H3. In contrast, owner-occupied units increased more than twenty five percent (25.1%) during the same time period.

Of the occupied units in 2010, approximately sixty five percent (64.7%) were owner-occupied and the remaining thirty five percent (35.3%) were renter-occupied. Table H1 below puts Hanahan's owner- vs. renter- occupied status in perspective by comparing it to Goose Creek, North Charleston, and Summerville during the same reporting period.

TABLE H1: 2010 HOUSING OCCUPANCY - COMPARISON

Municipality	Total Occupied Housing Units	Owner-Occupied	Renter-Occupied
Hanahan	7,092	64.7%	35.3%
Goose Creek	13,484	71.1%	29.0%
North Charleston	36,915	47.9%	52.1%
Summerville	16,866	63.6%	36.4%

To put Hanahan's vacancy rate (9.3%) in perspective, during the same reporting period, Goose Creek's was 8.4%, Summerville's was 9.1%, and North Charleston's was 12.6%. More than half (55.9%) of Hanahan's vacant units were rented units, 27.6% were considered seasonal, recreational or other, and a much smaller portion (16.6%) were homeowner vacant units.

Overcrowding is another factor used to determine the adequacy of housing conditions. The Census defines an overcrowded housing unit as one having 1.01 or more persons per room (this does not refer to persons per **bedroom**, but **all rooms** in the housing unit), severely overcrowded persons is defined as 1.51 or more persons per room.

TABLE H2: OVERCROWDED HOUSING UNITS - 2010

Occupants Per Room	Hanahan	Berkeley County	South Carolina
1.00 or Less	98.4%	97.4%	97.9%
1.01 to 1.50	1.1%	1.2%	1.3%
1.51 or More	0.5%	1.4%	0.7%

In 2010, Hanahan had a lower incidence of overcrowding than Berkeley County or the state (Table H2), for both owner-occupied and renter-occupied housing units. Hanahan's rate of overcrowding has declined significantly since 2000, this despite Hanahan's persons per household size increasing during the same time period.

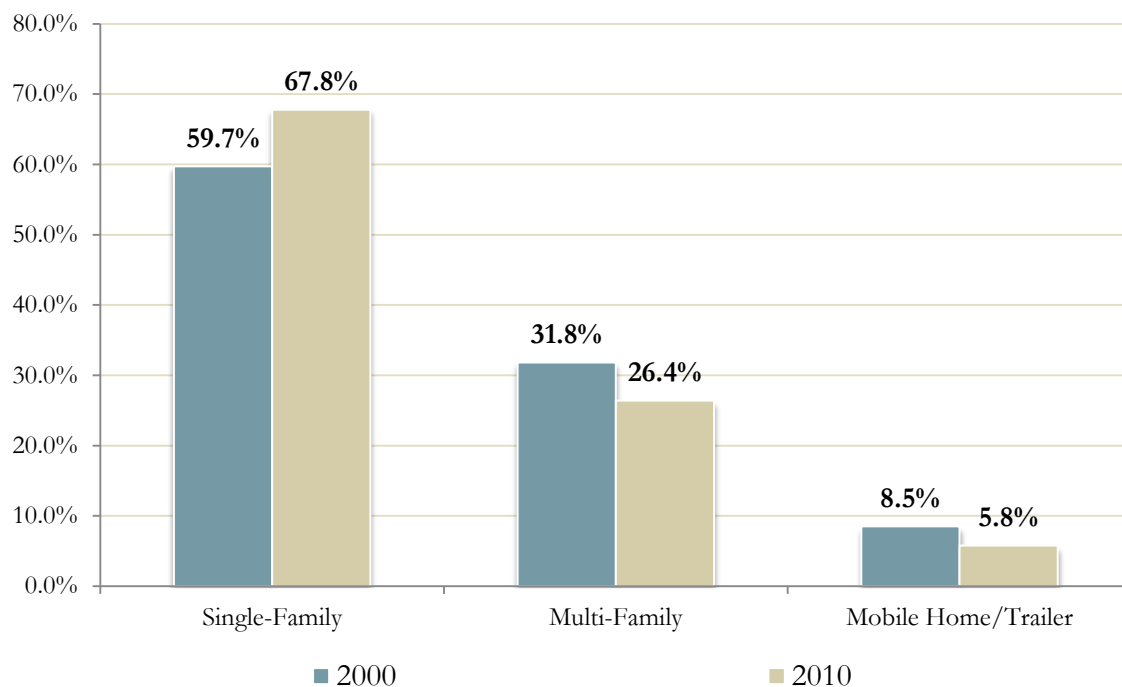


DIVERSITY OF HOUSING TYPES

The decline in overcrowded housing units is better understood when considering the decline in the proportion of multi-family units and mobile homes in the City, both of which are more susceptible to overcrowding.

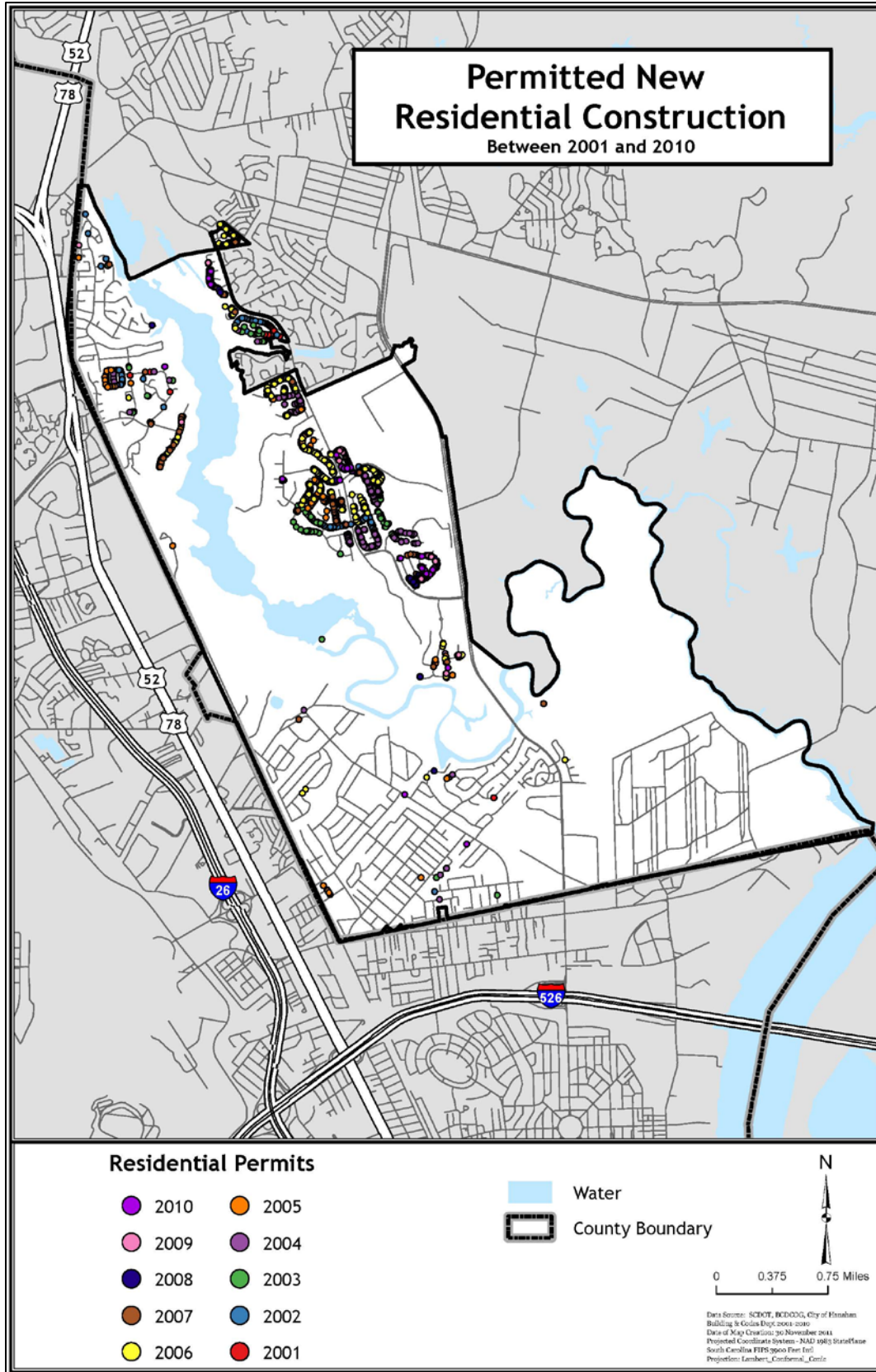
As shown below in Figure H4, the diversity of housing types in Hanahan hasn't significantly changed over the last decade. Single-family homes, whether detached or attached, comprised nearly sixty percent (59.7%) of Hanahan's housing stock in 2000 and almost sixty eight percent (67.8%) in 2010. Multi-family structures, including duplexes, apartments and condominiums, accounted for nearly twenty seven percent (26.4%) in 2010, and mobile homes made up nearly six percent (5.8%) of the housing stock.

FIGURE H4: HOUSING TYPES



According to municipal records, compiled by the Berkeley-Charleston-Dorchester Council of Governments, the City of Hanahan building department issued 1,811 single family residential permits for new home construction between 2001 and 2010. Map H1 on the following page shows that the majority of those permits were issued for Eagle Landing Subdivision and Tanner Plantation.

MAP H1: PERMITTED NEW RESIDENTIAL CONSTRUCTION, 2001-2010

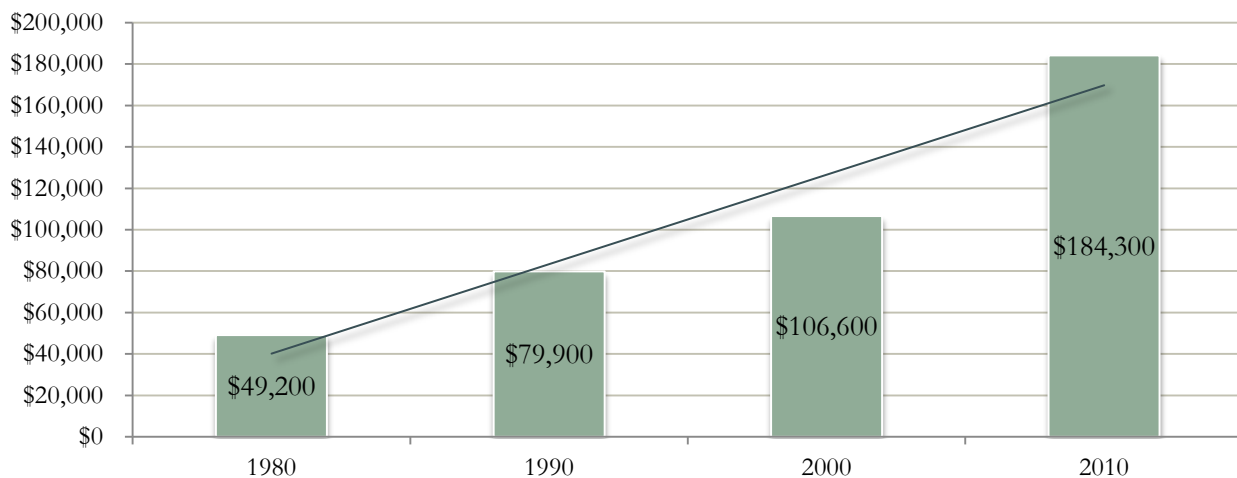


HOUSING AFFORDABILITY

Housing affordability is a strong consideration of prospective families looking to relocate and of employers who consider relocating a workforce to the area. While the term “affordable housing” is often misinterpreted, a home is considered “affordable” when rent or mortgage expenses do not exceed thirty percent (30%) of the household’s combined annual income.

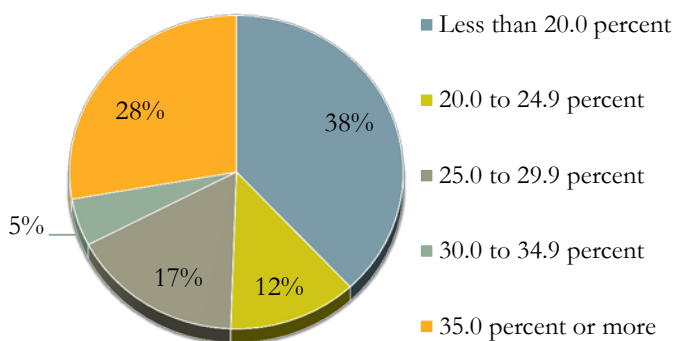
The median value of owner-occupied homes in Hanahan has risen steadily over the last several decades, as illustrated in Figure H5, to an estimated \$184,300 in 2010. At this time, more than fifty percent (51.7%) of owner-occupied homes were valued in the range of \$150,000 to \$299,000.

FIGURE H5: MEDIAN VALUE OF OWNER-OCCUPIED



A more accurate measure of affordability is to look at the home price-to-income ratio, which is the basic affordability measure for housing in a given area and is generally the ratio of median house prices to median household incomes. The median household income for Hanahan residents in 2010 was \$49,536, giving a ratio of 3.72, which is right at thirty percent (30%) of the household income. An assumption may be made that with the price-to-income ratio that close to the thirty percent (30%) threshold of “affordable”, there may be a high risk of default/foreclosure.

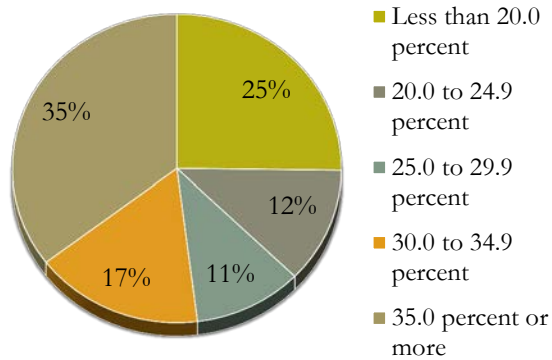
FIGURE H6: OWNER-OCCUPIED HOMES - 2010 ESTIMATES



In 2010, almost forty percent (38.1%) of the owner-occupied homes with a mortgage in Hanahan cost less than twenty percent (20%) of the household income, while more than sixty seven percent (67.4%) spent less than thirty percent (30%) of their income on housing. As a result, nearly thirty three percent (32.6%) of owner-occupied homes were not affordable to their occupants.

In the case of rented housing units, housing is considered affordable if the rent and utilities constitute no more than thirty percent (30%) of the gross annual household income.

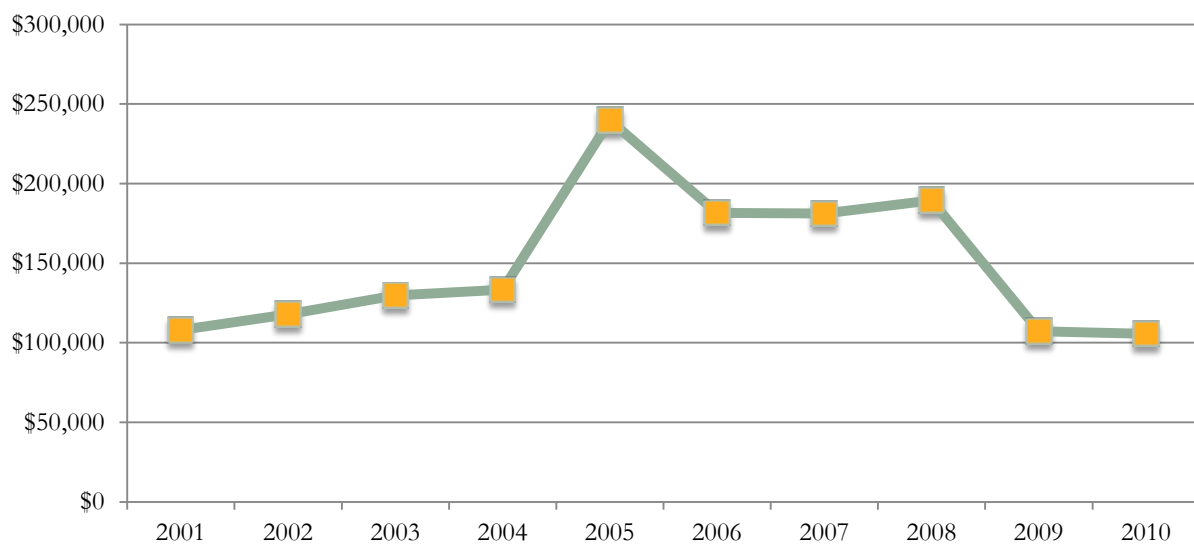
FIGURE H6: OWNER-OCCUPIED HOMES, 2010 ESTIMATES



According to 2010 Census Estimates, the median for rental units in Hanahan was \$808/month. Almost half (48%) of rental households spent less than thirty percent (30%) and just over fifty percent rental households spent more than thirty percent (30%) of their income on housing.

Municipal reports, compiled by the BCD Council of Governments, show that the 2010 average price of new construction (based on the building permit, not including the builder's profit) for single family housing in Hanahan was \$105,497. Figure H8 illustrates how the price of new construction has changed over the last ten (10) years, clearly indicating a bursting of the US housing bubble.

FIGURE H8: AVERAGE PRICE OF NEW CONSTRUCTION, 2001-2010



Source: BCD Council of Governments

FAIR HOUSING

Fair Housing refers to the right every U.S. citizen has to freely choose a place to live without regard to race, color, religion, gender, national origin, or disability. This is a right protected by federal and state laws, and any effort to block this right may constitute housing discrimination.

With funding from Berkeley County's Community Development Block Grant (CDBG) program, the BCD Council of Governments, in conjunction with Berkeley County and its municipalities, recently conducted an Analysis of Impediments to Fair Housing for Berkeley County and its municipalities.

The purpose of this analysis was to identify potential impediments to fair housing, and to recommend strategies for overcoming any impediments that are found to exist. The study covered a range of issues, including a thorough inventory of current housing costs, types and condition, and topics related to fair housing practices, such as education and awareness, ordinances and codes, and lending practices.

While the study found the composition of housing varied significantly throughout the County and municipalities, the results were such that there were no issues with affordability or fair housing impediments found in the City. In fact, Hanahan was found to have the highest percentage of multi-unit housing (at 30.6%) and, after excluding rental units on the Naval Weapons Station, the highest percentage of rental housing. Both of these figures highlight the affordability of housing in Hanahan.

One concern identified in the study was the age of housing located in the area between Yeamans Hall Road and Remount Road. This area was found to have the largest percentage of housing built before 1960 in the County. While this may not mean affordability is an issue, it does suggest that, due to the age, housing may not be designed in a way to ensure visitability for disabled individuals. Visitability features make homes easier for people who develop a mobility impairment to visit friends and family. Some common barriers to visitability include steps at every entrance and narrow interior doors.

FUTURE PROJECTIONS

Based on the BCDCOG's travel demand model, which simulates existing and future travel volumes on area roads and then uses that data to analyze household and employment data, Hanahan is projected to have a forty six percent (46.1%) increase in households over the next 25 years. This increase should more than accommodate the thirty five percent (35.0%) increase in population that is expected during the same time period.

ECONOMIC DEVELOPMENT¹

A strong, diversified economy is critical to the well-being of the residents of Hanahan and the surrounding region. The Economic Element looks at employment and income trends, so one can get a better picture of the type of businesses and industries that are suitable for the community in terms of job skills required, long-term sustainability, linkages to other economic activities in the region, impact on the resources of the area, and prospects for expansion and creation of higher-skill job opportunities.

Historically, Hanahan was seen primarily as a residential community, one whose employment growth and economic development were largely dependent upon the economic activity of the Greater Charleston Area. In recent years, however, the City of Hanahan's economic foundation has grown and become more vibrant, with companies such as the Space and Naval Warfare (SPAWAR) Systems Center, the Boeing Company, and FedEx Ground locating nearby, in addition to an array of other science, manufacturing, and distribution companies. This new business and industry will further Hanahan's ability to grow a diverse, innovative, and sustainable economy.

The detailed analysis in this section includes information pertaining to historic trends and projections on the general economy and income levels, places of and levels of employment, educational assessment, and any other subjects affecting the City's economy.

ECONOMIC BASE

Hanahan's economy was driven first by agriculture, with plantations like Yeamans Hall and Otranto (Yeshoe) producing rice, indigo, and other crops that were exported all over the world. The success of these plantations brought other social opportunities and aided the growth of the area.

When plantations could no longer function following the end of the Civil War and the end to slavery, the Hanahan area was reborn under different economic forces, primarily railroad and military presence. Rail was extended to the Port of Charleston in the nineteenth century and the Charleston Navy Base was established in 1901 along the Cooper River between its confluence with the Goose Creek and the port.

Military presence expanded significantly with the addition of the Charleston Naval Weapons Station during and subsequent to the Second World War, as Charleston was a point of embarkation for troops bound for Europe. In addition, Charleston was a destination for prisoners of war, many of whom were held in the Hanahan area. As a result, the US Army Depot was established in 1941 for the transmission of munitions from the interior of the country to Europe. The US Navy acquired a large tract of land east of Hanahan in 1954 as the Weapons Station Annex, which later became the site for the Atlantic Polaris Missile Facility and Nuclear Power Training School.

With the defense establishment investing in the area, supporting businesses and investments increased, paving the way for a strong economic foundation.

A strained Public Service District (PSD) budget prompted community leaders to establish the Trident Industrial Park in 1968 in south-eastern Hanahan, adjacent to the US Army Depot. Today the Trident Industrial Park houses logistics companies like Jerich International, Palmer Logistics and Premier Logistics, in

¹ Unless otherwise noted, the Source of all charts and tables are the U.S Census Bureau.

addition to other warehousing, storage, and distribution companies, such as Harrell Enterprises and Bentley World Packaging LTD.

A second Industrial Park, North Pointe, was established in the northeastern corner of the City, providing more than 100 acres and nearly 1.5 million square feet of developable land ideal for distribution, light manufacturing, or assembly. North Pointe currently houses such companies as defense contracting giant Science Applications International Corporation (SAIC), FedEx National, Key Logistics Solutions, and New Breed Logistics, which was selected in early 2011 by the Boeing Company to provide logistics support for the manufacture and final assembly of the Boeing 787 Dreamliner. There is currently close to 900,000 square feet still unoccupied and available for use in North Pointe Industrial Park.

Both Trident and North Pointe Industrial Parks are conveniently located in close proximity to Interstates 26 and 526, North Charleston Terminal (NCT) at the Port of Charleston, Charleston International Airport, and rail access.

Despite the 1996 closure of the Charleston Naval Complex, today the Naval Weapons Station is still the largest single employer in the Charleston Region, supporting more than 40 Tenant Commands with a workforce of approximately 13,500 military, civil service and contract employees. Space and Naval Warfare (SPAWAR) Systems Center Atlantic, located at the Naval Weapons Station Charleston, Southside, is a U.S. Navy electronics, engineering, and integration center employing approximately 5,000 people. Several of Hanahan's other larger employers include SAIC, The City of Hanahan, Heartland Health Care Center, and Lee Distributors.

While the City has been successful in supporting wholesale commerce and distribution companies, local retail and service businesses have not seen the same success, largely in part due to retail areas on Remount Road and Rivers Avenue in nearby North Charleston.

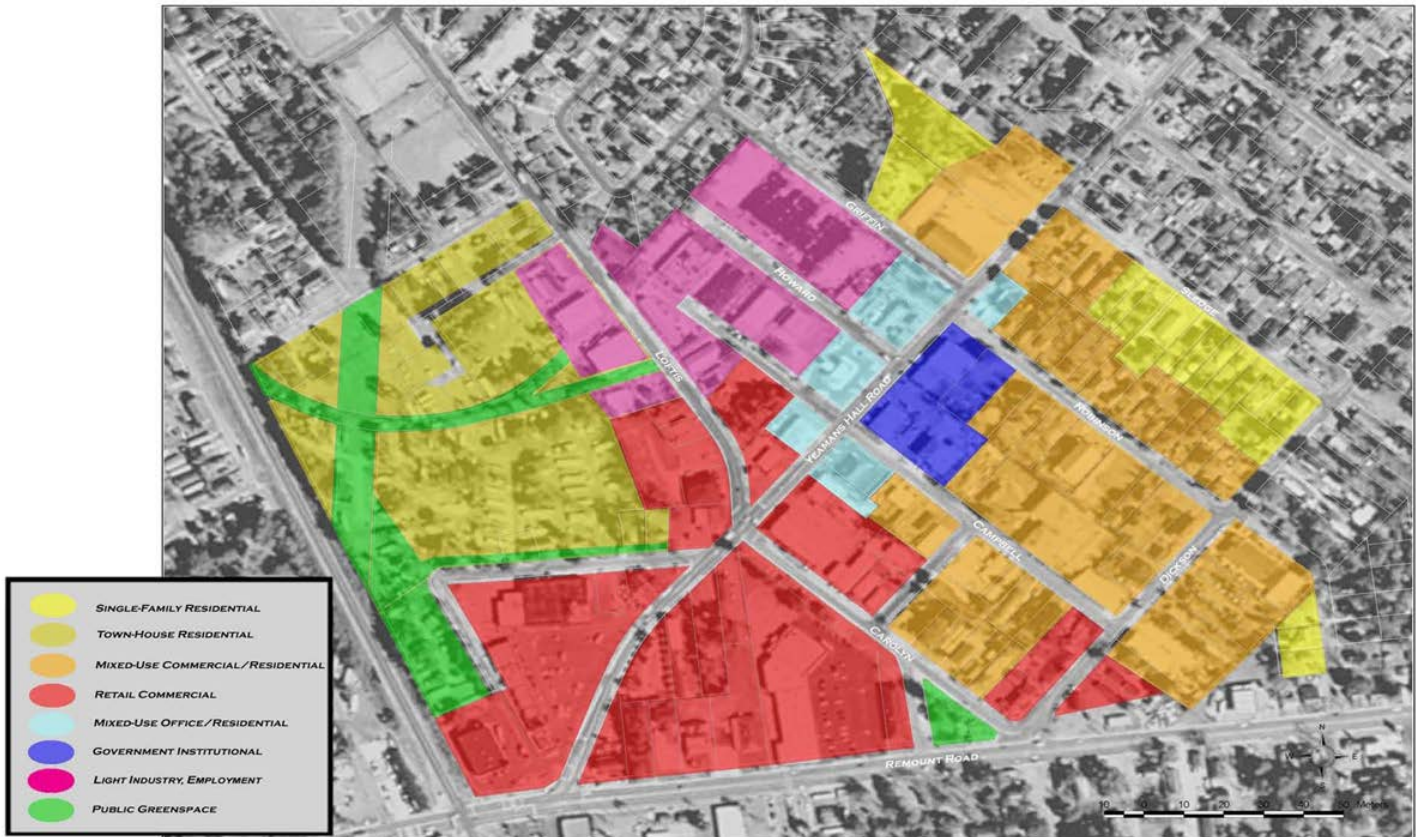
There are two major commercial centers in the City of Hanahan: the Town Center and the Tanner Plantation Shopping Center. Anchored by a Super Bi-Lo, Tanner Plantation Shopping Center also has a variety of restaurants and other service-related businesses. The Town Center is anchored by and encompasses the area surrounding the Municipal Complex and has a variety of businesses, including a Price Wise grocery store, drugstores, hardware stores and dry cleaners. According to InfoUSA Employer Database, there are 290 businesses in the City of Hanahan.

YEAMANS HALL ROAD COMMERCIAL DISTRICT IMPROVEMENT PLAN

The Yeamans Hall road corridor was first designated for further study in the Land Use Element of the 2002 Hanahan Comprehensive Plan. This came as a result of numerous complexities and issues that were identified during the comprehensive planning process. The first being the need to create an economically strong central business district that would spur economic activity in downtown Hanahan. Second was the need to address conflicting land uses, blighted properties, and deficient systems of public infrastructure along the corridor. The goal was to invigorate an important sector of the City of Hanahan through increased economic activity and tax base, improve efficiency and compatibility of land uses, expand housing choices, and enhance safety, mobility, and overall aesthetics. In 2006 the Yeamans Hall Road Commercial District Improvement Plan was developed and adopted as an amendment to the 2002 Hanahan Comprehensive Plan.

The District Improvement Plan directly addresses two important comprehensive planning elements: land use and community facilities. The scope of the Plan includes four components: land-use planning for the district, land use standards to implement the plan, a transportation system improvement plan, and a schematic design for Yeamans Hall Road. On the following page is the 20-Year Future Land Use Map that came out of the District Improvement Plan. Based on Plan recommendations, the FLUM below establishes eight (8) land use designations for the area, including a Town Center district which was intended to replace the General Commercial Zoning District.

**YEAMANS HALL ROAD ENHANCEMENT STUDY
20-YEAR FUTURE LAND USE**



The District Improvement Plan also provides new direction for the 1998 Hanahan Redevelopment Plan, which established a tax-increment financing (TIF) district to generate revenue for infrastructure enhancements. This funding vehicle captures any increase in property taxes after it is implemented and sets aside this “tax increment,” which then must be spent to upgrade infrastructure to serve those properties from which the tax increment is collected. Utilizing this program enables the City to reinvest directly in a district designated for redevelopment. In an effort to reinvest in the site and spur revitalization of the downtown district, much of the revenue collected to date was used to construct the new municipal complex and fire station.

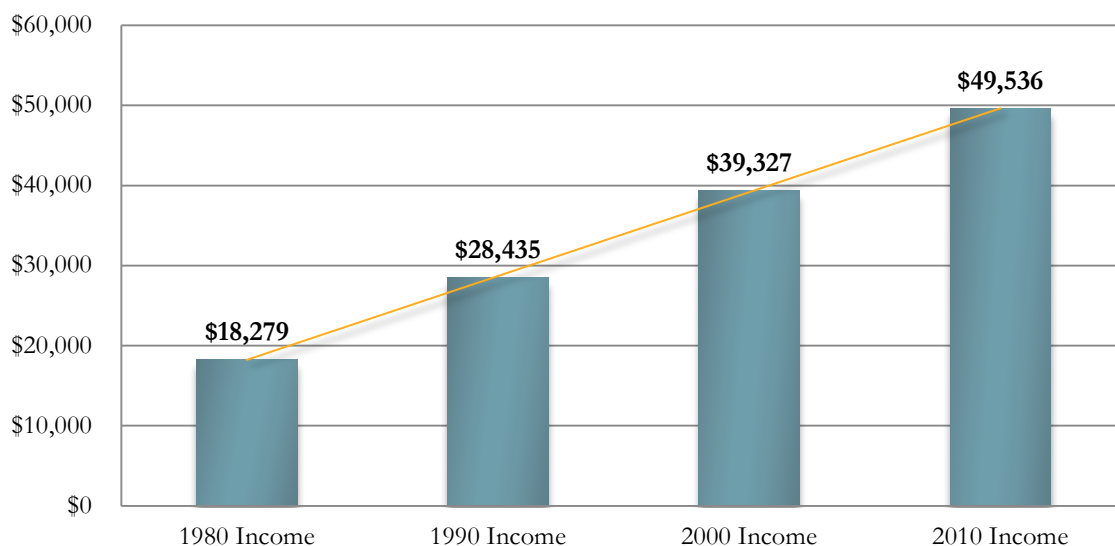
INCOME LEVELS

HOUSEHOLD INCOME

Household income is a measure commonly used by both public and private institutions to represent the total income of all residents over the age of 18 in each household, whether related to the householder or not. The household income is a measure of not just wages and salaries, but also unemployment insurance, disability and child support payments, regular rental receipts, as well as any personal business, investment, or other kinds of income regularly received. The use of household income remains among the most widely accepted measures of income.

As illustrated in Figure E1, the median household income for Hanahan residents has steadily increased over the last 30 years, with a 26 percent increase in just the last decade.

FIGURE E1: MEDIAN HOUSEHOLD INCOME TRENDS



In 2000, Hanahan had a median household income of \$39,327, with 21.3 percent of households earning between \$35,000 and \$49,999. Households earning this amount made up the largest percentage group, followed by 18.6 percent of households earning between \$50,000 and \$74,999.

In comparison, 21.1 percent of Berkeley County households and 18.8 percent of South Carolina households earned between \$50,000 and \$74,999, and 20.1 percent of Berkeley County households and 17.6 percent of South Carolina households earned between \$35,000 and \$49,999.

According to 2010 Estimates Hanahan had a median household income of \$49,536, with 15.9 percent earning between \$35,000 and \$49,999 (a 25% decline from 2000). The largest percentage group (18.2%) earned between \$50,000 and \$74,999.

In comparison, 21.3 percent of Berkeley County households and 18.2 percent of South Carolina households earned between \$50,000 and \$74,999, and 15.5 percent of Berkeley County households and 15.2 percent of South Carolina households earned between \$35,000 and \$49,999.

PER CAPITA INCOME

Per Capita Income estimates are a useful measure of an average person's economic status, and is estimated by dividing the total income of all people 15 years and over in a geographic area by the total population in that area. Non-profit institutions, private trust funds, and private health and welfare funds are also classified as individuals. In the long run, per capita income levels of a region are affected by both changing demographic composition and changing local economic conditions.

As illustrated in Table E2, the per capita income for Hanahan was slightly higher than both Berkeley County and South Carolina, but lower than the national average.

TABLE E2: PER CAPITA INCOME LEVELS - 2010

Geographic Region	Per Capita Income
United States	\$26,942
South Carolina	\$23,003
Berkeley County	\$22,178
Hanahan	\$24,813

The higher household income and lower per capita income in Hanahan might be an indicator of an increasing number of people living in a household due to the difficult economic times.

POVERTY LEVELS

As previously mentioned in the Population Element, the US Census Bureau uses a set of money income thresholds, which vary by family size and composition, to determine who lives in poverty. Poverty refers to the condition of lacking basic human necessities, such as clean water, food, clothing, and shelter. Poverty status of individuals can greatly affect the income levels and economic status of a City and therefore needs to be considered.

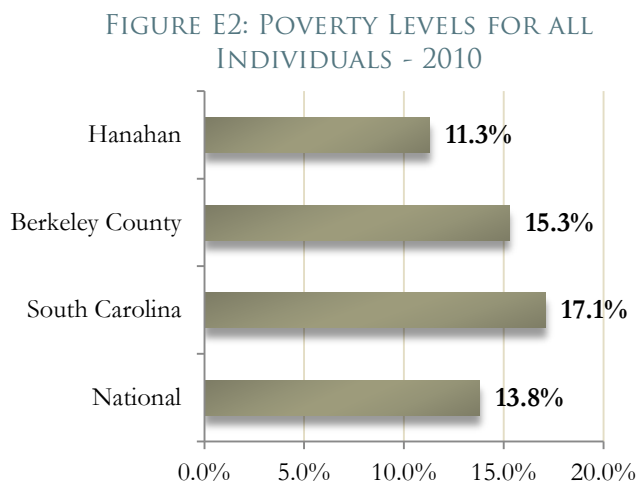


Figure E2 illustrates the poverty levels for all individuals for Hanahan, Berkeley County, South Carolina and the United States.

The US Census Bureau reports that in 2010, slightly more than 11 percent (11.3%), or 1,881 residents of Hanahan lived below the threshold for poverty. As illustrated in Figure E2, Hanahan had fewer individuals living below the poverty threshold than did Berkeley County (15.3%), the State (17.1%) and the Nation (13.8%).

WORKFORCE CHARACTERISTICS

One of the most important features for businesses looking to expand or select a new location is accessibility to an educated, highly and broadly skilled workforce.

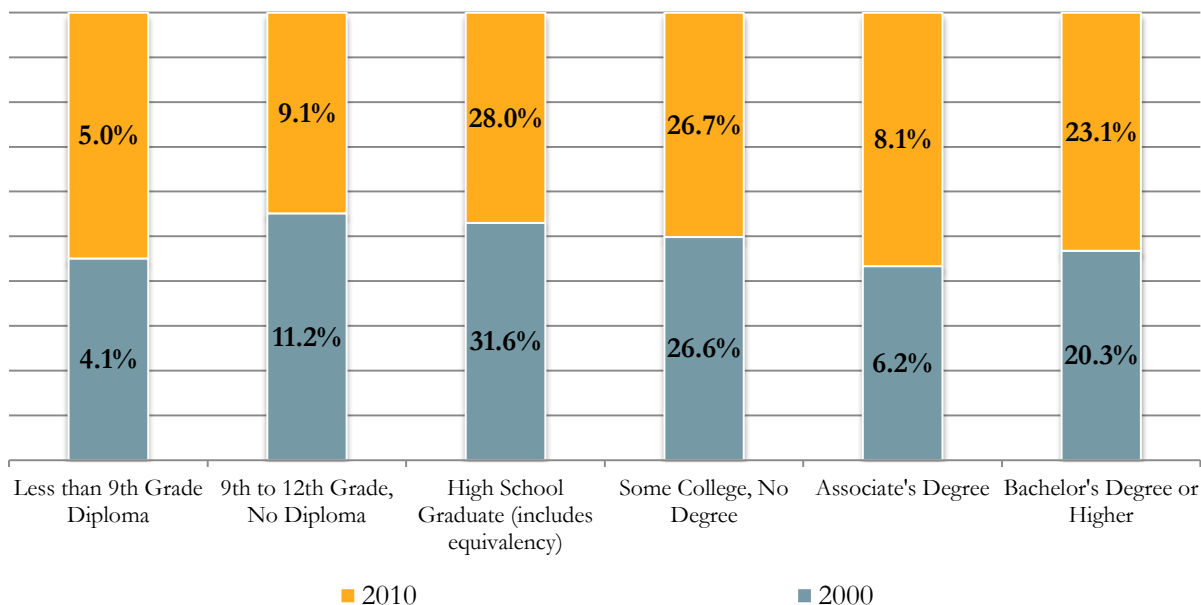
According to the 2010 Census Estimates, over 72 percent (72.4%) of Hanahan residents, ages sixteen years and older, are in the labor force, which grew nearly 12 percent (11.7%) from 2000. As the labor force grew, so did the number of people in the labor force with a higher education.

Education is one of the fundamental factors of economic development, as it raises people's productivity and creativity, and promotes entrepreneurship and technological advances. A high level of education affects not only the economic future and prosperity of individuals, but also the prosperity of entire community, as this information about the labor market can be used by the City or a chamber of commerce to promote Hanahan as a location to potential employers.

Over the last decade, the proportion of Hanahan residents who have a Bachelor's Degree or higher has increased by almost 14 percent (13.8%). The employment rates for those in the labor force with a Bachelor's Degree or higher is more than 98 percent (98.3%), compared to the employment rate of those in the labor force that do not have a Bachelor's Degree or higher (89.8%).

Figure E3 compares the educational attainment levels for Hanahan residents over 25 years of age from 2000 to 2010.

FIGURE E3: EDUCATIONAL ATTAINMENT - 2000 & 2010



While the increase in those with a Bachelor's Degree or Higher is encouraging, the decline in High School Graduates by almost 11 percent (11.4%), in addition to the increase (22%) in those with Less than 9th Grade Diploma is of concern.

TABLE E3: HIGH SCHOOL GRADUATE RATES, INCLUDES EQUIVALENCY (POP. 25 YRS. AND OLDER)

Geographic Region	2000	2010	% Change
United States	28.6%	29.0%	1.4%
South Carolina	30.0%	31.2%	4.0%
Hanahan	31.6%	28.0%	-11.4%

A community's high school graduation rate is a barometer of its health and the skill level of its future workforce. Table E3 compares Hanahan's high school graduate rates for the last decade to the state and nation.

The importance of education cannot be stressed enough, not

just for the individual, but for the economic health and prosperity of an entire community.

According to a quarterly report from the Bureau of Labor Statistics², the unemployment rate for those without a high school diploma was, in 2009, just under 15 percent (14.6%). For a worker with a Bachelor's Degree, however, the unemployment rate was only 5 percent (5.2%); three times better than the non-high school graduate.

In addition, the report indicated that those without a high school diploma earned 40 percent less and had an unemployment rate almost double the average rate for all workers.

EMPLOYMENT

Employment opportunity is an important economic indicator as it affects everyone's life and can be a proxy to the overall economy. If people are getting jobs and working, wages are growing and, therefore, quality of life is improved. It also gives an idea of future employment and job trends so that the labor force is able to stay relevant in the job market.

This section depicts the employment characteristics and trends for the City of Hanahan by comparing data from the 2000 Census and 2010 Census Estimates.

In 2000, the number of people aged 16 and older in the City of Hanahan that were a part of the total labor force reached 6,797; approximately 53 percent (52.5%) of the total population. Of the 6,797 members of the labor force, 6,410 (or 94.3%) were considered civilian labor force. According to 2010 Estimates, while the

TABLE E4: CITY OF HANAHAN EMPLOYMENT STATUS

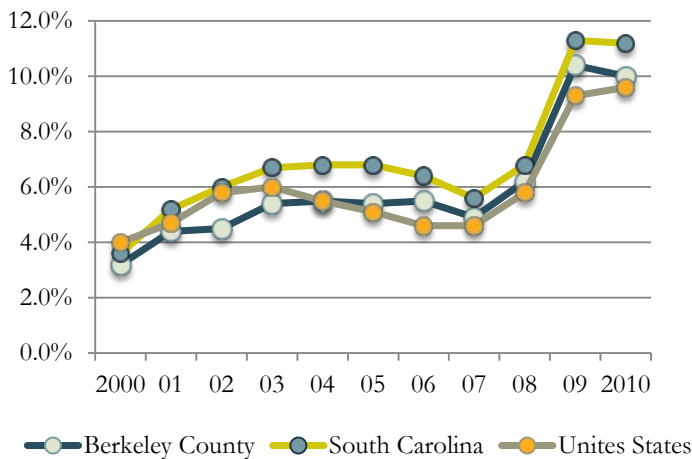
	2000 Census	2010 Census Estimates	Percent Change
In labor force	6,797	9,445	39.0%
Civilian labor force	6,410	9,380	46.3%
Employed	6,237	8,562	37.3%
Unemployed	173	818	373%
Armed Forces	387	65	-83.2%
Not in labor force	3,700	3,602	-2.6%

² *Education Pays: More Education Leads to Higher Earnings, Lower Unemployment.*
(<http://www.bls.gov/opub/ooq/2010/summer/oochart.pdf>)

number of people in the labor force had increased to 9,445, the proportion of people in the labor force of the total population remained at 52.4 percent. What did increase was the civilian population in the labor force, both employed and unemployed, which was at 9,380 (or 99.3% of total labor force). This increase is likely attributed to several occurrences, including changes in military facilities, including base closure and consolidations, as well as missions being completed or terminated.

UNEMPLOYMENT RATES

FIGURE E4: UNEMPLOYMENT RATE 2000-2010



A key indicator of a community’s economic strength and vitality, the unemployment rate is a measure of the prevalence of unemployment and is calculated as a percentage by dividing the number of unemployed individuals (all those looking for work and ignoring those who have chosen not to work) by all individuals currently in the labor force.

Compiled by the South Carolina Department of Employment & Workforce (SCDEW), annual employment data is limited to county and metropolitan statistical areas.

Figure E4 illustrates unemployment trends of Berkeley County, South Carolina and the United States between 2000 and 2010. Unemployment rates for Berkeley County varied between 2000 and 2008, but closely followed both the national and state trends. Berkeley County remained below the South Carolina average and until 2004 below the national average. In 2010 Berkeley County had an annual unemployment rate of ten percent (10%), which fell between the state (11.2%) and national (9.6%) averages.

Although SCDEW does not have 2010 employment data for the City of Hanahan, according to the US Census Bureau 2010 Estimates (2006-2010 American Community Survey 5 Year Estimates), Hanahan had an unemployment rate of over 6 percent (6.3%). If accurate, this falls below the County, State and National averages, faring well for Hanahan residents.

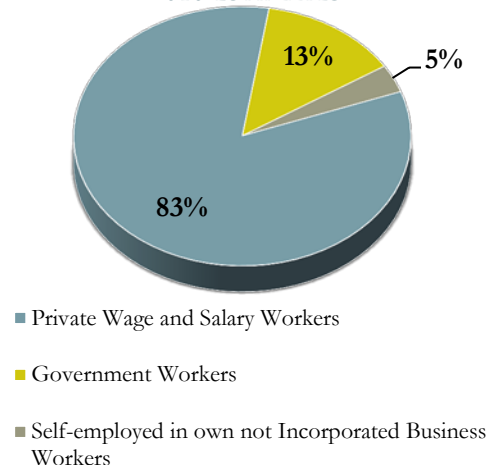
CLASS OF WORKER

The information on class of worker gathered by the US Census Bureau refers to the same job as a respondent's industry and occupation, categorizing people according to the type of ownership of the employing organization, such as private wage and salary worker, and self-employed.

According to ACS 2010 Estimates and illustrated to the right, more than 80 percent (83%) of Hanahan workers were classified as Private Wage and Salary Workers, a 6.4 percent increase from 2000.

In contrast, 13 percent were classified as Government Workers in 2010, a 28 percent decrease from 2000.

FIGURE E5: CLASS OF WORKER, 2010 ESTIMATES



EMPLOYMENT BY OCCUPATION

FIGURE E6: EMPLOYMENT BY OCCUPATION - 2010 ESTIMATES

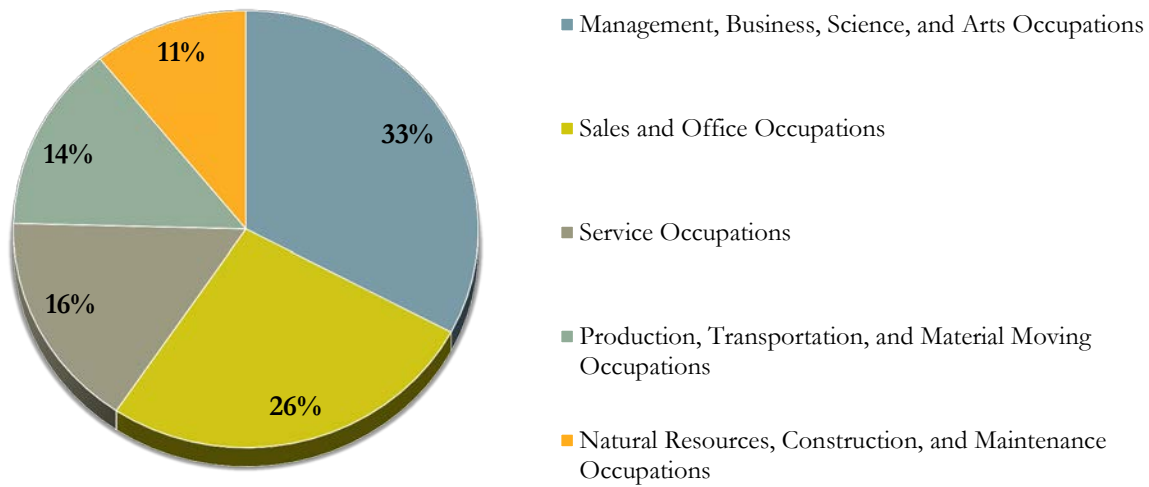


Figure E6 illustrates the 2010 Census Estimates of the number of employees working within each occupation category for the population 16 years and older. The 2010 estimates indicate the majority of Hanahan's workforce is employed in the Management, Business, Science and Arts Occupations (33%), Sales and Office Occupations (26%), or Service Occupations (16%).

Table E5 below shows that employment increased for all occupations, Service Occupations having the most growth over the last decade with almost a 90 percent (85.5%) increase. Management, Business, Science, and Arts Occupations saw 54.1 percent growth, followed by 25 percent growth in Production, Transportation, and Material Moving Occupations.

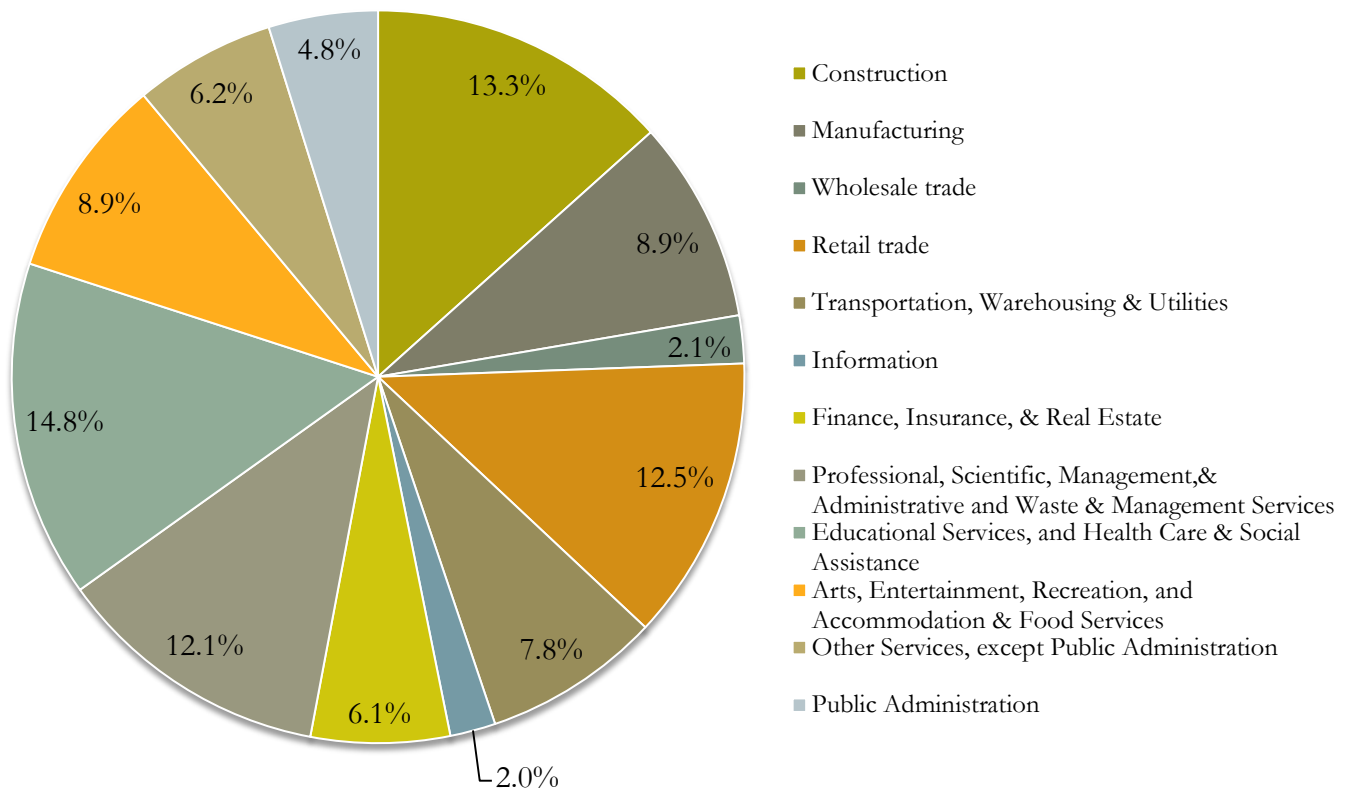
The significant growth in service occupations shows that the recent economic downturn did not affect service related industries nearly as much as other industries.

TABLE E5: EMPLOYMENT BY OCCUPATION, 2000-2010

Occupation	2000 Census	2010 Estimates	Percent Change
Management, Business, Science, and Arts Occupations	1,823	2,809	54.1%
Sales and office Occupations	1,940	2,277	17.4%
Service Occupations	738	1,369	85.5%
Production, Transportation, and Material Moving Occupations	948	1,185	25.0%
Natural Resources, Construction, and Maintenance Occupations	774	922	19.1%

EMPLOYMENT BY INDUSTRY

Employment by Industry data indicates the types of jobs in which residents of Hanahan are employed, regardless of occupation or whether the job is located outside city limits. The estimates below in Figure E7 indicate the majority of Hanahan's employed workforce is employed within Educational, Health Care and Social Assistance (15%), followed by Retail Trade (13%), Construction (13%) and Professional, Scientific & Management and Waste Management Services (12%).



As illustrated in Table E6 (on the following page), employment increased from 2000 in all industries except for Wholesale Trade and Public Administration, which declined by almost 16 percent (-15.7%) and 3 percent (-3.3%), respectively. Industries that saw the most growth were Construction (104.5%), Arts, Entertainment, Recreation, and Accommodation & Food Services (74.1%), Other Services (except Public Administration) (69.6%), and Professional, Scientific, Management, & Administrative and Waste & Management Services (65.8%). Changes in military facilities and increases in outsourcing also likely contributed to the increases seen in most other industries over the last decade.

TABLE E6: EMPLOYMENT BY INDUSTRY - 2000-2010

Industry	2000 Census	2010 Estimates	Percent Change
Construction	559	1,143	104.5%
Manufacturing	753	763	1.3%
Wholesale trade	216	182	-15.7%
Retail trade	801	1,071	33.7%
Transportation, Warehousing, and Utilities	503	664	32.0%
Information	173	175	1.2%
Finance, Insurance, & Real Estate	412	526	27.7%
Professional, Scientific, Management, & Administrative and Waste & Management Services	623	1,033	65.8%
Educational Services, and Health Care & Social Assistance	1,006	1,265	25.7%
Arts, Entertainment, Recreation, and Accommodation & Food Services	437	761	74.1%
Other Services, except Public Administration	312	529	69.6%
Public Administration	428	414	-3.3%

PLACE OF WORK AND COMMUTING PATTERNS

TABLE E7: PLACE OF WORK - 2010 CENSUS ESTIMATES

Worked in State of Residence	8,345
Worked in County of Residence	2,227
Worked Outside County of Residence	6,118
Worked Outside State of Residence	126
Total	8,471

Table E7 shows the place of work for Hanahan residents, according to 2010 Census Estimates. More than 73 percent (73.3%) of residents who worked in South Carolina commuted outside of Berkeley County for employment, while the remaining (26.7%) worked Total in county of residence (Berkeley County).

Hanahan residents had an estimated mean travel time to work of 21.6 minutes in 2010, slightly lower than that of the Region, State, and Nation.

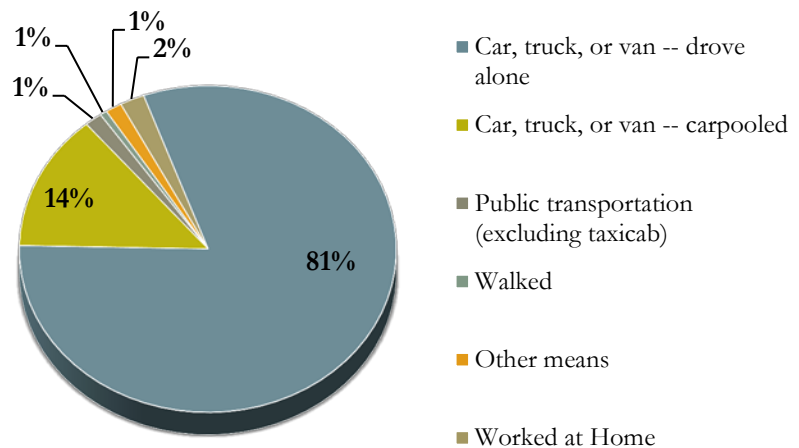
TABLE E8: MEAN TRAVEL TIME TO WORK – MINUTES
(CENSUS 2010 ESTIMATES)

Geographic Region	Hanahan	BCD Region	South Carolina	United States
Mean Travel Time to Work Minutes	21.6	24.4	23.3	25.2

A contributing factor to the commute time is that more than 70 percent (73.3%) of the residents commute outside Berkeley County for employment, as illustrated previously in Table E7. Longer commute times can negatively affect quality of life with increasing fuel costs, loss of time, and contributing to air pollution, affecting one's health. Increasing employment opportunities within the City of Hanahan would counteract these negative effects.

Figure E8 indicates the method of travel by which Hanahan residents get to work. A large majority (81%) of workers relied on vehicles and commuted alone, while very few used public transportation (1%). Fourteen percent (14.0%) carpooled with at least one or more people, and only 1 percent walked to work. This low percentage of walkers might be an indicator of segregation of employment uses from residential uses, and/or the condition of sidewalks and other pedestrian oriented facilities, which will be further analyzed in the transportation element.

FIGURE E8: COMMUTING TO WORK - 2010 ESTIMATES



ECONOMIC DEVELOPMENT RESOURCES

The City of Hanahan has its Economic Development Office which provides a wide range of services to businesses interested in relocating to the Hanahan area, including new business incentives and site planning. The City is also a member of the Berkeley County Chamber of Commerce, which is governed by a Board of Directors and works to help attract new industries to the area.

Berkeley County's business retention, expansion and recruitment efforts work hand-in-hand to maintain a vibrant local economy. Business retention and expansion programs address such issues as availability of public services and facilities, permitting procedures, property taxes, and labor-training programs, all of which affect decisions by established businesses and industries to remain or expand. Recruitment programs largely focus on attracting industrial users as a major economic development strategy. Retaining, expanding and attracting industrial businesses are important because they generally provide higher-paying jobs.

The following are statutory State incentives for qualified projects as determined by the South Carolina Department of Commerce (SCDOC) or the South Carolina Department of Revenue (SCDOR).

- **Job Tax Credits:** Provides companies with a credit against their corporate income tax liability for new jobs created, depending on the number of jobs created, the type of business, the location, and the wage rate. Based on Berkeley County's designation (TIER 1) and compensation amount, employers creating new jobs in Berkeley County receive job tax credits between \$1,500 and \$2,500 per job.
- **Corporate Headquarters Credits:** Companies that meet specific job requirements establishing a corporate or division headquarters in South Carolina are eligible for a credit equal to 20 percent of their lease cost for five years, OR 20 percent of the building design/construction costs. This credit may be used to eliminate the company's corporate income tax liability for up to ten years.
- **Investment Tax Credit:** As a designated Economic Impact Zone, Berkeley County can give companies locating there a credit against their corporate income tax liability of up to 5 percent of their investment in new production equipment. This credit can be applied without limits against corporate tax liability and may effectively eliminate it. Unused credits may be carried forward for ten years.
- **Sales Tax Exemptions:** South Carolina levies a six-percent sales tax statewide, and Berkeley County levies an additional one percent local option sales tax used for property tax relief. Industries investing more than \$35 million are eligible for an exemption on material handling equipment. Exemptions include equipment used in the production process, electricity and fuels used in the production process, raw materials, repair parts, and packaging materials.

The following are incentives offered to businesses at the discretion of Berkeley County that can be utilized and marketed by the City to help expand existing companies and attract new ones.

- **Property Tax Incentives:** Companies locating in South Carolina with an investment of \$50,000 or more receive an abatement of the County ordinary portion of their property taxes for a period of five years. In general, this will result in a savings of between 25 and 30 percent on a company's property taxes. Companies investing \$5 million or more in South Carolina within a five-year period may negotiate fee-in-lieu of property taxes (FILOT) with the County to obtain a reduced assessment, and a lower than normal millage rate can be negotiated for a period of up to 30 years with a fixed rate. In addition, a Special Source Revenue Credit (SSRC) can be added to further reduce property taxes. (South Carolina Department of Revenue, Tax Incentives for Economic Development, 2011 Edition).

FUTURE PROJECTIONS

The BCDCOG uses state population projections in its computerized travel demand model, which is a tool that simulates existing and future travel volumes on area roads. This data can then be adjusted to analyze a variety of land use and transportation scenarios, typically household and employment data.

Based on this data, Hanahan is projected to add an additional 4,082 jobs to its economy by 2035. In comparison, the City is projected to add approximately 6,300 people to its current population during the same time period. Without taking into account growth in the working age population, the City would need to plan for an additional 2,200 jobs to keep up with its population growth.

COMMUNITY FACILITIES

Community Facilities are the facilities available to residents of the community, including schools, library resources, and accessible recreational and health facilities. Other community facilities discussed in this section include services related to public safety and infrastructure, such as police and fire protection, emergency medical services, and utilities. Adequate access to these facilities has a direct effect on the quality of life for residents and are, therefore, essential to the vitality of a community.

The Community Facilities element of this plan looks at existing conditions of these facilities available to the residents of Hanahan, thereby allowing the Planning Commission and City Council the ability to make informed decisions regarding the need for additional facilities, as well as the potential impact of future development on existing facilities.

Public Facilities

EDUCATIONAL FACILITIES

The Berkeley County School System operates three public schools in Hanahan; one Elementary School, one Middle School and one High School. In addition to a variety of daycare and preschool institutions, there is one private school and an adult education center.

TABLE CF1: EDUCATIONAL FACILITIES IN HANAHAN

Facility	Grade	2010-2011 Enrollment
Hanahan Public Schools		
Hanahan Elementary School	PK-4th grade	996
Hanahan Middle School	5th-8th grade	778
Hanahan High School	9th-12th grade	942
Hanahan Private Schools		
Divine Redeemer Catholic School	K-8th grade	175
Other Schools Serving Hanahan Residents		
Goose Creek Primary School	K4-2 nd grade	943
Sedgefield Middle School	6 th -8 th grade	899
Goose Creek High School	9 th -12 th grade	1,645

Source(s): Berkeley County School District, SC Department of Education

Service areas of the Berkeley County School District are such that students who reside in five Hanahan neighborhoods (Briarwood Phase II, Carlton Place, The Reserve, Hanahan Plantation, and Kensington) attend Goose Creek Primary School, Sedgefield Middle School, and Goose Creek High School. Parents and local officials would prefer for school attendance boundaries to follow the City boundary so that all children residing in the City would attend schools in the City.

Although not located in the City of Hanahan, there are other private schools available to Hanahan residents, such as Northwood Academy and Ferndale Baptist School.

While there aren't any post-secondary schools directly in Hanahan, residents have access to a variety of post-secondary education centers throughout the Region. The one in closest proximity to Hanahan residents and located just outside of the City limits is the main campus of Trident Technical College, at 7000 Rivers Avenue. Other higher education facilities in the Region include the College of Charleston, the Citadel, and the Medical University of South Carolina.

The Berkeley County School District also offers adults and other community members the opportunities for continued education. One of the two adult education centers, Fishburne is located in Hanahan, and offers English as a second language (ESL) and family literacy classes, the opportunity to obtain a General Equivalency Diploma (GED), and professional certifications, training, and testing.

Indicative of the population growth, Hanahan schools have seen a 32 percent increase (2000-2001 enrollment was 2,061, 2010-2011 enrollment was 2,716) in enrollment numbers over the last decade. To better accommodate this growth, there are plans for a future elementary school near Tanner Plantation. In addition, once construction is completed on the Daniel Island High School, students will no longer be bused from the Cainhoy area to Hanahan High School, alleviating overcrowding there as well.

MUNICIPAL COMPLEX

City Hall is located at 1255 Yeamans Hall Road and houses the municipal court, City Council chambers, the offices of City Staff and officials administering building permitting, zoning, accounting, etc., and the Hanahan Police Department. Hanahan Fire Station No. 1 is also on this property.

LIBRARY RESOURCES

The Hanahan Library, a branch in the Berkeley County Library System, is located less than ½ mile southwest of the City's Municipal Complex. The 5,000 square foot facility is open six days a week and provides a full range of services to the citizens of Hanahan, including story time and summer reading programs for Hanahan's youth.

Funding for the Hanahan Library and the Berkeley County Library System is provided primarily by the County, with a small amount allocated to the system by the State.

The City will soon have a new 6,000 square foot library, with room for expansion. Berkeley County Council designated \$1.4 million from 2009 capital-improvement bonds for a new Hanahan library, and purchased the 2.4-acre tract from Charleston Water System last September. The new library will be located at the southeast corner of Hanahan Road and Murray Drive intersection.



RECREATIONAL FACILITIES



The City of Hanahan Recreational Department offers residents a variety of locations and opportunities for recreation, which total ten (10) baseball/softball fields, a full size soccer field, a football field, (3) children's playgrounds, several tennis courts, two (2) gymnasiums, Bettis Boat Landing,

two (2) passive parks, numerous picnic shelters, and considerable acres of green and open space.

Also available is the Hanahan Senior Citizen Center, a senior facility and program center that offers Hanahan seniors a variety of activities and programs, including line dancing, bingo, billiards and various levels of exercise classes. The Senior Center is located next to the Recreation Department Gym on Mabeline Road. The City is currently expanding the Senior Center with a 2,600 square foot addition with an anticipated completion date of May 2012. The \$500,000 expansion is being funded with a \$350,000 grant from the Lieutenant Governor's Office on Aging and \$150,000 from tax increment financing (TIF) district money. The extra space will allow more programs for the Senior Center's more than 400 members.

Construction is expected to begin around the Spring of 2012 to add a 500-seat amphitheater to the Hanahan City Park, located behind the Hanahan Senior Citizen Center. This area currently consists of park benches and the walking trail along the Goose Creek Reservoir.

Needs that have been identified by the Recreation Department include more soccer fields and multi-purpose fields, enhancements to existing facilities, exercise facilities for the Senior Center, and the capability to interconnect all of Hanahan with a trail system.

To meet the recreational needs for residents in the Tanner Plantation area, there are 42 acres located on Williams Lane that the City intends to develop as a recreational facility.

Table CF2 provides a complete list of existing recreational facilities and locations in the City of Hanahan. In addition, the subsequent map, Map CF1, displays the location of Hanahan's public facilities.

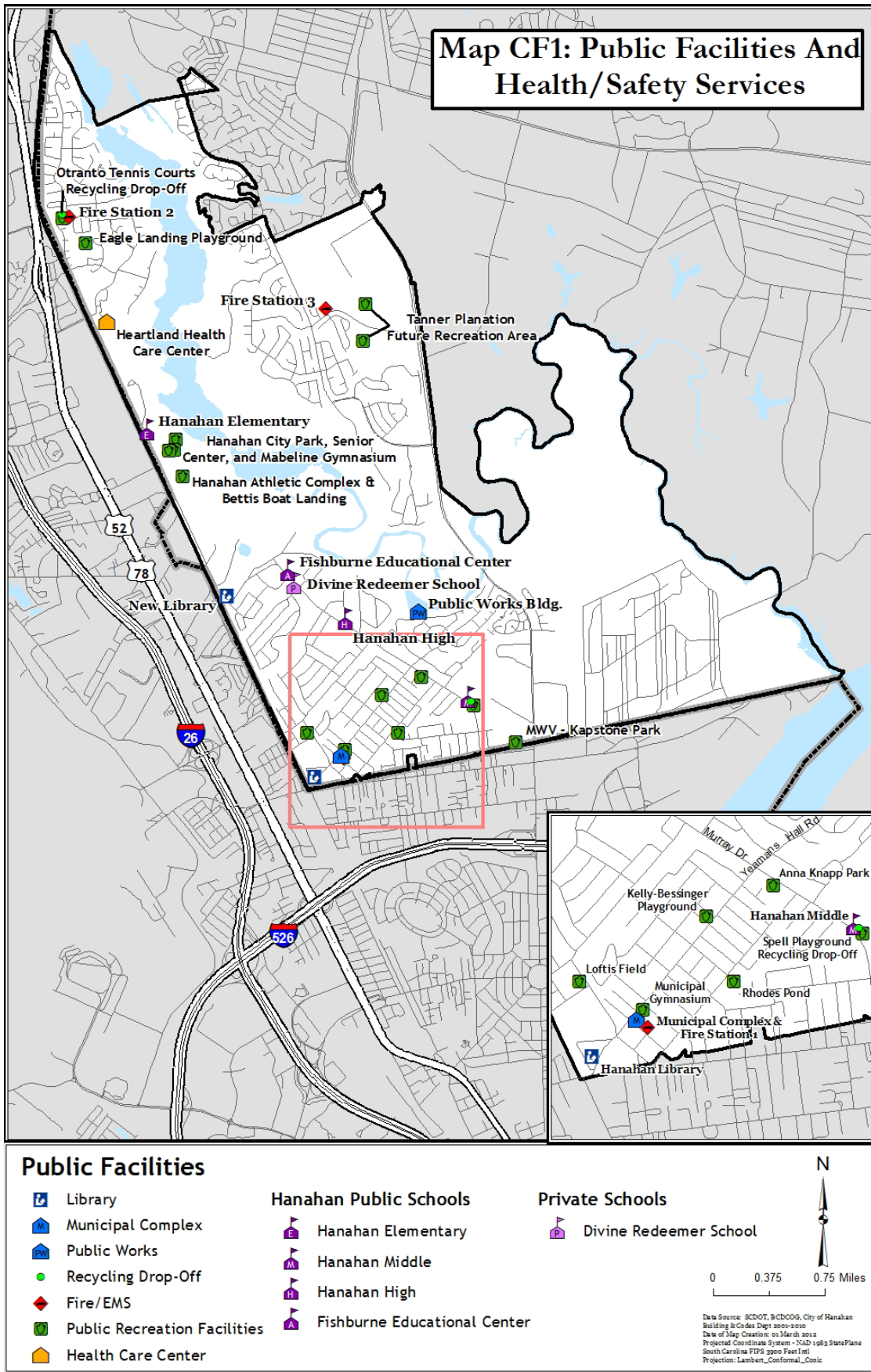


GOOSE CREEK RESERVOIR

TABLE CF2: HANAHAN RECREATIONAL FACILITIES

Recreational Facility	Type of Facility	Location
Hanahan Athletic Complex	Picnic shelter, 7 baseball/softball fields, a soccer field, and Bettis Boat Landing	Located on Railroad Avenue
Eagle Landing Playground	Children's playground and open/green space	Eagle Landing Subdivision
Kelly-Bessinger Playground	Children's Playground and Shelters	Located on Yeamans Hall Road
Spell Playground	Children's Playground, 2 tennis courts, baseball field	Located on Murray Drive across from Hanahan Middle School
Otranto Tennis Courts	Tennis courts	Otranto Subdivision
Loftis Field	Baseball Field	Loftis Road
Rhodes Pond	Passive park, park benches, lighted fountain	Dickson Avenue
Hanahan City Park	Park benches and a walking trail along the Goose Creek Reservoir	Behind Hanahan Senior Citizen Center
Anna Knapp Park	Passive park with picnic pavilion	Located on Murray Drive
Tanner Plantation	42 acres – currently undeveloped with plans to develop as recreational facilities	Located on Williams Lane
Mead Westvaco Park	Hanahan shares this facility with the City of North Charleston. Hanahan's portion of the site includes 2 baseball fields and a football field	Located on the corner of North Rhett and Remount Road
Hanahan Senior Citizens Center	Currently expanding this facility with a 2,600 sq. ft. addition to be completed in May	Located at 3102 Mabeline Road
Mabeline Gymnasium	City of Hanahan Recreational Department administrative offices/double gymnasium	Located at 3100 Mabeline Road
Hanahan Municipal Gymnasium	Basketball, volleyball, wrestling	Located on Yeamans Hall Road next to Municipal Complex

Source: City of Hanahan Recreation and Parks Department



Health and Safety

SOLID WASTE MANAGEMENT

The City of Hanahan Public Works Department consists of 16 employees who provide weekly trash pick-up service to Hanahan households. All solid waste is transported to Berkeley County Municipal Waste Landfill operated by BCWSA, and located on Highway 52 in Moncks Corner.

The Public Works Department currently has 6 garbage trucks, 7 pick-up trucks and 2 flatbeds, all of which regularly undergo preventative maintenance.

Recycling is an important component of solid waste management. BCWSA operates a recycling program at its Landfill, and the City has 2 drop-off facilities located in Otranto across from Hanahan Fire Station I on South Basilica Avenue, and on Murray Drive across from Hanahan Middle School. Both locations accept newspaper, glass, and aluminum cans. The Otranto location also accepts cardboard. The City is working with Berkeley County to add a third drop-off site to serve residents in the Tanner Plantation area. Berkeley County recently began offering a curbside recycling program to City of Hanahan residents. The program is voluntary and the cost for pickup is \$2.50 / month, which can be paid monthly, quarterly, or annually to Republic Services. The following approved recyclable materials can be comingled:

- **Plastics numbered 1-7;**
- **Aluminum and steel cans, including aluminum foil;**
- **Glass bottles and jars;**
- **Oil bottles with lids (motor oil must be free of gasoline/diesel); and**
- **Paper products, to include corrugated cardboard (no was finish).**

POLICE PROTECTION

The City of Hanahan Police Department consists of 34 sworn officers and 10 civilian employees, including animal control. The Department is divided into three (3) divisions: Operations, Investigations, and Support. The City is divided into four (4) zones, with 1 officer/zone working 12-hour shifts. The Department currently has 27 patrol cars, most of them new or in good condition.

The Hanahan Police Department is transitioning to a more community-focused, crime prevention strategy, which includes among other initiatives, crime-prevention notices hung on doors. In addition to its standard provisions, the City of Hanahan Police Department provides additional special services which include the following:

- **Reserve Officer Program (4 part-time volunteers)**
- **Victim Services**
- **Explorers (Youth) Program**
- **Citizen Police Academy**
- **School Resource Officers (2)**



FIRE PROTECTION AND EMERGENCY SERVICES

The City dispatches 31 firefighters from its three (3) fire stations to protect Hanahan citizens and their property. Fire Station No. 1 is located next to the Municipal Complex and serves Central Hanahan; Fire Station No. 2 is located on South Basilica Avenue in Otranto Subdivision; and Fire Station No. 3 is located on Williams Lane in Tanner Plantation.

The ISO (Insurance Services Office, Inc.) is the leading supplier of statistical, actuarial, and underwriting information for and about the property/casualty insurance industry. Based on such factors as water supply, hydrant location and quality of the fire department, the ISO fire insurance ratings for a community are the foundation on which most insurers build their coverage programs. The ISO ratings range from 1 to 10, with 1 being perfect. With the City's three (3) stations, the Fire Department has a response time of 3-7 minutes, and maintains an ISO rating of "3".

Hanahan Fire Department (HFD) employs a total of nine vehicles, including five pumpers and one aerial. The Department is currently in need of two (2) additional pumpers.

In addition to fire and rescue response and control, the staff of the HFD puts an emphasis on fire prevention, public education, risk reduction, and hazard abatement. HFD also responds to other emergency



situations including vehicle extrications, medical emergencies, hazardous materials incidents, high-angle rescue, structural collapse, swift water rescue, and any natural or man-made disasters. Contracting with Berkeley County Emergency Medical Services (EMS) to provide emergency care, the City currently has 5 paramedic / firefighter positions.

Berkeley County EMS can deliver Hanahan citizens to any one of a number of premier medical facilities in close proximity, including Roper St. Francis and the Medical University of South Carolina.

SOCIAL SERVICES

Hanahan residents have access to numerous organizations whose programs are dedicated to improving people's lives and positively impacting the community. The Dream Center, opened by Seacoast Church, provides many needed services including emergency food assistance and a mobile medical health clinic. Helping Hands of Goose Creek (HHGC), a local food pantry established in 1989 by the Trident United Way, serves the needs of south Berkeley County. Carolina Youth Development Center, which operates the Callen-Lacey Center for Children, is the only emergency shelter serving children in Berkeley County and provides a secure, protective, and nurturing environment for more than one thousand abused, abandoned and neglected children.

Other churches and philanthropic organizations in the area are also ardently dedicated to a wide range of compassionate ministries, including food pantries and youth outreach programs. Although not exclusive to Hanahan's residents, these great social service programs (such as those provided by Trident United Way, Berkeley Community Mental Health Center, Berkeley County Department of Social Services, etc.) certainly benefit Hanahan residents when necessary.

EMERGENCY PREPAREDNESS

Emergency preparedness refers to recognizing an impending hazard and having a plan in place to protect residents of the community. As a community on the coastline, the more common hazard associated with this area are hurricanes.

The *Berkeley Dorchester Hazard Mitigation Plan* (BDHMP), which was updated in 2010, addresses the tasking and responsibilities of individuals and agencies for various types and phases of disaster emergencies. Individual sections included within the Plan include direct response procedures for the emergency operation center, communications, public information, fire and rescue services, medical services, transportation and evacuation of residents.

Based on the risks and level of vulnerability identified, the City of Hanahan has taken protective measures to help mitigate storm damage and flooding from hurricanes and tropical storms. Measures include building codes, ordinances, and City stormwater management regulations, all of which improve building quality and improve hazard resistance of infrastructure. In the tables on the following pages are the proposed projects/programs/actions to be undertaken by the City of Hanahan in an effort to achieve goals and objectives identified through the BDHMP. Priority rankings, ranging from High (1) to Low (4), have been assigned to each activity and a timeframe for completion, either Short-Term (1-3 yrs) or Long-Term (3-5 yrs) has been established.



Type	Activity	Lead Agency	Funding Source	Goal(s) Addressed	Priority (1 highest to 4 lowest)	Status	Time frame
PA	City adopted and enforced Jan. 1, 2004, International series Building-related and Fire codes and the floodplain management improvement clause regulation	Building & Codes	General Fund	Minimize damage from future earthquakes, floods, hurricanes, and protect the lives of citizens from natural and man-made hazards	1	Completed	0
PA	Continue to provide coordination of City stormwater management regulations	Building & Codes	General Fund and Storm-water Fee	Minimize future flood damage; improve water quality; educate citizens regarding steps to take to reduce vulnerabilities; improve hazard resistance of infrastructure; reduce vulnerability of infrastructure to natural and man-made hazards	1	Completed	0
PA	Continue enforcement of zoning regulations, subdivision and land development regulations	Planning	General Fund	Minimize future flood damage; preserve environmental resources; promote long-term economic prosperity; preserve open space; encourage recreational activities; minimize future hurricane damage; minimize future earthquake damage; protecting the lives of our citizens from natural and man-made hazards	1	Completed	0
PA	Conduct or co-sponsor training workshops regarding the International Building-related, flood, and Fire Prevention Codes and Regulations if there is interest in these workshops	Building & Codes	General Fund/self-supporting Through workshop revenues	vulnerability to natural hazards and steps to reduce vulnerability; minimize future flood damage; minimize future earthquake damage; improve hazard resistance of infrastructure; minimize hurricane damage	1	Deferred	S
PA	Continue providing information to citizens regarding none structural mitigation actions	Emergency Preparedness	General Fund/ Grant Funding	Educating citizens regarding vulnerability to natural hazards and steps to reduce vulnerability; minimize future flood damage; minimize future earthquake damage	2	Completed	0
PA	Continue enforcing regulations requiring new manufactured homes brought into the City of Hanahan to be constructed to wind zone 2 requirements as required per State Law	Building & Codes	General Fund	Minimize future hurricane damages; protecting lives of citizens from natural and man-made hazards	1	Completed	0

TYPE: (PA); Preventive Activities, (PP); Property Protection Activities, (ES); Emergency Services Activities (GIS) Geographic Information Systems.



Type	Activity	Lead Agency	Funding Source	Goal(s) Addressed	Priority (1 highest to 4 lowest)	Status	Time frame
PA	Continue to prohibit the installation of new manufactured homes “V” flood zones and requiring manufacture homes installed in “A” flood zones to be on permanent foundations.	Building & Codes	General Fund	Minimize future flood damage; minimize future earthquake damage; minimize future hurricane damage; protecting lives of citizens from natural and man-made hazards	1	Completed	0
PP	Promote the use of voluntary standards for single-family residences to exceed minimal building code requirements for wind and seismic design	Building & Codes	General Fund	Minimize future flood damage; minimize future damage; minimize future hurricane damage; preserve environmental resources; educating citizens regarding vulnerability to hazards and steps to reduce vulnerability	2	Completed	0
PP	Promote standards for existing homes to be retrofitted to that exceed minimal codes	Building & Codes	General Fund	Reduce existing flood damage; preserve environmental resources; minimize future hurricane damages; minimize future earthquake damages; educating citizens regarding vulnerability to hazards and steps to reduce vulnerability	2	Completed	0
PP	Continue providing information to citizens regarding hazard safe interior rooms	Emergency Preparedness	General Fund	Minimize future tornado-related loss of life; Educating citizens regarding vulnerability to hazards and steps which may reduce vulnerability	2	Completed	0
PP	Work toward eliminating flooding in existing subdivisions	Building & Codes	General Fund	Minimize future loss	3	Unchanged / Efforts are ongoing	L
PP	Continue demolishing structures posing a threat to public safety, considering location within the special flood hazard area as a prioritization factor	Building & Codes	General Fund	Reduce existing flood damages; promote long-term economic prosperity; encourage recreational activities; minimize future hurricane damage; minimize future flood damage; reducing vulnerability of infrastructure to hazards	3	Completed	0

TYPE: (PA); Preventive Activities, (PP); Property Protection Activities, (ES); Emergency Services Activities (GIS) Geographic Information Systems.

Type	Activity	Lead Agency	Funding Source	Goal(s) Addressed	Priority (1 highest to 4 lowest)	Status	Time frame
PP	Seek funding for retrofitting, demolishing or relocating repetitively flooded properties if suitable candidates can be identified	Building & Codes	General Fund	Reduce existing flood damage; minimize future flood damage; preserve historic building inventory; reducing vulnerability of built environment to hazards	1	Unchanged / The City continues to seek funding and completes as funding becomes available.	L
PP	Distribute a brochure on protecting boats from damages during hurricanes to interested citizens through expos, offices, marinas and boat dealers	Emergency Preparedness	General Fund	Educating citizens regarding steps to take to reduce hazard vulnerability; minimize future hurricane damage; encourage recreational activities	3	Deferred	S
GIS	Develop and maintain storm drainage inventory maps and database	Building & Codes	General Fund & Stormwater Fee	Reduce existing flood damage, minimize future flood drainage and improve water quality.	2	Deferred	S
ES	Continue hazardous material training	Fire Department	General Fund & Grant Funding	Protecting lives of our citizens from man-made hazards; minimize future hazardous materials incidents; preserve environmental resources; improve hazard resistance of infrastructure; assessing vulnerability to man-made hazards; establishing cooperative relationships between public, private and non-profit sectors to enhance response for hazard events.	1	Completed	0
ES	Continue Terrorist Response Training	Police Department	Grant Funding	Protecting lives of our citizens from man-made hazards; minimize future terrorist activity incidents; preserve environmental resources; improve hazard resistance of infrastructure; assessing vulnerability to man-made hazards; establishing cooperative relationship between public, private and non-profit sectors to enhance response for hazard events; promote long-term economic prosperity.	1	Completed	0

TYPE: (PA); Preventive Activities, (PP); Property Protection Activities, (ES); Emergency Services Activities (GIS) Geographic Information Systems.

Source: Berkeley Dorchester Hazard Mitigation Plan, 2010

In addition, the Plan tasks Berkeley County government with responsibility for direction of combined emergency operations in the instance that all municipal resources have been exhausted.

Berkeley County has a Community Emergency Response Training Program and is a member of the National Weather Service Storm Ready Communities.

Public Infrastructure

WATER SUPPLY AND TREATMENT

Charleston Water System (CWS), formally known as the Commissioners of Public Works (CPW), provides potable water to Hanahan households and the Greater Charleston area. The largest treatment plant in the State, the Hanahan Water Treatment Plant is located on a 60-acre site on the banks of the Goose Creek Reservoir, which served as Charleston Water System's primary source of raw drinking water for much of the 1900's.

Founded in 1902, the plant now treats water taken from the Edisto River and the Bushy Park Reservoir and delivers it to approximately 400,000 customers in the Greater Charleston area through 1,700 miles of water mains. Although the site has been upgraded with new technology and equipment over the last century, the original pump buildings still house plant operations.

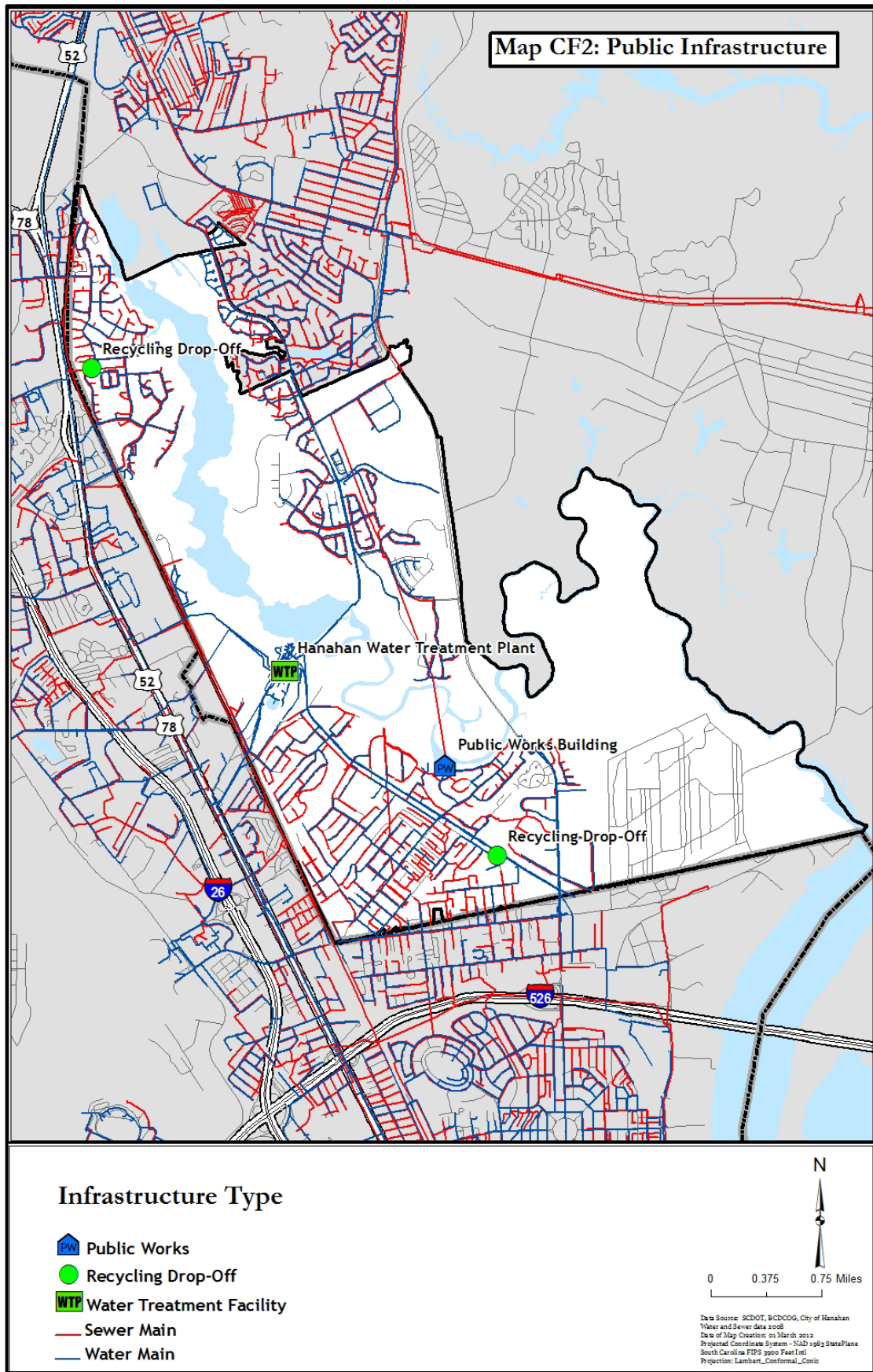
The Hanahan Plant meets or exceeds all regulatory requirements and is a member of the *Partnership for Safe Water*. Although the Plant has a permitted capacity to produce 118 million gallons per day (mgd), it produces an average of 55 mgd.

SEWERAGE SYSTEM AND WASTEWATER TREATMENT

The City of Hanahan owned and operated its own wastewater treatment plant (WWTP) until 2000, when it was sold to Berkeley County Water and Sanitation Authority (BCWSA). At this time BCWSA diverted flow from the Hanahan system to Berkeley County's Lower Berkeley WWTP on Red Bank Road near the Naval Weapons Station. The Lower Berkeley WWTP is capable of treating 22.5 million gallons of wastewater each day. The process removes pollutants from the wastewater and discharges the treated water into the Cooper River.

In cases where public water and sewer are not provided to properties within the City, private wells and septic systems are utilized. South Carolina's Department of Health and Environmental Control regulates and permits private wastewater systems.

The subsequent map, Map CF2, displays the water and sewer lines serving the City of Hanahan.



STORMWATER

Stormwater refers to the water that originates during precipitation events and is not absorbed into the ground. Stormwater is of concern for two main issues: one related to the volume and timing of runoff water (flood control and water supplies) and the other related to potential contaminants that the water is carrying, i.e. water pollution.

Therefore, managing the quality and quantity of stormwater is important in order to protect, maintain and enhance water quality, the environment, and the health and safety of the community.

The Clean Water Act (CWA), established by the Environmental Protection Agency (EPA) in 1972, creates the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Pursuant to the CWA, the City of Hanahan adopted its Stormwater Management Ordinance in 2007.

The Stormwater Management Ordinance establishes requirements and procedures that:

- **minimize property damage and control the potential adverse effects of increased stormwater runoff and related pollutant loads associated with both future development and existing developed land;**
- **reduce the effects of development on land and stream channel erosion;**
- **attain and maintain water quality standards;**
- **enhance the local environment associated with the drainage system;**
- **reduce local flooding;**
- **maintain to the maximum extent practical pre-developed runoff characteristics of the area in terms of flow rate, volume and pollutant concentration;**
- **facilitate economic development while mitigating associated pollutant, flooding, erosion, and drainage impacts; and**
- **direct the development and implementation of a Stormwater Management Program (SWMP)**

Impact Fees

Hanahan is one of many municipalities in South Carolina that uses impact fees in accordance with the South Carolina Development Impact Fee Act signed into law on June 30, 1999. Impact fees are a one-time assessment applied to off-set the additional public service costs of new development. Funds collected from impact fees pay for capital improvements that will directly benefit the new development, including the provision of water and wastewater services, sanitation and recycling, roads and bridges, stormwater and flood control, public safety, street lighting, parks, libraries, open spaces and recreation areas. Impact fees may also be used to finance the construction of facilities or purchase of land or equipment that are needed to provide these services.

Hanahan requires the payment of impact fees for the construction of residential structures and commercial establishments. New developments are assessed impact fees as follows:

- **Single-family residential structures are assessed an impact fee of \$799.61;**
- **Multi-family residential structures are assessed an impact fee of \$1,577.63 per unit; and**
- **Commercial structures are assessed an impact fee of \$0.44 per square foot.**

By utilizing impact fees, municipalities can guarantee that infrastructure and municipal services will sufficiently accommodate future development without placing an undue burden on the entirety of the community.

NATURAL RESOURCES

Natural resources encompass any naturally occurring element in the environment, such as climate, water features, soil types, plant and animal species, and more. A community's natural resources are a vital component to the comprehensive planning process because they play an important role in improving the quality of life for residents. Therefore, the community should identify, maintain, and preserve natural resources that are critical to their survival and enjoyment. Because some elements of the natural environment attract growth and development, it is important to determine the appropriateness for future development so as not to compromise the integrity of the natural environment.

CLIMATE

One of the most attractive natural features characterizing the Hanahan area is its climate. Winters are commonly mild while spring, summer, and fall are all typically well suited to outdoor recreation and outdoor plant growth. The climate is considered "temperate to subtropical," with an average annual "high" temperature of 73.3 degrees Fahrenheit. Hanahan enjoys approximately 230 days of sunshine each year and an average growing season lasting 294 days.

According to the Southeast Regional Climate Center, precipitation averages approximately 50.14 inches per year and the first freeze generally appears in early December, with the last freeze in late February. Temperatures less than 20 degrees Fahrenheit rarely occur.

One of the more serious weather concerns to Hanahan is the prevalence of tropical storms and hurricanes. The hurricane season lasts from late summer to the end of November. Tropical storms and hurricanes bring threats of high winds, intense rainfall, and storm surge. Hanahan's proximity to open water, tidally influenced rivers, low-lying areas, and flat terrain make it vulnerable. The last major hurricane to affect the tri-county area was Hugo, a category 4 hurricane which made landfall in September 1989.

The *Berkeley Dorchester Hazard Mitigation Plan (BDHMP)*¹, which was updated in 2010, included a summary of the level of vulnerability for each jurisdiction. These were based upon historical occurrences of natural hazards and are categorized as High (H), Moderate (M), Somewhat (S), and Low (L). High meaning 75 to 100% potential loss of the affected structures, Moderate 50 to 75%, Somewhat 25 to 50%, and Low 0 to 25%, potential loss of affected structures.

Table NR1 below illustrates the vulnerability levels for the City of Hanahan.

TABLE NR1: HANAHAN - LEVEL OF VULNERABILITY TO NATURAL HAZARDS

Floods	Hurricane / Tropical Storm	Tornado	Winter Storm	Thunder Storm	Hail	Wildfire	Drought	Earthquake/ Liquefaction	Dam Failure
M	H	L	L	L	M	L	L	S	L

Because of these risks, the City has taken protective measures to help mitigate storm damage and flooding from hurricanes and tropical storms. Measures include building codes, ordinances, and City stormwater management regulations, all of which improve building quality and improve hazard resistance of infrastructure.

¹ The Berkeley Dorchester Hazard Mitigation Plan can be found at http://www.bcdco.com/files/Hazard/BDHMP_Final121410.pdf

LAND

GEOLOGIC HAZARDS

Earthquakes are another natural disaster that poses a threat to Hanahan residents. Berkeley County is in close proximity to several known earthquake faults; all part of the most active Middleton Place-Summerville seismic zone in the Coastal Plain of South Carolina. Although the Gants Fault is the only known fault located in Berkeley County², much of the County is in a liquefaction zone, which is the process of ground water moving to the surface and softening the soil. In fact, liquefaction features from the 1886 earthquake are still evident in the Goose Creek – Hanahan planning area of the County, putting all of Hanahan within the liquefaction zone, according to South Carolina Department of Natural Resources (SCDNR).



Charleston, South Carolina: Damage from the Earthquake of 1886

The most severe earthquake recorded in South Carolina history occurred August 31, 1886 at a magnitude of 7.3. Centered at Middleton Place, it is estimated that this earthquake was at a higher intensity than any other earthquake recorded east of the Mississippi River. Experts have suggested that an earthquake of a magnitude of 5.0 is likely to occur in the next 100 years.

The South Carolina Seismic Network, operated by the University of South Carolina, gathers data which includes earthquake epicenter locations. Data collected for the period from 1698 to 2007 indicated that 48 events have had their epicenter in Berkeley County, five of which had magnitudes greater than three (most recent one was in 2003), which are considered as minor or light earthquakes.³

South Carolina Emergency Management Division has prepared a disaster plan, which can be found on their website: http://www.scemd.org/Plans/eq_plan.html

Map NR1 on the following page illustrates more specifically earthquakes that have had their epicenter within Hanahan's municipal boundaries, according to relative magnitude.

² Berkeley County Comprehensive Plan, 2010

³ Berkeley-Dorchester Hazard Mitigation Plan, 2010

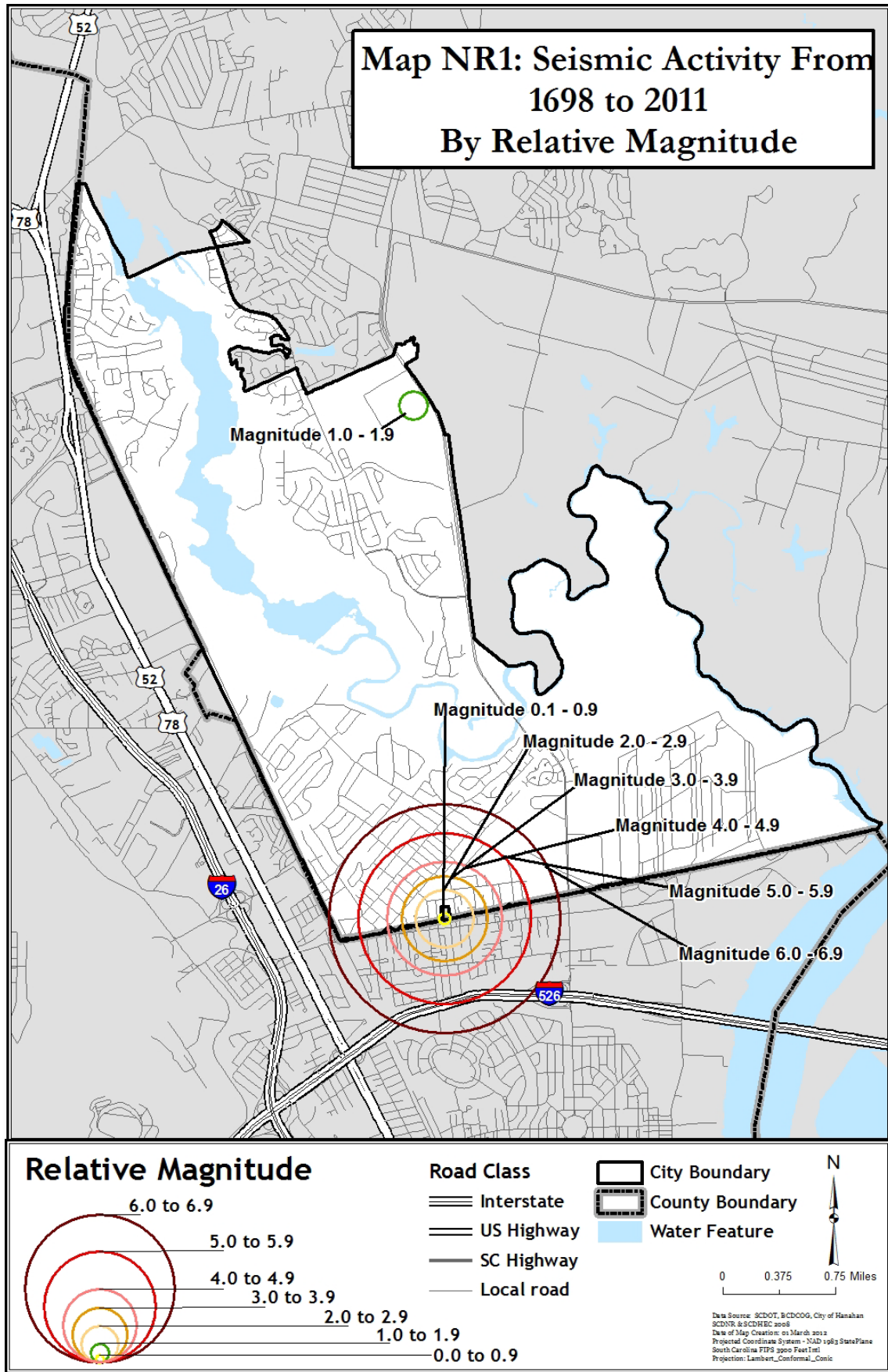


TABLE NR2: HANAHAN SOIL TYPES

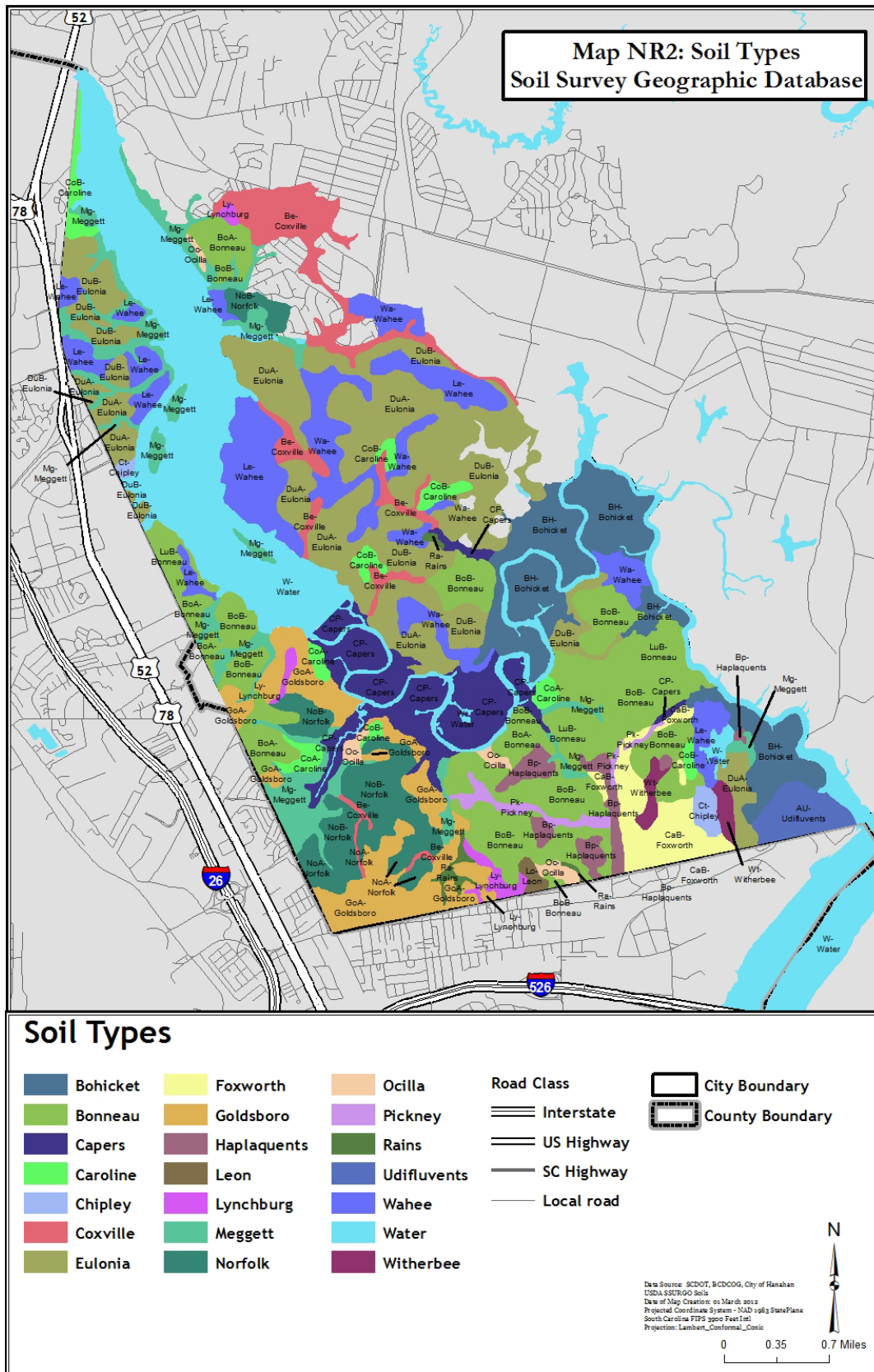
Soil Name	Drainage	Use Suitability
Aquic Udifluvents	Well-drained	Suitable for crops, pastureland and woodland; not suitable for most uses related to dwellings and other structures
Bohicket	Poor	Suitable for wetland wildlife habitat; not suitable for most uses related to dwellings and other structures
Bonneau	Well-drained	Suitable for crops, woodland and pastureland and most uses related to dwellings and other structures
Capers	Poor	Suitable for wetland wildlife habitat, somewhat suitable for woodland and pastureland; not suitable for crops and uses related to dwellings and other structures
Caroline	Well-drained	Suitable for woodland, pastureland and some crops; not suitable for most uses related to dwellings and other structures
Chipley	Poor	Suitable for crops, pastureland, woodland, and most uses related to dwellings and other structures
Coxville	Poor	Suitable for woodland, some pastureland and crops; not suitable for most uses related to dwellings and other structures
Eulonia	Well-drained	Suitable for crops, pastureland, woodland, and most uses related to dwellings and other structures
Foxworth	Well-drained	Suitable for woodland, some pastureland and crops; somewhat suitable for most uses related to dwellings and other structures
Goldsboro	Poor	Suitable for woodland, pastureland, some crops, and most uses related to dwellings and other structures
Haplaquents	Well-drained	Suitable for pastureland; not suitable for crops and most uses related to dwellings and other structures
Leon	Poor	Suitable for woodland, pastureland, some crops, and most uses related to dwellings and other structures
Lynchburg	Poor	Suitable for woodland, pastureland and some crops; poorly suitable for most uses related to dwellings and other structures
Meggett	Poor	Suitable for woodland, some pastureland and some crops not suitable for most uses related to dwellings and other structures
Norfolk	Well-drained	Suitable for crops, some woodland, and most uses related to dwellings and other structures
Ocilla	Poor	Suitable for woodland, some crops and uses related to dwellings and other structures
Pickney	Poor	Suitable for native vegetation, some pastureland and crops; poorly suitable for dwellings and other structures
Rains	Poor	Suitable for woodland, pastureland and some crops; poorly suitable for most uses related to dwellings and other structures
Wahee	Poor	Suitable for woodland, some crops and pastureland; poorly suitable for most uses related to dwellings and other structures
Witherbee	Poor	Suitable for native vegetation and woodland, some crops and pastureland; moderately suitable for most uses related to dwellings and other structures

USDA Natural Resources Conservation Science, Soil Survey

SOILS

Soil is a three-dimensional body on the surface of the earth that, in concert with air and water, is capable of supporting life. It is formed by the geography and topography of an area, and can be divided into numerous associations and types based on its formation and characteristics. By identifying and understanding the types of soil in an area and their suitability and limitations for various land uses, decisions regarding land use and development can be made more informatively, and this valuable natural resource can be preserved.

Table NR2 on the previous page lists the soil types and summarizes the limitations and use suitability of each type. Map NR2 displays the types and locations of soils identified in Hanahan.



HYDROLOGY

WATERSHEDS

A watershed is an area of land that drains down slope until it reaches a common point, that point being the lowest point within the watershed. These low points are bodies of water such as rivers and lakes. This means that every stream, brook, tributary, and river that we see will eventually reach a larger body of water within its associated watershed.

Watersheds are extremely important in that they often provide drinking water, recreational opportunities, and scenic value. Therefore, the protection of watersheds is vital to storm water and water quality management, as well as quality of life. The replacement of natural vegetation with impervious surfaces such as roads, roof tops and parking lots increase runoff, which leads to contamination of surface water and water supply.

The City of Hanahan lies entirely within the Goose Creek watershed, which is part of the Cooper River Basin. The Cooper River Basin encompasses 8 watersheds and a total of 471.2 stream miles, together with more than 60,000 acres of lake waters and more than 13,000 acres of estuarine areas.⁴ The Cooper River accepts drainage from the Goose Creek, Back River, and Wando River before flowing into the Charleston Harbor and the Atlantic Ocean.



Within Hanahan the Creek is dammed, creating the Goose Creek Reservoir. All of these aforementioned water sources have been classified as fresh water except where Turkey Creek flows into the Goose Creek River just below the dam, which has been classified as tidal saltwater.

The Goose Creek watershed totals 44.1 stream miles and has 589.7 acres of lakes and reservoirs. Land cover within the Goose Creek watershed includes: 41.7% urban land, 45.0% forested land, 4.5% non-forested wetland, 2.6% scrub/shrub land, 2.6% agricultural land, 2.1% forested wetland, 1.4% water, and 0.1% barren land.⁵

GROUNDWATER

Groundwater is a valuable natural resource found beneath the earth's surface and is a source of fresh water for a variety of uses, most importantly drinking water. Groundwater is contained within and extracted from an aquifer, which is an underground layer of water absorbent rock or other loose materials (gravel, sand or silt) capable of providing economically viable amounts of water to wells or springs.

According to the USGS Ground-Water-Level Annual Statistics for the Nation, Hanahan is located within the Middendorf Formation local aquifer, which is part of the larger Southeastern Coastal Plain Aquifer System.

The Middendorf aquifer stretches from the upper coastal plain beyond the Atlantic coastline where it is buried by younger Coastal Plain sediments at maximum depths of over 3000 feet. Middendorf sediments are comprised of fine to coarse quartzite and arkosic sands, with sporadic interbeds of sandy clays, kaolins, and gravel.

⁴ SCDHEC, Bureau of Water

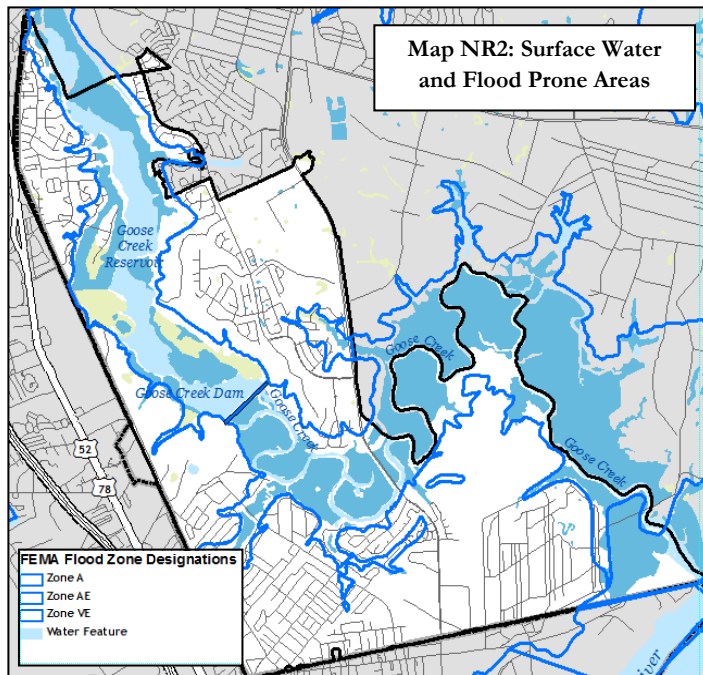
⁵ BCDCOG 208 Water Quality Management Plan Update, 2011

In 2001, SCDHEC designated Charleston, Berkeley and Dorchester Counties as the Trident Capacity Use Area in accordance with the *Groundwater Use and Reporting Act*, Title 49, Section 5 of the S.C. Code of Laws. This designation was made after DHEC's comprehensive groundwater investigations in the Trident area found progressive groundwater level declines, salt-water intrusion, and an increasing demand on the groundwater resource as a result of rapid industrial and commercial growth. For example, the Middendorf aquifer showed signs of declining groundwater levels from the predevelopment level of 126 feet above mean sea level to approximately 56 feet below sea level, a total decline of more than 180 feet.⁶

As a designated Capacity Use Area, anyone who withdraws 3 million gallons or more in any one month must receive a permit from DHEC. In addition, the amounts of groundwater withdrawn are reported to DHEC annually so that usage can be monitored. Regulatory requirements such as these will help to ensure that this limited and valuable resource is available for everyone by utilizing best management practices.

SURFACE WATER, FLOODPLAIN AND WETLANDS PROTECTION

Surface water is water that flows on the ground and collects in streams, rivers, lakes, wetlands and the ocean. Primary uses of surface water include drinking water, irrigation uses, and recreational uses.



A floodplain is the land immediately adjacent to the stream, river, etc., that is periodically inundated with water after a flood. Map NR2 illustrates surface water and floodplain areas in Hanahan. Floodplains contain wetlands which function to slow down the flow of water and to act as a filter.

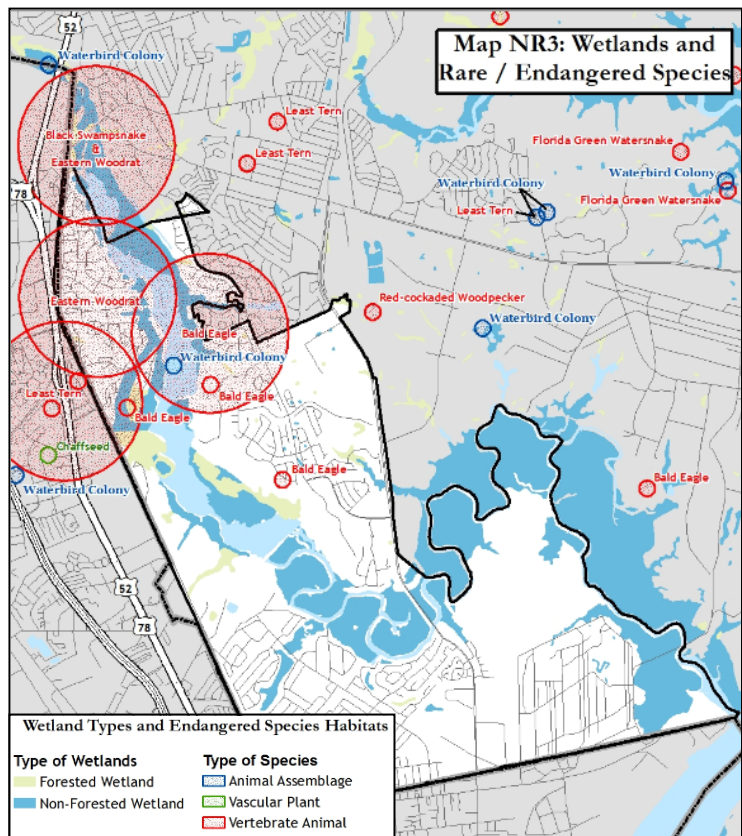
Wetlands are categorized by their characteristic vegetation, and can be classified as saltwater, freshwater, or brackish (more salinity than fresh water, but not as much as seawater). Known as some of the most ecologically important areas on earth, wetlands have multiple and diverse functions ranging from being valuable for wildlife habitat to improving water quality and providing flood protection.

Since the enactment of the Federal Clean Water Act, the U.S. Army Corps of Engineers serves as the lead agency in the issuance of permits for specified activities in wetlands. Types of activities subject to regulations include: filling, dredging, or draining wetlands; constructing and land clearing activities in wetlands; mining or creating impoundments in wetlands; and managing storm water runoff in wetlands. Most agricultural and forestry activities are exempt.

⁶ SCDHEC, Bureau of Water

As evidenced in the subsequent map, Map NR3, Hanahan has an abundance of wetlands within its municipal boundaries, both forested and non-forested. It is important that the City continue to protect its wetlands as development occurs, in particular on the banks of the Goose Creek Reservoir and along Turkey Creek. When wetlands are compromised, the threat of increased flooding and reduced water quality can become an issue.

South Carolina has a Stormwater Management and Sediment Reduction Act, which grants SCDHEC the authority to implement a statewide erosion and sediment reduction and stormwater management program to address the increase in storm water runoff rate and quantity, the decrease of rainwater infiltration, and the increase in erosion associated with the widespread urban development that has been occurring throughout the State.



In addition, as stormwater drainage and detention have become even more important of an issue, the City of Hanahan has taken an active role by adopting its Stormwater Management Ordinance in 2007.



As discussed in detail in the Community Facilities Element, the Stormwater Management Ordinance establishes requirements and procedures that function to address a multitude of issues, including maintaining water quality standards, minimizing property damage and the adverse impacts of flooding, and reducing the effects of development on land and stream channel erosion.

Impact fees have also been utilized in stormwater and flood control, in particular with new developments like Tanner Plantation in eastern Hanahan.

WATER QUALITY⁷

The BCDCOG recently updated its 208 Water Quality Management Plan pursuant to Section 208 of the Federal Clean Water Act. The purpose of the 208 Plan is to preserve and enhance water quality and to meet the goals of the Federal Clean Water Act and the South Carolina Pollution Control Act. The 208 Plan serves to guide local decision makers when addressing issues and opportunities related to water quality.

South Carolina Department of Health and Environmental Control (SCDHEC) monitors water quality from “monitoring sites”, four of which are located within Hanahan’s municipal boundaries. One of these monitoring sites is located along Goose Creek, and three are along the Goose Creek Reservoir. The monitoring site along Goose Creek (Goose Creek at S-08-136 Bridge) does not support recreational uses due to harmful levels of fecal coliform bacteria, although a significant decreasing trend suggests conditions are improving.

Recreational uses are supported at all sites along the Goose Creek Reservoir. Aquatic life uses, which include fishing, the survival and propagation of a balanced indigenous aquatic community (fresh and marine) of fauna and flora, shellfish harvesting, and crabbing, are only partially supported at the upstream site (Goose Creek Reservoir, 2.3 miles South of Goose Creek Town Center) and not at all supported at the midstream site (Goose Creek Reservoir at the 2nd power lines upstream of the boat ramp) and downstream site (100 m upstream of dam) due to varying pH levels (acidity/basicity), and various concentrations of phosphorus, chlorophyll-a, and copper.

A significant increasing trend in dissolved oxygen concentrations at the downstream site suggests improving conditions for this parameter. There is also a significant increasing trend in pH at the downstream site.

While overall water quality of the Goose Creek Watershed is not considered to be impaired with regards to dissolved oxygen, the data does indicate much of the system does not meet the applicable water quality standard for dissolved oxygen for significant periods of time. In order to achieve the recommended 70 percent reduction in discharge of oxygen demanding substances to the overall system, a phased approach is proposed, with an initial Phase I reduction of 60 percent. More detailed information on water quality can be found on the SCDHEC’s Bureau of Water homepage at <http://www.scdhec.gov/water> and click on “Watersheds and TMDLs” and then “TMDL Program”.

SPECIAL PROJECTS

The Goose Creek Reservoir Restoration project was initiated when low levels of dissolved oxygen resulted in nuisance aquatic plant growth and fish kills. South Carolina Department of Natural Resources (SCDNR) has used an array of tools to focus on eliminating excess vegetation. These include chemical treatments based on recommendations of the S.C. Aquatic Plant Management Council, and utilizing §319 funds to remove other masses of vegetation to open up more of the reservoir for enhanced circulation. As of 2004, the Reservoir meets standards for dissolved oxygen at all monitoring sites.

⁷ BCDCOG 208 Water Quality Management Plan Update, 2011

ENDANGERED SPECIES



The Endangered Species Act (ESA) of 1973 is designed to protect plants and animals that are listed by the federal government as "endangered" or "threatened" from becoming extinct due to growth and development. This includes prohibiting any taking, disturbance, or destruction of a listed species and its habitat. The law applies to private parties and private land; a landowner is not allowed to harm an endangered animal or its habitat on his property.

Table NR2 lists the state-recognized and federally-recognized threatened and endangered species that may be found in Berkeley County. The preceding map, Map NR1, displays the location and types of endangered species in and around Hanahan.

TABLE NR2: ENDANGERED OR THREATENED PLANT AND ANIMAL SPECIES – STATE AND FEDERAL PROTECTION

Common Name	Species Name	*Designation
Shortnose Sturgeon	Acipenser brevirostrum	SE-Endangered
Flatwoods Salamander	Ambystoma cingulatum	SE-Endangered
Rafinesque's Big-eared Bat	Corynorhinus rafinesquii	SE-Endangered
American Swallow-tailed Kite	Elanoides forficatus	SE-Endangered
Bald Eagle	Haliaeetus leucocephalus	SE-Endangered
Red-cockaded Woodpecker	Picoides borealis	SE-Endangered
Gopher Frog	Rana capito	SE-Endangered
Spotted Turtle	Clemmys guttata	ST-Threatened
Least Tern	Sterna antillarum	ST-Threatened
Shortnose Sturgeon	Acipenser brevirostrum	LE-Endangered
Red-cockaded Woodpecker	Picoides borealis	LE-Endangered
Pondberry	Lindera melissifolia	LE-Endangered
Canby's Dropwort	Oxypolis canbyi	LE-Endangered
Chaffseed	Schwalbea americana	LE-Endangered

*LE-Listed Endangered; SE-State Endangered; ST-State Threatened

Source: SC Department of Natural Resources

ENVIRONMENTAL HAZARDS

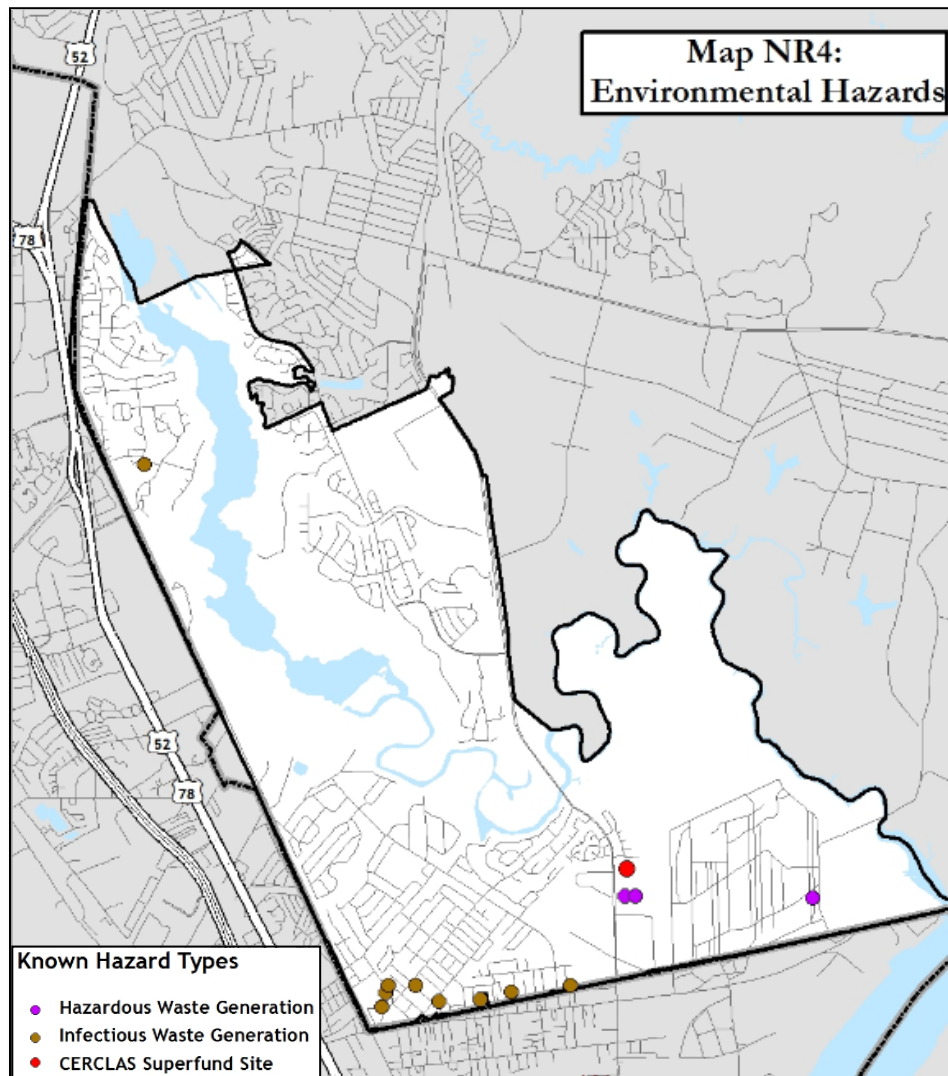
In addition to previously mentioned natural disasters, environmental hazards pose a risk as well. Environmental hazards refer to any event or situation which poses a threat to the surrounding natural environment and adversely affect people's health. The map on the next page depicts the possible environmental hazards located in and near Hanahan.

The hazardous waste generation sites indicate where small quantity hazardous material is being treated or disposed.

The infectious waste generation sites indicate locations associated with medical facilities and services, which are required to report annually to SCDHEC on the amount of waste generated.

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, to: 1.) identify sites from which hazardous waste releases might occur or have occurred into the environment; 2.) provide cleanup or ensure cleanup by the responsible parties or government; and 3.) evaluate damages to surrounding natural resources.

The CERCLA site indicated on the map was identified for cleanup under the CERCLA regulations.



CULTURAL RESOURCES

Cultural resources may include communities, areas, structures, sites and objects having historic, archaeological, architectural, social or cultural significance, and provide many benefits to the community in which they are located.

Preserving historical resources provides citizens of the community with a link to the past through which they can understand their heritage. Cultural resources can distinguish a particular community as unique from another and help to foster civic pride. If properly retained, these unique characteristics can also contribute an economic benefit by helping attract new residents, businesses and visitors.

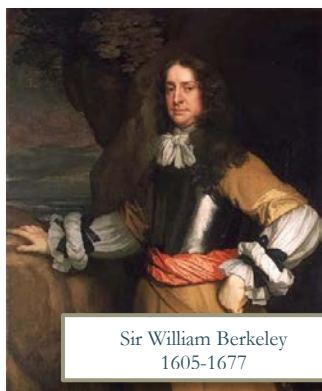
Unplanned or haphazard development patterns often have devastating effects on historic and cultural resources. In order to preserve these unique qualities for future generations, those worthy of preservation should be identified and a plan for protection must be created and implemented. Through the planning process, the community should be involved as much as possible in order to create public awareness and appreciation. The historic and cultural elements discussed here must then be considered when deciding matters of land use, zoning, and development.

The primary goal of preservation of cultural resources is best described more generally in the words of John Lawrence, Dean of the School of Architecture at Tulane University, *“The basic purpose of preservation is not to arrest time but to mediate sensitively with the forces of change, to understand the present as a product of the past and a modifier of the future”*.

AREA HISTORY

The Hanahan area has a rich heritage dating back to the seventeenth century when, long before the area was settled by the English, the lowcountry was inhabited by Native American tribes, namely the Etiwan and Sewee. These natives made invaluable contributions to settlement of the area by teaching the English how to adapt food, housing, and travel methods to survive harsh conditions of the new land. They were particularly helpful to white Europeans from Barbados who settled along the Goose Creek as early as 1672-73. These early pioneers from Barbados had brought with them a social order based on slave labor and landed gentry. They struggled as they faced hunger and disease building new lives in the frontier outside the orderly settlement the Lord Proprietors developed.

Although there was initial cooperation between Native Americans and European settlers, the two groups often trading goods, native tribes eventually grew unhappy with white settlers and rebelled.



Sir William Berkeley
1605-1677

Raids and other forms of conflict increased through the early 1700's as Native Americans suffered abusive treatment at the hands of traders and settlers. By 1715, the settlers were in danger of annihilation at the hands of the Yemassee Indians as they advanced through the lowcountry, killing over 400 people. Anger at the lack of support from the Lord Proprietor during this conflict became a major inspiration for protesting the Lord Proprietors and appealing to the British government to make South Carolina a Royal Colony. As South Carolina was placed under the protection of England, the frontier period of the lowcountry's history came to an end.

Berkeley County got its original name in 1862, from Lord John Berkeley (d. 1678) and Sir William Berkeley (d. 1677), two of the Lords Proprietors of Carolina. In 1706 when a parish system of government was adopted, the County was dissolved and reconstituted as St. James Parish.

It included the parishes of St. John Berkeley, St. James Goose Creek, St. James Santee, St. Stephen, St. Thomas and St. Denis. In 1769 this area became part of the Charleston District, and it did not become a separate county again until 1883.

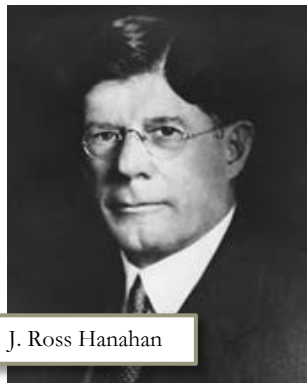
Before 1680, the Lords Proprietors made land grants to Edward and Arthur Middleton and to John Yeamans of lands along the Goose Creek, a tributary of the Cooper River. The new location of Charles Towne enabled direct access by water from these lands, thus making them valuable sites for plantations on which to raise indigo and rice. Arthur Middleton established Yeshoe Plantation (later renamed Otranto Plantation) at the navigable head of the Goose Creek, while John Yeamans established Yeamans Hall Plantation downstream, on land nearly surrounded by the Goose Creek and the Cooper River.

Subsequently, the areas in and around what is now known as Hanahan thrived in the antebellum plantation economy that expanded throughout much of the southern United States into the 1860s.

Although economic changes followed the Revolutionary War (1775-1783), the Civil War era (1861-1865) had an even larger impact on the local economy, particularly the plantations, as slavery came to an end. By the late 19th century, most plantations were abandoned, and the black to white ratio of the population had dropped significantly.

The Hanahan area was reborn under different economic forces, primarily railroad and military presence. Rail was extended to the Port of Charleston in the nineteenth century and the Charleston Navy Base was established in 1901 along the Cooper River between its confluence with the Goose Creek and the port.

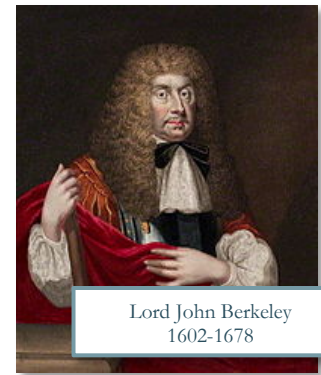
Most important was the damming of the Goose Creek at the turn of the twentieth century. Groundwater under much of Charleston had long been contaminated by effluent from raw sewage, so the City required a permanent, reliable freshwater source. The private Charleston Water and Light Company met this demand by creating the Goose Creek Reservoir and Saxon Pumping Station and Treatment Facility, operations of which commenced in 1903. A railroad station was established on the Atlantic Coast Line so that supplies could be delivered to the new facility, and Remount Road was constructed to provide access to US Highway 52. Unfortunately, the new water supply quickly proved inadequate due to population growth in the area, the devastating 1916 hurricane that compromised the dam, and droughts in 1918 and 1926. Supply was therefore supplemented by a seven-foot-wide, 23.11-mile-long underground pipeline from the Edisto River to the treatment facility in 1936.



J. Ross Hanahan

In 1917, J. Ross Hanahan, Chairman of the Charleston Commissioners of Public Works, was instrumental in the acquisition of the reservoir, pumping station, and adjoining lands for CPW from the private company. The Saxon facility and the railroad station were then renamed after Mr. Hanahan after a shipment of supplies was lost at the Saxon Stop, located just over the North Carolina state line along the Atlantic Coast Line, a mistake created by the similarity of the names of the two locations.

The US military endured as a major employer in the area during and after the Second World War. Charleston was a point of embarkation for troops bound for Europe and a destination for prisoners of war, many of whom were held in



Lord John Berkeley
1602-1678

the Hanahan area, and the US Army Depot was established in 1941 for the transmission of munitions from the interior of the country to Europe.

The US Navy acquired a large tract of land east of Hanahan in 1954 as the Weapons Station Annex, which later became the site for the Atlantic Polaris Missile Facility and Nuclear Power Training School.

Like many areas across the United States, Hanahan developed briskly after WWII as a suburban bedroom community. Increased demand for services was met as the Highland Park Fire and Water District became a public service district (PSD) in 1946, empowered to provide sanitary and stormwater sewage systems, parks and recreation facilities, and refuse collection in addition to fire protection and potable water service. The Highland Park-Remount Road Exchange Club chose the name “Hanahan,” the enduring name of the railroad station near Remount Road, as the new name for the local communities and the PSD, as well as for itself, in 1947. In 1950, Fishburne Elementary School opened on land donated by the Highland Park developer, a Hanahan Health Club was formed, and the Hanahan Public Service Commission (PSC) created a zoning commission to administer land use controls in the district, as its population approached 3,000.



OAKS AT HANAHAN HIGH SCHOOL

Growing pains in 1950s Hanahan, a suburban community in an otherwise rural county, caused its leaders to consider secession from Berkeley County in favor of adjacent Charleston County, since most Hanahanians were employed in the latter and utilized its services, ranging from hospitals to schools to emergency back-up assistance, which could reach Hanahan faster than similar units based in Moncks Corner. Such sentiment subsided, however, when full-time firefighters supplemented the volunteer department after long debate and when Hanahan High School opened its doors for the 1958-59 academic year.

Awareness of community identity increased as *The*

Hanahan News, later to become *The Hanahan & Goose Creek News*, was created in 1959 with Carl E. Meynardie as its publisher and editor.

In 1956 Hanahan citizens were introduced to a different movement when Alfred Burton presented the idea of incorporation to the Hanahan PSC. Numbering about 5,500 by this time, Hanahanians considered the costs and benefits of becoming a municipality throughout the next decade as the need for more adequate infrastructure increased. With the powers of the PSC expanded, a sanitary sewer system, which was necessary to ensure that the sewage of all subdivisions would be treated before discharge into the Cooper River, was completed and began operating in 1967.

As the 1960's neared an end, Hanahan had gained a Parks and Playground Commission; a post office branch; and a library. Trident Industrial Park was established in 1968 to provide local employment opportunities and to serve as a tax base, since the district was nearing build-out and the PSC's budget was becoming strained by inflation. The 1970 US Census counted 8,376 residents in the Hanahan Public Service District.

In 1972 the City of North Charleston became incorporated, bounding much of the southern and western limits of the Hanahan PSD. With this new city came increased tensions regarding home rule when the City of North Charleston annexed a Berkeley County parcel from within the Hanahan PSD, and Hanahanians learned that State Law prohibited incorporation of a new city within two miles of an existing city of 15,000 people. Concurrently, under scrutiny of the constitutionality of its zoning commission and ordinance, the

Hanahan Public Service Commission was taken to court in 1972 by a developer seeking rezoning to build a convenience store in the Trident Industrial Park.

State Senator Rembert C. Dennis of Berkeley County, who supported and worked with the Hanahan community since its inception, had been working for years at the state capitol to create legislation to support zoning in public service districts, but without success. In the early 1970s, he shifted gears to amend State Code covering incorporation. He and State Assemblyman Robert L. Helmly of Berkeley County successfully cleared the way for Hanahan incorporation, amending code to permit new cities of at least 7,000 within two miles of existing cities of 15,000, provided such are divided by county lines. Hanahan PSD Manager L. Hugh Smith collected 240 signatures on a petition to the Secretary of State's office to prompt a local referendum on the matter of incorporation.

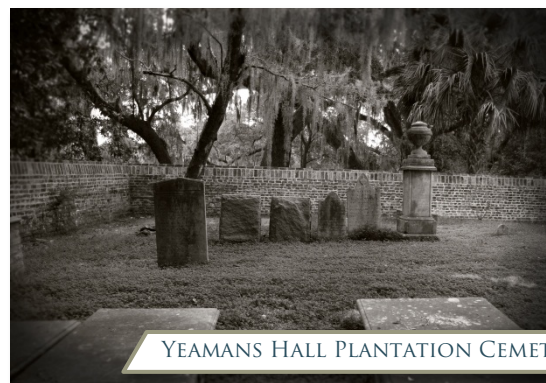
Despite the opposition of the Public Service Commission, which faced obsolescence, Hanahanians voted to incorporate by a margin of 1093 to 903 on September 18, 1973. The new city, with a population of 11,408, included the entire PSD as well as abutting undeveloped lands northward to the Otranto and Saint James subdivisions. Hanahan was thus able to update, administer, and enforce its zoning ordinance and became eligible for federal revenue-sharing funds, distributed to corporate municipalities on a per capita basis. Hanahan annexed the Otranto neighborhood, developed on lands of the former plantation, in 1976. The 1980 US Census counted 13,224 Hanahanians, a figure that has risen to nearly 18,000 as of the 2010 Census, much of which can be attributed to the annexation of the Brown Tract (now Tanner Plantation) in early 2000, which had 4,366 persons as of the 2010 Census.

HISTORIC STRUCTURES & SITES

The Goose Creek supported two antebellum plantations that have left distinctive marks on Hanahan that are very much evident today: Yeamans Hall Plantation and Otranto Plantation (formerly Yeshoe Plantation). Otranto Plantation is individually listed on the National Register of Historic Places.

YEAMANS HALL PLANTATION

Yeamans Hall Plantation was a 1,070-acre land grant made to Sir John Yeamans, perhaps as early as 1670. Mr. Yeamans had a home built of bricks imported from England on the land, which had as more than half of its perimeter the Goose Creek and the Cooper River. Although he didn't live to see construction on the house completed, his wife, Lady Margaret, lived there until her death. Sometime between 1677 and 1718 the plantation was transferred to Thomas Smith, whose family owned the land for six generations. Like many Southern plantations, Yeamans Hall went into decline after the War Between the States, and the house was lost in a fire precipitated by the earthquake of 1886. The Smiths thus sold the plantation in 1900. Seeking to reuse the land, in 1915, North Charleston developer E.W. Durant invited the renowned landscape architect Frederick Law Olmsted, Jr., to survey the land and assess its suitability as a golf resort. Olmsted came away impressed with its natural beauty, extended golfing season, proximity to Charleston, and accessibility by rail, as did several other experienced resort developers. Durant, Henry K. Goetchi, architect James Gamble Rogers, and others thus organized the Yeamans Hall Company, which purchased options on the property from residential real estate developers, the Charleston Farms Company, in 1924.



YEAMANS HALL PLANTATION CEMETERY

Olmsted's design firm was commissioned to prepare a "general plan" for the proposed Yeamans Hall Club, and Rogers designed its clubhouse, which opened in 1928 and still functions in its original capacity. The resort is noted to be a destination of dignitaries and celebrities but retains a very private status.

Therefore, unfortunately, most Hanahanians do not enjoy the benefits of this reputedly beautiful resource, despite its location within city limits.

OTRANTO (YESHOE) PLANTATION



OTRANTO PLANTATION – RIGHT REAR OBLIQUE

SERVANTS HOUSE ON PROPERTY

Otranto Plantation was established in 1679, upstream from Yeamans Hall Plantation, when the Lords Proprietors of Carolina made a land grant of 1780 acres to Edward and Arthur Middleton of Barbados, who had relocated to Carolina the year prior.

As the Middleton family amassed considerable tracts of land in the new province, Edward transferred his share of Yeshoe to Arthur shortly after its

founding. The plantation passed through several owners via inheritance and sale before it was purchased in 1771 by botanist Dr. Alexander Garden, for whom the *gardenia* is named. A loyalist, Dr. Garden left the Lowcountry for England at the outbreak of the American Revolution and left the plantation in trust for his son and

namesake, a minor undergoing education in England. Upon coming of age, the younger Garden returned to South Carolina to join the revolution, eventually holding the rank of major under General Nathaniel Green.

After the revolution, Alexander Garden, Jr., married and returned to Yeshoe, when for the first time it appears on records as Otranto Plantation. It is believed that the name change corresponds with the construction of the current plantation home. As the Gardens had no heirs, Otranto Plantation changed hands several more times and was twice subdivided before Philip Johnstone Porcher acquired the house and 400 acres remaining in the southeastern portion of the original tract. Porcher's family was still in residence in 1865 when Union troops under the command of General R.B. Potter raided and looted the undefended plantation after the fall of Charleston near the end of the War Between the States.

The Porchers sold the land in 1872 to the Otranto Hunting Club, which constructed a clubhouse that remains today as a single-family residence. Andrew Combs, a real estate developer, purchased the property in recent decades and renovated the plantation house, the interior of which had been gutted by fire, as the clubhouse for a residential community to be constructed on the 400-acre plantation.

The house was listed on the National Register of Historic Places in 1978, two years after the Otranto community, then with fifty families, voted to join the City of Hanahan for better police and fire protection.



OTRANTO PLANTATION - TODAY

Otranto Plantation indigo vats found alongside the Cooper River to the east of the plantation are dated to about 1760 and also on the National Register as of 1989.

The vats are within the boundaries of the Cooper River Historic District which was listed on the National Register as of February 2003, thus potentially providing their site with protection from incompatible land uses.

HISTORIC MARKERS



BOWEN'S CORNER

Bowen Corner is located at the intersection of Foster Creek Road and Tanner Ford Boulevard. An African-American farming community from the mid-19th century through the late-20th century, Bowen's Corner was originally part of a rice plantation established along Goose Creek in 1680¹. Although much of the surrounding area has been developed in recent years, there are several families still living in Bowen's Corner who are descendants of the former slaves and freedmen.

STEEPBROOK PLANTATION

Steepbrook Plantation is located on Mabeline Road at the Hanahan Elementary School. Established in 1701, this rice plantation was once the home of Peter Manigault, a longtime member of the Commons House of Assembly and Speaker of the House from 1765-1772². At the time of his death (1773) he was the wealthiest man in North America.

PLACES OF WORSHIP

Religion has long been a fundamental part of the City's history and culture. While Yeamans Hall Presbyterian Church is the oldest place of worship in the City limits, the original St. James Church (the St. James-Goose Creek Chapel) still stands alongside Old US 52, north of the present-day City of Goose Creek. Built sometime between 1714 and 1719, in 1970 the chapel was listed as a National Historic Landmark, which is the highest designation of significance nationally. Today, there are approximately thirteen places of worship located in Hanahan City limits.

NATURAL AND SCENIC RESOURCES

GOOSE CREEK RESERVOIR

Accessible by Bettis Boat Landing off of Mabeline Road, the Goose Creek Reservoir is a scenic 600-acre natural drainage basin that, in addition to providing drinking water, provides Hanahan residents with opportunities for fishing, boating, and bird and alligator watching.

1 The Historical Marker Database (<http://www.hmdb.org/marker.asp?marker=29500>)

2 The Historical Marker Database (<http://www.hmdb.org/marker.asp?marker=41608>)



TURKEY CREEK

TURKEY CREEK

Turkey Creek runs off of the Goose Creek just north of Yeamans Hall Road and crossing Murray Drive. In addition to providing scenic resources through waterfront properties, the Creek provides opportunities for fishing.

COMMUNITY ORGANIZATIONS AND EVENTS

Community events often help to define the people and places in which they are held. So much so, that they often become part of the culture of the community itself. Below is a list of some of the events being held in the City of Hanahan:

- **Movie in the Park (approximately 4 times per year)**
- **Music in the Park (1 Sunday each month in Summer and Fall, weather permitting)**
- **Christmas Tree Lighting (1st Friday of December)**
- **Annual Christmas Parade**
- **Fall Festival (3rd Saturday in October, held at Picnic Shelter on Railroad Avenue)**
- **Carolina Children's Charity Run (Hanahan hosts this event on the 3rd Saturday in September)**

The City will be incorporating additional community events and activities once construction is complete on the new amphitheater behind the Senior Citizens Center.

EXISTING LAND USE

Analysis of the existing land use and development patterns is an important guide for future land use decisions. Not only will it provide insight for the planning of long-range growth and development, it will enhance Hanahan's ability to accommodate growth and to plan for the future provision of public services and facilities.

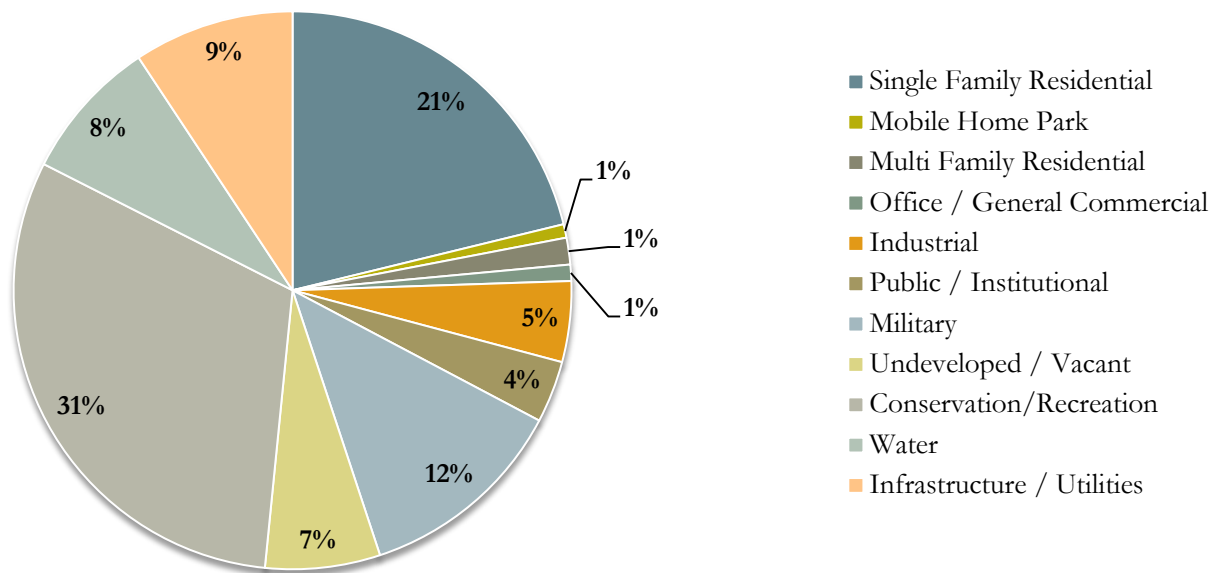
Through consideration of information from all of the other elements; including population, housing, economic, natural and cultural resources, transportation and community facilities, coordinated land use planning can be attained that supports efficient growth and development patterns and can also promote sustainable economic development, protection of natural and cultural resources, and provision of adequate and affordable housing.

EXISTING LAND USE DIVISIONS

The incorporated City of Hanahan contains a total of approximately 7,417 acres (11.6 square miles) in southwestern Berkeley County. Of this area, 8.2 percent is water and the remaining 91.8 percent is land, highlands or wetlands. It is bounded to the south and west by the City of North Charleston and to the north by unincorporated portions of Berkeley County, which is adjacent to the City of Goose Creek. Hanahan is bounded to the east by the Naval Weapons Station Charleston, which was formerly a submarine base, and is still federal property. A very small portion of this federal base is inside Hanahan's City limits. Figure ELU1 below shows each category and the percentage of total land usage they occupy as illustrated in this figure, conservation / recreation constitutes the largest percentage of land use with 31 percent (of which 1,200 acres is wetlands), followed by single-family residential and Military with 21 percent and 12 percent, respectively.

The existing land use map reflects the way land in the City limits is presently being used, regardless of the current zoning designation. Using aerial photography, City zoning classification, input from City staff and field verification, land use information for the City was classified according to the following standard land uses:

FIGURE ELU1: PERCENT OF LAND AREA BY USE



OFFICE / GENERAL COMMERCIAL

This category is for land dedicated to non-industrial business uses, including retail sales, office uses, service provision, and entertainment facilities. Commercial uses may be located as a single use in one building or grouped together in a shopping center or office building in urbanized areas. These uses are typically found in town centers and along major highways. Approximately 1 percent (70 acres) of Hanahan's land area is categorized as office or commercial.

CONSERVATION / RECREATION

Conservation / Recreation land is dedicated to active or passive recreational uses, as well as land conserved as green space where development is restricted. These areas may be publicly or privately owned and may include public parks, playgrounds, nature preserves, wildlife management areas, golf courses, recreation centers or similar uses. These areas also provide public benefits and ecosystem services such as clean water, wildlife habitat and biodiversity, and natural flood control. The City of Hanahan has approximately 2,291 acres (31.0%) of its area designated for conservation and recreation, with 53% of this designated as wetlands.

INDUSTRIAL

Industrial land is designated to accommodate manufacturing facilities, processing plants, factories, warehousing and wholesale trade facilities, or other similar uses. Currently, 5 percent (347 acres) of land area within the City of Hanahan is utilized for industrial use.

PUBLIC / INSTITUTIONAL

Public / Institutional lands are used for nonprofit or public uses, such as schools, religious institutions, hospitals and assisted living facilities, and government owned or operated buildings. Government uses include City Hall and other government buildings or complexes, police and fire stations, libraries, post offices, schools, etc. While military may fall under this category, it has been separated out due to its large presence in Hanahan. After excluding military, approximately 4.0 percent (266 acres) of Hanahan's land is public / institutional.

RESIDENTIAL

Residential land is used for living purposes and is divided into the following three categories:

1. **Single-Family Residential:** consists of a site built home on a single lot, the residential type most commonly found in neighborhoods and the predominant category of residential land uses in Hanahan. (Includes townhouses)
2. **Multi-family Residential:** consists of residential properties with more than one housing unit per structure, such as duplexes, triplexes, condos, and apartments.
3. **Mobile Homes / Park:** consists of manufactured housing on individual lots or in planned developments and cooperative communities.

Approximately 24 percent (1,745 acres) of Hanahan's land is categorized as residential. Of the total housing units, approximately 67.8 percent are single-family, 26.4 percent are multi-family, and the remaining 5.8 percent are mobile homes.

INFRASTRUCTURE/ UTILITIES

This land use category is comprised of rights of way, railroads, utilities, public facilities and services, major transportation routes, public transit stations, or other similar uses. Currently, Hanahan has 690 acres (9.0%) designated as infrastructure and utilities.

UNDEVELOPED / VACANT LAND

This category is for lots or tracts of land that are undeveloped and unused, but not necessarily designated as open space or restricted from future development. Nearly 7 percent (494 acres) of Hanahan's land is currently vacant. These sites can be ideally suited for infill development wherever adjacent land uses do not conflict with the new development.

MILITARY

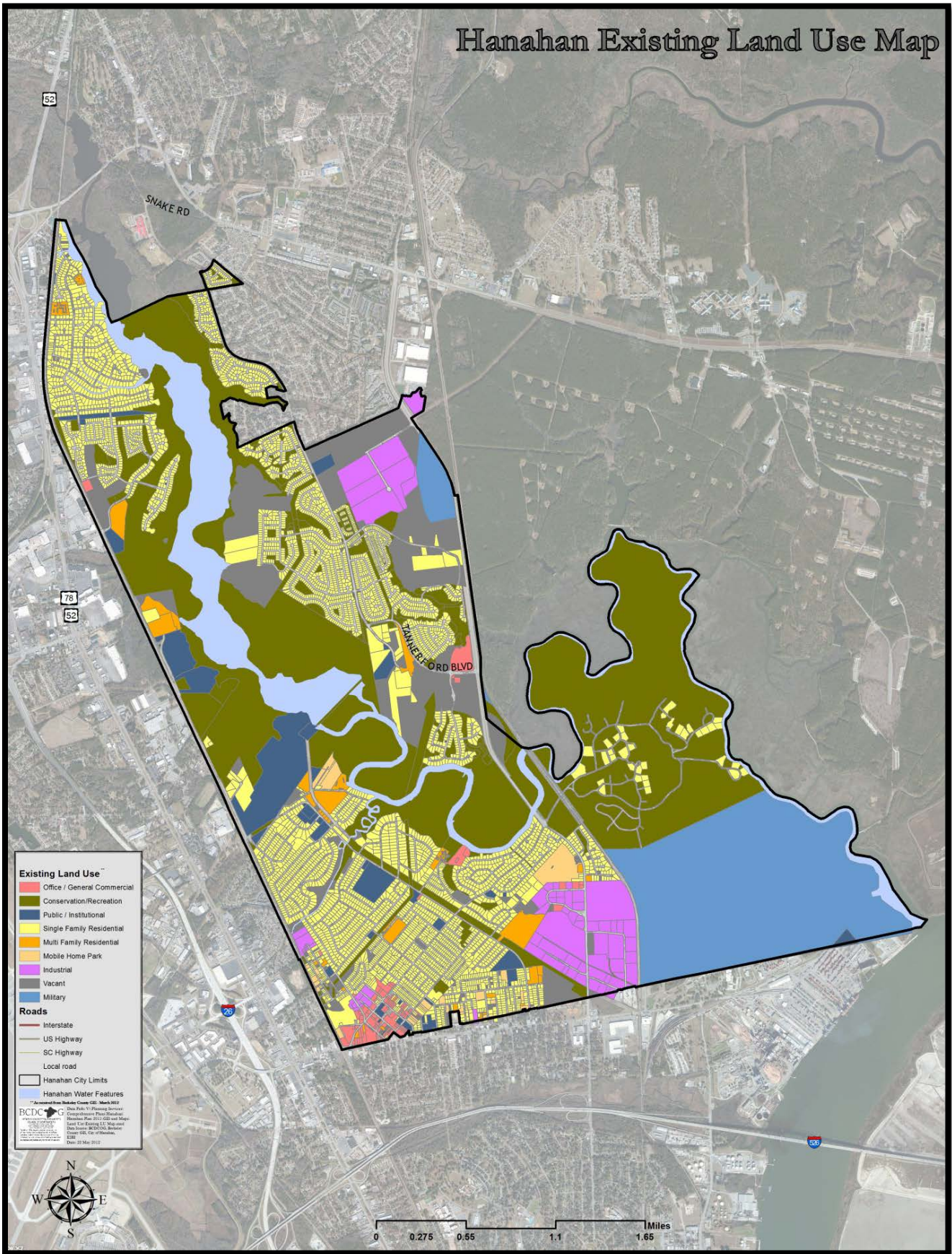
Military uses occupy 12 percent (904 acres) of land area in the City of Hanahan. The Naval Weapons Station Charleston (NWSC), which takes up much of the southeast portion of Hanahan, maintains and operates facilities and provides services and material to support commands of the operating forces of the Navy. The facility also supports the Maritime Prepositioning Force (MPF) Program, and serves as homeport for ships as directed by the Chief of Naval Operations (CNO), and Commander, Military Sealift Command (MSC).

Table ELU1 below separates existing land uses into 11 categories and their total acreage.

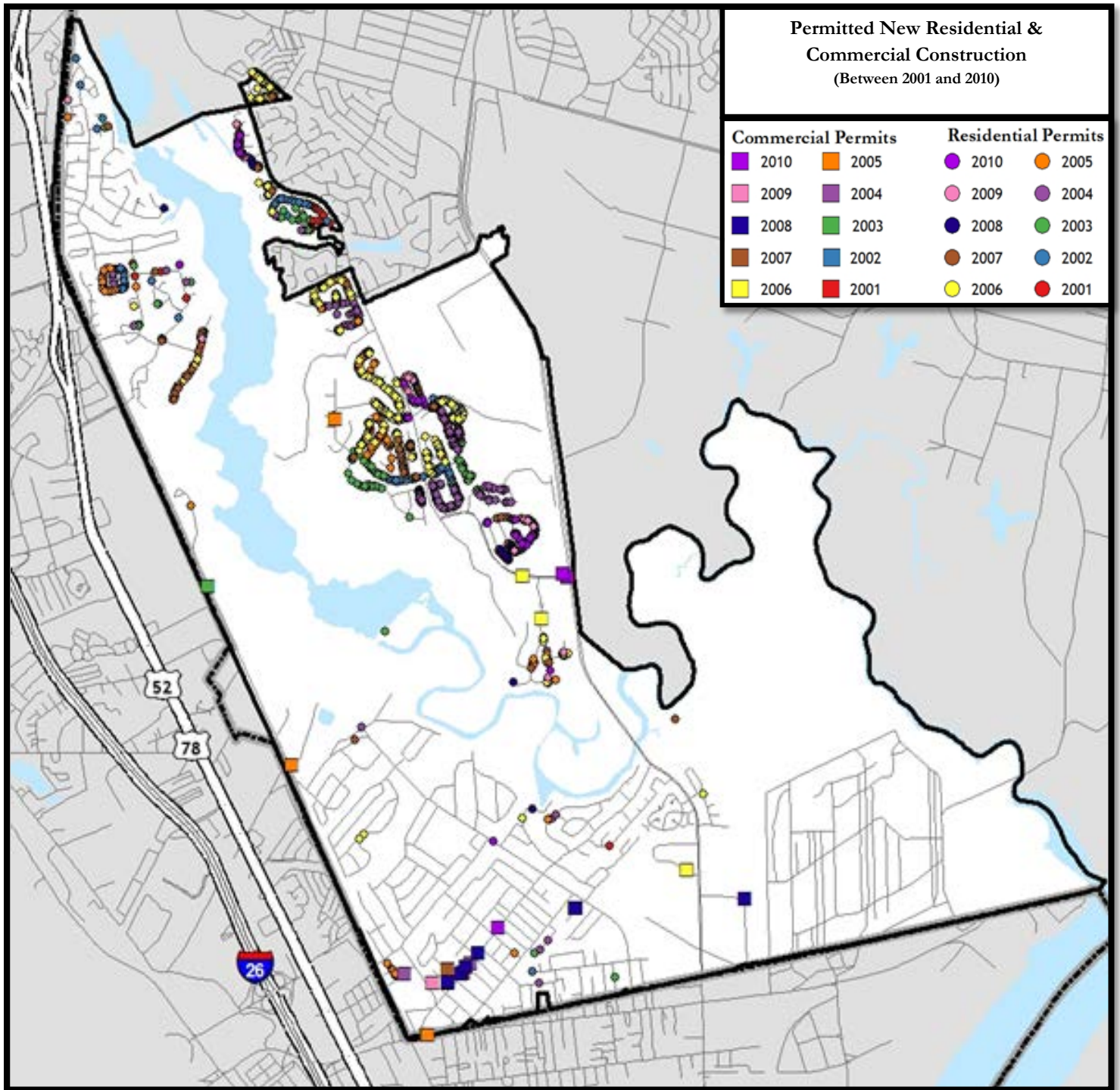
TABLE ELU1: HANAHAN EXISTING LAND USES BY ACREAGE

Land Use Categories	Total Acres	% of City's Total Acreage
Office / General Commercial	70	0.9%
Conservation / Recreation	2,291	30.9%
Public / Institutional	266	3.6%
Single-Family Residential	1,572	21.2%
Multi-Family Residential	115	1.6%
Mobile Home Park	58	0.8%
Industrial	347	4.7%
Undeveloped / Vacant Land	494	6.7%
Water	610	8.2%
Infrastructure / Utilities	690	9.3%
Military	904	12.2%
TOTAL	7,417	100%

Hanahan Existing Land Use Map



More telling than changes in population density over the last decade, as was discussed in the Population Element, is to look at growth based on building permit activity. The subsequent map illustrates where principal building activity has taken place over the last decade, both residential and commercial. As might be expected, much of the construction over the last 10 years consisted of residential buildings in Tanner Plantation. There has also been some residential construction in Eagle Landing, and commercial development downtown around Yeamans Hall Road.



YEAMANS HALL ROAD COMMERCIAL DISTRICT IMPROVEMENT PLAN

As was discussed in the Economic Element, the Yeaman's Hall road corridor was initially designated for further study in the Land Use Element of the 2002 Hanahan Comprehensive Plan when issues related to conflicting land uses, blighted properties, and deficient systems of public infrastructure along the corridor were identified. The goal was to not only invigorate an important economic sector of the City of Hanahan, but to improve efficiency and compatibility of land uses, expand housing choices, and enhance safety, mobility, and overall aesthetics. In 2006 the Yeaman's Hall Road Commercial District Improvement Plan was developed and adopted as an amendment to the 2002 Hanahan Comprehensive Plan.

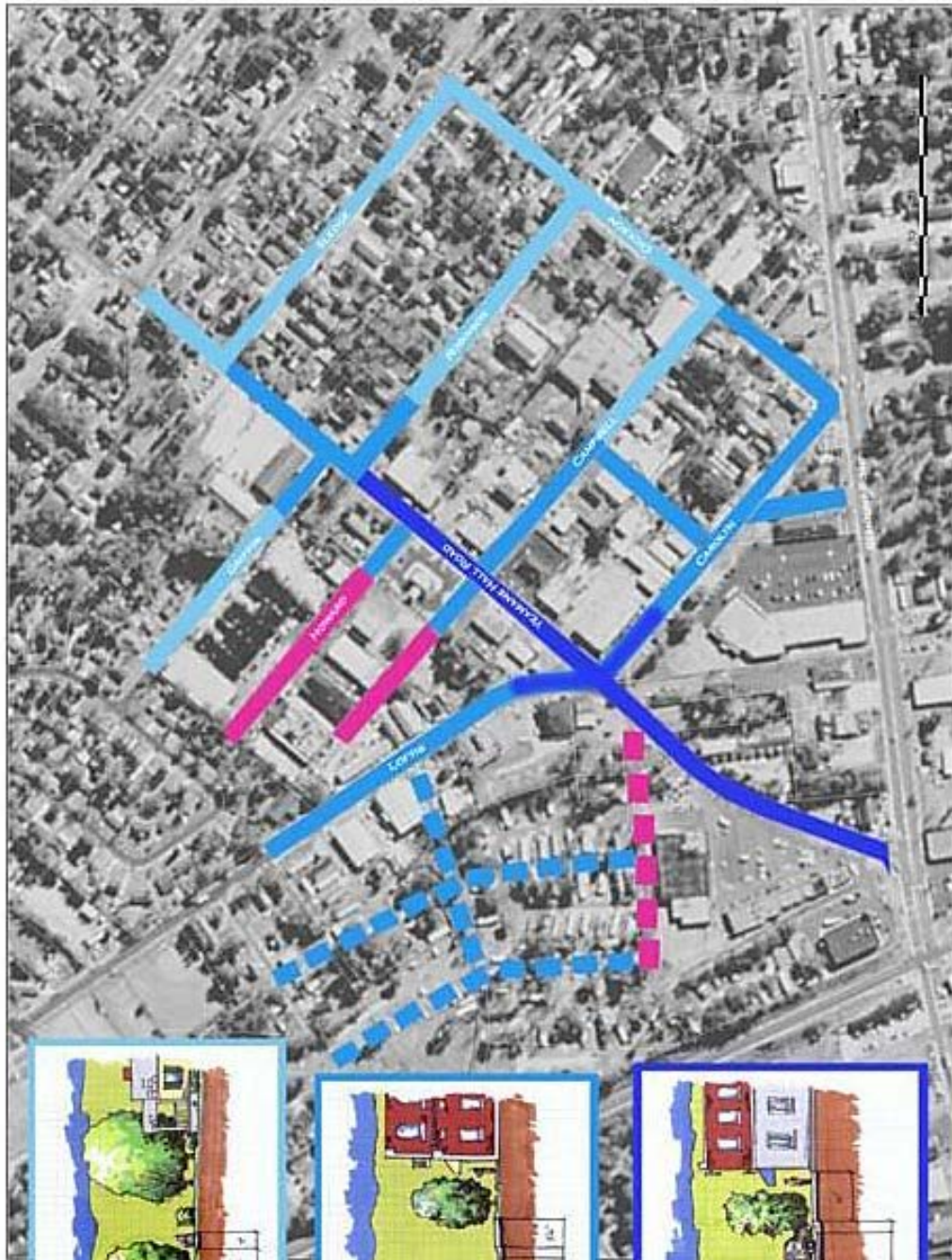
The District Improvement Plan directly addresses two important comprehensive planning elements: land use and community facilities. The scope of the Plan includes four components: land-use planning for the district, land use standards to implement the plan, a transportation system improvement plan, and a schematic design for Yeaman's Hall Road. In addition to the Yeaman's Hall Road Future Land Use Map, a Future Street Design Schedule Map was also developed for the Plan. The Yeaman's Hall Road Schematic Design proposes improvements to the Corridor, such as installation of sidewalks, innovative stormwater management to control flooding, on-street parking, and streetscaping.

The Street Design Schedule Map, shown on the following page, connects future land uses to

- 1. Design of the public right-of-way: including streets, sidewalks, drainage, lighting, other utilities, and possibly on-street parking and scheduled plantings; and**
- 2. Building form: including the size, massing, and placement of structures on private property adjacent to the right-of-way, and right-of-way design, which includes transportation volume and flow (including pedestrian and bicycle traffic as well as automobile traffic).**

The City of Hanahan has been successful in implementing some of the proposed recommendations and improvements outlined in the Corridor Study. This includes an updated zoning ordinance which was adopted in 2008 incorporating a new Town Center zoning district to replace General Commercial. The new zoning district is flexible in that it allows a variety of land uses and mitigates potential conflict through performance standards.

**YEAMANS HALL ROAD ENHANCEMENT STUDY
FUTURE STREET DESIGN SCHEDULE**



CHARLESTON AIR FORCE BASE COMPATIBILITY ZONES

As mentioned in the Transportation Element, the Charleston Air Force Base (AFB) is located just southwest of Hanahan adjacent to the Charleston International Airport (CHS). In 2004 the Charleston Air Force Base (AFB) released an update of the 1992 Air Installation Compatible Use Zones (AICUZ) Study¹. In this Study the Charleston AFB designates specific areas surrounding the airport that are exposed to the possibility of aircraft accidents and noise contours. The AICUZ Program identifies three (3) safety zones which include CZ (Clear Zones), APZ (Accident Potential Zone) I and APZ II. As illustrated in the map below, a portion of western Hanahan falls into APZ II. Considered a less critical zone than CZ and APZ I, APZ II still holds the potential for accidents and, therefore, encourages land use planning and controls in these areas for the protection of the public.

The AICUZ Study considers the following land uses compatible with APZ II:

- **APZ I Compatible Uses (industrial/manufacturing, transportation, communication/utilities, wholesale trade, open space, recreation, and agricultural);**
- **Low-density single-family residential land uses (preferably no more than 1 dwelling/acre);**
- **Personal and business services; and**
- **Commercial/retail trades uses of low intensity or scale of operation.**

In addition, nonresidential land uses should be limited to one story, and lot coverage should not exceed 20 percent. Certain high density uses such as multi-story office buildings and places of assembly such as theaters, schools, churches, and restaurants are not considered as compatible land uses according to the Study.

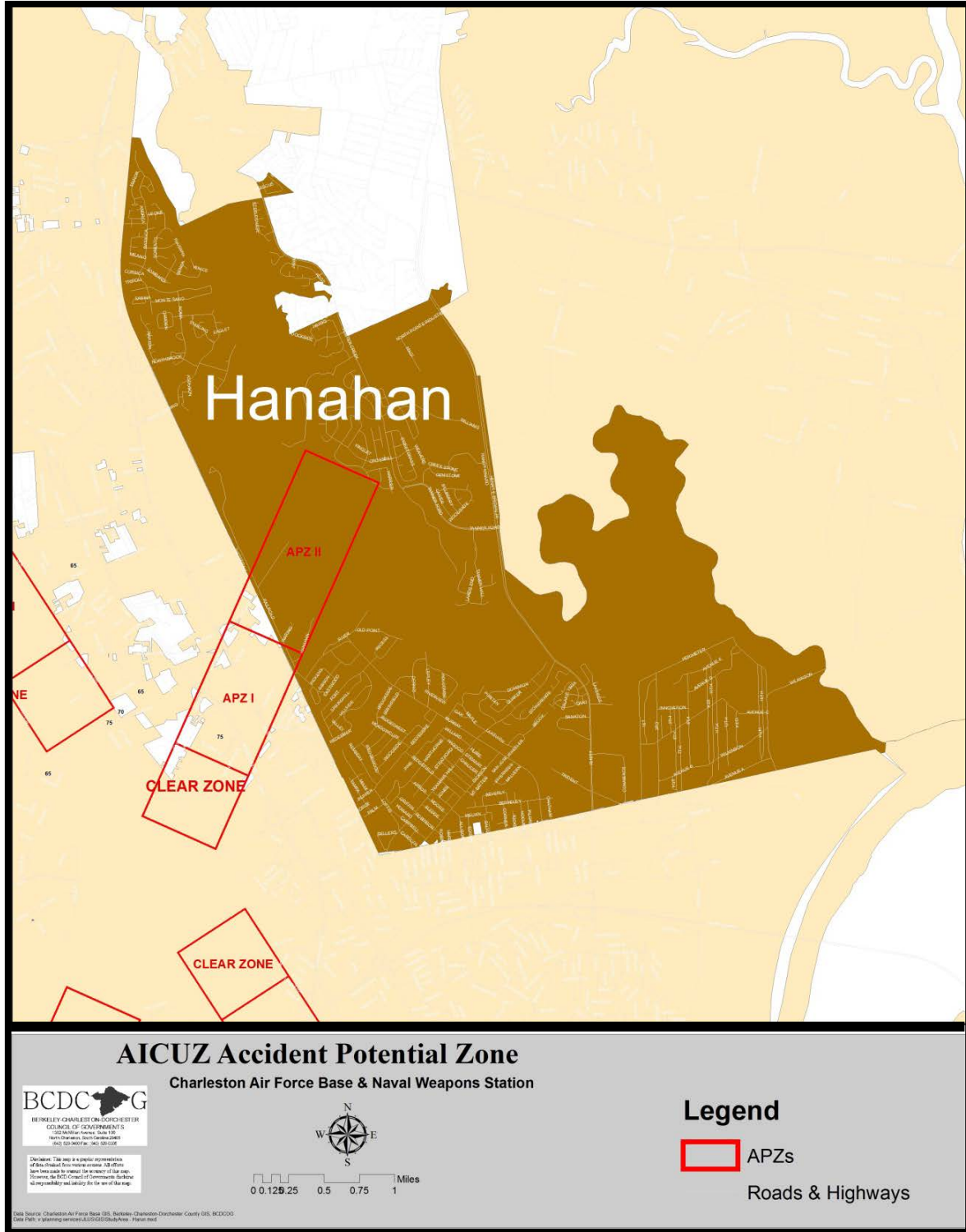
In 2008 the Charleston AFB updated its 1993 Joint Land Use Study (JLUS) which recommends policies and compatible development strategies based on the AICUZ established airfield Clear Zones, APZ I, and APZ II. The two (2) main priorities were creation of compatible development plans within each defined airfield, and consideration of aircraft noise impacts affecting surrounding community development. Based on this, it was recommended that comprehensive aircraft noise impact compatibility overlay zones be established through the implementation of noise impact reduction standards and sound abatement measures. Overlay Zones should consider the following elements: implementation of aircraft noise abatement procedures; and community land use restrictions in high aircraft impact areas.

As a result of the 1993 Joint Land Use Study recommendations, Hanahan amended its zoning ordinance in 1994 to incorporate JLUS recommendations. In addition, the City has adopted a Naval Weapons Station Compatibility Overlay Zone, which is intended to ensure that any development of land contiguous to the US Naval Weapons Station (NWS) is compatible with the military use. The Overlay District requires the City of Hanahan to provide notice (30 days prior to public hearing) along with a written report with the findings to the base commander in order to provide comment on any rezoning and major land development in this federal military installation overlay zone.

¹ Air Installation Compatible Use Zone Study, Charleston Air Force Base, South Carolina

(http://www.bcdco.com/pdf/JLUS/ChasAFB_AICUZ.pdf)

The following map illustrates the area of land in Hanahan that falls within the APZ II. Because this area has limited development potential due to the proliferation of wetlands and other low areas, the majority of this land will continue to be reserved for conservation and recreational uses, or low density residential.



TRANSPORTATION

The ability to be mobile, by a variety of transportation modes, is critical in ensuring a healthy and livable community for current and future residents, as well as an attractive environment for businesses and industries.

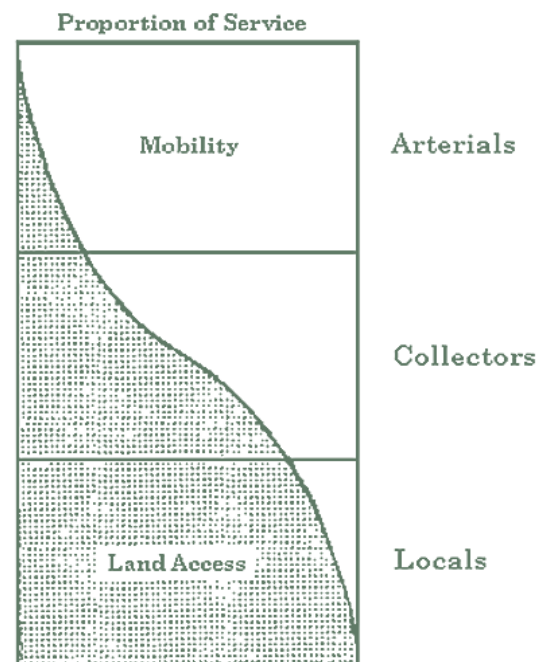
Mobility, for the purposes of this Transportation Element, is defined in broad terms as moving people and goods safely throughout the community using various transportation modes. In an effort to maintain and improve quality of life, issues such as congestion, which is considered by many to be an important quality of life issue, must be addressed, as well as increasing and improving alternative modes of transportation, such as bicycle and pedestrian facilities, and access to public transportation.

EXISTING TRANSPORTATION SYSTEMS

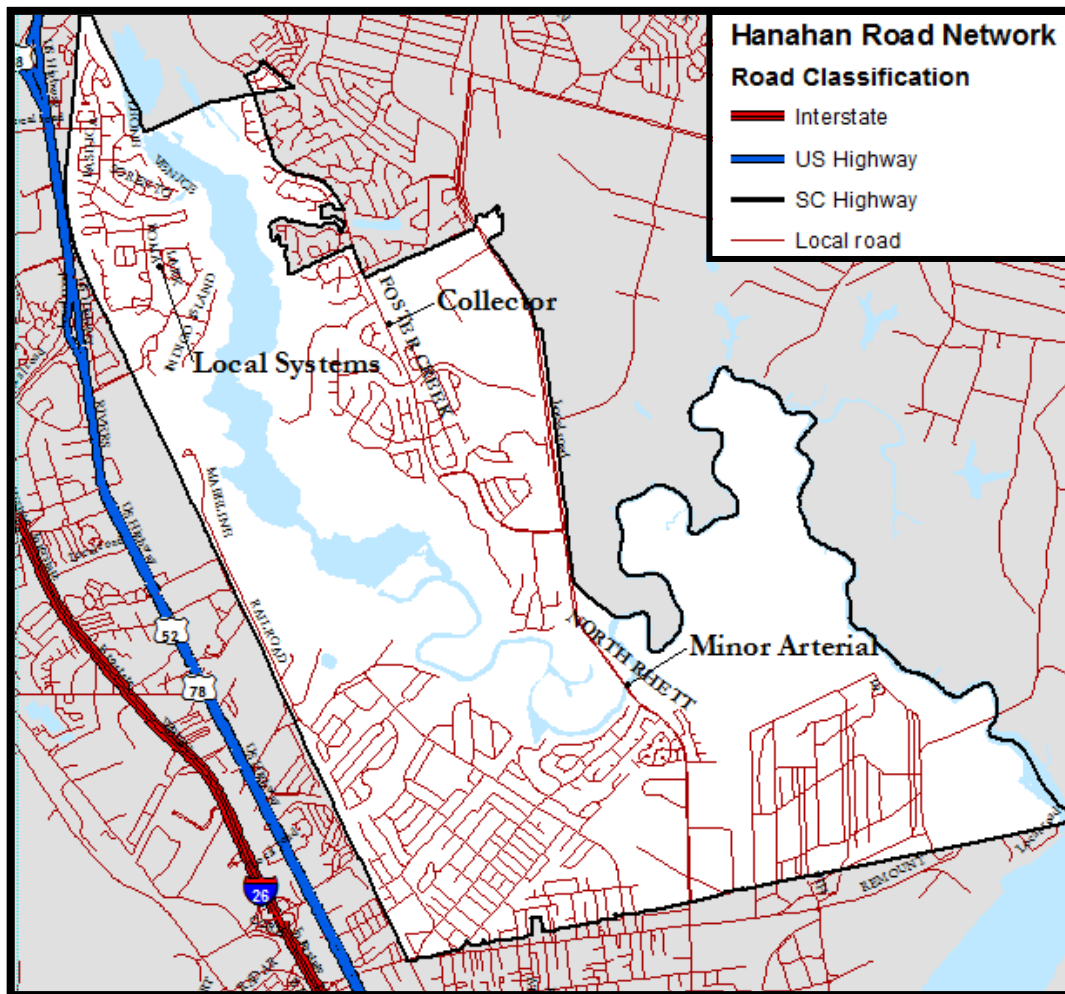
ROAD NETWORKS

The Federal Highway Administration (FHWA) has an established Functional Classification System that groups roads and highways with similar characteristics, based on the character of service they are intended to provide. The classification system comprises three fundamental building blocks: local roads, collectors, and arterials. As illustrated in the graphic below, local facilities emphasize the land access functions, arterials emphasize a high level of mobility for through movement, and collectors offer a compromise between both functions.

Access in the BCD Region is served by two interstate highways, I-26 and I-526, and three major arterials, US 17, US 52 and US 78. Although none of these roads run directly through the City of Hanahan, Interstate 26 and US 52 (Rivers Avenue) parallel the City of Hanahan to the west, and Interstate 526 is in close proximity to the southern border of the City. Hanahan is also comprised of a variety of minor arterials, collectors, and local systems, as illustrated on the next page.



Roads within the City of Hanahan are largely owned and maintained by the South Carolina Department of Transportation (SCDOT) and Berkeley County, with the exception of roads within the Naval Weapons Station, which are maintained by the Federal Government. In addition, there are roads that are owned and maintained by private developers and individuals. While in the past these roads would eventually come under the control of the SCDOT or Berkeley County, the SCDOT Commission recently capped the number of roads it would maintain and placed responsibility for all new roads within the county system.



All federal funds in the urban area of the BCD Region are administered through CHATS (the Charleston Area Transportation Study Team), which is the Metropolitan Planning Organization for the BCD Region, staffed by the BCD Council of Governments. The CHATS Policy Committee is a policy-making body formed of elected officials from all three counties, to make decisions concerning transportation policies and to prioritize and allocate federal dollars to road projects in the entire Census-defined urbanized area, as well as those areas expected to be urbanized over the next 20 years.

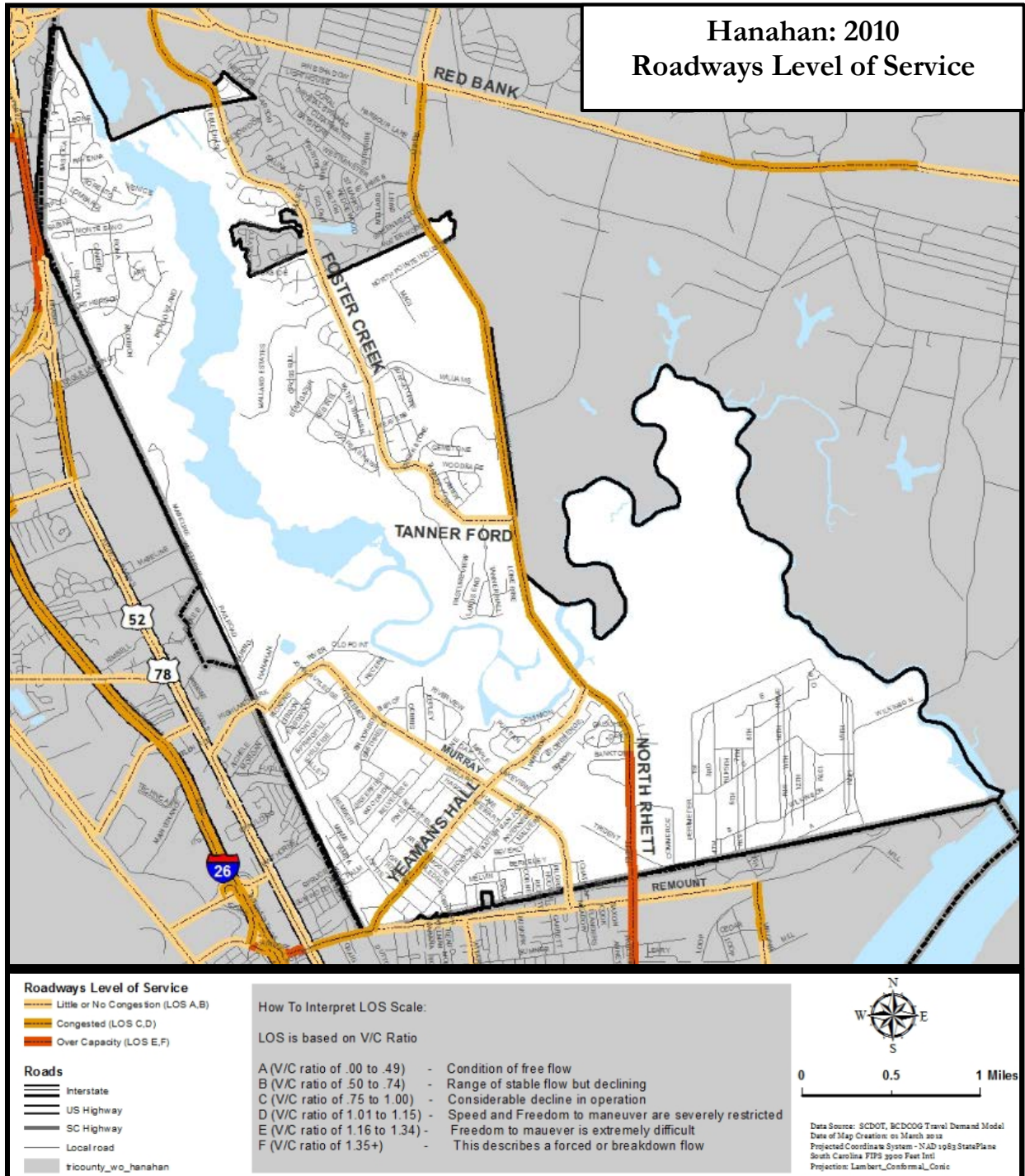
In Berkeley County, the CHATS study area has included the Goose Creek-Hanahan Planning Area and a significant portion of the Wando Planning Area. With the changes in the urbanized areas based on the 2010 Census, the entire Town of Moncks Corner is now classified as being in the urbanized area and will be officially included in the CHATS study area.

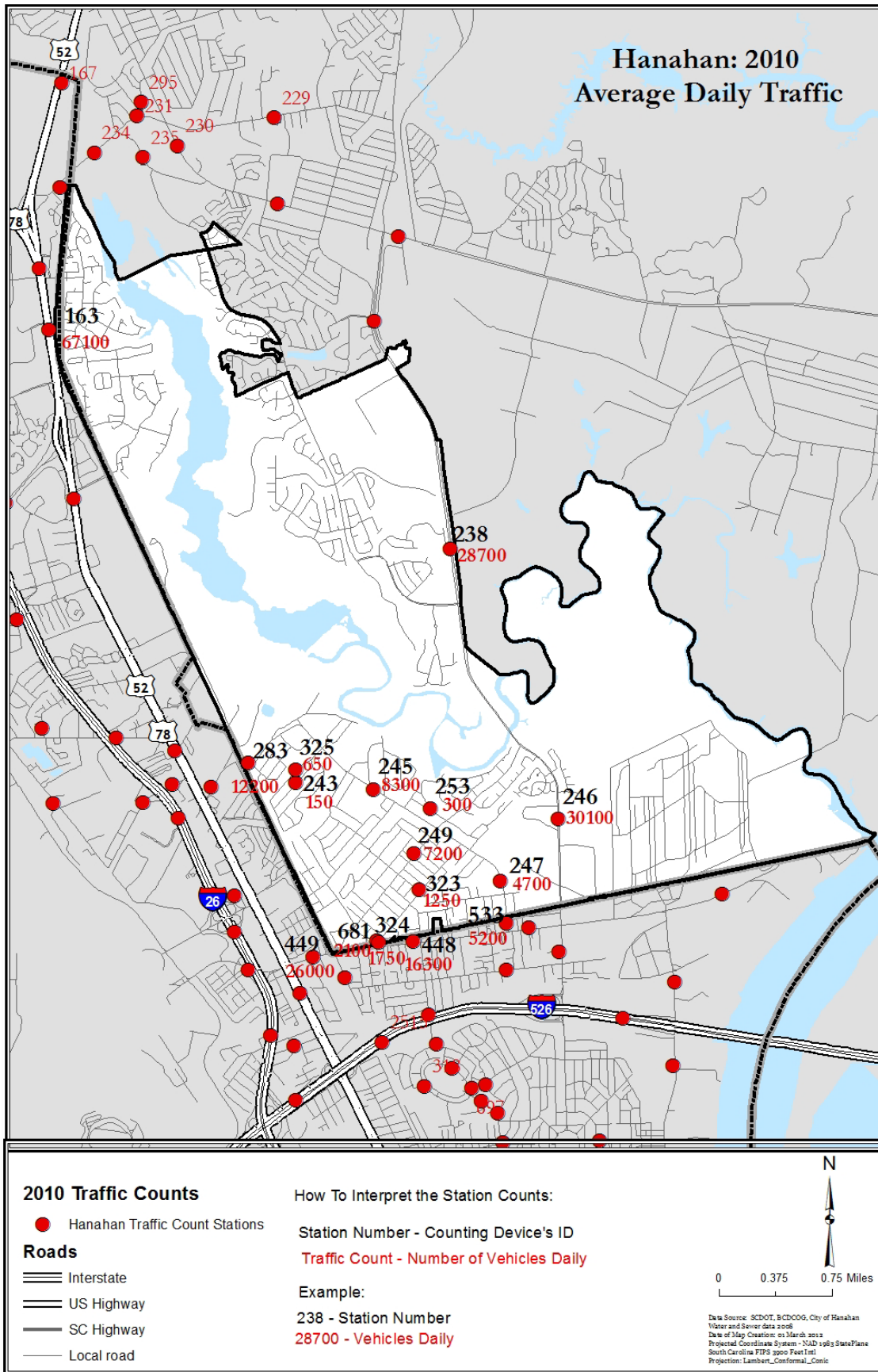
TRAFFIC VOLUMES AND CAPACITY (Note: Traffic Count Stations/Data Operated by SCDOT)

The level of congestion on a roadway can be indicated by the volume/capacity ratio (V/C). V/C is a measure of the amount of traffic on a given roadway in relation to the amount of traffic the roadway was originally designed to handle.

A V/C less than 0.8 generally indicate a roadway that is operating acceptably. As the V/C approaches 1.0, the roadway becomes increasingly congested. It may operate acceptably for much of the day, but is likely to be congested during peak periods.

A V/C greater than 1.0 indicates a roadway that is carrying more traffic than for which it was designed. Roadways with high V/C are generally very congested, especially in the peak periods, and may operate in stop-and-go conditions. While there are currently no roadways in Hanahan that experience high V/C ratios, the subsequent maps depict the Level of Service and the traffic count stations for all of Hanahan. Multiple stations (245, 247, 249, 253, 323, and 325), most of them in the downtown area, had a decrease in average daily traffic counts from 2000 to 2010. The stations with the largest increases in traffic during the same time period were 246 and 238, along North Rhett Avenue, which increased by 64 percent and 53 percent, respectively. In addition, stations 283 and 324 saw slight increases.





COMPLETE STREETS

Complete streets are streets that serve everyone – bicyclists, pedestrians, people with disabilities, transit passengers and drivers alike. A well-designed street, whether it’s a suburban arterial or local shopping or residential street, accommodates more than just motor vehicles moving at high speed. As part of promoting a healthy livable community, the City of Hanahan supports the “Complete Streets” concept for the full accommodation of non-automotive travel, including bicyclists and pedestrians.

BICYCLE AND PEDESTRIAN FACILITIES

As noted in the regional 2035 Long Range Transportation Plan, transportation plans no longer focus solely on roadway solutions; in the quest for an improved quality of life, plans now strive to enhance the livability of the communities. One common theme of any livable community is how well it accommodates pedestrians, bicyclists and other alternative modes of transportation.

Walking and bicycling have numerous benefits, including the following:

- **Personal Benefits** — Cardiovascular fitness, health, and transportation cost savings;
- **Societal Benefits** — Reduced vehicle miles of travel, improved public health through a cleaner environment and healthier citizens, and improved mobility for those that are disabled or without access to private automobiles; and
- **Environmental Benefits** — Reduced air and noise pollution and improved water quality from fewer parking lots/spaces/structures

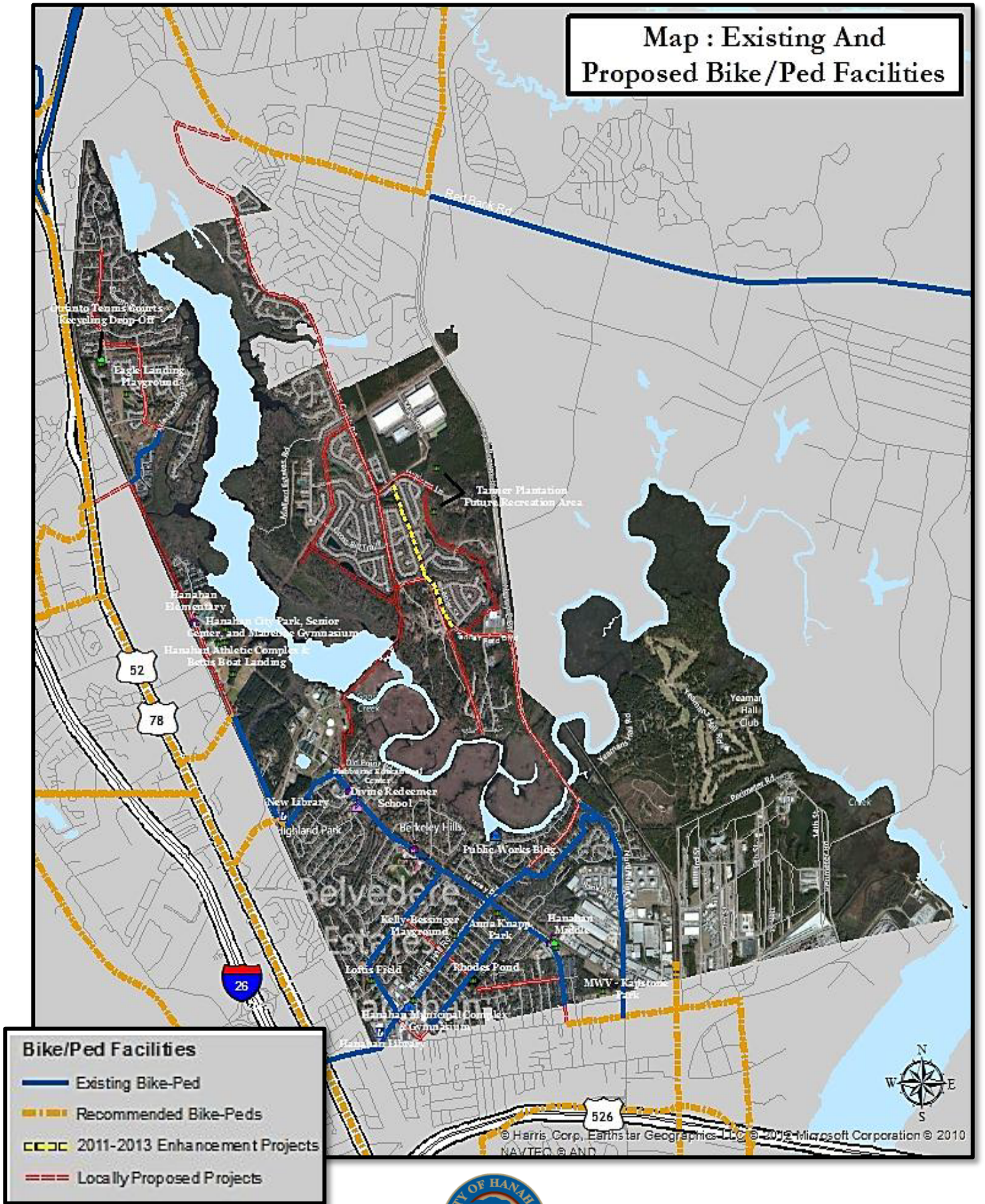
CITY OF HANAHAN MULTI-USE TRAIL

The City has made it a priority to plan and develop a complete multi-use trail system for safe, non-motorized transportation within the city limits. This trail is designed to connect the community, especially for the youth, elderly and disabled. The map on the following page shows the comprehensive trail system designed to provide safe routes for pedestrians and bicyclists. Over time, this facility will connect existing neighborhoods to schools, a recreation center and a commercial area. The trail system will be completed in phases, with future phases to include extending the trail to provide further access along Foster Creek Road to include additional residential neighborhoods, while working in conjunction with Berkeley County and the City of Goose Creek.

In 2011, the City of Hanahan was awarded \$225,416 in federal transportation enhancement funds to complete 5,000 feet of the multi-use trail; the total cost of the project is \$322,023 with the City of Hanahan and Berkeley County funding the difference. This phase of the trail facility will be located along the Santee Cooper power line easement from the commercial district along Tanner Ford Boulevard, through the residential district with a terminus near the planned recreation complex on Williams Lane. One-third of Hanahan residents would benefit from this project. So, as to provide access to as many citizens as possible, the City has planned to install additional pedestrian crossings, and to include signage and road markings, all of which will assist the citizens on the west side of Foster Creek Road with safe connections to the trail.

The City of Hanahan applied for a \$100,000 grant in 2012 through the South Carolina Department of Parks, Recreation and Tourism to install an asphalt walking trail which will run from Bettis Boat Landing to the picnic shelter at the Recreation and Parks Athletic Complex. The trail will be approximately 2,000 feet in length and 8 feet wide. The required match for this grant will be \$25,000.00.

Map : Existing And Proposed Bike/Ped Facilities



TRAVEL DEMAND MANAGEMENT / MOBILITY MANAGEMENT

The Berkeley-Charleston-Dorchester Council of Governments (BCDCOG) is coordinating with the City of Hanahan and all the counties, municipalities, and employers on the implementation of Travel Demand Management (TDM) strategies and policies to reduce travel demand, specifically that of single-occupancy private vehicles. As part of the Region's Mobility Management Program, commuters are encouraged to take transit, carpool, telecommute, use flextime, van pool, walk, or bicycle to work.

To help bring together commuters, the BCDCOG has implemented **Trident Rideshare**, a free and convenient web-based service at www.tridentrideshare.com that connects commuters looking to share cars, bicycles, taxi, transit or walking trips in Berkeley, Charleston and Dorchester Counties. Commuters recognize that sharing a ride not only provides opportunities for social interaction, but it helps preserve air quality, decreases traffic congestion, conserves fuel, promotes better health, and saves money. Trident Rideshare is now offering **Emergency Ride Home funds** as an additional incentive to utilize alternate transportation modes; **Emergency Ride Home** offers reimbursement for rides taken by registered Trident Rideshare members who rely on alternate transportation modes and need an unscheduled ride home due to an emergency or unexpected event.

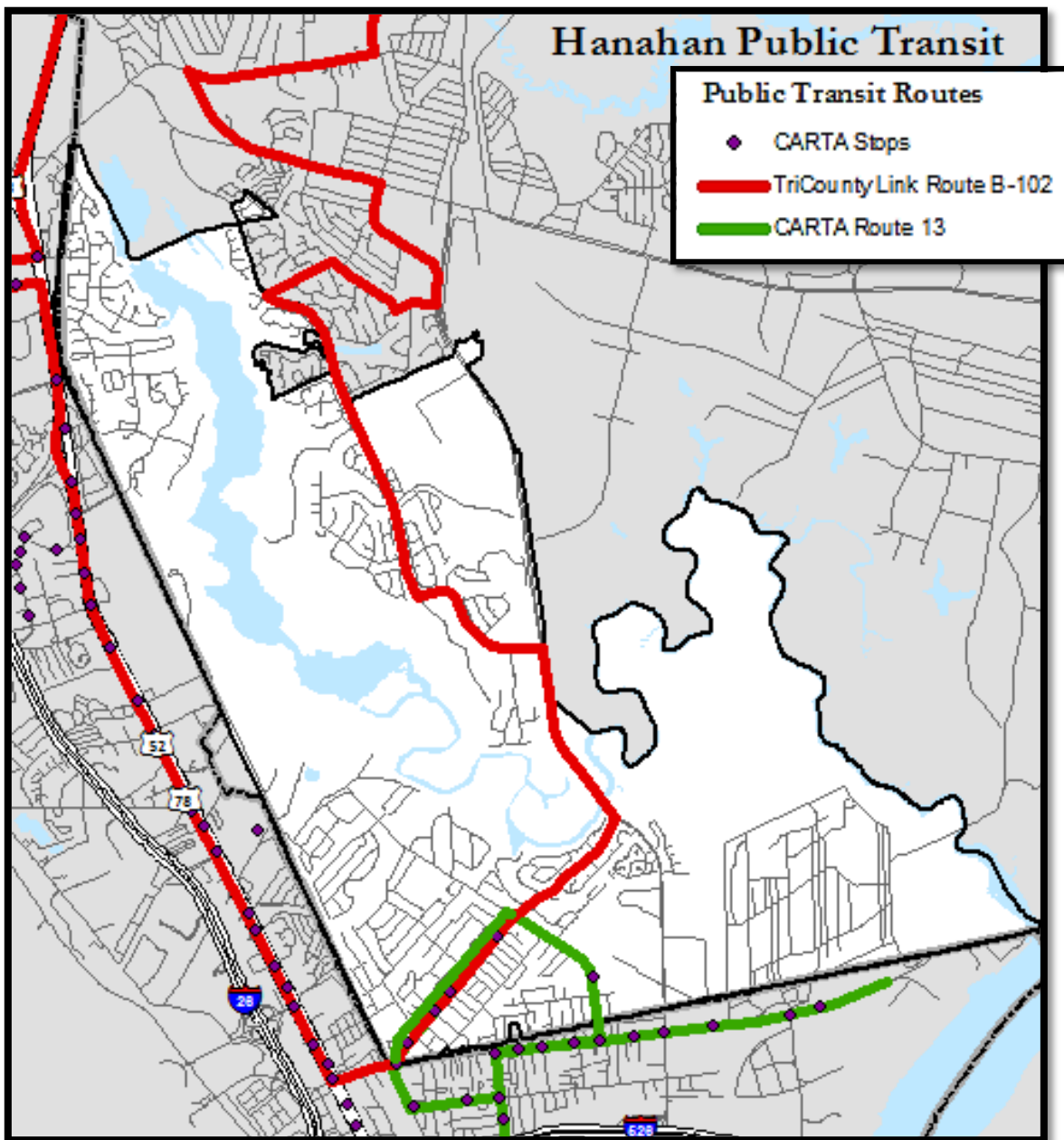
PUBLIC TRANSIT

Public transit is another important component to the City of Hanahan's transportation network. By providing mobility options, public transit helps enhance quality of life by allowing users to reduce vehicle miles traveled, save money otherwise spent on rising gas costs, and encourages transit-oriented development around planned transit station areas.

The City of Hanahan is served by two transit systems, CARTA and TriCounty Link. CARTA (Charleston Area Regional Transportation Authority) offers Fixed-Route, Flex Service, Express Commute Service, and Tel-A-Ride Paratransit, which is CARTA's transportation service for the disabled. Tel-A-Ride is available to riders living in areas served by other CARTA services on a non-fixed route. While CARTA's buses are equipped with wheelchair lifts, many disabled riders need the door to door transportation service provided by Tel-A-Ride. A doctor must certify a rider's qualification to use Tel-A-Ride yearly.

The City of Hanahan is primarily served by CARTA's Route 13-Remount Road, as depicted in the map on the following page. Route 13 runs from the CARTA Superstop at the intersection of Rivers Avenue / Cosgrove Avenue, stopping at Hanahan City Hall before going on to Yeamans Hall Road and Remount Road. Although CARTA Route 10 does not run through city limits, it does serve the northern portion of the City with its stop on Hanahan Road at the SC Works-Charleston Career Center.





The increase in transit users on the Route 13-Remount Road route is noted in Table T1 on the next page. This increase may be partly attributed to the outreach efforts of the CARTA and other mobility management strategies as well as the higher cost of gas and car maintenance.

TriCounty Link operates rural bus services throughout the tri-county region, providing coverage for much of Hanahan and overlapping service areas with CARTA to provide an expansive network of routes for Hanahan residents. The City of Hanahan is primarily served by TriCounty Link's Route B-102, which provides service in and between Moncks Corner, Goose Creek, North Charleston, and Hanahan. TriCounty Link's ridership trends are noted in Table T2 on the next page.

TABLE T1: RIDERSHIP REPORT 2010-2012 (YTD)
CARTA ROUTE 13 – REMOUNT ROAD

MONTH	2010	2011	2012	% Increase
January	9,928	8,350	10,443	5.2%
February	9,090	8,068	10,100	11.1%
March	10,404	9,030	11,052	6.2%
April	9,931	8,869	10,166	2.4%
May	10,631	9,072	-	-
June	10,127	9,897	-	-
July	9,944	8,345	-	-
August	10,215	9,685	-	-
September	9,722	9,594	-	-
October	8,901	10,736	-	-
November	8,463	10,061	-	-
December	8,455	10,623	-	-
Total Annual	115,811	112,330	41,761 (YTD)	-

Source: CARTA

TABLE T2: RIDERSHIP REPORT 2010-2012 (YTD)
TRICOUNTY LINK ROUTE B-102

MONTH	2010	2011	2012	% Change
January	897	739	677	-24.5%
February	881	781	734	-16.7%
March	981	937	832	-15.2%
April	945	754	708	-25.1%
May	875	847	-	-
June	793	841	-	-
July	840	730	-	-
August	979	823	-	-
September	894	748	-	-
October	817	698	-	-
November	904	685	-	-
December	821	684	-	-
Total Annual	10,627	9,267	2,951 (YTD)	-

Source: TriCounty Link

Ridership on Route B-102 decreased from 2010, as noted in Table T2. While the TriCounty Link B-102 Route is open to the public, it is primarily a contract service route for Berkeley Citizens Inc., a nonprofit agency located in the Town of Moncks Corner that provides support and service to individuals with developmental disabilities and special needs in Berkeley County. Therefore, fluctuation in ridership is based on the client base at Berkeley Citizens Inc.

The figures below illustrate CARTA and TriCounty Link ridership trends for the last two years:

FIGURE T1: CARTA ROUTE 13 RIDERSHIP 2010-2012 (YTD)

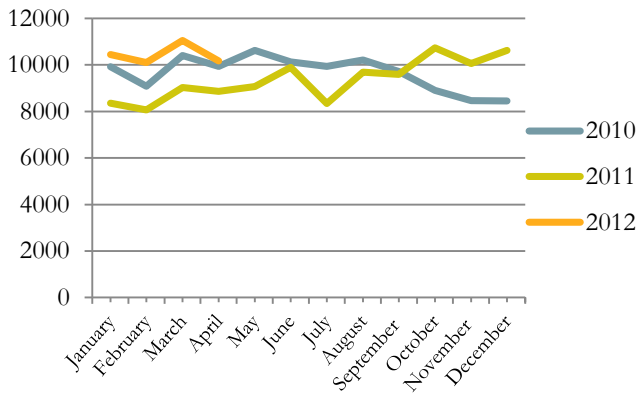
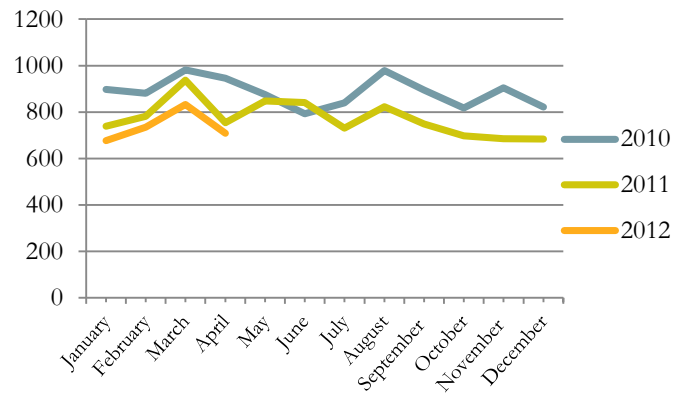


FIGURE T2: TRICOUNTY LINK ROUTE B-102 RIDERSHIP 2010-2012 (YTD)

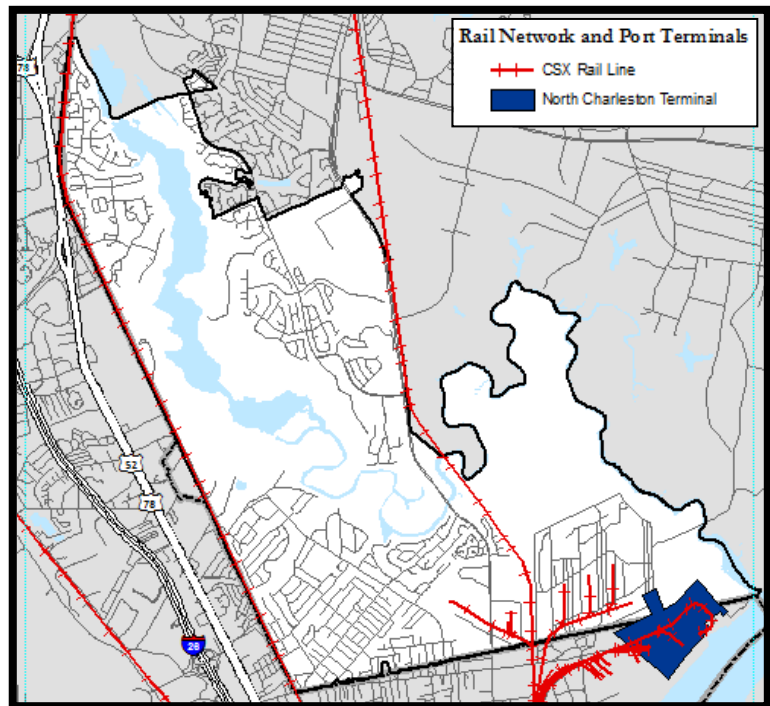


RAIL SERVICE

Railroads continue to play an essential role in the Region’s transportation networks. Railroads in the BCD Region are more often utilized by freight trains than for passenger service, serving as a means of transporting large amounts of goods, therefore saving time, money, and alleviating truck traffic on already congested roads.

These rail lines are depended upon heavily by the Charleston area ports to transport goods from container ships in and out of the Region daily. CSX Corporation (formerly Seaboard System) owns and operates two lines, one of which establishes the western boundary of Hanahan.

Passenger services are available through Amtrak on their Palmetto and Silver Service trains, which run from New York to Miami with a stop in North Charleston at the Gaynor Avenue station. Amtrak operates on the same rail lines owned by CSX through an agreement between companies, and trips are scheduled so as to avoid any conflicts between trains and to prevent backups.



SEAPORT FACILITIES

As the nation's fourth busiest container port, the South Carolina State Ports Authority (SCSPA) owns and operates several terminals on the Wando and Cooper Rivers, comprising the Port of Charleston. Among these terminals is the North Charleston Terminal (NCT), touching Hanahan to the south at the Naval Base and accessed by Remount Road. The SCSPA is currently undertaking several projects, including the construction of the new Navy Base Terminal on the former shipyard. A 280-acre container terminal, this facility will boost capacity in the port by approximately 50 percent, with the first phase slated for completion by 2018.

The SCSPA has included an environmental and community mitigation plan as part of the new terminal, which includes measures aimed at offsetting potential negative impacts on the surrounding community. In addition the SCDOT has planned extensive mitigation for impacts associated with the Port Access Road.



AIRPORT FACILITIES

The Charleston International Airport (CHS) is located just southwest of Hanahan adjacent to the Charleston Air Force Base, providing commercial and military air service for the Charleston metropolitan area. In 2011, CHS emplaned more than 2.5 million people on the scheduled, commuter and charter airlines serving the airport. With the addition of Southwest Airlines in March 2011, CHS now offers direct flights to 15 destinations, including Chicago, Baltimore, Houston and Nashville.

The terminal complex is a 270,000 square foot structure on three levels, with ten gates. Construction is expected to begin in late 2012 at the CHS for Terminal Redevelopment and Improvement and should be completed by the end of 2014. The purpose of this multi-million dollar project is to accommodate the current and growing passenger volumes, as well as improve space efficiency for the airlines and tenants. Additional public parking is also included as part of the overall redevelopment plan.

Another \$1.4 million, five-month project to add 428 more parking spaces is currently underway. These additional spaces will make room for the future doubling of the 1,200-space parking deck.



PLANNED / APPROVED TRANSPORTATION PROJECTS

CHATS recently adopted its 2035 Long Range Transportation Plan (LRTP), which identifies specific and general transportation system improvement recommendations and strategies to accommodate future transportation demands while promoting safety and efficiency. As illustrated below, the City of Hanahan has one committed project, the Railroad Avenue Extension from Mabeline Road to Eagle Landing Boulevard, which will be funded through non-Guide Share federal funds.



ONGOING STUDIES

ALTERNATIVES ANALYSIS

The BCD Council of Governments have hired Davis & Floyd Engineering to conduct an Alternatives Analysis (AA) to evaluate the potential effects of transit improvements with respect to project costs, benefits, environmental and social impacts, and financial feasibility for the I-26 and US 52 corridors.

The AA Study will include a broad scope of potential alternatives, including exclusive bus lanes, HOV lanes, Bus Rapid Transit, fixed-guideway modes including light rail and commuter rail, and a no-build alternative. The outcome of the study will be an adopted Locally Preferred Alternative for the corridor.

PRIORITY INVESTMENT

This element offers an analysis of projected federal, state and local funds available for public infrastructure and facilities during the next ten years and recommends the projects for those funds. These recommendations should be coordinated with adjacent and relevant jurisdictions and agencies affected by or that have planning authority within the City of Hanahan. Typical projects identified for funding include public infrastructure and facilities such as water, sewer, roads, schools and community facilities.

ENABLING LEGISLATION

In 2007 the General Assembly passed the Priority Investment Act. The Act includes several amendments to the 1994 Comprehensive Planning Enabling Act, including a requirement for comprehensive plans to add a Priority Investment Element. The Act reads as follows:

“A priority investment element that analyzes the likely federal, state, and local funds available for public infrastructure and facilities during the next ten years, and recommends the projects for expenditure of those funds during the next ten years for needed public infrastructure and facilities such as water, sewer, roads, and schools. The recommendation of those projects for public expenditure must be done through coordination with adjacent and relevant jurisdictions and agencies. For the purposes of this item, ‘adjacent and relevant jurisdictions and agencies’ means those counties, municipalities, public service districts, school districts, public and private utilities, transportation agencies, and other public entities that are affected by or have planning authority over the public project. For the purposes of this item, ‘coordination’ means written notification by the local planning commission or its staff to adjacent and relevant jurisdictions and agencies of the proposed projects and the opportunity for adjacent and relevant jurisdictions and agencies to provide comment to the planning commission or its staff concerning the proposed projects. Failure of the planning commission or its staff to identify or notify an adjacent or relevant jurisdiction or agency does not invalidate the local comprehensive plan and does not give rise to a civil cause of action.”

PRIORITY INVESTMENT AREAS

CAPITAL IMPROVEMENT PROJECTS AND SCHEDULED TRANSPORTATION PROJECTS

A member of the Charleston Area Transportation Study (CHATS), Hanahan participates in the composition of the CHATS Long-Range Transportation Plan (LRTP) for the Berkeley-Charleston-Dorchester Region. The LRTP identifies road construction and upgrade projects to be undertaken using a variety of funding sources, Sales Tax Funds and Federal Funds through CHATS.

The 2035 CHATS Long Range Transportation Plan identifies one committed project for Hanahan, the Railroad Avenue Extension from Mabeline Road to Eagle Landing Boulevard. Although this project is currently on hold due to unresolved issues between SCDOT, CSX Railroad and the U.S. Army Corps of Engineers, this improvement is essential in that it would connect the Eagle Landing and Otranto communities to the rest of Hanahan. This would eliminate the need to cross railroad tracks and go through the busy shopping district on Rivers Avenue to travel within the City, both of which creates unsafe conditions for residents and commuters.

The City of Hanahan was recently awarded a transportation enhancement grant to fund Phase 1 of a multi-use comprehensive trail in the Tanner Plantation development. The first phase of the trail will be located along the Santee Cooper power line easement from the commercial district along Tanner Ford Boulevard, through the residential district and ending near the planned recreation complex on Williams Lane. One-third of Hanahan residents will benefit from this project. So, as to provide access for as many citizens as possible, the City has planned to install additional pedestrian crossings, and to include installation of signage and road markings, to facilitate safety of users living on the west side of Foster Creek Road.

Future phases propose to include extending the trail to provide access for additional residential neighborhoods further along Foster Creek Road, while working in conjunction with Berkeley County and the City of Goose Creek.

OTHER CAPITAL IMPROVEMENT PROJECTS INCLUDE:

- **Continued process of land acquisition and construction of a new Public Works Facility; and**
- **Continued use of revenue from Tax Increment Financing (TIF) District for Town Center revitalization efforts.**



Prepared by:
Hanahan Planning Commission
with the assistance of the
Berkeley-Charleston-Dorchester Council of Governments
and the
City of Hanahan Planning and Zoning Department



BERKELEY-CHARLESTON-DORCHESTER
COUNCIL OF GOVERNMENTS
1362 McMillan Avenue, Suite 100
North Charleston, South Carolina 29405
(843) 529-0400 Fax: (843) 529-0305