



5.4 Socioeconomics and Communities

5.4.1 What are the characteristics of Charleston County?

The proposed Mark Clark Expressway project is located in Charleston County, which is situated on the Atlantic coast in the southeastern portion of South Carolina. Charleston is a major tourist destination, known for its historic buildings and plantations, forts, waterfront and coastal islands.

Charleston County is a unique coastal area with a vast array of high-quality natural resources including pristine natural habitats, a wide range of residential communities and neighborhoods, an abundance of historic structures and archeological sites, and a scenic urban and rural road network. These features contribute to the area's unique character and charm. Charleston County has also been recognized by The Partners for Livable Communities as one of the top ten most livable places in the United States.³⁸

The study area for the project includes areas to the west of the Charleston peninsula, including West Ashley, Johns Island and James Island. Each distinct region of the study area is separated by a river or water body: the Ashley River separates downtown Charleston from West Ashley and James Island, the Stono River separates West Ashley from Johns Island and Johns Island from James Island, and the Wappoo Cut separates James Island from West Ashley. Figure 5-1 provides a map of the study area.

5.4.1.1 How were the community and socioeconomic profiles developed?

The study area includes communities within and immediately surrounding where the proposed change will occur, and where most of the direct and indirect effects would be felt. The creation of a community profile helps to establish the context for assessing potential impacts and for decision-making. Developing a community profile involves identifying community issues and attitudes, locating notable features in the study area, and assessing social and economic conditions and trends in the community and region that have a bearing on the transportation action.³⁹

The project team used information from the 2000 U.S. Census Bureau, BCDCOG and other resources to develop a profile of the demographic characteristics within Charleston County and communities within the study area. Information on population, age, race, housing and income are displayed in the charts and tables that follow in this section. The project team looked at population information for the blocks in the study area, the City of Charleston, Charleston County, and the State of South Carolina. Site visits and meetings with local officials, stakeholders, residents and business owners in and surrounding the study area were also conducted. A list of these meetings is included in Chapter 4 Public Involvement and Agency Coordination.

³⁸ Charleston County www.charleston.county.org

³⁹ The CIA Website http://www.ciatrans.net/cia_faq.html#3,



5.4.1.2 How are Charleston County and the study area growing?

According to data from the U.S. Census, the population of Charleston County increased 5 percent from 295,039 people in 1990, to 309,969 in 2000 and ranked as the 3rd most populous county in the state. Based on population estimates from 2000 to 2007, the South Carolina Association of Counties ranked Charleston County in the top ten fastest growing counties in the state.⁴⁰ The 2007 population estimate for Charleston County is 340,326, which represents an increase of approximately 15 percent since 1990.

Within the study area, there are thirty-seven census blocks, all of which fall within the City of Charleston. The census blocks included 57,007 residents in 2000 and were estimated to have 64,317 residents as of 2008. Within the study area the two largest minority groups are African-Americans (29.6%) and Hispanic or Latinos (3.3%). A detailed discussion on minority populations within the study area can be found in Section 5.6, Environmental Justice.

Population estimates from the Updated CHATS Travel Demand Model predict that the population growth in Charleston County will continue over the next 25 years and the growth rate for the region will be higher than that for the State of South Carolina through 2035. In addition, the study area is anticipated to grow considerably (75 percent) by 2035. Table 5.10 illustrates population trends for the study area, Charleston County, South Carolina, and the BCD Region, while Table 5.11 illustrates the population characteristics for the study area, Charleston County and South Carolina.

Table 5.10 Population Estimates for the BCD Region						
Total Population	2003	2010	2020	2030	2035	2003 -2035 (Percent)
Study Area Total	115,251	123,834	135,109	145,580	202,006	75%
Charleston County	317,386	344,033	382,936	426,686	496,267	56%
South Carolina	4,133,794	4,486,740	4,949,090	5,407,890	5,637,590	36%
BCD Region	533,251	593,887	680,387	771,622	867,141	63%

Source: Updated CHATS Travel Demand Model

Table 5.11 Population for Charleston County			
	Study Area	Charleston County	South Carolina
Percent of population that is white	64.7%	61.9%	65.2%
Percent of population that is minority	34.3%	38.1%	35.3%
Median age	36.8	34.5	35.4
Percent of population age 65 and over	13.8%	11.9%	12.1%

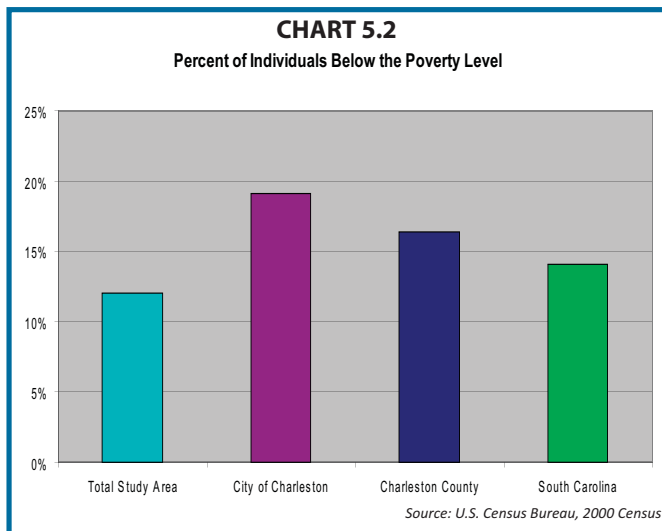
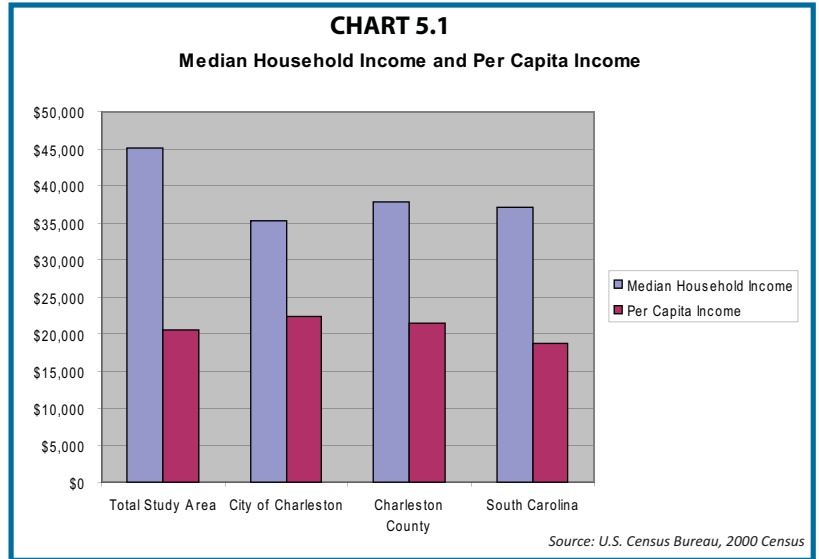
Source: U.S. Census Bureau, 2000 Census

40 S.C. Association of Counties, Population Trends – <http://www.sccounties-scac.org/profiles/PopTrendsIV.htm>, (Accessed 1/19/09)



5.4.1.3 What are the economic characteristics of the study area?

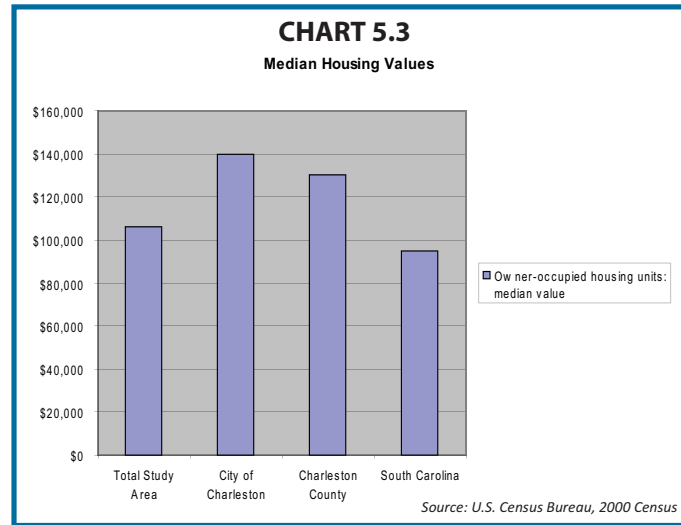
The study team examined income levels, home ownership rates, and the values of homes in Charleston County and the refined study area. Two methods of measuring income were used: median and per capita. Median household income is measured by taking all of the annual incomes reported to the U.S. Census by households in an area, and calculating the income level that half of the households are above and half of the households are below. It is essentially the income earned by the household for whom half of their neighbors make more money and half of their neighbors make less money. Per capita income is measured by adding all of the incomes reported for an area together and dividing by the number of people in the area. Median household income is higher in the study area than the City of Charleston, Charleston County and South Carolina, see Chart 5.1.



People living below the poverty level are those who live in households with incomes at or below the U.S. Department of Health and Human Services poverty guidelines of \$18,850 for a family of four (2000 Census guidelines). Compared to the City of Charleston, Charleston County and the state, the study area has the lowest percentage of individuals living below the poverty level, see Chart 5.2. This means that on average, study area residents earn more money than the average resident of the City of Charleston or Charleston County and there are also fewer people in poverty than elsewhere in the Charleston area.



Approximately 61 percent of the population in the study area own the homes they live in and the median value of a home in the study area was \$105,862 as reported by the 2000 U.S. Census, see Chart 5.3. As of 2000, approximately five percent of the homes were vacant. It is important to note that housing values in the Charleston Area have increased since 2000. Although home values declined last year by 5.9 percent. The median home value in Charleston County for 2007 was \$227,000.⁴¹



For the sake of comparison, a summary of these economic characteristics for the study area, the City of Charleston, Charleston County and South Carolina are included in Table 5.12.

	Total Study Area	City of Charleston	Charleston County	South Carolina	United States
Median Household Income	\$45,149	\$35,295	\$37,810	\$37,082	\$41,994
Per Capita Income	\$20,533	\$22,414	\$21,393	\$18,795	\$21,587
Individuals Below Poverty Level	12%	19.1%	16.4%	14.1%	12.4%
Unemployment	NA	6.6%	5.9%	5.9%	5.8%
Percent of households with no vehicle	7.5%	13.0%	11.9%	9.0%	10.2%
Percent of households with no phone service	1.1%	7.0%	2.7%	4.2%	2.4%
Percent Owner-occupied	61%	51.1%	61%	72%	66.1%
Percent Vacant	5%	8.5%	12.6%	12.5%	8.9%
Owner-occupied housing units: median value	\$105,862	\$139,700	\$130,200	\$94,900	\$118,000

Source: U.S. Census Bureau, 2000 Census

41 U.S. Census Bureau, 2005-2007 American Community Survey



5.4.1.4 What are the employment characteristics of the study area?

Employment:

The labor force in Charleston County is comprised of 155,555 employees. The top categories of employment by industry for Charleston County are educational/health/social services (22.7 percent), retail trade (12.6 percent) and recreation/food service (12.3 percent). These categories differ from the top industries for the state, which includes manufacturing (19.4 percent), educational/health/social services (18.6 percent) and retail trade (11.9 percent). This is due to the large number of colleges and medical facilities in Charleston. Employment in manufacturing comprises approximately 6.8 percent of the labor force in Charleston County, compared to 19.4 percent for the state. The top ten employers in the county include U.S. Navy-Naval Weapons Station, MUSC, Charleston Air Force Base, Charleston County School District, Roper St. Francis Healthcare, Piggly Wiggly Carolina Company, Robert Bosch Corporation, Wal-Mart, Charleston County, and Trident Medical Center. Table 5.13 provides information on the major employers in Charleston County.

Table 5.13 Major Employers in Charleston County			
Employer	Number of Employees	Product/Service	Location
U.S. Navy-Naval Weapons Station	10,800	Area Naval Commands	North Charleston
Medical Univ. of South Carolina	10,000	Hospital, education, research	Downtown
Charleston Air Force Base	6,150	US Air Force Base	North Charleston
Charleston County School District	5,400	Education	Throughout
Roper St. Francis Healthcare	3,400	Hospital	Downtown, West Ashley
Piggly Wiggly Carolina Co.	2,500	Grocery	Throughout
Robert Bosch Corp.	2,450	Antilock brake system	North Charleston
Wal-Mart	2,350	Retail	Throughout
Charleston County	2,100	Government	Throughout
Trident Medical Center	2,000	Hospital	North Charleston

Source: Charleston Metro Chamber of Commerce

Charleston County had an unemployment rate of 5.9 percent in 2000, which is comparable to both the state of South Carolina's rate and the U.S. rate of 5.8 percent, see Table 5.12. Data through 2007 showed Charleston County unemployment rates dropping to 4.5 percent and total employment rising to 167,530.⁴² Census data for 2000 showed that the median household income in Charleston County is \$37,810, and 16.4 percent of the population lives below the poverty level. The median income of Charleston County is slightly higher than the state of South Carolina (\$37,082) and lower than the U.S. median of \$41,994.

North of the Charleston peninsula, North Charleston is another employment and commercial center for the region. This area is currently undergoing extensive redevelopment, including the redevelopment of 300 acres of the old Navy base, several residential developments (Mixson Avenue, Horizon Village, Oak Terrace Preserve) and a mixed-used development including 3,800 residential units (Magnolia Development – Ashley River Center). Additionally, The Boeing Co. will build a Boeing 787 aircraft assembly plant in North Charleston and become a major employer creating at least 3,800 jobs. Many more of the area's major employers are located in North Charleston, including Charleston Air Force Base. In addition, the area's largest employer the U.S. Naval Weapons Station, with 13,000 employees, is located

42 SCES <http://www.sces.org/lmi/Spotlights/Charleston.pdf>; access 12/18/08.



in Goose Creek, in the southeast portion of Berkeley County, north of North Charleston. The Charleston International Airport is also located in North Charleston, just off of I-526. “The Charleston region is also an important center for maritime trade, boasting the nation’s sixth busiest seaport” in dollar value of commerce.⁴³

Table 5.14 shows the employment data for the region from the Updated CHATS Travel Demand Model. Between 2003 and 2035, these estimates show continued employment growth in North Charleston (37 percent) and strong growth in parts of the study area, with West Ashley and Johns Island growing by 104 percent and 188 percent, respectively. Additionally, Table 5.14 provides employment data estimates for the study area.

Table 5.14 Employment Estimates for Region and the Study Area						
	2003	2010	2020	2030	2035	2003-2035 Percent Change
BCD Region	261,488	284,216	317,665	349,540	415,571	59%
Charleston County	184,357	193,980	205,110	212,826	274,074	49%
Dorchester County	1,730	1,817	2,187	2,518	10,751	521%
Downtown Charleston	45,692	46,834	48,473	49,442	50,534	11%
North Charleston	77,062	79,845	85,028	89,379	105,724	37%
Ravenel/Hollywood	2,480	2,542	2,631	2,684	9,379	278%
Summerville	23,515	32,112	43,359	54,917	54,917	134%
Study Area						
James Island	7,572	8,129	9,770	9,498	9,498*	25%
Johns Island	5,199	6,687	8,410	9,272	14,998	188%
West Ashley	27,738	28,947	29,901	31,958	56,491	104%
<i>Source: Updated BCDCOG CHATS Travel Demand Model (2003); *For 2035 forecast, regional land use plans did not include any projects of significance that indicated additional growth in employment.</i>						

5.4.1.5 How does tourism contribute to Charleston’s economy?

Tourism activities generally affect several service sectors through spending on lodging, dining, and special activities. Tourism also generates transportation activity and increases in retail sales and provides ten of thousands of direct and indirect jobs. The Charleston area receives more than 4 million visitors annually. This area is known for its history, food, arts, recreational and cultural opportunities, miles of beaches and waterfront, shopping, local hospitality, and walkability. In 2008 visitors contributed \$3.05 billion dollars to the local economy. Travel and tourism sales represent 15 percent of all sales in Charleston County. In 2008 visitors on average spent \$212 per day in the area, see Table 5.15. The Charleston area tourism industry is expected to increase with the addition of cruise line ships sailing from Charleston year round.

43 U.S. Department of Commerce, Bureau of the Census, Report FT920, December 2007



	2004	2005	2006	2007	2008
Total Admission Tax Collected (5%) Charleston County	\$3,378,294	\$3,880,888	\$4,444,408	\$4,268,095	\$4,657,645
Average Expenditure Per Visitor Per Day	N/A	\$225	\$235	\$235	\$212
Annual Number of Visitors	4.11 Million	4.06 Million	4.21 Million	4.33 Million	4.12 Million
Total Economic Impact	\$2.49 Billion	\$2.80 Billion	\$3.06 Billion	\$3.09 Billion	\$3.05 Billion
% of sales attributed to Tourism in Charleston County	13%	13%	16%	16%	15%

Source: Office of Tourism Analysis, College of Charleston, 2009

5.4.1.6 How Do People Get Around the Charleston Area?

Cars, trucks and vans are by far the most common sources of personal transportation for residents of the Charleston area and the study area. Table 5.16 shows that over 70 percent of the residents of the City of Charleston and Charleston County use a vehicle to get to work. Additionally, less than four percent of the residents of the City of Charleston and Charleston County area workers use public transportation. Of the residents which live in the City of Charleston, 6.6 percent walk to work; this is higher than residents of Charleston County (3.5 percent).

Geographic Area	Worker 16 years and over				
	Percent Driving to Work	Percent in Carpools	Percent Using Public Transportation	Percent Walking to Work	Mean Travel Time to Work (minutes)
City of Charleston	73.5%	11.6%	3.6%	6.6%	20.1
Charleston County	76.6%	12.8%	2.5%	3.5%	22.6

Source: U.S. Census Bureau, Census 2000

Travel Characteristics: The average travel time to work in Charleston County is 22.6 minutes. A majority of the work force drives alone (76.6 percent) to work with 12.8 percent carpooling, while 3.5 percent of commuters walk to work and 2.5 percent take public transportation.



Roadway network:

The roadway network in Charleston County includes two interstates, three U.S. highways and several state routes. Interstate 26 (I-26) comes from the northwest into the center of downtown Charleston and ends with connections to U.S. 17 and U.S. 52 (Meeting Street). Approximately 50 miles north of Charleston, I-26 connects with Interstate 95 (I-95), a north-south route that crosses the state. Beginning at its interchange with I-26 in North Charleston, I-526 forms a half-circle around the city of Charleston to connect to U.S. 17 in Mount Pleasant to the east and to U.S. 17 in West Ashley to the west. U.S. routes in the county include the aforementioned U.S. 17, a north-south route along the coast and the north-south routes of U.S. 52 and U.S. 78, which end as Meeting Street and King Street respectively, in downtown Charleston. State routes within the study area include the north-south SC Route 61 (Ashley River Road) and the east-west SC Route 7 (Sam Rittenberg Boulevard) in West Ashley, east-west SC Route 700 (Maybank Highway) on Johns Island which also continues onto James Island and ends at SC Route 171 (Folly Road), a north-south route through the island.

Public Transit:

Public transportation servicing the study area is provided by CARTA and RTMA. CARTA has two express routes for James Island and West Ashley, respectively, plus one route for James Island with service to downtown Charleston and four routes for West Ashley with service to downtown Charleston and North Charleston. While CARTA does not provide transit service to Johns Island, RTMA provides two routes in Johns Island that connect with CARTA routes in West Ashley.

Pedestrians and Cyclists:

The West Ashley Greenway is a ten-mile long, rail to trail that is partly located within the study area. This Greenway is a designated bicycle path and a hiking path. The scenery on the trail varies from suburban to rural along the way. Many of the local roads in the study area include sidewalks and pedestrian signals at intersections.

Airports\Waterways\Rail:

Airports in Charleston County include the Charleston Executive Airport located south of the refined study area on Johns Island, the Mount Pleasant Regional Airport in Mount Pleasant and the Charleston International Airport is located in North Charleston.

The Atlantic Intracoastal Waterway runs along the eastern seacoast and includes in its course Wappoo Creek and the Stono River, which are within the study area.

Amtrak has a station in North Charleston with daily service to destinations on the eastern seaboard.

5.4.1.7 What are the characteristics of the local school system?

The Charleston County School District operates the local elementary and secondary school system. Charleston County School District has 44 elementary schools, 14 middle schools, and ten high schools along with five combination schools, seven charter schools and eleven magnet schools serving over 42,500 students. In addition, there are 42 private schools accommodating approximately 8,000 students. Murray-LaSaine Elementary School is located in the



refined study area.

Higher education and continuing education opportunities are available within the county through the College of Charleston, Citadel Military College of South Carolina, Trident Technical College, American College of the Building Arts, Charleston School of Law, Miller-Motte Technical College, MUSC Medical Center, ECPI College of Technology, Art Institute of Charleston, Southern Wesleyan University, Clemson University, Troy University LLC, Charleston Southern University, Lowcountry Graduate Center, Webster University Charleston, Strayer University Charleston Campus and Park University. There are no higher education or continuing education facilities in the refined study area.

Five percent of the population of the City of Charleston has less than a 9th grade education and 83.7 percent is a high school graduate or higher, additionally, 37.5 percent has a bachelor's degree or higher. The percentage of those who have a high school diploma and higher, or a bachelor's degree and higher is above the state averages of 76.3 percent and 20.4 percent, respectively.

Table 5.17 shows the number of students enrolled in various types of schools in the Charleston area. This includes the Charleston County School District schools, private schools, and colleges in the Charleston area. Nearly 40 percent of all students are in grades one through eight. Table 5.17 also shows the education levels of City of Charleston area residents. The City of Charleston has a lower percentage of high school graduates (19.8 percent) than both Charleston County (22.9 percent) and the State of South Carolina (30 percent).

5.4.1.8 What other community services and facilities are located in the study area?

Libraries:

The Charleston County Library System houses its Main Library in downtown Charleston, and has five regional and ten local branch libraries. The James Island local branch library and the Johns Island and St. Andrews regional branch libraries are located within the study area.

Emergency Services:

There are several hospitals servicing the region located in downtown Charleston at the base of the James Island Connector, including: the Ralph H. Johnson VA Medical Center, Roper Hospital, Kindred Hospital and MUSC which includes the MUSC Children's Hospital and Hollings Cancer Center. The Bon Secours St. Francis Hospital, is located in West Ashley near the interchange of I-526 and Paul Cantrell Boulevard.

Charleston County has 14 fire departments including the James Island Public Safety District and the St. John's Consolidated Fire District to service their respective areas. The county has eight urban and six rural EMS districts. The City of Charleston Fire Department #17 is located within the study area on Johns Island.

There are no police stations located in the refined study area.



Table 5.17						
Comparison of Educational Characteristics						
Total Population	City of Charleston		Charleston County		South Carolina	
	Total	Percent	Total	Percent	Total	Percent
	School Enrollment					
Population 3 years and over enrolled in school	30,276		87,355		1,053,152	
Nursery school	1,600	5.3%	6,164	7.1%	68,727	6.5%
Kindergarten	1,299	4.3%	4,714	5.4%	62,867	6.0%
Elementary School (grades 1-8)	8,771	29.0%	34,253	39.2%	474,360	45.0%
High School (grades 9-12)	4,330	14.3%	16,541	18.9%	230,359	21.9%
College or Graduate School	14,276	47.2%	25,683	29.4%	216,839	20.6%
Education Level						
Population 25 years and over	60,358		199,361		2,596,010	
Less than 9th grade, no diploma	3,066	5.1%	11,774	5.9%	215,776	8.3%
9th to 12th grade, no diploma	6,745	11.2%	25,078	12.6%	398,503	15.4%
High school graduate (includes equivalency)	11,930	19.8%	45,752	22.9%	778,054	30%
Some college, no degree	12,107	20.1%	42,365	21.3%	500,194	19.3%
Associate degree	3,881	6.4%	13,139	6.6%	173,428	6.7%
Bachelor's degree	14,217	23.6%	39,239	19.7%	351,526	13.5%
Graduate or professional degree	8,412	13.9%	22,014	11%	178,529	6.9%
Percent high school graduate or higher	83.7%		81.5%		76.3%	
Percent bachelor's degree or higher	37.5%		30.7%		20.4%	

Source: U.S. Census Bureau, 2000 Census



Parks and Recreation:

Charleston County Park and Recreation Commission, Charleston County Greenbelt Plan and the City of Charleston provide recreational opportunities including but not limited to parks, boat landings and beach/water access. Located within the refined study area are the James Island County Park, operated by the Charleston County Park and Recreation Commission, and the West Ashley Greenway, operated by the City of Charleston. The James Island County Park encompasses 643 acres. Facilities at the park include a water park, campgrounds, trails and picnic areas, fishing piers and dog park. Additional city and neighborhood parks and recreation facilities located within the refined study area include:

- Ferguson Village (James Island);
- Maybank Tennis Center (James Island);
- Charleston Municipal Golf Course (James Island); and
- Lowcountry Senior Center (James Island).

There are no city and neighborhood parks, recreation facilities or public boat landings located on Johns Island within the refined study area.

In addition, numerous city and neighborhood parks are also located within the study area. City and neighborhood parks, recreation facilities and public boat landings located within the study area include:

- Bayview Soccer Complex (James Island);
- Harborview Park/Fort Johnson (James Island);
- Medway Park (James Island);
- Parkway Drive Park (James Island);
- Plymouth Park (James Island);
- Stephen Washington/Honey Hill Park (James Island);
- Sunrise Park (James Island);
- Wappoo Bridge Park (James Island);
- Westchester Playground (James Island);
- James Island Recreation Center (James Island);
- Boat ramp at Wappoo Creek at Folly Road (James Island);
- Boat ramp at Plymouth Landing at Riverland Terrace on Wappoo Creek (James Island);
- Boat ramp at Battery Island on the Stono River (James Island);
- Charles Towne Landing State Park (West Ashley);
- Pierpoint boat ramp located at the end of Cedar Lane (West Ashley);
- Charleston Tennis Center and the Shadow Moss Golf Club (West Ashley);
- Chadwick Park (West Ashley);
- Forest Park Playground (West Ashley);
- West Ashley Greenway (West Ashley);
- Stono Park (West Ashley);
- Randolph Park (West Ashley);
- Marty Utesy Park (West Ashley);



- West Ashley Bikeway (West Ashley);
- Mulberry Pond Park (West Ashley);
- Balsam Park (West Ashley);
- West Ashley Park (West Ashley);
- St. Andrews Parish Parks and Playground (West Ashley);
- Ponderosa Playground (West Ashley);
- Johns Island Park (Johns Island); and
- Angel Oak Park (Johns Island).