PORT ST. JOHN SMALL AREA STUDY



Sunrise view from the Port St. John Boat Ramp. Photo taken by K. Shropshire.

BREVARD COUNTY, FLORIDA Planning and Development Department October, 2020



Table of Contents

EXECUTIVE SUMMARY	1
INTRODUCTION	3
Purpose of the Small Area Study	3
Study Area and Boundaries	3
Planning History in Port St. John	3
CHARACTER OF THE COMMUNITY	6
Community Background	6
Historical Aspects	6
Access	16
Commercial	16
Residential	16
Wayfinding	16
Urban Facilities	
Community Survey	18
POPULATION, DEMOGRAPHICS AND HOUSING	
Population	
Demographics	22
Households	23
Housing Types	23
Household Ownership	24
Trends in Brevard and Port St. John	26
LAND USE AND ZONING	27
General Pattern of Land Use	27
Future Land Use	27
Zoning	34
INFRASTRUCTURE AND SERVICE DEMAND	37
Transportation Network	37
Stormwater	42
Public Water and Wastewater	44
Parks and Recreation	48
Public Schools	51

SAFETY AND EMERGENCY MANAGEMENT	52
Fire Rescue	52
Law Enforcement	53
Emergency Management	54
Evacuation	55
ENVIRONMENTAL AND ECOLOGICAL FACTORS	57
Coastal High Hazard Area / Storm Surge	57
FEMA Flood Zones and Flood Hazard Areas	59
Soils	59
Wetlands	62
Land Use and Cover – Upland FLUCCS	64
Indian River Lagoon – Septic Overlay	65
Protected Species Potential	
CITIZENS COMMITTEE RECOMMENDATIONS	
MAP SERIES INDEX	_
Map 1. Study Area and Boundaries	
Map 3. Residential Density - History: 1988 and 1992	
Map 4. Future Land Use History: 2001 and 2014	
Map 5. Adopted Future Land Use	32
Map 6. Zoning Map	
Map 7. Public Works Phase 1 and 2 Drainage Plan – Port St. John	
Map 8. Stormwater Projects and LiDAR Elevation Map – Port St. John	
Map 9. Utility Services Wastewater Service Area – Port St. John	
Map 11. Evacuation Zones in Port St. John	
Map 12. Evacuation Routes in Brevard County.	
Map 13. Storm Surge map	
Map 14. Flood Zones and Flood Hazard Areas	60
Map 15. Soils map	
Map 16. National Wetlands Inventory (NWI) map	
Map 17. Florida Land Use Cover and Forms Classification System (FLUCCS) map	
Map 18. Nitrogen Reduction Septic Overlay map	
Map 17. Eagle 196313 and 36100 3ay 746a3 map	

EXECUTIVE SUMMARY

On October 4th, 2018, the Board of County Commissioners directed Planning and Development Department staff to conduct a Small Area Study of Port St. John. The study set out to take an in depth look at the area; infrastructure and environment; and the community's vision to serve as a tool for planning for development while preserving a unique quality of life. Seven residents of Port St. John were officially appointed on July 18th, 2019 by the District 1 Commissioner to serve as members of the Citizens Committee to guide the Port St. John Small Area Study. The first Citizens Committee meeting took place on August 15, 2019.

The Small Area Study focused on providing data and information to the Citizens Committee for the purpose of formulating recommendations for future improvement projects, land development regulations or amendments to the Comprehensive Plan. The study addressed long-term concerns by examining the Character of the Community; Population, Demographics and Housing; Land Use and Zoning; Infrastructure and Service Demand; Safety and Emergency Management; and Environmental and Ecological Factors. Final recommendations were developed during the course of the Study, and five (5) recommendations were selected by vote at the final meeting of the Citizens Committee on September 24, 2020.

The top recommendations of the 2020 Port St. John Small Area Study Citizens Committee are as follows:

Recommendation 1: Relocate Brevard County Fire Station from Fay and Carol Avenue to the west which is more to the center of Port St. John. Ideally, the land owned by Brevard County at or near Fay Avenue and Adams Place (Funding source could be a combined MSTU and MSBU within the boundary).

Recommendation 2: Adjust the Port St. John Dependent Special District boundary (PSJ Advisory Board) to the north to match the Small Area Study boundary less any lands that are currently part of the City of Cocoa or the City of Titusville.

Recommendation 3: Change the Future Land Use designation from Residential 4 (RES 4) to Neighborhood Commercial (NC) on 2.92 acres located on Fay Boulevard (tax account #s: 2309950, 2309949, 2309948). No changes to zoning recommended.

Recommendation 4: Change the Future Land Use designation from Residential 4 (RES 4) to Neighborhood Commercial (NC) on 0.30 acres located at the intersection of Fay Boulevard and Grissom Parkway (tax account #: 2310247). No changes to zoning recommended.

Recommendation 5: No changes recommended in the area of Fay Boulevard and US Highway 1. Current Future Land Use and Zoning designations are consistent.



Citizens Committee Members

Vaughan Kimberling, Chair

Carmine Ferraro, Vice Chair

Steven Darling

Matt Denyer

Chris Kane

Maureen Rupe

Chuck Wortham

Brevard County Staff

Tad Calkins, Planning & Development Director

Jeffrey Ball, AICP, Planning & Zoning Manager

Cheryl Campbell, Planner III

Jane Hart, Associate Planner

Anne Rembert, GIS Analyst II - GIS & Mapping

In coordination with various County departments and State agencies

INTRODUCTION

Purpose of the Small Area Study

On October 4th, 2018, the Board of County Commissioners (BCC) directed staff to conduct a study of Port St. John (PSJ) after a Small Scale Comprehensive Plan Amendment and rezoning request with a Binding Development Plan (BDP) in PSJ was approved after much discussion and public comment. The subject parcel was 1.68 acres located on the south side of Fay Boulevard. On July 18th, 2019, seven residents of Port St. John were officially appointed by the District 1 Commissioner to serve as members of the Citizens Committee to guide the Port St. John Small Area Study (herein after known as The Study). The first PSJ Citizens Committee meeting was held on August 15, 2019.

The Study set out to take an in depth look at the area; infrastructure and environment; and the community's vision to serve as a tool for planning for development while preserving a unique quality of life. The Study focused on providing data and information to the Citizens Committee for the purpose of formulating recommendations for future improvement projects, land development regulations or amendments to the Comprehensive Plan. The Study addressed long-term concerns by examining the Character of the Community; Population, Demographics and Housing; Land Use and Zoning; Infrastructure and Service Demand; Safety and Emergency Management; and Environmental and Ecological Factors.

Study Area and Boundaries

The Port St. John Study Area is an irregularly-shaped polygon (please refer to **Map 1** on page 5) generally bordered by the City of Titusville to the north, Canaveral Groves Boulevard to the south, the Indian River Lagoon to the east, and Challenger Memorial Parkway (SR 407) to the west. The study area is approximately 8,450 acres.

Planning History in Port St. John

In 2005, a Small Area Study was proposed to investigate planning and zoning issues in regards to the area in and surrounding the intersection of Port St. John Parkway and Grissom Parkway. Five public meetings were held during September and October of 2005 to discuss the proposed Small Area Study and development issues. Topics discussed per the recorded meeting minutes included zoning, natural resources, stormwater, and roadway maintenance. Draft recommendations were composed; however, a formal SAS was not finalized.

Draft recommendations of the 2005 proposed SAS:

- Create a commercial corridor along Grissom Parkway and Port St. John Parkway, mixing light retail and low-density residential uses.
- Limit driveway access on Port St. John Parkway.
- Encourage access roads along Port St. John Parkway.
- Avoid using wetter soils for commercial uses; use these areas for low-density residential.
- Encourage closures for state owned "paper roads" to discourage use as shortcuts.

- Address visibility issue at the Camp Road connector; encourage traffic study to create alternative road intersection design to provide traffic safety and speed control.
- Encourage traffic feasibility study for turn lanes in Community commercial area and both sides of Canaveral Grove Boulevard intersection, as well as south of intersection; address safety concerns and accident-prone areas.
- Request that natural resources provide an updated Scrub Jay habitat map.
- Target City of Cocoa utilities for future growth.
- Encourage architectural and landscaping review for new commercial development.
- Encourage extension of public transportation and stations near Medical Center.
- Encourage retention and maintenance of existing parks and recreational facilities.
- Encourage study for locating a possible ATV trail network.
- Encourage the creation of a sidewalk/bike trail network on east side of Grissom.
- Encourage connectivity to areas of recreation and community use, and to planned greenway and nature trails near study area.

In addition to the 2005 proposed SAS, the citizens Port St. John have historically been active with the decision-making process on matters affecting their community. Examples of this citizen involvement¹ include:

1987: The Port St. John Homeowner's Association (PSJHOA) worked with County officials to plan a Port St. John Fire Station and Library. Both were completed in 1988.

1988: The PSJHOA began lobbying State and County officials for a Port St. John I-95 Interchange. Their efforts were realized when the new interchange opened in 1999.

1990: The PSJHOA coordinated with State and County agencies concerning septic tank issues and allowed residential build-out.

1992: The PSJHOA served as the community liaison between area residents, County staff, and contractors during the expansion of Fay Boulevard to four lanes.

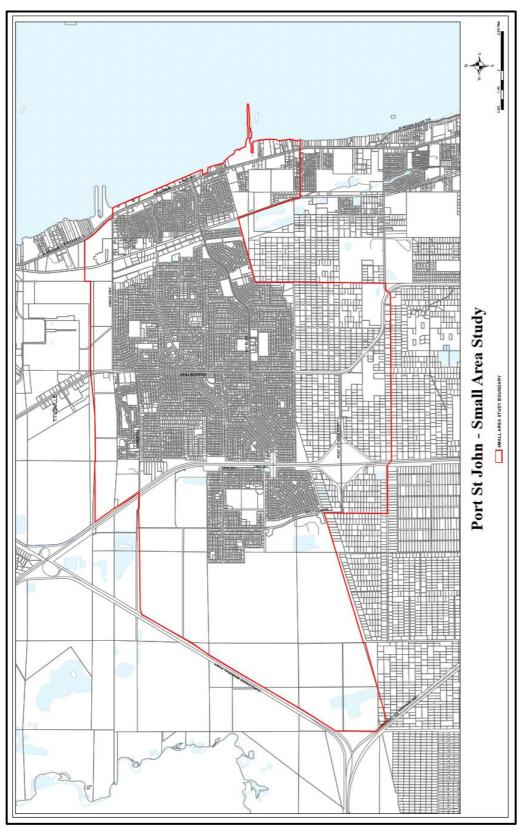
1994: Various community organizations lobbied for a special self-imposed Parks and Recreation MSTU to build additional and expand existing recreational facilities. Port St. John Residents approved the MSTU referendum.

1995: The PSJHOA coordinated with County staff to expand the Parks and Recreational MSTU to include purchasing additional property and building the Fay Lake Wilderness Park. Port St. John residents approved the MSTU expansion.

1996: The PSJHOA lobbied Brevard County Commissioners for a Port St. John Advisory Board. On July 2, 1996 the Brevard County Commission created the Port St. John Dependent Special District, and the first members were elected November 1996.

1998-99: Various community organizations and citizens lobbied the County to perform a Municipal Incorporation Feasibility study. The issue was placed on the November 2000 ballot, and approximately 73% of voters favored a feasibility study to be performed. Subsequently, the Brevard County Commission unanimously approved funding the study. While results of the study indicated proposed incorporation of the City of Port St. John was feasible, incorporation never moved forward.

¹ D.L. Laney, "Port St. John Incorporation Feasibility Study", University of Central Florida, Department of Public Administration, October, 2001.



Map 1. Study Area and Boundaries

CHARACTER OF THE COMMUNITY

Community Background

The community of Port St. John is located in the north central portion of Brevard County, immediately south of the City of Titusville and approximately 1.8 miles north of the City of Cocoa. Port St. John is bordered to the east by the Indian River Lagoon (IRL) and to the west by Challenger Memorial Parkway (SR 407) and Highway 528 (SR 528). Port St. John is primarily a residential community, often described as having a "small town" nature that many Port St. John citizens wish to preserve.

Historical Aspects

PRE-1900s

The Port St. John area, along with much of the region surrounding the Indian and Banana rivers in east Florida, was home to the group of native North American Indians known as the Ais. The Ais were first encountered at a village south of what is now Cape Canaveral by Spanish explorer Juan Ponce de Leon in 1513, the same year he named Florida. The Ais tribe was comprised of several hundred thousand hunter and gatherer people that lived in small villages along the shores of the Indian River Lagoon from what is now Brevard County down to northern Martin County until the late eighteenth century. The long, stable culture of the Ais was facilitated by the rich marine resources of the Indian River region and endured almost two hundred years after the first contact with European explorers.²

Following several unsuccessful attempts to settle Florida, and a brief attempt at settlement by the French, Spain finally claimed rule of Florida in 1565. The east coast of Florida was a strategic asset for the Spanish and remained mostly unsettled except for native Indian populations during their 200-year rule. By the time the Spanish left in 1763, most of the Ais population had been eradicated by disease, warfare, and malnutrition.³

After two brief decades of British rule, the second Spanish period began in 1784. During Spain's second period of rule, the King permitted non-Catholics to settle in Florida and only required an oath of loyalty to the crown for land ownership. As such, the population of East Florida during this period was mixed, being comprised of people of Spanish, Minorcan, Indian, Anglo-European, and African (both free and slave) descent.⁴

Privately owned land in and around is now northern Brevard County included two major tracts known as the Reyes Grant and the Delespine Grant. Domingo Reyes owned the

² Historic Property Associates, "Historical Development of Titusville", *North Brevard Historical Society*, accessed December, 2019, https://nbbd.com/godo/history/NBrevHist/.

³ Ibid.

⁴ Ibid.

1000-acre Reyes Grant, located north of Titusville, and operated a sugar mill and sugar cane plantation on the land from about 1804 to 1835. The other privately-owned tract was the Delespine Grant, a 43,000-acre tract of land located south of Titusville which encompassed the area that is today known as Port St. John.⁵

The Delespine Grant, one of the largest tracts of land ever granted by the Spanish in Florida, was conceded to Joseph Delespine in 1817 by the East Florida Governor for the King of Spain. When the United States acquired the Territory of Florida from Spain in 1821, the U.S. Supreme Court started reviewing the numerous existing Spanish land grant claims for confirmation, and in 1838 the Court adjudged in favor of Joseph Delespine's heirs that their claim was valid.⁶ A survey of the Delespine tract was conducted in 1851 (**Figure 1** on page 10).⁷

Mary Boye, the granddaughter of Joseph Delespine, inherited the land, and together with her husband Captain James Pritchard, moved to the area and became an important pioneering family in Brevard County. The Pritchards settled on part of the grant located just north of Highway 50 where they grew sugar cane and citrus until the freeze of 1886. The Pritchard family then moved to Titusville where Captain Pritchard sold real estate, owned a hardware store, established the first bank in Titusville and even built the first electric generating plant in Titusville. The Pritchard's ancestral home, built in 1891, still stands in Titusville and is on the U.S. National Register of Historic Places. The Pritchards made significant contributions to the development of northern Brevard, and their original tract of land (the Delespine Grant) connects the area of Port St. John to one of the oldest pioneer families in Brevard County.8

1900 to PRESENT

The area that is today known as Port St. John remained relatively undeveloped until the mid-twentieth century. The earliest aerial photography of Brevard County available for review was taken in 1943 (**Figure 2** on page 11) and shows the study area as mostly pristine with some development appearing in proximity to U.S. Highway 1 (U.S. 1) and the existing Florida East Coast Railway. The topography and natural features of the study area in existence prior to large scale development are depicted on a historic United States Geologic Service (USGS) topographic map from 1951 (**Figure 3** on page 12). The general area of the Delespine Grant (from which the study area originated) is noted on

⁵ Historic Property Associates, "Historical Development of Titusville", *North Brevard Historical Society*, accessed December, 2019, https://nbbd.com/godo/history/NBrevHist/.

⁶ United States Supreme Court, "The United States, Appellants, v. Joseph Delespine's Heirs et al.", *Cases Adjudged in the Supreme Court, Volume 37*, (1838), 654-655.

⁷ State of Florida Archives, *Florida Memory Project*, accessed December, 2019. https://www.floridamemory.com/FMP/SLG/doc_images/Delespine_Joseph_35x1/35x1_6_10_Delespine_Joseph_0 26.jpg.

⁸ Michael Boonstra, "Titusville's Pritchard House", *Michael's Genealogy and Brevard County History* (blog), May 2011, accessed December, 2019, http://mylibraryworld-michaelb.blogspot.com/2011/05/.

the map. Several wetland areas are shown and transportation is primarily via unimproved dirt roads with the exception of U.S. 1.

During the late 1950s and early 1960s, residential development in Brevard County began to ramp up due to the employment opportunities provided by the growing space race and nearby Air Force Missile Test Center. Thousands of acres were purchased by General Development Corporation (GDC) in cooperation with the Mackle Company to develop planned communities in Florida, with two located in Brevard: Port St. John in the northern portion of the county and Port Malabar in the south.

In December 1957, GDC purchased 2,707 acres of land that would eventually become the nucleus of the Port St. John community. The grand opening of the Port St. John was held in July 1960 proposing to build custom homes in the \$13,000 to \$17,000 range on 9,000 platted lots. A major addition of acreage was acquired in 1960, increasing GDC holdings to 5,400 acres.

The 1960 GDC Annual Report describes their newest community – Port St. John:

"In the heart of the Cape Canaveral missile area, midway between the thriving cities of Cocoa (9 miles to the south) and Titusville, the county seat (10 miles to the north), lies General Development's newest planned community - 5,400 acre Port St. John. The

nearby Air Force Missile Test Center alone employs 47,500 persons. In the fiscal year of 1958 it spent \$87 million for the purchase of supplies, services and maintenance of facilities and \$408 million in salaries.....

The tract, divided by U.S. Highway 1, borders the Indian River in the east and the St. Johns River in the west. Layout of a complete community (home sites, home areas, school and shopping center sites, parks, recreational area) was completed early in 1960." 12



"Reader's Digest" ad, November 1959

1970 aerial photography shows the progress made by GDC in their Port St. John planned community during the first ten years of development (**Figure 4** on page 13).

⁹ The Mackle Company, "General Development Corporation", accessed December, 2019, http://www.themacklecompany.com/femjrstorypublic/00-index.htm.

¹⁰ David L. Laney, *Port St. John Feasibility Study*, (University of Central Florida, 2001).

¹¹ The Mackle Company, "General Development Corporation", accessed December, 2019, http://www.themacklecompany.com/femjrstorypublic/00-index.htm. ¹² Ibid.

By 1985, the total size of Port St. John had increased to 5,500 acres (**Figure 5** on page 14). Steady growth in the community was attributed to the close proximity to the Space Center and high technology industries that were coming into the area. However, restrictions on septic tanks and water wells began to limit growth during this time period as GDC was unable to meet its obligation to provide water distribution and waste treatment services. GDC offered to give control over these utilities to the City of Cocoa and Brevard County, and also pay \$1.5 million to install a 3 mile main water pipe to connect Port St. John to the city's water system.¹³

While lack of public water and sewer infrastructure temporarily restricted development of many existing lots in the area, builders began to target land west of Interstate 95. Because lots greater than half acre were exempt from the septic tank and water well density restrictions, residential growth began to expand on the western side of Port St. John. Commercial developers, in anticipation of city water connection and a second boom of residential growth, began moving into the eastern portion of Port St. John.¹⁴

In 1990, GDC filed for bankruptcy, turning over all remaining functional assets in the various GDC developments to their respective governments ¹⁵. Brevard County and the City of Cocoa both continue to provide waste treatment and water distribution service in the Port St. John area.

To this day Port St. John remains primarily a residential community due to its historical beginnings as a planned GDC development. Nearly 8,000 housing units were located in the general Port St. John study area during the 2010 census (see **Table 3** on page 25), remarkably close to GDC's original projection of 9,000 platted residential lots at the grand opening of the Port St. John Planned Community fifty years earlier. Aerial imagery taken in 2019 (**Figure 6** on page 15) shows the Port St. John area as it mostly exists today...a residential "small town" community in northern Brevard County, Florida.



The Port St John Christmas Parade is a tradition that brings the whole community together each year. Photo source: City of Titusville.

¹³ Orlando Sentinel, "Wilted Growth in Port St. John Waits For Cocoa's Water", September 10, 1985, accessed December, 2019, https://www.orlandosentinel.com/news/os-xpm-1985-09-10-0330000257-story.html.

¹⁵ The Mackle Company, "General Development Corporation", accessed December, 2019, http://www.themacklecompany.com/femjrstorypublic/00-index.htm.

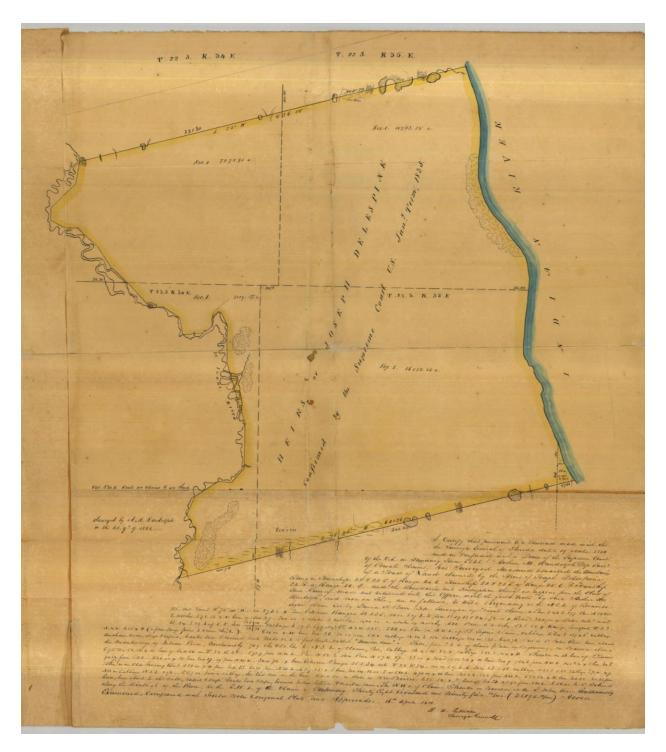


Figure 1. 1851 Survey of the Delespine Grant. Source: State Archives of Florida.

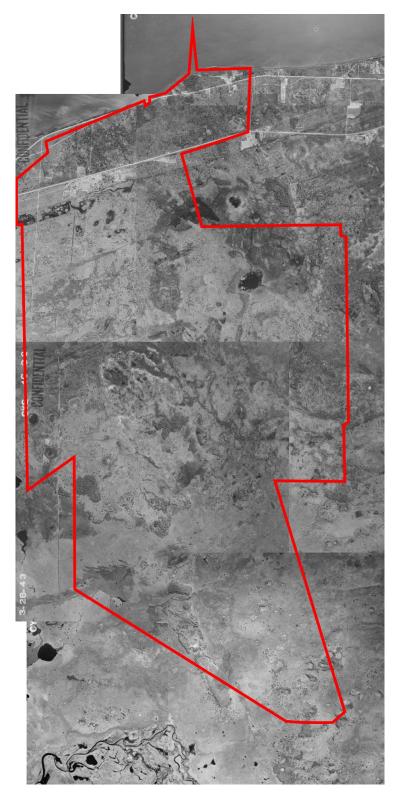


Figure 2. 1943 aerial photography (with approximate study boundary superimposed). Source: University of Florida Digital Collections, George A. Smathers Libraries.

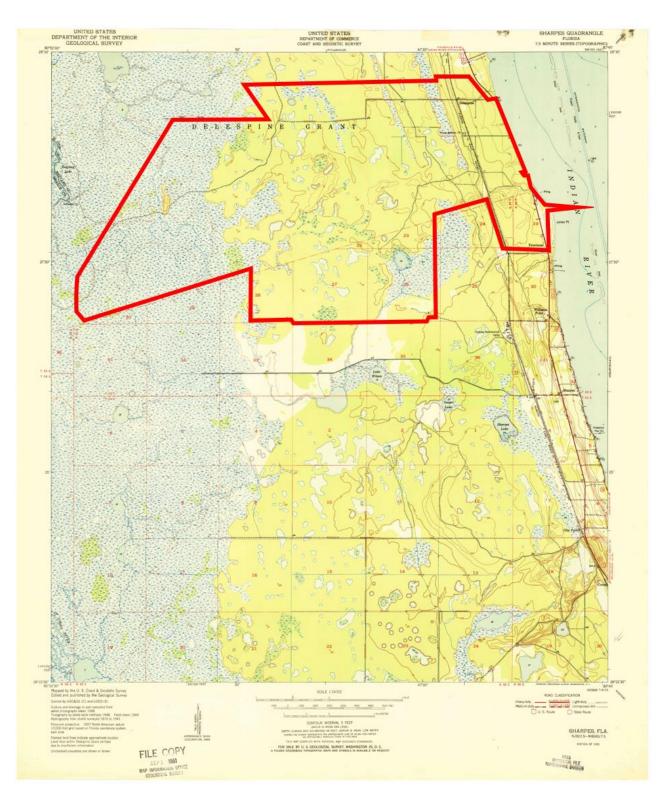


Figure 3. Historic USGS Topographic Map - 1951 (with approximate study boundary superimposed). Topographic map source: U.S. Geological Survey.



Figure 4. 1970 aerial photography (with approximate study boundary superimposed). Photo image source: University of Florida Digital Collections, George A. Smathers Libraries.



Figure 5. 1985 satellite imagery (with approximate study boundary superimposed). Satellite image source: Google Timelapse.



Figure 6. 2019 aerial imagery (with approximate study boundary superimposed). Image source: Brevard County Planning and Development Department.

Access

Vehicular access into Port St. John is via two major north-south transportation arterials in Brevard County (Interstate I-95 and U.S. 1). Port St. John Parkway, Grissom Parkway, and Fay Boulevard are major connectors within the study area.

Commercial

The primary shopping and business area for Port St. John residents is along U.S. 1. Additional commercial properties are located along Curtis Boulevard, Fay Boulevard, Grissom Parkway and Port St. John Parkway. Outside of the study area, the City of Titusville to the north provides additional retail opportunities, as well as the City of Cocoa to the south. Refer to Map 5 on page 32 in the Land Use and Zoning section of this report.

Residential

The Port St. John area is primarily a residential community. Over 90% of occupied housing units are single detached. Please refer to the Population and Demographics section of this report (Housing Types on page 23).

Wayfinding

Because Port St. John is not a city it does not have clear defining signage at its north and south entry points. There is limited signage along the two commercial corridors of U.S. 1 and Port St. John Parkway that would help direct residents and visitors to the main recreational areas and facilities.

Urban Facilities

Urban facilities refer to the various basic services and facilities found throughout the Port St. John area to serve the needs of the community. These include fire stations, law enforcement, medical facilities, community centers, libraries, hurricane shelters, schools, parks, and cemeteries.

A Community Characteristics Inventory prepared by the Brevard Metropolitan Planning Organization (MPO) in 2007 listed urban facilities throughout Brevard County by zip code. Brevard County Planning and Development staff updated the MPO inventory during this study through internet research to better represent facilities currently present in the Port St. John study area.

Fire Stations

Brevard County Fire Station #26 - 6655 Carole Avenue

Law Enforcement

Brevard County Sheriff, Port St. John Sub-Station - 4700 Fay Blvd

Medical Facilities

Port St John MedFast Urgent Care - 5005 Port Saint John Pkwy

Parrish Medical Group - 5005 Port Saint John Pkwy

Port St John Family Practice - 5005 Port Saint John Pkwy

North Brevard Medical Support - 5005 Port Saint John Pkwy

Health First Medical Group, - 7227 N Highway 1

Brevard Health Alliance - 7227 N Highway 1

Wuesthoff Medical Center - 7227 N Highway 1

Steward Health Center, Physical therapy - 7227 N Highway 1

Port St John Eye Care - 3720 Curtis Blvd

Family Health Center at Port St John - 3740 Curtis Blvd

North Brevard Children's Medical - 3750 Curtis Blvd

Community Centers/Hurricane Shelters

Port St John Community Center - 6650 Corto Road

Libraries

Port St. John Public Library – 6500 Carole Ave

Schools

Atlantis Elementary School - 7300 Briggs Ave

Challenger 7 Elementary School - 6135 Rena Drive

Enterprise Elementary School - 7000 Enterprise Road

Space Coast Junior/Senior High School - 6150 Banyan Street

Parks

Fay Lake Wilderness Park - 6300 Fay Boulevard

Fay Park - 6315 Depot Avenue

Friendship Park - 1055 Barclay Drive

Robert Nicol Park - 6660 N Highway 1

Port St. John Boat Ramp - 6650 N Highway 1

Cemeteries

Brevard Memorial Park Cemetery 320 Spring Street

Community Survey

A non-scientific community survey was conducted at the start of the Small Area Study to assess current opinions of the Port St. John community regarding issues like amenities, neighborhood integrity/appearance, and growth management/development. Planning and Development staff prepared an 18 question survey (Appendix A) that was available online through the Survey Monkey website. Paper versions were available and distributed to the Port St. John Community Center and the District 1 Commissioner's office. Information regarding the community survey including a web link to access the online questionnaire was posted on the District 1 Commissioner's social media page (i.e., Facebook) on August 16th. The survey was shared on social media by some of the Citizens Committee members.

A total of 739 responses were collected between August 15 and August 26, 2019. Most (737) were collected through the online Survey Monkey site. Community survey results were provided to the Citizens Committee and are summarized below.

Top two important issues indicated on the survey for meeting resident's needs were Schools (70%) and Neighborhood services: banks, post-offices, doctor's offices, convenient stores for daily activities (58%). Entertainment/Restaurant choices (48%) and more recreational choices (44%) ranked 3rd and 4th highest, respectively.

Survey respondents selected shaded playgrounds (62%) and bike lanes (55%) as the top two Parks and Recreation amenities they would like to see in Port St. John. Two-thirds of respondents indicated in favor of a non-motorized (kayak) launch area on the Indian River Lagoon.

Police, Fire, Waste management, and Improved drainage services ranked the highest (over 80% each) on the survey for improving the street and neighborhood environment in PSJ, with improvement of sidewalks, street lighting and traffic congestion next highest (over 70%).

Preservation of the Indian River Lagoon (90%) is a very important issue in Port St. John according to survey responses, as well as preservation of green space and native plants (75%) and coordinating land uses that are in harmony with the character of the community (72%). Almost 60% of respondents indicated they did not want large discount or home improvement stores like Lowes or Walmart to develop. It is important to note that at least 38 people commented that they did not want another Dollar Store in Port St. John.

POPULATION, DEMOGRAPHICS AND HOUSING

Brevard County was founded in 1844 by Theodorus W. Brevard. The County's first recorded population was 139 in 1850. As of 2018, Brevard County's estimated population is 583,563, with a projected 2020 population of 598,500.¹⁶

Population

The Port St. John Study Area encompasses the Port St. John Census Designated Place (CDP) along with portions of several Census Tracts, including 621.04, 621.06, 621.08, 621.09, and 712. For the purpose of evaluating the demographic makeup of the Study Area, the Port St. John Census Designated Place (CDP) plus Census Tract 621.04 was utilized because these areas appear to capture the majority of developed area within the Study Area as can be seen in the Census Tract Boundary Map (Map 2, page 21). It is important to note that census tract data for the Port St. John area is only available beginning with the 2000 Census. Prior to 2000, only data for the Port St. John CDP was collected by the decennial census and was utilized in this demographic analysis to best represent the Study Area's population.

Historical and current population data has been used to evaluate the pace of growth within the study area. The percent of change calculation is a simple mathematical concept that represents the degree of change over time by making a comparison between two values expressed as a percent increase. **Table 1** on page 20 examines the population and change over time within Florida, Brevard County, and Port St. John.

From 1980 to 2010, Florida's population almost doubled, growing by 97%. With that said, the pace of growth has begun to level out, steadily declining over the last several decades. Brevard County's population increased at almost exactly the same rate as the state, growing 99% over the same 30-year period.

In 1980, the population within the Port St. John CDP was 1,837. By 2010, the population bloomed to 12,267, or a 568% growth over the 30-year period evaluated – a rate that was almost 6 times higher than the State or County growth rate. The Port St. John CDP experienced a 386% increase for the 10-year period between 1980 and 1990, but since that time the rate of growth has decreased significantly.

Between 1990 and 2000, the Port St. John CDP was still experiencing moderate growth at a rate of 36%, but the pace of growth had declined by 350% from the prior 10-year period. From 2000 to 2010, the growth rate slowed to 1%, while Brevard County and Florida continued to grow at 14% and 18% respectively.

The rapid population growth in the Port St. John area from 1980 to 1990 appears to coincide with the Space Transportation System (STS) program that launched thirty-two

¹⁶ BEBR – Projections of Florida Population by county, 2020-2045, with Estimates for 2018, accessed November 2019, https://www.bebr.ufl.edu/population/data.

(32) space shuttle flights during the decade and brought high-paying tech jobs to Brevard.

The Kennedy Space Center (KSC) went through several layoff periods with the first major workforce reduction occurring at the end of the Apollo program in 1972. 7 A smaller layoff period occurred in 1986 after the explosion of the space shuttle Challenger when a temporary two and a half year launching hiatus resulted in ten (10) percent reduction in the shuttle workforce (approximately 1,110)18; however, KSC "closed out the 1980s as busy as ever", launching five shuttle missions in 1989.19 Another significant layoff period (~6-9,000) began in 2010 near the end of the Space Shuttle program as the Kennedy Space Center reduced its workforce and repurposed facilities and infrastructure to support NASA's Space Launch System and a variety of commercial launch vehicles in the next decade.²⁰

Currently, development is occurring in the Port St. John area as reflected in new residential permits issued during the past few years. In 2017, Brevard County building permits were issued for forty-eight (48) new residential, detached single-family construction in the 32927 zip code. In 2018, building permits were issued for ten (10) residential manufactured homes and fifty-eight (58) new residential, detached singlefamily homes in the 32927 zip code. Source: Brevard County Planning and Development Department.

Table 1. Population Change

			Population	n Change					
	Florida (total population)	% change	Brevard (total population)	% change	PSJ CDP (total population)	% change	PSJ CDP + Census Tract 621.04 (total population)	% change	
1980 Census (USCB)	9,746,961		272,959		1,837				
1990 Census (USCB)	12,937,926	33%	398,978	46%	8,933	386%	no data		
2000 Census (USCB)	15,982,378	24%	476,230	19%	12,112	36%	18,657		
2010 Census (USCB)	18,801,310	18%	543,376	14%	12,267	1%	19,256	3%	
2017 ACS estimates (USCB)	20,278,447	8%	568,183	5%	11,489	-6%	19,217	0%	
2018 estimates (BEBR)	20,840,568	3%	583,563	3%	no data		no data		
2020 projection (BEBR)	21,517,600	3%	598,500	3%	no data		no data		
Sources: United States Census	Sources: United States Census Bureau (USCB) and Bureau of Economic and Business Research (BEBR)								

¹⁷ NASA, Spaceport News, June 29, 2012, accessed November, 2019,

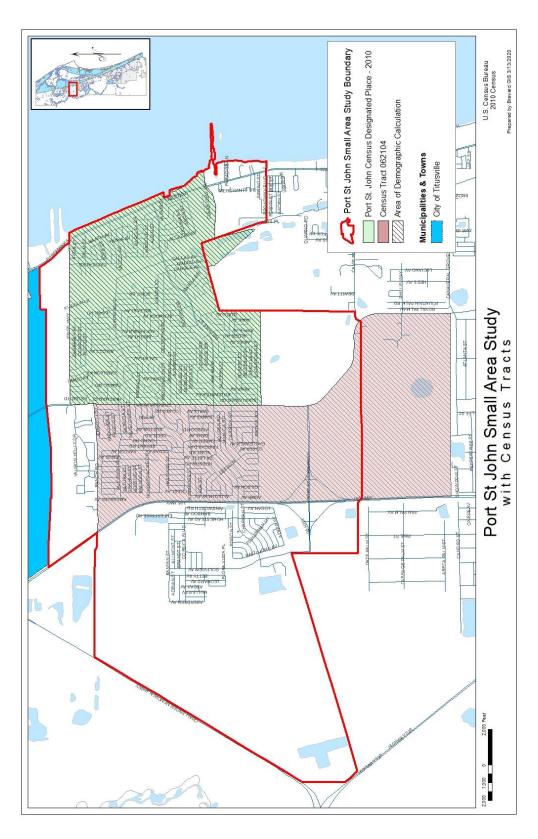
https://www.nasa.gov/centers/kennedy/pdf/664283main jun29-2012.pdf.

¹⁸ NY Times, "NASA Cutting Work Force At Space Center In Florida", September 5, 1986, accessed November 2019, https://www.nytimes.com/1986/09/05/us/nasa-cutting-work-force-at-space-center-in-florida.html.

¹⁹ NASA, Kennedy Space Center Historical Timeline, June 29, 2012, accessed November 2019,

https://www.nasa.gov/centers/kennedy/about/history/timeline/80s-decade.html.

²⁰ NASA, Spaceport News, June 29, 2012, accessed November, 2019, https://www.nasa.gov/centers/kennedy/pdf/664283main_jun29-2012.pdf.



Map 2. Census Tract Boundary

Demographics

EMPLOYMENT:

According to five year estimates provided by the US Census Bureau's American Community Survey (ACS) for 2013-2017, the top occupational industry category for the civilian employed population in Port St. John was Educational Services, Health Care, and Social Assistance. The next highest employment industry during that time period in Port St. John was Retail Trade (**Figure 7**).

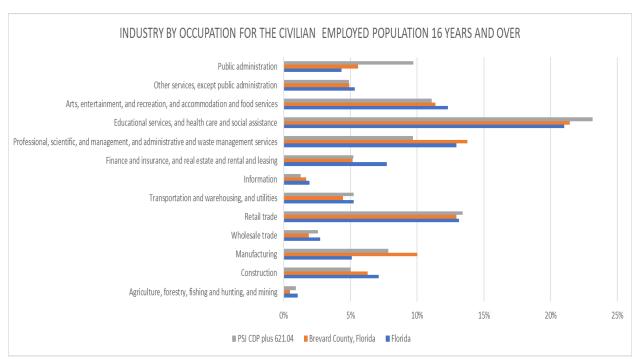


FIGURE 7. Source: C24050 INDUSTRY BY OCCUPATION FOR THE CIVILIAN EMPLOYED POPULATION 16 YEARS AND OVER, Universe: Civilian employed population 16 years and over, 2013-2017 American Community Survey 5-Year Estimates.

AGE-SEX:

US Census Bureau's ACS estimates for 2013-2017 indicate the population in Port St. John appears to be a younger community compared to Brevard County as a whole. The median age of residents in Port St. John is 43.0 years, while Brevard County's median age is 47.1 years. The higher median age in Brevard County reflects the larger number of retirees in the County.

Port St. John also appears to have a more diverse range of ages living in the community compared to Brevard County and the State of Florida. One noticeable difference is that the Port St. John community contains a smaller proportion of retirees (residents aged 65 years or older) than Brevard County or Florida. In fact, compared to Brevard County, Port St. John has a larger 30 to 60 year old population. Port St. John also has a higher

percentage of 20 to 24 year old community members and children (9 and younger) in its population compared to the County. This indicates that the Port St. John area is a family oriented, working community and less of a retirement destination than other areas of Brevard County.

While the State of Florida and Brevard County both have slightly less males than females, 49% and 51%, respectively, Port St. John estimates reflect an even split at 50% for each gender.

Households

Household is defined as set forth in Florida Statutes 196.075, "a person or group of persons living together in a room or group of rooms as a housing unit, but the term does not include persons boarding in or renting a portion of the dwelling." As shown in **Table 2**, census data indicates the household count in the Port St. John CDP has changed from 3,191 in 1990 to 4,709 in 2010 for an increase of 48% during that 20-year period which was just slightly higher than Brevard County and the State of Florida. However, the majority of that increase in the Port St. John area occurred during the first decade (1990 – 2000). The 10-year period between 2000 and 2010 showed a much smaller increase of approximately 10% in households in the Port St. John area, while Brevard County and the State of Florida increased by 16% and 17% respectively.

According to five year estimates provided by the US Census Bureau's ACS for 2013-2017, most households moved into their Port St. John homes between 2000 and 2014.

Household Change								
							PSJ CDP +	
	Florida		Brevard		PSJ CDP		Census Tract	
	(total	% Change	(total	% Change	(total	% Change	621.04	% Change
	households)		households)		households)		(total	
							households)	
1990 Census	5,134,869		161,365		3,191		no data	
2000 Census	6,337,929	23%	198,195	23%	4,307	35%	6,545	
2010 Census	7,420,802	17%	229,692	16%	4,709	9%	7,263	11%

Table 2. Household Change

Housing Types

Source: United States Census Bureau (USCB)

A single-family dwelling is defined as a private residence building used or designed for use as a home or residence, in which the use and management of all sleeping quarters and all appliances for sanitation, cooking, ventilation, heating and lighting are designed primarily for the use of one family unit. Typically, all rooms within the building must have internal access and the building shall have only one kitchen and one electrical meter. Multi-family dwelling units are defined as a residential building designed for or occupied by more than two families, with the number of families in residence not exceeding the number of dwelling units provided.

A mobile home means a modular unit which is designed for temporary or permanent single-family residential use and which is mobile as defined by F.S. Ch. 320, and is built

on an integral chassis with an attached running gear. A mobile home shall be constructed to comply with federal mobile home construction and safety standards promulgated by the United States Department of Housing and Urban Development. All mobile homes used for residential purposes shall have a license from the state division of motor vehicles pursuant to F.S. Ch. 320. Further, all regulations contained in F.S. Ch. 319 shall apply.

Manufactured home shall have the same meaning as "manufactured home" in Florida Statutes 320.01(2) (b). Manufactured Home means a mobile home fabricated on or after June 15, 1976, in an offsite manufacturing facility for installation or assembly at the building site, with each section begring a seal certifying that it is built in compliance with the federal Manufactured Home Construction and Safety Standard Act.

There are various types of zoning classifications in Port St. John, which define the minimum floor area of the living area. Single-family dwelling units can vary from 750 square feet Multi-family dwelling units include duplexes and apartments. to 2000 square feet. Duplexes require a minimum floor area of 1,150 square feet with a minimum of 575 square feet per unit. One bedroom apartments require a minimum floor area of 500 square feet, two bedrooms - 750 square feet plus 100 square feet for each additional bedroom, and efficiencies - 400 square feet.

According to ACS housing characteristics data, the Port St. John area consists predominately of single, detached residential housing with most structures having been built between 1980 and 1989.

Household Ownership

One measurement of a community's stability is the amount of housing that is owneroccupied. This generally implies a strong vested interest in the community. Residents who own their homes take pride in their property, which is outwardly reflected in the upkeep and maintenance of homes and neighborhoods. The percentage of homeowners versus renters is known as homeownership rate. The homeownership rate is derived by the number of owner-occupied units divided by the total number of occupied household units.

In addition to homeownership, a rental component is an essential aspect of a vital housing market. There are many reasons why individuals need or desire to rent, such as younger couples saving for their first home, individuals without children, or working professionals with a preference for a management company to be responsible for building and outdoor maintenance. The demand for rental housing does not diminish when limited apartments are available. Instead, the market reacts by landlords purchasing single-family homes and then leasing them as rental units. For this reason, a component of well managed rental communities rather than individually managed single-family housing rental units is desirable.

Table 3. Housing Units

Housing Units																			
	2000					2010						Percent change 2000-2010							
1					PSJ CDP +						PSJ CDP +				PSJ CDP +				
1	Brevard	% of total	PSJ CDP	% of total	Census	% of total	Brevard	% of total	PSJ CDP	% of total	Census	% of total	Brevard	PSJ CDP	Census				
ı	totals	70 OI LOCAI	totals	70 OI LOCAI	Tract	ract	70 OI total	totals	totals	totals	totals	70 OI LOCAI	totals	70 01 1010	Tract	70 OI total	Dicvara	. 55 CD1	Tract
					621.04						621.04				621.04				
Total housing units	222,072		4,544		6,841		269,864		5,183		7,922		22%	14%	16%				
Owner Occupied	147,885	75%	3,738	87%	5,764	88%	168,841	74%	3,995	85%	6,269	86%	14%	7%	9%				
Renter Occupied	50,310	25%	569	13%	781	12%	60,851	26%	714	15%	994	14%	21%	25%	27%				
Vacant	23,877	11%	237	5%	296	4%	40,172	15%	474	9%	659	8%	68%	100%	123%				

As **Table 3** demonstrates, total housing units in the Port St. John CDP plus Census Tract 621.04 area increased 16% from 2000 to 2010. As of 2010, 86% of the 6,269 housing units in the area were owner occupied, compared to 88% in 2000, decreasing slightly in the Study Area and Brevard County as a whole.

Renter occupied housing units in the Study Area increased slightly between 2000 and 2010, whereas Brevard saw relatively no change with regards to percentage of housing units used as rental properties. Overall, renter occupied housing units in the Port St. John CDP plus Census Tract 621.04 increased by 27% from 2000 to 2010, whereas Brevard County saw an increase of 21%.

Although the percentage of vacant housing units increased twofold in the Port St. John area between 2000 and 2010, the 9% vacancy rate in the Port St. John CDP plus Census Tract 621.04 area in 2010 was still lower than the 15% vacancy rate within Brevard County as a whole.

Table 4. Median Household Income

Median Household Income										
	Florida		Florida Brevard				PSJ CDP +			
					Pς	I CDP	Census Tract			
		Horiua		Bicvara		CDI	621.04			
									(ave	eraged)
2010 ACS	\$	47,661	\$	49,523	\$	56,953	\$	59,442		
2011 ACS	\$	47,827	\$	50,068	\$	57,294	\$	59,856		
2012 ACS	\$	47,309	\$	49,099	\$	56,188	\$	59,110		
2013 ACS	\$	46,956	\$	48,039	\$	50,228	\$	55,206		
2014 ACS	\$	47,212	\$	48,483	\$	52,733	\$	54,823		
2015 ACS	\$	47,507	\$	48,925	\$	49,042	\$	52,388		
2016 ACS	\$	48,900	\$	49,914	\$	49,371	\$	55,892		
2017 ACS	\$	50,883	\$	51,536	\$	57,530	\$	61,666		
Source: United States Census Bureau, American Community Survey (ACS): 2010-2017										

As **Table 4** demonstrates, as of 2017, the median household income, defined as half of households making less than this amount and half making more, was \$61,666 in the Port St. John CDP plus Census Tract 621.04. The data indicates the median household income has been significantly higher than Florida's and Brevard County's between the years of 2010 to 2017. Most recently, the median household income in the Port St. John CDP plus Census Tract 621.04 was 20% higher than Brevard County and 21% higher than Florida as

a whole. This trend indicates that the average household income in the Port St. John area is reflective of the large percentage of the Port St. John population in their peak earning years (ages 45-54) and also possibly associated with growth in aerospace manufacturing and other high paying technology jobs within Brevard County.

Trends in Brevard and Port St. John

Since 1844, Brevard County has proven to be an attractive place to live. projected 2020 population of 598,500, it can be expected that the Port St. John Study Area will see its share of growth. Between 1980 and 1990, Port St. John experienced its highest growth in population. Port St. John population growth was nearly 6 times higher than the County and the State of Florida between that 10-year time period; however, growth in the Port St. John CDP has slowed considerably since that time as the CDP area has built out.

Owner occupied housing represents 86% of the housing units in Port St. John area, having a greater percentage of homesteaded properties than the County overall. Areas with high homeownership rates typically demonstrate stability and social solidarity. Furthermore, the Port St. John area consistently has a higher median household income when compared to the County and the State, which implies that the area is likely to continue to maintain stable conditions. Port St. John's "small-town" appeal, access to the Indian River Lagoon, and convenient location within the county, make it great place to live.

LAND USE AND ZONING

General Pattern of Land Use

The Port St. John Study Area contains a mix of commercial and residential development. The Study Area is predominately made up of single-family residential with most commercial land uses in close proximity to U.S. 1. An examination of the general land use pattern is critical to understanding what zoning classifications are appropriate.

Future Land Use

Originally established in 1988, the purpose of the Future Land Use Map (FLUM) is to delineate Brevard County's vision of how the communities within it are developed and maintained. The FLUM is required as part of the Comprehensive Plan authorized by Chapter 163, Florida Statues. The FLUM identifies the goals of development of an area by assigning each parcel of land in Brevard County a Future Land Use designation, which defines and establishes densities (the number of residential dwelling units in a given land area per acre) and intensities (amount of nonresidential development per acre). Density is an important characteristic in relationship between land use, transportation and Level of Service (LOS) standards.

Port St. John has experienced a number of density reductions and land use changes in the last few decades. **Maps 3 and 4** (pages 29 and 30) and the narrative below demonstrate the changes over time.

The 1988 Brevard County Comprehensive Plan was prepared in accordance with Chapter 163, Part II, Florida Statutes, "The Local Government Comprehensive Planning and Land Development Regulation Act of 1985", and Florida Administrative Code Rule 9J-5, "Minimum Criteria for Review of Local Government Comprehensive Plans and Determination of Compliance". The 1988 Brevard County Comprehensive Plan replaced the County Comprehensive Plan which was adopted in July of 1981 as mandated by the Local Government Comprehensive Planning Act of 1975. Residential density established in 1988 is shown on **Map 3**, page 29.

On November 21, 1991 a Port St. John Small Area Plan (SAP) was completed by County staff at the direction of the Brevard County Board of County Commissioners. From the SAP, a list of recommendations was prioritized. The amendments that were proposed by Brevard County Staff and Adopted by the County Commission based upon these recommendations (92A.3.1-3.9) resulted in changes to the Density Map reducing density by 35,668 dwelling units over 5,412 acres. Commercial uses were concentrated along the US 1 corridor and were reduced by 84 acres. Heavy/light industrial areas were reduced by 35 acres as this land was converted to residential and planned industrial park uses. Planned industrial parks were utilized to better buffer existing industrial and residential areas. Additional density reductions of 624 dwelling units over 800 acres were adopted in 1992 (92B.6.1-6.2). Refer to Map 3, page 29.

In 2001, Brevard County received approval by the Department of Community Affairs (DCA) through the Evaluation and Appraisal Report (EAR), to amend the Future Land Use Map. Prior to the Future Land Use Map Amendment in 2001, the County utilized both a Density Map and a Future Land Use Map. When this amendment was completed, the County had combined the two maps into one map calling it the Future Land Use Map which created twenty-two (22) different Future Land Use (FLU) categories (see Map 4, page 30).

In 2006, Brevard County Board of Commissioners adopted Comprehensive Plan Amendment 2006A.2 to update the Future Land Use Map and Future Land Use Element to depict publicly owned conservation lands and federal lands. The amendment consisted of two sub-portions:

Plan Amendment 2006A.2.1

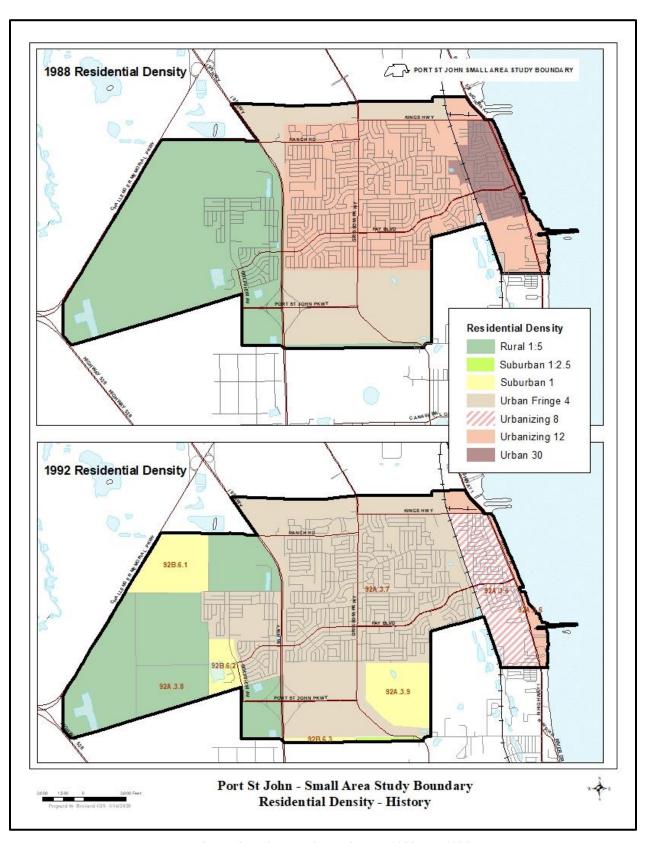
A proposal initiated by Brevard County to change the Future Land Use Map series designation from various Future Land Uses to Public Conservation, Municipal Conservation and Federal Lands on approximately 105,000 acres of property. These lands are distributed county-wide and include acreage within the Port St. John study area.

Plan Amendment 2006A.2.2

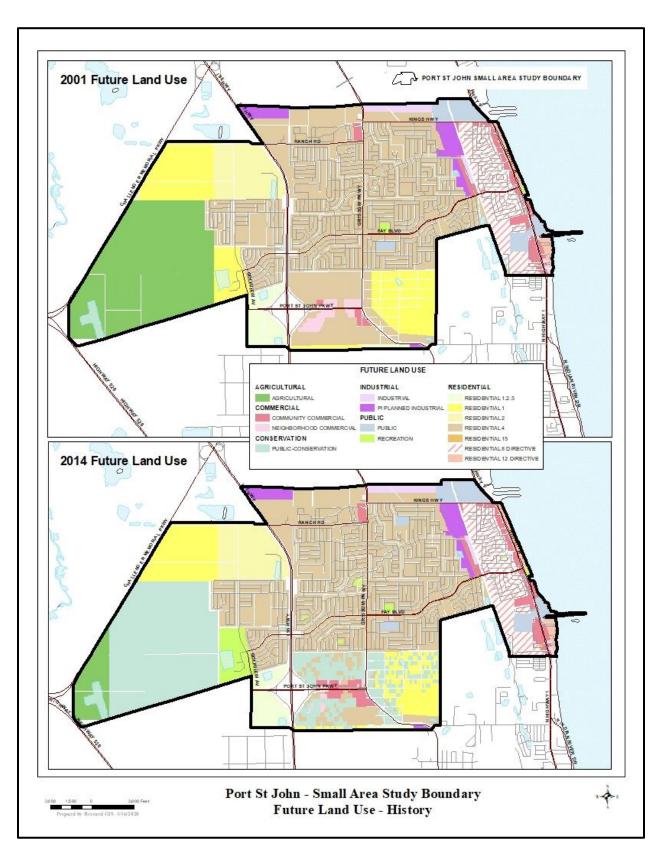
A proposal was initiated by Brevard County to amend Policy 5.1 and add Objective 16 and Policy 16.1 within the Future Land Use Element of the Comprehensive Plan. These proposed modifications created one new Future Land Use designation; Federal Lands. This amendment also provided language that state Federal Lands shall not be subject to authority by Brevard County.

Several additional small scale (<10 acres) and large scale (>10 acres) comprehensive plan amendments have been adopted by Brevard County since the inception of the Future Land Use Map in 2001. FLU changes through 2014 are shown on Map 4 on page 30.

The current (December 2019) adopted Future Land Use Map for the Port St. John area is provided as Map 5 on page 32 of this report. Table 5 on page 31 lists all Future Land Use Map designations for the Study Area and provides a breakdown of total acreage and vacant acreage. Zoning Land Use Map designations for the Study Area as of December 2019 are shown in **Table 6** on page 34 of this report.



Map 3. Residential Density - History: 1988 and 1992



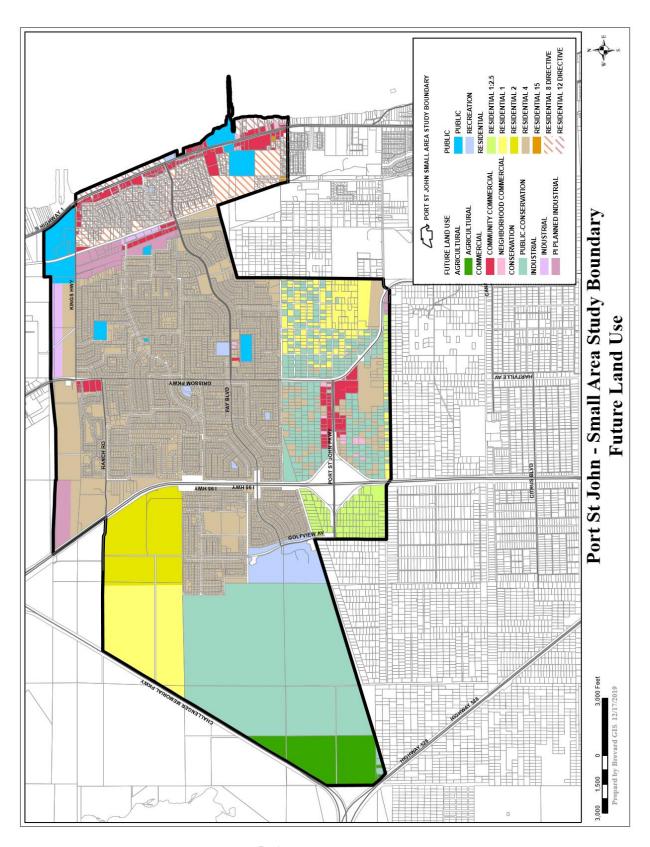
Map 4. Future Land Use History: 2001 and 2014

Table 5. All Future Land Use Map Designations for Study Area

Future La	nd Use Designation	Total Acreage	% of Total Acreage	Vacant Acreage	% of Future Land Use Designation Vacant
Reside	ential Land Uses	5182	61.30%	1255	82.52%
RES 1:2.5	Residential 1:2.5	222	2.63%	195	12.81%
RES 1	Residential 1	732	8.66%	214	14.04%
RES 2	Residential 2	416	4.93%	0	0.00%
RES 4	Residential 4	3293	38.95%	764	50.25%
RES 15	Residential 15	3	0.04%	0	0.00%
RES 8_DIR	Residential 8 Directive	449	5.32%	81	5.34%
RES 12_DIR	Residential 12 Directive	66	0.78%	1	0.08%
Comm	ercial Land Uses	284	3.35%	117	7.69%
СС	Community Commercial	252	2.98%	100	6.57%
NC	Neighborhood Commercial	31	0.37%	17	1.11%
Indus	trial Land Uses	261	3.08%	101	6.66%
IND	Industrial	79	0.93%	31	2.01%
PI	Planned Industrial	182	2.15%	71	4.65%
Conser	vation Land Uses	2007	23.74%	2	0.16%
PUBCONS	Public-Conservation	2007	23.74%	2	0.16%
Public Facilities	Public Facilities & Recreation Land Uses		5.26%	41.8	2.75%
PUB	Public Facilities	240	2.84%	42	2.75%
REC	Recreation	205	2.42%	0	0.00%
Agricu	Itural Land Uses	275	3.26%	3	0.22%
AGRIC	Agriculture	275	3.26%	3	0.22%
Total unde	r County Jurisdiction	8454	100%	1520	100%

Source: Brevard County Planning & Zoning Office December 2019

Note: Vacancy derived from State of Florida Department of Revenue Use Codes



Map 5. Adopted Future Land Use

The Port St. John Study Area is estimated to include 8,454 acres. Overall 1,520 acres, or 17.98% of the land in the Study Area remains vacant. Residential Future Land use designations represent 5,182 acres, or 61.30% of the Study Area. Of the Residentially designated land, Residential 4 FLU is the most represented designation at 3,293 acres, or 38.95% of the Study Area, with density limited to four units to the acre. Within Brevard County, there are eight FLU designations, Residential 30 being the highest which allows up to 30 dwelling units per acre. Presently in Port St. John, Residential 15 is the highest FLU designation, allowing up to 15 dwelling units per acre.

Residential Future Land Use	Maximum Density
Residential 15	15 dwelling units per acre
Residential 12 Directive	12 dwelling units per acre
Residential 8 Directive	8 dwelling units per acre
Residential 4	4 dwelling units per acre
Residential 2	2 dwelling units per acre
Residential 1	1 dwelling unit per acre
Residential 1:2.5	1 dwelling unit per 2.5 acres

Residential development potential in Port St. John is limited by 29.01% of the Study Area being made up of Conservation, Public Facilities, and Recreation Land Uses, accounting for almost one third of all acreage in the Study Area.

Commercial and industrial development (non-vacant) is mostly located along US 1 and when combined, constitutes a mere 3.86% of the Study Area. Of the 284 acres of land in Port St. John designated as Commercial FLU, 41.21% remains undeveloped. Of the 261 acres of land with Industrial FLU designations, 38.89% remains undeveloped in the Study Area.

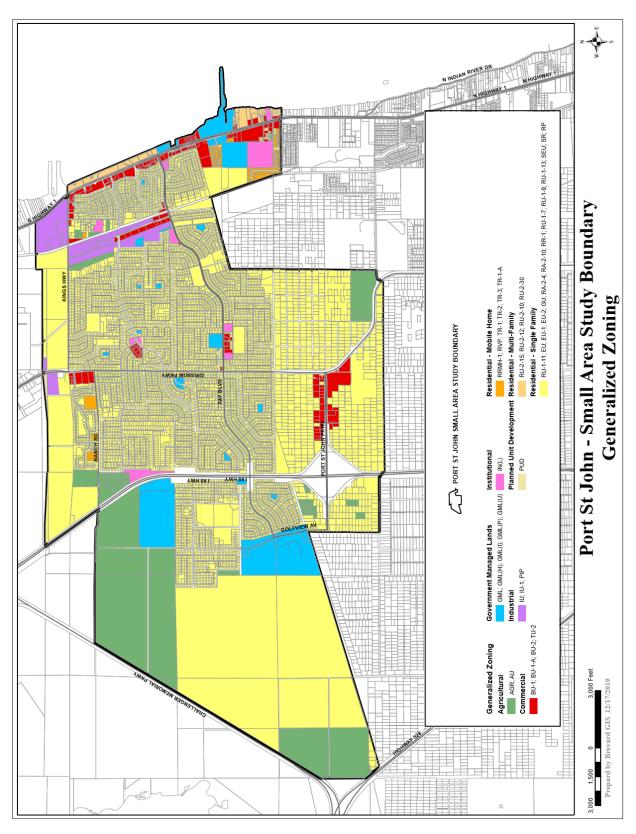
Per Policy 2.16 of the Future Land Use Element of the Brevard County Comprehensive Plan, the allocation of commercial acreage in the Future Land Use Map is periodically reviewed as part of the Evaluation and Appraisal Report (EAR) submitted to the State of Florida Department of Economic Opportunity (DEO, formerly DCA) every seven years as required by Chapter 163 of the Florida Statutes. Evaluation of commercial allocations is based upon the following minimum criteria: commercial development trends; the types, intensities, locations, and land areas of commercial land use designations; and commercial acreage allocations shall consider all commercial development, whether within or outside of commercial land use designations.

Zoning

Table 6. All Zoning Land Use Map Designations for Study Area

	Zoning Land Use Map Designations for Study A	Total Acreage	% of Total Acreage	Vacant Acreage	% Vacant of Zoning Class.
Un	improved, Agricultural & Residential Zonings	7289	86.31%	1270	83.52%
GU	General Use	2951	34.94%	796.12	52.37%
AGR	Agriculture	6	0.08%	0	0.00%
AU	Agricultural Residential	1139	13.48%	34.71	2.28%
RR-1	Rural Residential	14	0.17%	3.82	0.25%
EU-2	Estate Use Residential	1	0.02%	0.68	0.04%
RU-1-7	Single-Family Residential	293	3.47%	30.58	2.01%
RU-1-9	Single-Family Residential	2285	27.06%	263.23	17.32%
RU-1-11	Single-Family Residential	371	4.39%	100.29	6.60%
RU-1-13	Single-Family Residential	98	1.16%	29.96	1.97%
RA-2-10	Single-Family Attached Residential	1	0.01%	0	0.00%
RP	Residential Professional	3	0.03%	0.19	0.01%
SR	Surburban Residential	127	1.51%	10.06	0.66%
	Multiple-Family Residential Zonings	69	0.82%	4	0.25%
RU-2-10	Medium-Density Multiple-Family Residential	23	0.27%	3.29	0.25%
RU-2-12	Medium-Density Multiple-Family Residential	12	0.14%	0.46	0.03%
RU-2-15	Medium-Density Multiple-Family Residential	34	0.41%	0	0.00%
Mobil	e Home Residential & Rec. Vehicle Park Zonings	63	0.74%	14	0.91%
RRMH-1	Rural Residential Mobile Home	20	0.24%	9.80	0.64%
TR-1	Single-Family Mobile Home	23	0.27%	3.11	0.20%
TR-1-A	Single-Family Mobile Home	0	0.01%	0	0.00%
TR-2	Single-Family Mobile Home	17	0.20%	1.00	0.07%
TR-3	Mobile Home Park	2	0.02%	0	0.00%
	PUD Zonings	5	0.06%	0	0.00%
PUD	Planned Unit Development	5	0.06%	0	0.00%
	Commercial Zonings	258	3.06%	105	6.88%
BU-1-A	Restricted Neighborhood Retail Commercial	18	0.22%	4.73	0.31%
BU-1	General Retail Commercial	155	1.83%	53.29	3.51%
BU-2	Retail, Warehousing and Wholesale Commercial	52	0.61%	15.22	1.00%
TU-2	Transient Tourist Commercial	34	0.40%	31.30	2.06%
	Industrial Zonings	192	2.27%	87	5.72%
PIP	Planned Industrial Park	101	1.19%	80.51	5.30%
IU	Light Industrial	91	1.08%	6.40	0.42%
	Special Zonings	569	6.74%	41	2.72%
GML	Government Managed Lands	196	2.32%	0	0.00%
GML(H)	Government Managed Lands High-Intensity	0	0.00%	0	0.00%
GML(I)	Government Managed Lands Institutional	0	0.00%	0	0.00%
GML(P)	Government Managed Lands Parks & Conservation	193	2.28%	0	0.00%
GML(U)	Government Managed Lands Utility	92	1.09%	40.92	2.69%
IN(L)	Institutional Use Low	88	1.04%	0.46	0.03%
- ` ` 	Total under County Jurisdiction	8445	100%	1520	100%

Source: Brevard County Planning & Zoning Office December 2019



Map 6. Zoning Map

Land uses are divided by residential, commercial and industrial districts. Zoning districts function for the purpose of defining a list of rules. These rules typically establish a list of land uses permitted in each district and a series of development standards governing lot size, building height, and required setback provisions. The Port St. John Study Area encompasses a variety of zoning classifications requiring as much as 5 acres down to 5,000 square feet per parcel.

Residential Zoning classifications make up 87.7% of the Study Area. Typically made up of single-family homes, the total acreage of unimproved, agricultural & residential zonings is 7,289 acres or 64.94% of the Study Area, of which 17.42% remains undeveloped.

The zoning classification having the most acreage in the study area is General Use (GU), which makes up 34.94% of the Study Area and about 40% of the Unimproved, Agricultural & Residential Zonings. The GU zoning classification encompasses rural single-family residential development, or unimproved lands for which there is no definite current proposal for development, or land in areas lacking specific development trends. Of the GU Zoned acreage in Port St. John, 26.98% remains undeveloped. Additionally, a large percentage of the study area is classified as Single-Family Residential RU-1-9 zoning (27.06%). The RU1-9 zoning classification encompasses lands devoted to single-family residential development of a spacious character. The RU-1-9 zoned acreage in Port St. John that remains undeveloped is only 11.52%.

Original Agricultural Residential (AU) zoning for Brevard County was established May 2, 1958 [Lot sizes were required to be a minimum lot size of 5,000 square feet, having a minimum width of 50 feet and a minimum depth of 75 feet]. On March 6, 1975, AU zoning classifications were required to be an area of not less than one acre, having a minimum width of 125 feet and a minimum depth of 125 feet. After 1975, AU requirements were amended to a minimum lot size of two and one-half acres, having a minimum width of 150 feet and a minimum depth of 150 feet. Lots are determined as "Nonconforming lots of record" if they do not meet today's standards and had been recorded or platted prior to or on March 6, 1975.

Multi-Family Residential Zonings make up only 69 acres and 5.42% of that land remains vacant. While a majority of the land zoned for Mobile Home Residential and Recreational Vehicle Park (63 acres) is utilized, 22.17% remains vacant.

Five acres of land in Port St. John is zoned Planned Unit Development (PUD) which may contain mixed uses; however, none of this designated zoning remains undeveloped.

Commercial and Industrial Zoning classifications account for 5.33% of the total land area. However, about 40% of commercial land is vacant and approximately 45% of industrial land is vacant. Conservation, Public Facilities and Recreation are considered Special Zoning and account for 6.74% of the Study Area's lands.

INFRASTRUCTURE AND SERVICE DEMAND

Transportation Network

TRAFFIC VOLUMES

The Space Coast Transportation Planning Organization (SCTPO) maintains a traffic count database to monitor traffic volumes on arterial and collector roadways in Brevard County. Within the study area, the SCTPO performs annual traffic counts for seventeen roadway segments. Within the Study Area, existing traffic volumes were reviewed to evaluate the current operating conditions of the overall roadway network. **Table 7** provides a summary of the 2018 Annual Average Daily Traffic (AADT) and current Maximum Acceptable Volume (MAV) published by the SCTPO on May 31, 2019.

Table 7. Port St. John 2018 AADT Summary Table

D d	Segr	ment	2010 AADT	2427	0/ 8481/	100	
Roadway	From To		2018 AADT	MAV	% MAV	LOS	
FAY	GOLFVIEW	HOMESTEAD	3,157	15,600	20%	D	
FAY	HOMESTEAD	DEER	6,743	15,600	43%	D	
FAY	DEER	GRISSOM	8,775	15,600	56%	D	
FAY	GRISSOM	AREQUIPPA	13,094	33,800	39%	D	
FAY	AREQUIPPA	CAROLE	12,856	33,800	38%	D	
FAY	CAROLE	US 1	15,670	33,800	46%	D	
GRISSOM	CANAVERAL GRVS	CAMP	9,140	17,700	52%	С	
GRISSOM	CAMP	PORT ST. JOHN PKWY	10,288	17,700	58%	С	
GRISSOM	PORT ST. JOHN PKWY	BRIDGE	14,147	17,700	80%	С	
GRISSOM	BRIDGE	FAY	12,667	17,700	72%	С	
GRISSOM	FAY	CURTIS	9,678	15,600	62%	D	
GRISSOM	CURTIS	KINGS HWY	11,161	15,600	72%	D	
GOLFVIEW	PORT ST. JOHN PKWY	FAY	5,680	15,600	36%	D	
KINGS HWY	GRISSOM	US 1	5,064	15,600	32%	D	
PT ST JOHN PKWY	I-95	GRISSOM	11,028	39,800	28%	С	
US 1	BROADWAY BLVD.	FAY	28,470	41,790	68%	С	
US 1	FAY	KINGS HWY.	25,038	41,790	60%	С	

The MAV indicates the maximum traffic volumes allowed based on the Level of Service (LOS) desired. Comparing the AADT with the MAV, all segments of the major roadway network are currently operating at an acceptable level of service (see Table 7). The 10 year AADT data collected by the SCTPO is summarized in Table 8 (page 38) and shows a 76% increase in traffic volumes for Port St. John Parkway from I-95 to Grissom Parkway; however, traffic volumes for most other roadways within the study area have decreased.

	Segr	nent	AADT									
Roadway	From	То	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
FAY	GOLFVIEW	HOMESTEAD	2,770	2,660	2,740	-	2,680	-	2,880	-	3,160	-
FAY	HOMESTEAD	DEER	7,900	7,250	6,990	6,780	-	6,460	-	6,640	-	6,740
FAY	DEER	GRISSOM	10,400	9,720	9,470	9,350	8,920	9,150	8,770	10,890	9,390	8,780
FAY	GRISSOM	AREQUIPPA	-	12,830	-	12,380	-	12,830	13,400	13,590	1	13,090
FAY	AREQUIPPA	CAROLE	13,880	-	13,410	-	12,230	-	12,350	-	12,860	-
FAY	CAROLE	US 1	17,310	16,280	16,520	15,570	15,230	14,510	15,020	15,340	15,700	15,670
GRISSOM	CANAVERAL GRVS	CAMP	9,710	8,940	9,320	8,980	8,960	9,010	9,490	8,660	9,360	9,140
GRISSOM	CAMP	PORT ST. JOHN PKWY	10,720	10,160	10,760	9,940	9,620	10,120	9,430	10,140	10,550	10,290
GRISSOM	PORT ST. JOHN PKWY	BRIDGE	13,050	12,890	13,680	12,670	12,720	13,840	NC	14,940	13,920	14,150
GRISSOM	BRIDGE	FAY	11,800	11,290	11,750	11,380	12,130	12,390	12,740	13,700	12,070	12,670
GRISSOM	FAY	CURTIS	11,080	-	10,940	1	9,870	-	9,600	-	9,680	-
GRISSOM	CURTIS	KINGS HWY	-	11,410	-	11,010	-	10,430	-	13,710	-	11,160
GOLFVIEW	PORT ST. JOHN PKWY	FAY	-	4,640	-	4,610	-	4,830	-	-	5,570	5,680
KINGS HWY	GRISSOM	US 1	4,940	-	4,710	-	4,300	1	4,060	-	5,060	-
PT ST JOHN PKWY	I-95	GRISSOM	8,440	8,410	8,570	8,210	8,890	9,960	10,550	10,370	10,990	11,030
US 1	BROADWAY BLVD.	FAY	31,190	29,750	30,660	28,620	27,830	25,530	27,110	27,820	29,560	28,470
US 1	FAY	KINGS HWY.	29,920	27,480	26,860	26,580	25,320	23,960	25,870	27,610	27,240	25,040

The surrounding roadway network adjacent to Port St. John exhibits similar growth characteristics as shown in **Table 9**. The roadways are below the maximum allowable volume and are operating at an acceptable LOS, with the exception of the segment of SR 407 from SR 528 to I-95 which is exceeding the MAV by 13%. This segment of roadway is maintained by the Florida Department of Transportation (FDOT).

Table 9. Adjacent Roadway Network 10 Year AADT Summary Table

Da advisor.	Segr	AADT											
Roadway	From	То	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	MAV
SR 407	SR 528	I-95	6,360	6,660	6,990	6,340	6,140	6,830	7,220	8,750	9,150	9,970	8,820
SR 407	I-95	SHEPARD DR	7,060	6,630	6,500	6,320	6,290	7,460	7,660	9,190	8,980	10,090	24,200
US 1	CAMP	BROADWAY BLVD.	31,400	29,310	28,210	27,760	27,080	24,890	24,300	28,130	29,170	29,210	41,790
US 1	KINGS	SR 405	24,890	23,500	23,630	22,770	20,730	20,250	20,890	22,830	22,810	23,690	41,790
GRISSOM	KINGS HIGHWAY	SHEPARD	10,480	10,010	9,890	-	8,970	-	9,320	-	10,080	-	30,400
GRISSOM	CANAVERAL GRVS	CAMP	9,710	8,940	9,320	8,980	8,960	9,010	9,490	8,660	9,360	9,140	17,700
CAMP	GRISSOM	US 1	2,920	2,800	2,650	2,450	2,290	2,370	2,150	2,670	2,730	2,690	15,600

PUBLIC WORKS TRANSPORTATION CONSTRUCTION

The Brevard County Transportation Construction Management Program is part of the Public Works Department and oversees the design, acquisition, and construction of all Public Works Capital Improvement Projects (CIP), such as new roadways, road widening, turn lanes, sidewalks, and traffic signals. Current CIP projects in Port St. John include Grissom Parkway and Fay Boulevard intersection safety improvements and Curtis Boulevard improvements.

Safety Improvements at the intersection of Grissom Parkway and Fay Boulevard will include the replacement of the existing span wire signal with mast arm signal supports; installation of lighting at each corner of the intersection; replacement of existing sidewalk curb ramps; and upgrading pedestrian crossings. Construction cost for this project is estimated at \$550,000, and a preconstruction meeting is to be scheduled in November 2020.

Improvements at Curtis Boulevard include new concrete sidewalk construction on the west side of Curtis Boulevard from Fay Boulevard to Song Drive for a cost of \$276,000;

evaluating street lighting (\$33,000 estimated initial cost to install); and future intersection improvements at Fay Boulevard and Curtis Boulevard.

PUBLIC WORKS ROAD MAINTENANCE

The Road and Bridge Program in the Brevard County Public Works Department administers the maintenance of all County roadways, drainage structures, ditches and canals, and the design, installation, and maintenance of landscaping projects on County roads and facilities. Additionally, the Road and Bridge Program is responsible for bridge operation/maintenance and emergency response throughout unincorporated Brevard County.

During fiscal year 2018-2019, over 20 miles of road resurfacing was completed in Brevard County Commission District 1, with 13 of those miles located in Port St. John. Roads resurfaced in Port St. John include the following:

Aledo	Carillon Av	Kimball Av
Ancona Rd	Carter St	Kings Highway
Andover St	Cinema St	Mace Av
Anecia	Dill Av	Mayflower St
Ann Catherine Ct	Dodge Rd	Melody St
Bamboo Av	Doreen Rd	Milton Av
Barbara Rd	Falcon Blvd	Miraflores Av
Bartow Av	Freeport Rd	Patricia St
Bridge Rd	Frisco St	Patrick Ln
Briggs Av	Grissom Parkway	Walton Av

Currently in fiscal year 2019-2020, there are 18 miles of resurfacing projects funded in District 1 with 11 miles to be completed in Port St. John. Road resurfacing planned in Port St. John* (June 2020) include the following:

Airlift St	Bright Av	Fairfax St
Bayfront Rd	Buxton Av	Greenhill St
Bentley Rd	Caliph Av	Haddington Dr
Bismarck Rd	Camden Av	Huber St
Bonanza St	Carlowe Av	Hunt Rd
Boston Rd	Depot Av	Sunflower Dr
Bowie Ct	Everglades St	W Baker Cir

^{*}Note: At the time of this Study, Public Works noted that the final plan was in progress, and that additional roads were to be added.

PUBLIC WORKS DRAINAGE MAINTENANCE

Road and Bridge performs drainage maintenance to improve drainage and reduce flooding in Brevard County. In Port St. John, drainage maintenance projects target fifteen (15) phases/areas, and include ditch/outfall clearing during wet season; swale rehabilitation during dry season; and replacement of failing metal pipes and concrete gutters. **Map 7** on page 41 shows the Phase 1 and Phase 2 areas in Port St. John and the types of drainage maintenance projects that have been completed or are planned to be completed.

PUBLIC WORKS TRAFFIC OPERATIONS

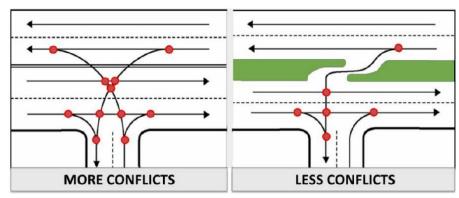
The Brevard County Public Works Department's Traffic Operations Program oversees all signage, signalization, and striping throughout the unincorporated areas of the County, including the maintenance of 350 traffic signals, 130 school zone flashers, and approximately 600 streetlights. The Program's traffic system is monitored in real-time through an Intelligent Transportation System (ITS) that is managed and operated at the county government center in Viera.

Traffic Operations is currently addressing the needs of an aging population in Brevard by installing larger print on signs and LED (light-emitting diode) lighted signs. Additional Traffic Operations initiatives include the following:

- Traffic Signal Re-timing
- Uninterruptible Power Sources
- Intelligent Transportation Systems
- Traffic Management Center, for centralizing control of traffic signals
- Improve travel time, minimize delays

PUBLIC WORKS TRAFFIC ENGINEERING

Traffic studies are conducted to determine traffic engineering needs in regards to Speed Limits, Stop Sign Warrants, Speed Humps, Sign Installations, Pavement Markings, Left and Right Turn Lanes, Pedestrian Crossings, Traffic Signal Warrants, and Street Lighting. Currently, a traffic safety study is taking place at Curtis Boulevard and Fay Boulevard. "Draft" Study recommendations include changing to a Directional Median Opening at this intersection to reduce conflict points. Refer to diagram below showing how Directional Median Openings result in less intersection conflicts. Note: Directional Median opening depicted on right. Diagram provided by Brevard County Public Works.





Map 7. Public Works Phase 1 and 2 Drainage Plan – Port St. John

Stormwater

The Brevard County Stormwater Program was created in 1990 by the Board of County Commissioners to prevent flooding and address stormwater related pollution problems. Although regulations implemented in 1978 as part of the County's growth management required stormwater treatment for all newly developed subdivisions and commercial sites, many areas in Brevard County had already been developed and had little or no stormwater treatment facilities. As additional measures were required to store water runoff volumes to reduce flooding of downstream properties in these areas and to treat stormwater runoff to reduce pollutants carried to surface waters, Brevard County adopted an ordinance in 1990 establishing a Stormwater utility, thereby providing a dedicated source of funding for the Stormwater Program.

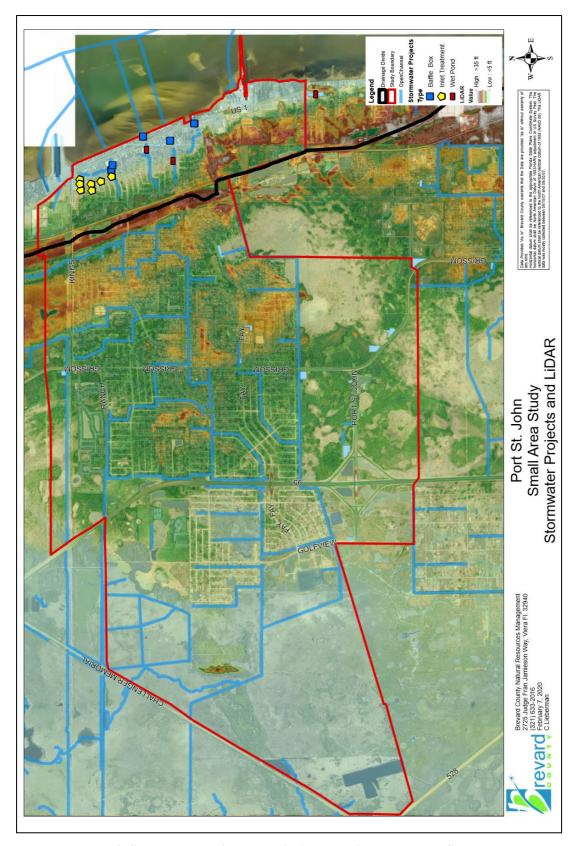
Today, the Stormwater Program is part of the Natural Resources Management Department and has proven to be a leader in stormwater management in the state of Florida. The program is comprised of four sections: Stormwater Utility, Stormwater Engineering and Design, Water Quality, and National Pollutant Discharge Elimination System (NPDES) and Best Management Practice (BMP) Compliance.

According to the Department, thousands of individual outfalls in Brevard County drain untreated stormwater into either the Indian River Lagoon or St. Johns River. The Stormwater Program has numerous projects planned for the next several years that will help alleviate flooding issues in identified areas and provide treatment to stormwater before it reaches its final destination, the Indian River Lagoon or St. Johns River.

In Port St. John, the Stormwater Program has completed several drainage, flood abatement, and water quality projects. Project types constructed throughout the Study Area include: channel stabilization, culvert replacement, and sediment traps and baskets. In addition, the Stormwater Program has constructed a dry pond at Cottrell Avenue, a stormwater pond at Albin Street and drainage swales at Fay Lake Wilderness Park. Pending Stormwater Program projects in Port St. John include water quality and culvert improvements at Fay Lake Wilderness Park.

Map 8 on the following page (provided by Brevard County Natural Resources Department) shows locations of some of the stormwater projects described above as well as land elevations in the Port St. John Study Area as portrayed by Light Detection and Ranging (LiDAR) imaging. LiDAR was collected in 2007 and made available to the County in 2009. LiDAR is a method of collecting elevation information from an aircraft or ground vehicle and has been found to be quite accurate in Brevard County, even in areas with dense vegetation. As can be seen from the map it is quite detailed and is very useful for planning and evaluation purposes.

The land surface in Port St. John varies in elevation between a maximum of 52 feet and minimum of 0 feet in the North American Vertical Datum of 1988 (NAVD88), excluding the ponds and canals which can extend to minus 12 feet. A dividing ridge runs north-south which determines the direction of drainage to either the Indian River Lagoon to the east or the St. Johns River to the west of Port St. John (refer to **Map 8** on page 43).



Map 8. Stormwater Projects and LiDAR Elevation Map – Port St. John

Public Water and Wastewater

PUBLIC WATER SERVICE

Public water service is provided to the Port St. John area by the City of Cocoa Utilities. Currently, the City serves 8,534 residential customers and 170 commercial customers (i.e., meter connections) in Port St. John, and total monthly water consumption is over 43 million gallons each month (refer to **Table 10** below).

City of Cocoa Utilities Department has confirmed that they have existing capacity to meet the future needs of Port St. John. According to the City, the Dyal Water Treatment Plant (WTP) currently produces about 22 million gallons per day (mgd) and has the capacity and permits to treat 60 mgd. Safe well field management practices advise an operating rate that allows for well rotation to alleviate stress on the aquifer and provide down time for well and pump repair and maintenance. Such management practices allow Cocoa to operate the well field safely at 27.31 mgd for average flows. Cocoa supplements its ground water supply with surface water from the Taylor Creek Reservoir. The constructed capacity of the surface water treatment system is 24 mgd and it is currently equipped to deliver 12 mgd. Cocoa also supplements its ground water supply with an Aquifer Storage and Recovery (ASR) system. Last year Cocoa injected 0.32 billion gallons of treated water into the ASR wells and recovered 0.07 billion gallons. The current FDEP-permitted capacity of the Dyal WTP, 60 mgd, is greater than the predicted maximum day demand (MDD) through 2040. The installed treatment capacity of the current infrastructure at the Dyal WTP can achieve the predicted 2040 MDD.

Table 10. Water Generation in Port St. John

Description	# of Units	Average GPD	Total Consumption Monthly					
Residential Customers	8,534	147.8	37,842,000					
Commercial Customers	170	1,014.5	5,174,000					
Total Current Demand			43,016,000					
Source: City of Cocoa Utilities Department								

^{*} Customers = meter connections.

PUBLIC WASTEWATER (SANITARY SEWER) SERVICE

The Brevard County Utility Services Department operates six wastewater treatment plants and three drinking water plants within the County, providing quality drinking water, reclaimed irrigation water, and wastewater services for its customers. The system operates 24 hours a day, seven days a week, and must meet numerous State and Federal regulations. The Utility is an enterprise operation, funded entirely from customer user fees.

One of the wastewater treatment plants owned and operated by Brevard County Utility Services is located in Port St. John. The Port St. John plant treats 490,000 gallons of wastewater per day, and is currently operating at approximately 80% of its permitted

hydraulic capacity. Although there are no capacity issues servicing the existing 1,500 customers in Port St. John, sewer service is not available for a majority of the Study Area at this time. Much of Port St. John is outside the Utility's sewer service area (refer to Map 9 on page 46).

The wastewater treatment plant in Port St. John treats influent wastewater to Florida Department of Environmental Protection (FDEP) Standards, as a condition of the Utility's Operation Permit, and has two effluent disposal alternatives: Reclaim water customers or deep well injection. The Port St. John plant provides reclaimed water to 12 customers located in the vicinity of Curtis Boulevard.

Within the north central portion of the Study Area, one residential subdivision (Cypress Woods, approximately 28 acres) is serviced by the City of Titusville's Water Resources Department for sanitary sewer.

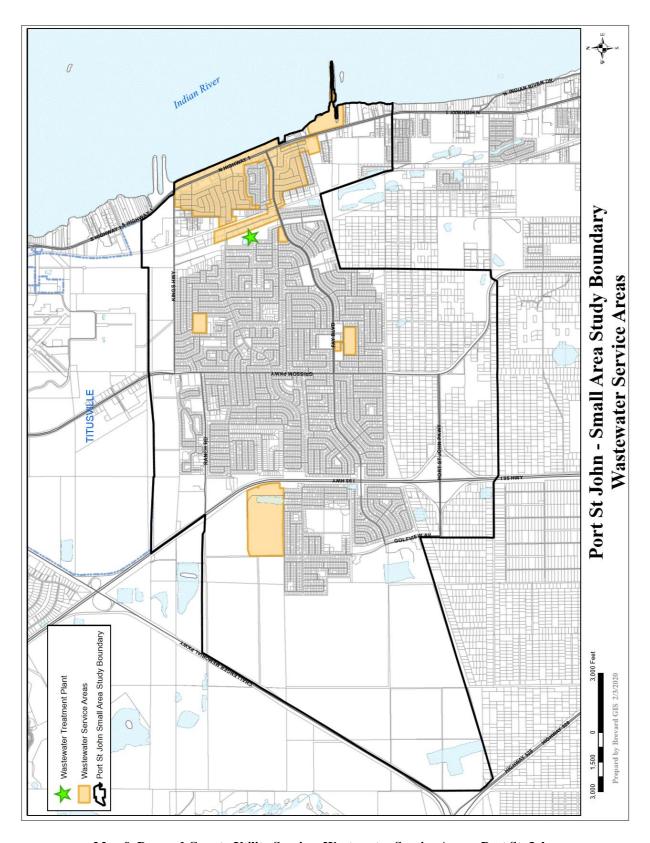
SEPTIC

Where sewer is not available and vacant parcels in the study area are developed, an Onsite Sewage Treatment and Disposal Systems (OSTDS) Construction Permit must be obtained. The Florida Department of Health (DOH) regulates OSTDS, commonly known as septic systems. Permitting and inspections of all OSTDS are handled by the County Health Department's Environmental Health Section. All parcels where sewer systems are not available as defined in Section 381.0065(2) (a), Florida Statutes, may apply to the department to install a septic system. All septic systems must be installed meeting all requirements of Section 381.0065, Florida Statutes (F.S.) and Chapter 64E-6, Florida Administrative Code (F.A.C.). Additionally, the use of an alternative septic system designed to provide at least 65% total nitrogen reduction through multi-stage treatment processes shall be required for areas in Brevard County that are included within the Indian River Lagoon septic overlay per Chapter 46, Article II, Division IV - Nitrogen Reduction Overlay (refer to Septic Overlay Map on page 65).

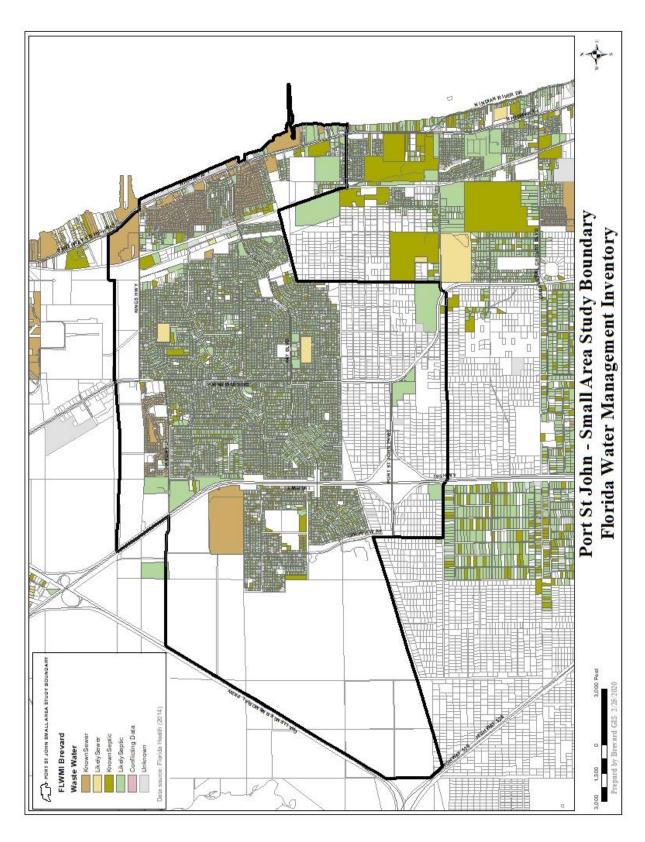
The Florida Department of Health's Florida Water Management Inventory (FLWMI) has identified 9,244 parcels possibly served by septic systems in the 32927 zip code (refer to **Table 11** below). The FLWMI map of the study area (**Map 10** on page 47) was created from DOH data and shows parcels known or likely to have septic systems. The map also shows parcels known or likely to be serviced by sanitary sewer. More information about the FLWMI can be found on the Florida Department of Health's website at: http://www.floridahealth.gov/environmental-health/onsite-sewage/research/flwmi/index.html

Table 11. FLMWI septic data for 32927 zip code

FLMWI Septic Systems in zipcode 32927	count
Known Onsite Septic Systems	1,427
Likely Onsite Septic Systems	7,666
Somewhat Likely Onsite Septic Systems	151
Total possible septic systems	9,244



Map 9. Brevard County Utility Services Wastewater Service Area – Port St. John



Map 10. Septic Systems (OSTDS) locations and Sewer Service locations in Port St. John

Parks and Recreation

PUBLIC PARKS

Brevard County Parks and Recreation Department manages numerous parks and facilities, providing residents and visitors a variety of recreational opportunities throughout the County. In addition to managing 108 parks, 3 campgrounds, 3 golf courses, 6 nature centers, 42 beach access sites, and 13 school athletic sites, the Department oversees more than 18,000 acres of Environmentally Endangered Lands (EELs) sanctuaries and conservation areas. Land management activities conducted by the Department serve to mitigate fire and flooding. Parks and Recreation community centers also serve as shelters and multi-agency coordination centers during disasters.

In Port St. John, Brevard County Parks and Recreation Department manages and maintains six park sites. The section below describes the location, size and amenities of each park within the Study Area.

Fay Lake Wilderness Park - 6300 Fay Boulevard

Fay Lake Wilderness 192.7-acre community park located at the west end of Fay Boulevard. This park offers access to a 27-acre fishing lake with fishing piers and launch area for small non-motorized boats. Facilities include two playgrounds, pavilions, and a dog park.

Fay Park - 6315 Depot Avenue

Located at the intersection of Fay Boulevard and Depot Avenue is the 11.1-acre Fay Park. This park is a center of activity for the Port St. John area and features family picnic shelters with grills near a playground and restrooms. Athletic facilities include a concession building, basketball court, tennis and racquetball courts. Tennis Courts open 8:00 a.m. to 10:00 p.m. daily.



Photo of Fishing Pier at Fay Lake Wilderness Park. Source: K. Shropshire

Friendship Park - 1055 Barclay Drive

Friendship Park is a 0.96-acre neighborhood park located north of Fay Boulevard off of Barclay Drive. The public park is shaded by palm and pine trees and includes a small green area, playground equipment and a park bench to serve the local Port St. John community. At the time of this Study, Friendship Park is closed due to damage caused by recent hurricanes and is in the process of being repaired. No scheduled reopen date has been set. The Parks and Recreation Department will provide updates on the progress of the park reopening on their website at https://www.brevardfl.gov/ParksRecreation/ in the North Area Parks Section.

Nicol Park - 6660 N Cocoa Boulevard (US Hwy 1)

Nicol Park is a 5.03-acre community river park that is easily accessible from North U.S. Hwy 1. This park offers picnicking at picnic shelters with grills, benches, and an attractive playground for children. Facilities include restrooms and a drinking fountain. Shoreline fishing is a popular activity at this park, and a paved walkway invite leisurely strolls. Nicol Park is a great site to view a rocket launch. The park and restrooms will stay open to the public when a launch is scheduled after normal hours.

Port St. John Boat Ramp - 6650 N Cocoa Boulevard (US Hwy 1)

The popular 1.17-acre Port St. John Boat ramp is conveniently located near the Fay Boulevard and U.S. 1 intersection and provides boat access to the Indian River Lagoon. The park is open 24 hours a day, and can accommodate 40 cars and boat trailers. It is a great site to sit and relax by the water, and also serves a nice viewing location for launches out of Kennedy Space Center.

Port St. John Community Center - 6650 Corto Road

Port St. John Community Center is a 5.48-acre community park located on Corto Road off of Grissom Parkway. This facility features a large activity room, kitchen and stage popular for rentals, fitness classes and youth programs. The center also includes two activity rooms with two pool tables, a ping pong table and foosball table. Additionally, the center has a computer room that is open to the public for use and an arts and craft room. Outdoor features include a playground and basketball court. The Port St. John Community Center also serves as a hurricane shelter during evacuations. For information on evacuation and how to receive emergency alerts, visit Brevard County Emergency Management's website at https://www.brevardfl.gov/EmergencyManagement/.



Photo of the Port St. John Community Center. Source: Brevard County Parks and Recreation Department

In addition to the 216.4 acres of public parks in the Study Area, Brevard County owns ten (10) vacant lots scattered throughout Port St. John that were originally owned by General Development Corporation and subsequently acquired by the County. Most of these vacant lots are wooded, providing a total of 14.89 acres of natural green space in the community.

Policy 1.3 of the Recreation and Open Space element of the Brevard County Comprehensive Plan establishes an acceptable level of service for Parks and Recreation as a total of 3.0 acres of developed County-owned or managed by agreement parks per 1,000 people living in the unincorporated areas of each Parks Operations Area. Port St. John is located in the North Area Parks Operations Area which has an acceptable

level of service with 1,048.91 acres park land per the Recreation and Open Space element.

CONSERVATION AND WILDLIFE

There are many properties within the Study Area that have been acquired through local, state, or federal programs and serve as conservation sanctuaries. Most of these sites have little or no public access, but function to conserve natural resources and biological diversity in the Study Area.

The Brevard County Environmentally Endangered Lands (EEL) Program was established in 1990 to protect the natural habitats of Brevard County by acquiring environmentally sensitive lands for conservation, passive recreation, and environmental education. This was made possible by citizens who voted to tax themselves up to \$55 million for the acquisition and maintenance of Brevard County's natural areas. Residents reaffirmed the EEL Program in 2004 under a second referendum to use the same tax that is currently being collected for the Beach and Riverfront Program to protect the natural habitats within Brevard County. This would be accomplished by the acquisition of environmentally sensitive lands through a willing-seller program for the purposes of conservation, passive recreation, and environmental education.

EEL Program properties are managed to conserve native habitats and the plants and animals that utilize them. Each sanctuary or management area has a site-specific comprehensive management plan developed by EEL staff and the selection and management committee. The EEL program strives to maintain a regional approach to managing the EEL Sanctuary Network through the guidance provided in the Sanctuary Management Manual and through management partnerships with local, state, regional, and federal conservation agencies and private-sector conservation programs.

The St. Johns National Wildlife Refuge (NWR), located on the floodplain of the Upper St. Johns River Basin, is administered by the U.S. Fish and Wildlife Service as part of the National Wildlife Refuge System. Established in 1971 to provide habitat for threatened and endangered species, the St. Johns NWR is comprised of two management units: the 2,016-acre Bee Line Unit (located within the Study Area) and the 4,241-acre State Road 50 Unit (located north of Port St. John near Titusville).

According to the 2011 Comprehensive Conservation Plan for the St. Johns NWR, at least 19 federal- and state-listed species and species of management concern are known to occur at the refuge. These include four federally listed (threatened) wildlife species: the wood stork (Mycteria americana); crested caracara (Caracara cheriway); eastern indigo snake (Drymarchon corais couperi); and American alligator (Alligator mississippiensis). Over 90 percent of the refuge consists of wetlands which support these and other imperiled species, as well as native wildlife diversity. Only 3 percent of the refuge's native habitat is upland.

EEL Program properties and St. Johns NWR lands that are located in the Port St. John Area are depicted as Public-Conservation areas on the Future Land Use Map of Port St. John (refer to Map 5 on page 32).

Public Schools

As of 2017, there was an estimated 3,149 students ranging from ages five to nineteen years of age living within The Study Area²¹. Students residing in the Study Area attend either Atlantis, Challenger 7, Enterprise, or Fairglen Elementary Schools. Students in 7th through 12th grade attend either Space Coast Junior/Senior High School or Cocoa Junior/Senior High School. All of these public schools are located within the Study Area with the exception of Fairglen Elementary and Cocoa Junior/Senior High School.

When a new development application or building permit is submitted for review, the Brevard Public Schools under the Facilities Planning Department receives notification of the project for the purposes of completing a school concurrency review. The concurrency review is cumulative to ensure sufficient student capacity. Redistricting of schools occurs when a threshold is tripped, however, none of the schools mentioned have exceeded any thresholds with the current development. Refer to **Table 12** below.

Table 12. Projected School Enrollment and Capacity.

Table recreated from data provided in Brevard County School Board 2019-2020 Student Accommodation Plan. Source: Brevard County School Board Facilities Services, 2019.

School Years 2018-19 to 2023-24 Student Enrollment Projections and School Capacity Analysis (Total Factored Capacity)

	School Inform	ation and C	apacity			Projected Student Membership				Projected Capacity in Use			;				
	School Inforn	nation		Total Capacity	Current Year	(Note 4)			Current Year	(Note 5)							
School	Type	Grades	Utilizati	2018-19	2018-19	2018-19	2019-	2020-	2021-	2022-	2023-	2018-	2019-	2020-	2021-	2022-	2023-
			on	Student	Factored	Actual	20	21	22	23	24	19	20	21	22	23	24
			Factor	Stations	Capacity							Actual					
				(Note 2)	(Note 3)												
			(Note														
			1)														
Atlantis	Elementary	PK-6	100%	739	739	713	693	668	669	658	641	97%	94%	90%	91%	89%	87%
Challenger 7	Elementary	PK-6	100%	573	573	571	577	541	526	518	502	100%	101%	94%	92%	90%	88%
Enterprise	Elementary	K-6	100%	729	729	599	620	605	615	632	643	82%	85%	83%	84%	87%	88%
Fairglen	Elementary	PK-6	100%	789	789	681	675	680	705	732	745	86%	86%	86%	89%	93%	94%
Space Coast	Jr / Sr High	7-12	90%	2,063	1,857	1,586	1,590	1,588	1,556	1,513	1,507	85%	86%	86%	84%	82%	81%
Cocoa	Jr / Sr High	PK, 7-12	90	**2,280	2,052	1,577	1,582	1,670	1,762	1,882	1,929	89%	77%	81%	86%	92%	94%

Notes

Note 1: Utilization Factors are established by the Florida Department of Education's (FDOE) State Requirements for Educational Facilities (SREF).

Note 2: Permanent Student Stations for 2018-19 are based on the information contained in the FDOE Florida Inventory of School Houses (FISH) database on 10/10/2018.

Note 3: Factored Capacity is calculated by multiplying Satisfactory Student Stations by the Utilization Factor. Total Factored Capacity is the addition of the Permanent Factored Capacity plus the Relocatable Factored Capacity.

Note 4: Projected Student Membership figures based on Finance 2019-20 Budget Projections combined with Growth Management Projections for 2020-21 to 2022-23.

Note 5: Projected Capacity in Use is calculated by dividing the Projected Student Membership by the 2018-19 Total Factored Capacity (See Note 2 exceptions).

** An addition at Cocoa Jr/Sr High school adds 300 student stations for the 2019-2020 school year.

School Capacity Analysis data shows that Challenger 7 Elementary is projected to exceed capacity by four students in 2019-20; however five-year projections indicate enrollment will decrease, and Challenger 7 Elementary is projected to be at only 88% of capacity by 2023-24.

²¹ U.S. Census Bureau, American Community Survey (ACS), 2017.

SAFETY AND EMERGENCY MANAGEMENT

Fire Rescue

Brevard County Fire Rescue (BCFR) is the largest fire and emergency medical service (EMS) provider in the County providing emergency services from 32 fire stations. Emergency response resources include 18 class-A fire engines, 5 ladder trucks, 31 ambulances, 3 special operations units and other command and wildfire units. All primary emergency response units are capable of providing patient care at the paramedic level (ALS). Each year, over 50,900 emergency medical patients are cared for and transported to area hospital. More information about Brevard County Fire Rescue can be found on their website at brevardfire.us.

The Port St. John area is served by BCFR Engine 26: the station is located at 6655 Carole Avenue. The fire station is staffed 24/7 with three firefighters; the engine provides advanced life support (ALS) emergency medical care at the paramedic level. Initial fire engine response to building structure fires is Engine 26, Engine 29 (3950 Canaveral Groves Blvd.), Truck 24 (2280 Columbia Boulevard, TVL), Truck 13 (City of Titusville), Engine 28 (if staffed by the volunteers). Rescue 26, housed at station 26, is the primary ambulance dispatched to transport emergency medical patients to the area hospitals.

Engine 26's primary response area consists of US1 from Broadway Blvd on the South to Golden Knights Blvd on the North, Grissom Pkwy from Willow Creek Blvd on the North to Bridge Road on the South and West to all of the area West of I-95 off of Fay Blvd. and Golfview. They are second due to the Canaveral Groves area.

BCFR includes additional fire rescue services such as a Special Operation Team for hazardous materials and technical rescue responses, Fire prevention, 911 Dispatch and Ocean Rescue. Additionally, safety information can be found on the department's website at www.brevardfire.us.

Table 13. Calls for Service in Station 26's Area for 2019

Type of Call	Total for Engine 26	Average On Scene Time
Total Medical/EMS Calls	1,957	13:14
Total Fire Calls	123	47:39
Other Type Calls	340	8:46
Total Calls	2,420	14:38
Fire Alarms	77	8:50
Brush Fires	29	36:15
HAZMAT	19	18:24
Miscellaneous Fires	2	38:03
Structure Fires	24	111:33
Vehicle Fires	7	61:17
Average Turn Out Time	00:01:16	
Average Response Time	00:05:30	

Source: Brevard County Fire Rescue

Law Enforcement

The Brevard County Sheriff's Office North Precinct provides the north Brevard area unincorporated law enforcement services. The Precinct is located at 2290 Columbia Boulevard in Titusville. Furthermore, the North Precinct also has a Port St. John Substation located at 6305 Depot Avenue in Cocoa. The North Precinct covers zones 14, 15, and 16 and has a service responsibility of Port St. John, which encompasses north to Kings Highway, south to Port St. John Parkway, east to the Indian River and west to Challenger Memorial Parkway. In addition, a new zone (Zone 19) was created in Port St. John in January 2020, which encompasses north to Fay Boulevard, south to Camp Road, east to the Indian River and west to Grissom Parkway. The Table below depicts calls for service in both 2018 and 2019 for Zones 14, 15, and 16 of the North Precinct and the percentage change in calls over that time.

Table 14. Percent of Increase/Decrease North Precinct Calls for Service – Zones 14, 15, & 16

Zones 14, 15, & 16							
Type of Call	2018	2019	2018-2019				
Assist Motorist/Disabled Vehicle	291	277	-5%				
Battery	751	990	32%				
Burglary	103	76	-26%				
Burglary Vehicle	120	124	3%				
Fraud/Forgery	153	145	-5%				
Injured/III Person	1,894	1,821	-4%				
Intoxicated Driver	17	28	65%				
Narcotics	147	117	-20%				
Reckless Driving	588	548	-7%				
Robbery	9	3	-67%				
Sex Offense	53	37	-30%				
Shooting in Area	68	64	-6%				
Theft	246	204	-17%				
Traffic Enforcement	235	309	31%				
Traffic Stops	3,613	3,542	-2%				
Vehicle Stolen	60	49	-18%				

These do not represent all of the calls for service, but many of the categories that directly affect the residents within the Study area. The residents' complaints about speeding vehicles and traffic violations are also reflected in the number of citations and traffic stops performed by the Sheriff's Office. Out of the 16 types of calls within the area, 12 of the types of calls depict a decrease between the years 2018 and 2019 by as much as 67%. Calls related to burglaries decreased by 26% and 4 out of the 16 types of calls depict a percentage increase between 2018 and 2019. The North Precinct's General Crimes Unit has been aggressive in the ability to solve burglary related crimes.

The North Precinct has taken an active role in reducing the amount of crime while also taking in consideration the need to assist the public in their needs no matter what the event may be.

Emergency Management

Brevard County Emergency Management is responsible for the disaster preparedness of all residents in the County. This department provides communication and coordination of emergency services before, during, and after a disaster and has three divisions: Emergency Management Operations, Public Safety Radio Systems, and Enhanced 9-1-1 Administration/Address Assignment. The mission of the Emergency Management Department is to provide Brevard County residents, businesses and industries, non-profit organizations, and local governments the education and support necessary to reduce the loss of life and human suffering; to minimize property damage; and to protect environmentally sensitive areas from all types of disasters through a comprehensive, risk-based, all-hazard emergency management program.

Brevard County implements emergency response actions in two ways: through field operations and through support operations conducted by the activated County emergency support functions (ESFs) operating from the County's Emergency Operations Center (EOC). Brevard County Emergency Management serves as the coordinating group for County agencies, municipal governments, and community organizations during pre-disaster planning and programming, as well as during actual emergency response and disaster recovery operations. Each ESF is managed by a primary agency that is assisted by several designated support agencies.

Brevard County Emergency Management is the lead organization "in-charge" through the coordination and direction of the Policy Group and ESF recommendations. The Policy Group is responsible for major, county-wide policy and planning decisions during and after disasters. This group includes the:

- County Commission Chairperson
- County Manager
- County Emergency Management Director
- County Public Safety Director
- County Fire Chief
- County Attorney
- County Sheriff
- Superintendent of Brevard Public Schools
- Space Coast Public Management Assoc. Rep.

In the event of an emergency, Brevard County Emergency Management is the official source of information on evacuation orders and shelter openings. Maps 11 and 12 (on pages 55 and 56, respectively) show evacuation zones and evacuation routes in Port St. John. Brevard County Emergency Management also provides information on disaster preparedness and options to receive emergency alerts on their website at https://www.brevardfl.gov/EmergencyManagement/ or call 321-637-6670 for more information.

Evacuation

Most coastal Florida counties have designated evacuation zones because they are susceptible to storm surge from tropical storms and hurricanes. All residents within evacuation zones should be aware of their primary and alternate evacuation routes. It is important that local emergency management always be consulted regarding evacuation orders during an emergency. Brevard County Emergency Management provides information on how to register to receive emergency alerts on their website at https://www.brevardfl.gov/EmergencyManagement/ or call 321-637-6670 for more information.

EVACUATION ZONES

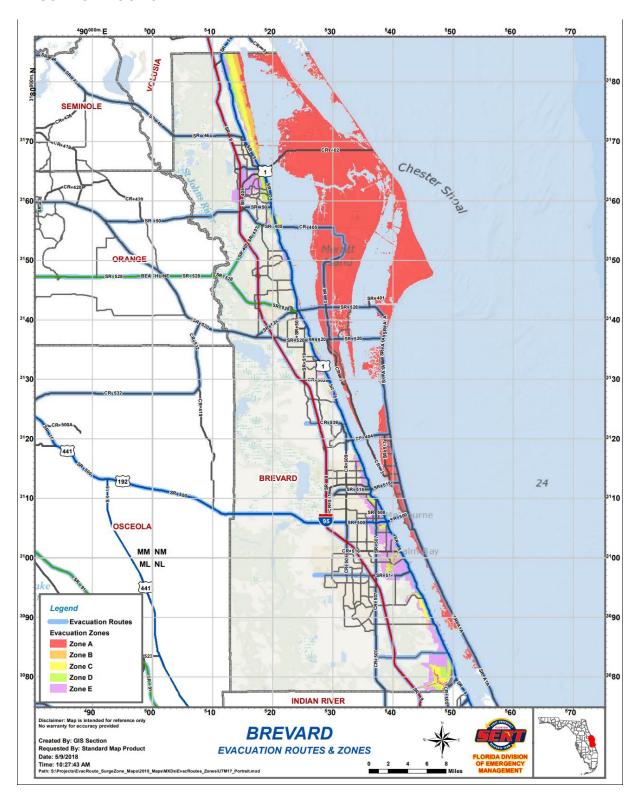
Zone A (Red): When an Atlantic-approaching hurricane threatens Brevard County, a mandatory evacuation will be called for Zone A, which includes the barrier islands, Merritt Island and some mainland low-lying areas. Evacuation zones for Port St. John are shown below (Map 11). In addition, those who live in mobile or manufactured homes, or in low-lying or flood-prone areas are also vulnerable and should also evacuate, whether on the mainland or the barrier islands.

County-wide evacuation route and zone maps (**Map 12** on page 56) are based upon the most up-to-date regional evacation studies and are intended for general reference. Additional information and address specific (Know Your Zone) evacation zones and evacuation routes can be found at the Florida Division of Emergency Management's website at https://www.floridadisaster.org/planprepare/disaster-preparedness-maps/.



Map 11. Evacuation Zones in Port St. John.

EVACUATION ROUTES



Map 12. Evacuation Routes in Brevard County.

ENVIRONMENTAL AND ECOLOGICAL FACTORS

Coastal High Hazard Area / Storm Surge

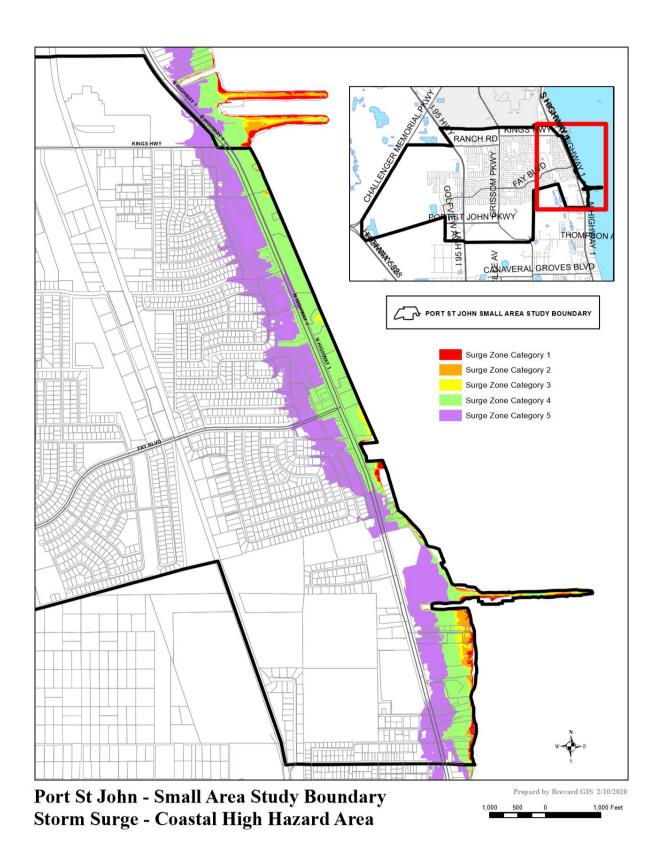
Brevard County has lands designated as Coastal High Hazard Areas (CHHA's), which are defined in Florida Statutes Chapter 163.3178(2)(h) as areas below the elevation of the Category 1 storm surge line as established by a Sea, Lake and Overland Surges from Hurricanes (SLOSH) computerized storm surge model. Objective 7.0 of the Coastal Management Element in Brevard County's Comprehensive Plan seeks to limit densities within the coastal high hazard zone and direct development outside of this area. The existence of sewer, water, roadways or other public infrastructure shall not be considered adequate rationale for an increase in zoning density or intensity within the coastal high hazard area per Policy 7.6 of the Coastal Management element.

Within the designated Coastal High Hazard Areas, the County does not support or finance new local transportation corridors nor locate sewer and water transmission lines except where there are no other cost-feasible alternatives. If County utility lines are relocated for any purpose, they are relocated outside of the Coastal High Hazard Area, except where there is no cost-feasible alternative.

Public facilities, except recreational facilities, will not be located by Brevard County within the Coastal High Hazard Area, except where there are no cost-effective alternatives. The County will continue to implement the Transfer of Development Rights program, which has been established to transfer density from transfer districts within the coastal high hazard area to receiving districts outside of the Coastal High Hazard Area.

In 2015, the State Legislature amended Chapter 163.3178(1) (f) to enumerate requirements of a redevelopment component in the Coastal Management Element. The County is currently in the process of amending the Coastal Management Element of the Comprehensive Plan to address how to minimize or eliminate inappropriate and unsafe development in the Coastal High Hazard Areas when opportunities arise.

The storm surge map (Map13 on page 58), created as part of the Statewide Regional Evacuation Study (SRES) Tide Atlas series published in 2010, identifies those areas subject to potential storm surge flooding from the five categories of hurricane on the Saffir Simpson Hurricane Wind Scale as determined by NOAA's numerical storm surge model, SLOSH. Areas that flood from the surge of a Category 1 hurricane are designated as Coastal High Hazard Areas, Designated CHHAs in Port St. John are shown as red areas in Surge Zone Category 1 on Map13 (page 58).



Map 13. Storm Surge map

FEMA Flood Zones and Flood Hazard Areas

The Federal Emergency Management Agency (FEMA) produces flood maps, known as Flood Insurance Rate Maps (FIRMs), that support the National Flood Insurance Program (NFIP) and provide the basis for community floodplain management regulations and flood insurance requirements. On Flood Insurance Rate Maps, flood hazard areas are identified as a Special Flood Hazard Area (SFHA), commonly referred to as "flood zone".

The FEMA Flood Insurance Rate Map (**Map 14** on page 60) depicts the Special Flood Hazard Area within the Port St. John Study Area. These "flood zone" areas are labeled as Zone A and Zone AE and are referred to as the base flood or 100-year flood.

Definitions of the FIRM zones identified within the Study Area on Map 14 are as follows:

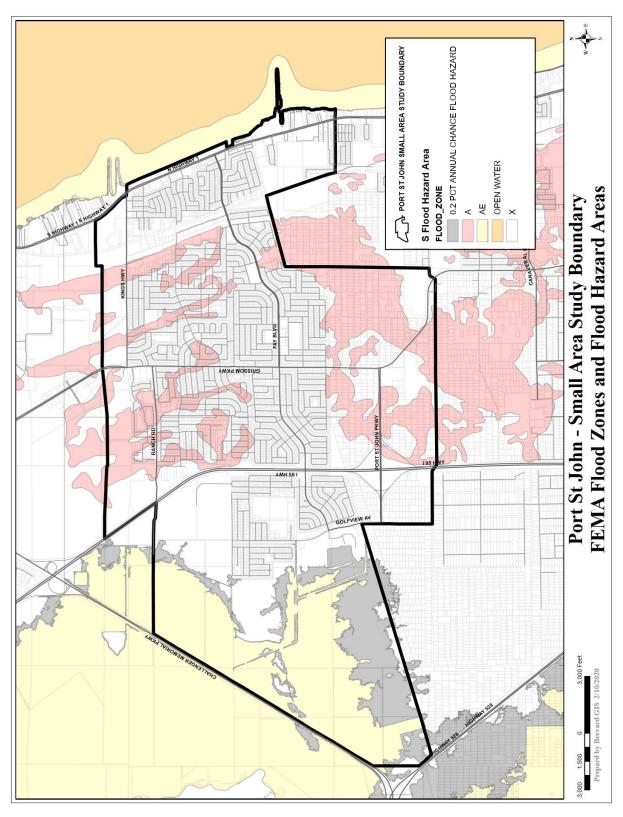
- Zone A An area inundated by 1% annual chance flooding, for which no Baseline Flood Elevations (BFEs) have been determined
- Zone AE An area inundated by 1% annual chance flooding, for which Baseline Flood Elevations (BFEs) have been determined
- Zone 0.2 PCT ANNUAL CHANCE FLOOD HAZARD An area inundated by 0.2% annual chance flooding (or 500-year) flood hazard
- Zone X An area of minimal flood hazard

While a large portion of the developed area in Port St. John is located outside the Special Flood Hazard Area and labeled as Zone X (area of minimal flood hazard), a majority of the western boundary of the Study Area is within SFHA Zone AE, and subject to inundation by the 1 percent annual chance flood event. Similarly, much of the southern border of the Study Area is within SFHA Zone A, including a section of Port St. John Parkway, and is also subject to the 1 percent annual chance flood. Mandatory flood insurance purchase requirements apply to both Zone AE and Zone A.

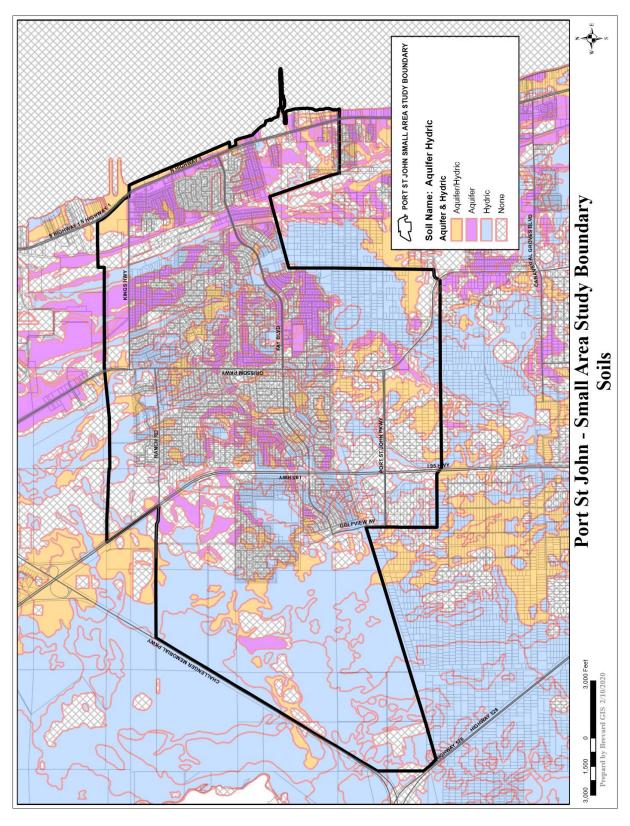
Additional information on flood hazard mapping and flood zone information for specific addresses can be viewed on the FEMA Flood Map Service Center website at https://msc.fema.gov/portal/home.

Soils

The Study Area contains mapped aquifer recharge soils and hydric soils as shown on the USDA Soil Conservation Service Soils Survey map (**Map 15** on page 61). Areas containing these soils may be subject to development and impervious restrictions as defined in Brevard County's Conservation Element Policy 10.2, the Aquifer Protection Ordinance (89-12), and the Wetlands Protection Ordinance (2000-47).



Map 14. Flood Zones and Flood Hazard Areas



Map 15. Soils map

Wetlands

The natural wetlands of Port St. John tend to be located in the same locations as the flood zones (Map 14 page 60) and hydric soils (Map 15 page 61); which all correspond to the lower elevations. The National Wetlands Inventory map (Map 16 on page 63) depicts the following wetlands types in the Study Area:

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake

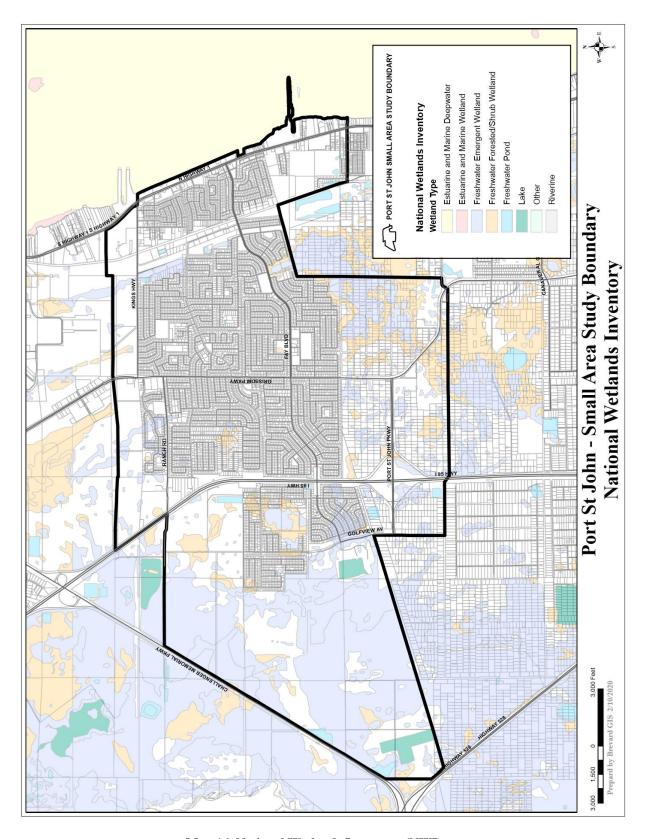
Confirmation of wetlands would require field verification, and may be larger or smaller than depicted on Map 16. Objective 5 of the Conservation Element of the Brevard County Comprehensive Plan is to preserve, protect, restore, and replace wetlands to achieve no net loss of functional wetlands in Brevard County after September, 1990. The County shall ensure the protection of wetlands and wetland functional values by prioritizing protective activities with avoidance of impacts as the first priority, minimization of impacts as the second priority, and mitigation for impacts as the third priority.

Per Section 62-3694(c)(1), residential land uses within wetlands shall be limited to not more than one (1) dwelling unit per five (5) acres unless strict application of this policy renders a legally established parcel as of 9/9/88, which is less than five (5) acres, as unbuildable. For subdivisions greater than five acres in area, the preceding limitation of one dwelling unit per five (5) acres within wetlands may be applied as a maximum percentage limiting wetland impacts to not more than 1.8% of the total non-commercial and non-industrial acreage on a cumulative basis as set forth in Section 65-3694(c)(6). Any permitted wetland impacts must meet the requirements of Sections 62-3694(e) and 62-3696.

Section 62-3694(c) (3) contains criteria for commercial and industrial development within wetlands. Per 62-3694(c) (3), commercial and industrial land development activities shall be prohibited in wetlands contained in properties designated on the Future Land Use Map as commercial or industrial, and in surrounding upland buffers for such wetlands, except as provided in 62-3694(c) (3) for (a) 1-95 interchanges, (b) mitigation qualified roadways, (c) abutting properties, and (d) access to uplands. Where the state does not require a buffer, wetland buffers shall be established in accordance with section 62-3694(c)(10). Where impacts are permitted, the applicant is encouraged to propose innovative wetland preservation alternatives. Where the state does not require mitigation for any wetland impact, mitigation shall be provided to meet the County's no net loss policy as defined in section 62-3696.

The Conservation Element identifies six (6) Mitigation Qualified Roadway segments in the Port St. John area of unincorporated Brevard County:

- U.S. Highway 1 from Titusville City Boundary to City of Cocoa Boundary
- Grissom Parkway from Titusville City Boundary to City of Cocoa Boundary
- Port St. John Parkway from I-95 interchange area to Grissom Parkway
- Kings Highway from U.S. Highway 1 to approximately 325 feet west of Kuesaw Lane
- Curtis Boulevard from Fay Boulevard to approximately 210 feet east of Song Drive
- Fay Boulevard from Carole Avenue to Adobe Avenue



Map 16. National Wetlands Inventory (NWI) map

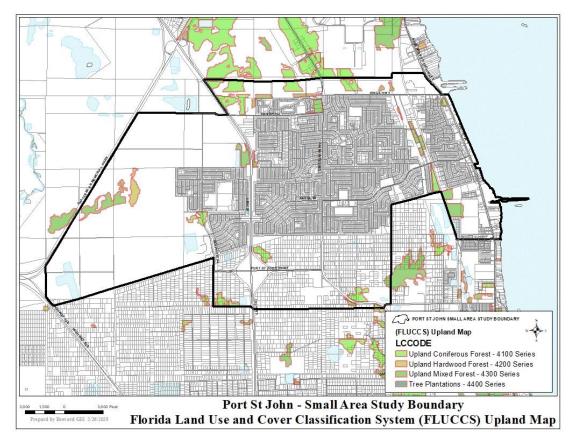
Land Use and Cover – Upland FLUCCS

The Study Area contains the following mapped polygons of Florida Land Use and Cover Classification System (FLUCCS) Upland Forest 4000 series codes:

- 4100 Upland Coniferous Forest
- 4200 Upland Hardwood Forest
- 4300 Upland Mixed Forest
- 4400 Tree Plantations

Heritage Specimen trees (greater than or equal to 24 inches in diameter) are included in 4000 series FLUCCS codes and may reside in the Port St. John area. Per Brevard County Landscaping, Land Clearing and Tree Protection ordinance, Section 62-4331(3), the purpose and intent of the ordinance is to encourage the protection of Heritage Specimen trees. In addition, per Section 62-4341(18), Specimen Trees shall be preserved or relocated on site to the Greatest Extent Feasible. Per Section 62-4332, Definitions, Greatest Extent Feasible shall include, but not be limited to, relocation of roads, buildings, ponds, increasing building height to reduce building footprint or reducing Vehicular Use Areas.

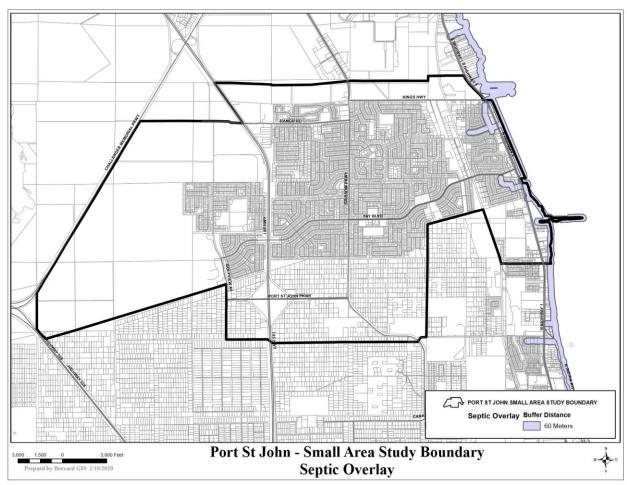
The Upland FLUCCS map (**Map 17** below) depicts the mapped upland forest areas in Port St. John.



Map 17. Florida Land Use Cover and Forms Classification System - Upland map

Indian River Lagoon – Septic Overlay

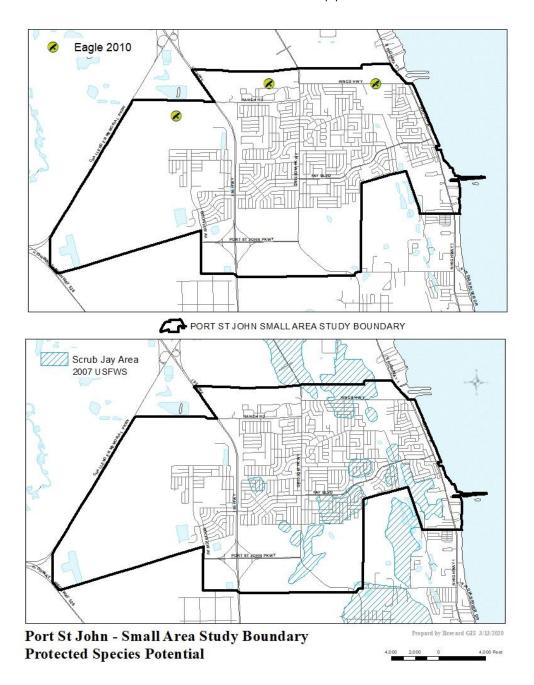
In October 2018, the Board of County Commissioners approved septic tank restrictions to protect the Indian River Lagoon (IRL) from harmful nitrogen inputs by prohibiting the installation of new conventional septic tanks along the beachside, on Merritt Island, and in mainland areas close to the IRL and its tributaries. Portions of the Study Area are within the restricted areas as shown on the Nitrogen Reduction Septic Overlay (Map 18) below. Per Chapter 46, Article II, Division IV of the Brevard County Code, no building permits shall be issued or site plans approved after May 22, 2018, for properties located within the overlay area unless the property is being serviced by a central sewage treatment facility or an Onsite Sewage Treatment and Disposal System (OSTDS) is used that meets or exceeds a 65 percent reduction in total nitrogen and complies with Florida Statutes 381.0065, Chapter 64E-6, Florida Administrative Code, and Chapter 46 of Brevard County Code.



Map 18. Nitrogen Reduction Septic Overlay map

Protected Species Potential

Map 19 (below) shows areas of potential Scrub Jay occupancy, as well as locations of Eagles Nests as mapped by U.S. Fish and Wildlife Service (USFWS) in 2010, indicating that federally and/or state protected species may be present on lands within the Study Area. Prior to any plan, permit submittal, or development activity, including land clearing, all necessary permits or clearance letters from the Florida Fish and Wildlife Conservation Commission and/or USFWS should be obtained, as applicable.



Map 19. Eagle Nests and Scrub Jay Areas map

CITIZENS COMMITTEE RECOMMENDATIONS

The Recommendations below are ranked in order of priority and were selected as the top recommendations by the Citizen's Committee for staff to present to the Brevard County Board of County Commissioners (BOCC).

Recommendation 1: Relocate Brevard County Fire Station from Fay and Carol Avenue to the west which is more to the center of Port St. John. Ideally, the land owned by Brevard County at or near Fay Avenue and Adams Place (Funding source could be a combined MSTU and MSBU within the boundary).

STAFF RESPONSE, FIRE RESCUE DEPARTMENT: Station 26, currently located at 6655 Carole Avenue in Port St. John, was built in 1988. Prior to that time, the area was served by Brevard County Fire Rescue via the building located at 4870 N. US Highway 1 which currently houses the Four Community Volunteer Fire Department. The recommendation to relocate Station 26 west to the area of Fay and Adams Place would gain approximately 1.4 miles or two minutes to the west. Brevard County Fire Rescue is a regional response system with a run area that includes US1 north to Golden Knights Boulevard and south to the area of Camp Road.

Brevard County Fire Rescue is currently taking a comprehensive look at the location of all fire stations from many aspects, including age, structural integrity, proper size for current staff requirements, and location within the run area to most efficiently serve a regional response area. This review of Fire Rescue operations will also take a look at expanding service as a response to community needs, for example the consideration of a Port St. John station west of 195.

Recommendation 2: Adjust the Port St. John Dependent Special District boundary (PSJ Advisory Board) to the north to match the Small Area Study boundary less any lands that are currently part of the City of Cocoa or the City of Titusville.

STAFF RESPONSE, PLANNING AND DEVELOPMENT: The geographical boundaries of the Port St. John Dependent Special District were established in 1996 by BOCC adoption of Brevard County Ordinance 96-30. The recommendation to expand the geographical boundaries of the Port St. John Dependent Special District would require BOCC approval and adoption of an ordinance.

Recommendation 3: Change the Future Land Use designation from Residential 4 (RES 4) to Neighborhood Commercial (NC) on 2.92 acres located on Fay Boulevard (tax account #s: 2309950, 2309949, 2309948). No changes to zoning recommended.

STAFF RESPONSE, PLANNING AND DEVELOPMENT: Changing the Future Land Use designation to NC on the parcels described in Recommendation #3 would establish consistency with the current zoning classifications. A Small Scale Comprehensive Plan Amendment would be required.

Recommendation 4: Change the Future Land Use designation from Residential 4 (RES 4) to Neighborhood Commercial (NC) on 0.30 acres located at the intersection of

Fay Boulevard and Grissom Parkway (tax account #: 2310247). No changes to zoning recommended.

STAFF RESPONSE, PLANNING AND DEVELOPMENT: Changing the Future Land Use designation to NC on the parcel described in Recommendation #4 would establish consistency with the current zoning classification. A Small Scale Comprehensive Plan Amendment would be required.

Recommendation 5: No changes recommended in the area of Fay Boulevard and US Highway 1. Current Future Land Use and Zoning designations are consistent.