



2018

CONCURRENCY

MANAGEMENT

REPORT

Prepared by the
Department of Community Development
November 2018

CONTENTS

I.	<u>EXECUTIVE SUMMARY</u>	1
II.	<u>OVERVIEW OF CONCURRENCY MANAGEMENT</u>	3
A.	Public Facilities and Services Subject to Concurrency Review	3
B.	Concurrency Administration	4
C.	Exemptions from Concurrency	4
D.	Vested Development	5
E.	Adopted Level-of-Service Standards (LOS)	7
F.	Capacity Reservations	7
G.	Development Deferrals/Moratoria	7
III.	<u>CURRENT CAPACITIES AND LEVEL OF SERVICE</u>	8
A.	Transportation	8
B.	Sanitary Sewer	19
C.	Potable Water	23
D.	Stormwater Drainage	27
E.	Solid Waste Disposal	30
F.	Recreation and Open Space	32
G.	Schools	35
IV.	<u>SUMMARY AND CONCLUSIONS</u>	38

This 2018 Concurrency Management Report was prepared by the Community Development Department, with assistance from the Finance, Parks & Recreation, Public Utilities, and Public Works Departments and Volusia County Schools.

I. EXECUTIVE SUMMARY

Concurrency is the finding that public facilities and services necessary to support new development are available, or will be made available, by the time the impacts of development are expected to occur. As mandated by State law, all municipalities must conduct concurrency reviews on development proposals and make a finding of concurrency before any development orders or permits can be issued. Concurrency reviews evaluate a project's impact on the following seven public facilities and services:

Transportation
Sanitary Sewer
Potable Water
Stormwater Drainage
Solid Waste
Recreation
Public Schools

The concurrency management system for the City of Port Orange is established by policy in the City's Comprehensive Plan, and administered through regulations contained within the City's Land Development Code. The Community Development Department is responsible for regularly monitoring the cumulative effect of all approved Development Orders and Development Permits on the capacity of public facilities. In addition to the individual concurrency reviews for current development proposals, this report, prepared annually, is intended to meet this obligation.

From October 1, 2017 through September 30, 2018 the Community Development Department issued Development Orders that secured capacity reservations for 289,880 square feet of new non-residential space and 408 residential units.

In review of the City's position with respect to concurrency, the public facilities and services subject to concurrency review are at sufficient levels for FY 18/19.

- Traffic: Traffic volumes within the City have increased on some segments and decreased on other segments over the past year. Roads on the west side of I-95 will likely experience the most traffic growth in the future. The capacity on Williamson Boulevard north of the Pavilion and Taylor Road between Dunlawton Avenue and Clyde Morris Boulevard will need to be monitored as these segments are slightly above its LOS standard. Roadway improvements are planned for the next several years to keep pace with anticipated development.
- Sanitary Sewer and Potable Water: These systems continue to have capacity to support additional growth within the City. The LOS for potable water will be monitored to ensure that permitted ground water withdrawal capacity per the Consumptive Use Permit, issued to the City by St. Johns River Water Management District, is not exceeded.
- Stormwater Drainage: The stormwater LOS requirement is being met for all drainage facilities constructed after the 1970's (when the City's stormwater regulations were adopted) with respect to being able to treat the runoff from the 25-year, 24-hour storm

without causing flooding or polluting the receiving water bodies. The City continues to identify long-term solutions and implement drainage improvement and maintenance programs to enhance the function of the full stormwater system including those areas developed prior to the adoption of the stormwater regulations.

- Solid Waste: Solid waste generation rates are slightly above the adopted LOS standard. There is no concurrency review for trash collection; however, the City's ability to collect and dispose of this waste is subject to concurrency review. As long as the City has sufficient financial resources to pay for private waste collection and room is available at the landfill, the City will have fulfilled its obligation to ensure that its waste is collected and disposed, regardless of the LOS standard. The amount of solid waste generated by individuals is not something that the City can directly control; however, the City can promote recycling programs to inform residents and businesses about the benefits of reducing the amount of waste generated.
- Recreation and Open Space: The LOS is being met for all recreational facilities.
- Public Schools: LOS is being met for all but one of the public schools located in the Port Orange area. Port Orange Elementary is slightly above the LOS standard; however, this is due to the gifted program offered at this school that draws students from outside the attendance boundary and not unplanned development. The school district will continue to monitor the capacity at Port Orange Elementary; however, the capacity level is not considered a concurrency issue because there is not much new residential growth planned within the school attendance boundary and the adjacent schools have remaining capacity.

II. OVERVIEW OF CONCURRENCY MANAGEMENT

Concurrency is the finding that public facilities and services necessary to support a proposed development are available, or will be made available concurrently with the impacts of a development. All Florida municipalities are required to adopt and implement concurrency management systems in accordance with State law.

The concurrency management system for the City of Port Orange is established by policy in the City's Comprehensive Plan, and administered through regulations contained within the City's Land Development Code (LDC). Local level-of-service standards (LOS) for seven types of public facilities and services have been adopted as part of the Comprehensive Plan. During the subdivision or site plan review process, the City evaluates each proposed development for its anticipated impact on these facilities and services, and makes a finding of whether approval of the project would cause these facilities or services to drop below their adopted LOS.

In general, no final Development Orders or permits may be issued for development until there is a finding that all public facilities and services included in the City's Concurrency Management System have sufficient capacity to accommodate the impacts of the development, or that improvements necessary to bring facilities up to their adopted LOS will be in place at the same time the impacts occur. Development Orders and permits include subdivision approval, site development plan approval, and the issuance of building permits.

Public Facilities and Services Subject to Concurrency Review

Concurrency review evaluates impacts on seven types of public facilities and services:

Transportation
Sanitary Sewer
Potable Water
Stormwater Drainage
Solid Waste
Recreation
Public Schools

If the City's concurrency review reveals a proposed development will generate impacts that exceed available capacity, the City must secure a financial, or other legally binding commitment, to ensure that improvements necessary to correct the anticipated deficiency will be in place concurrent with the impacts of the proposed development. Should the City and/or the developer be unable to provide such assurances, the project must be denied. Projects denied due to a failure to meet concurrency requirements, but for which all other LDC requirements have been met, can be placed on a prioritized list for approval of Development Orders once facility improvements have been made.

Concurrency Administration

The Community Development (CD) Department is responsible for coordinating all concurrency reviews by City departments. Concurrency reviews are conducted as part of the development review process for site plans and residential subdivisions. The CD Department may also conduct non-binding concurrency reviews for developments in the pre-application or conceptual plan stage.

The CD Department is also responsible for monitoring the cumulative effect of all approved Development Orders and development permits on the capacity of public facilities. The annual Concurrency Management Report is intended to meet this obligation.

From October 1, 2017 through September 30, 2018, the CD Department conducted concurrency reviews for 14 non-residential projects and 5 residential projects. During this period, Development Orders were issued (or extended) and capacity reservations were secured for a total of 289,880 square feet of new non-residential space and 408 residential units. As of September 30, 2018, there are 499,822 square feet of non-residential space and 1,016 residential units that remain vested but un-built from previous years (see Exhibit 1).

Exemptions from Concurrency

Three types of development are exempt from concurrency review.

1. Vested projects with valid development orders or permits issued prior to November 1, 1990;
2. Public facilities; and
3. De minimus projects.

Development Orders for projects which meet these criteria may be issued without a finding of concurrency. However, if the proposed development will impact a public facility for which a deferral or moratorium on development has been placed, then no development orders may be issued until the deficiency is corrected.

Public facilities necessary to ensure the protection of the health, safety and general welfare of the citizens of Port Orange are exempt from concurrency review. This includes all public facility construction projects in the City's Capital Improvements Program required to maintain adopted LOS standards. This means that new public facilities, such as fire stations, are not reviewed to determine whether they will generate impacts that may negatively affect the City's level of service standards.

A de minimus development has very minimal impact, if any, on the City's adopted level of service standards set forth in the Comprehensive Plan. The following criteria are used to determine if a development is de minimus:

- Development of a single-family or two-family (duplexes) dwellings on a lot of record or un-platted parcel created before April 10, 1990 is deemed to be de minimus from all Concurrency reviews.
- Development with a daily trip generation rate of less than one percent of the maximum trip volume at the adopted level-of-service on an adjacent roadway and, on non-hurricane evacuation routes, would not cause the maximum volume to be exceeded by 110 percent

- is deemed de minimus for purposes of assessing transportation LOS.
- Development that does not increase the number of school-age residents beyond the district-wide LOS standards established by the Volusia County School Board is deemed de minimus for purposes of assessing school levels of service.

In addition, developments in the Port Orange Town Center Transportation Concurrency Exception Area (TCEA) are exempt from the standard vehicular transportation concurrency review requirements of the LDC. The TCEA is intended to support the redevelopment objectives of the City by providing a multi-faceted strategy for maintaining acceptable overall mobility, while minimizing the need for major road improvements that would potentially alter the desired character of the Town Center. Development within the TCEA is required to comply with the mobility strategies identified by the City to ensure continued safety and efficiency of the transportation system and to mitigate the impacts of the proposed development. Little development has occurred in the area since the TCEA was adopted, and although the exemption exists, there are no transportation concurrency issues in the area.

Vested Development

Development projects which had valid development orders or permits prior to the commencement of the City's concurrency regulations on November 1, 1990 are considered vested. This also includes all vacant single-family and two-family residential lots in subdivisions platted before that time. Lots and parcels which are vested for concurrency but have not yet been constructed or built out are considered reserved, meaning that the capacity has been reserved in the concurrency system to support their eventual construction.

When completed and occupied, the vested and reserved residential development will add approximately 2,286 new citizens to Port Orange¹. The current list of remaining vested development, as of September 30, 2018, is listed in Exhibit 1, along with the developments that have current Development Orders and capacity reservations.

¹ Average household size is 2.25, per the 2010 Census. Previous census provided average household size by housing unit type (i.e. single-family, multi-family, mobile home). As of the 2010 Census, this data is no longer provided.

EXHIBIT 1: VESTED & RESERVED DEVELOPMENT (September 30, 2018)

SINGLE FAMILY SUBDIVISION LOTS	NUMBER	NON-RESIDENTIAL DEVELOPMENT	SQUARE FEET
<u>SUBDIVISION</u>	<u>LOTS</u>	<u>DEVELOPMENT</u>	<u>SQUARE FEET</u>
Angler's Cove	5	301 Dunlawton	830
Cambridge Acres	2	7-Eleven	3,010
Carter Woods	2	Acorn Mini Storage	90,000
Countryside I-XII	2	Arby's	3,000
Cross Creek I-II	1	Benton House	46,000
Devonwood	1	Elite Plaza	9,900
Golden Pond Estates	1	Gaff's	5,570
Hidden Oaks at Spruce Creek	2	Giuseppe's	7,100
Ken Bern	1	Jimmy Hula's	3,700
Kings Landing	71	Newport Lot 3 (2 buildings)	7,982
Kingswood I-III	1	Oak Street Warehouse	8,900
Northern Lites	4	Pavilion at Port Orange (Lot 5)	124,903
Oakland Park I-III	1	Port Orange Gateway Center Lot 3A	10,250
Palms Del Mar	1	Port Orange Self Storage	49,000
Pheasant Run West	1	Port Orange Senior Housing	54,820
Pinnacle II	60	Raydon, Phase II	66,557
Port Orange Plantation - Hawks Preserve I	4	Unatin Office Bldg.	8,300
Port Orange Plantation - Hawks Preserve II	48	<u>GRAND TOTAL</u>	<u>499,822</u>
Reedy Creek Acres	1		
Reedy Creek North	3		
Riverbank Properties	3		
Riverwood VIII	2		
The Sanctuary on Spruce Creek I-III	3		
Sawgrass Point I-III	1		
Skylake II-III	2		
Sleepy Hollow II	1		
Spruce Creek Woods	1		
Spruce Estates	1		
Sugar Forest III	1		
Summertrees South I-III	2		
Sweetwater Estates	9		
Syford Acres	2		
Viking I-II	1		
Water's Edge XII	1		
Westport Reserve 3	115		
Westport Reserve 4	71		
Woodhaven I	178		
Woodlake	3		
<u>TOTAL</u>	<u>609</u>		
MOBILE HOME LOTS / SPACES			
Bayview	4		
Crane Lakes	8		
Halifax Estates	8		
Laurelwood I-V	1		
Pickwick Village	1		
Spruce Creek Village	5		
Twin Gates	3		
<u>TOTAL</u>	<u>30</u>		
MULTI-FAMILY/TOWNHOUSE/DUPLEX UNITS			
Bella Oaks	138		
Canalview Place	20		
Cornerstone Grove	58		
Golf Homes at Cypress Head	52		
Hidden Village	1		
Potato Patch	1		
Southern Oaks	6		
Trailwood I	8		
Woodhaven I	93		
<u>TOTAL</u>	<u>377</u>		
 <u>GRAND TOTAL</u>	 <u>1,016</u>		

Adopted Level-of-Service Standards (LOS)

The adopted level-of-service standards (LOS) for public facilities subject to concurrency are established in the City of Port Orange's Comprehensive Plan and the Land Development Code. The standards for each facility and service are indicated in Part II of this report.

Capacity Reservations

If a concurrency review for a proposed development reveals that there is sufficient capacity to support it, a Development Order will be issued and capacity is reserved. Capacity reservations are made based on the date of project approval by the Community Development Department or the City Council. Capacity reservations are made in conjunction with the issuance of a final Development Order. They are valid only for the specific land use(s), densities, intensities and construction and improvement schedules as contained on the Development Order and any applicable development agreements for the property.

The issuance of a Development Order generally reserves public facility capacity for the project for one year. For Planned Unit Developments (PUD) and Planned Commercial Developments (PCD), capacity may be reserved for the first phase of the project for up to one year from the issuance of the approval. Capacity reservations for concurrency expire when the underlying Development Order or development agreement expires or is revoked.

The City Council may also reserve public facility capacity for a particular land area or specific land use, provided it is done in accordance with a specific development or redevelopment strategy identified in the Comprehensive Plan. This would include such community development objectives as providing affordable housing or diversification of the tax base.

Development Deferrals/Moratoria

If, at any time, the City's inventory of public facilities capacities indicates that a facility has dropped below its adopted LOS, then the City will cease to issue any development orders which would impact that facility. Such a deferral will continue until the adopted LOS is reestablished through facility improvements or other methods, or the adopted LOS as established in the Port Orange Comprehensive Plan is amended to reflect a lower, acceptable community standard. If improvements to a facility are not anticipated to keep pace with the demand brought about by new development, then the City may declare a development deferral or moratorium of specified duration and/or location.

III. CURRENT CAPACITIES AND LEVEL OF SERVICE

This section of the report will look at each facility subject to concurrency. First, the facility's adopted level-of-service (LOS) will be identified. Next, the current status of the facility relative to its adopted LOS will be evaluated. Lastly, the City's ability to meet the demands of new development at adopted levels-of-service during the upcoming year will be considered and a description of projected long-term improvements is provided.

TRANSPORTATION FACILITIES

Level of Service Measures

The City evaluates LOS for concurrency review purposes based on peak-hour trips for city roads and on peak-hour and daily trips for County and State roads. This allows the City to evaluate the existing and projected LOS on roadway segments so the City can target specific improvements to maintain the adopted LOS or to make improvements for specific movements, if necessary.

Adopted Level-of-Service Standards

Exhibit 2 lists the currently adopted level-of-service standards for roads in the City.

Exhibit 2: Adopted Roadway Level-of-Service Standards

Administrative Facility Type	Adopted LOS Standard
Florida Strategic Intermodal System (SIS)	C
State Arterials and non-SIS roads	D
County	E
City	E

Florida Strategic Intermodal System (SIS) Roadways - LOS "C"

In Port Orange, the sole Florida Strategic Intermodal System (SIS) roadway facility is I-95. The state mandates these roads be maintained at LOS "C" or better. According to the Highway Capacity Manual, LOS "C" is defined as stable flow but the operation of individual users is significantly affected by interactions with other vehicles in the traffic stream. Ability to select and maintain a desired speed is affected by the presence of other vehicles, and changing lanes becomes more difficult. The general level of comfort and convenience is good, although considerably less than at LOS "A."

State Arterials (Non-SIS Facility) & Designated Hurricane Evacuation Routes - LOS "D"

State-maintained principal arterials and hurricane evacuation routes are designated at LOS "D". Only US 1 (Ridgewood Avenue), SR 421 (Dunlawton Avenue), SR A1A (Dunlawton bridge) and SR 5A (Nova Road) are designated with LOS "D". According to the Highway Capacity Manual, LOS "D" is defined as high-density yet stable flow. The ability to select a desired speed and to change lanes is severely restricted, although the driver or passenger still experiences a fair level of comfort and convenience. Small increases in traffic flow can cause operational problems at this LOS.

All City Roads and County Arterial and Collector Facilities - LOS "E"

The City's LOS standard for city roads and the County's LOS standard for county roads is "E". According to the Highway Capacity Manual, LOS "E" is defined as high-density and often unstable traffic flow. Speeds are generally reduced to a low, but relatively uniform value during peak periods. The ability to change lanes is extremely difficult and is generally accomplished by forcing another vehicle to slow down to accommodate such maneuvers. Comfort and convenience is poor and driver frustration is high. Small increases in traffic volume or other minor problems such as a stalled vehicle can cause traffic to come to a complete stop for relatively long periods. LOS "E" is slightly more degraded than "D" however most motorists don't recognize a difference.

Design Capacity and Existing Level-of-Service

Exhibit 3, "Roadway Counts, Functional Classification and LOS" indicates the design capacity and adopted levels of service of various arterial and collector roadways in the City of Port Orange, existing traffic volumes, existing level-of-service, and the percentage change in traffic volumes between 2016 and 2017 for County and State roadways and 2016 and 2018 for City roads. The capacity of roadways is based on roadway characteristics for urbanized areas described in Table 1 of the 2013 Quality Level of Service Handbook published by FDOT.

Traffic Counts and Trends

There is one roadway segment along Williamson Boulevard operating above the adopted level-of-service (Madeline Ave. to Willow Run Blvd.). There is also one segment of Taylor Rd. (Dunlawton Ave. to Clyde Morris Blvd.) operating above the adopted level-of-service. During 2018, traffic counts taken throughout the city generally indicated moderate increases on some routes and decreases in others (see Exhibit 3). The volumes indicated in Exhibit 3 are presented as average daily trips. The most recent daily traffic counts available were taken in 2018 for City roads and 2017 for State and County roads. No traffic count data for City roads is available for 2017.

State Roads (2017 Data)

Of the 14 state count stations, 11 showed traffic volume increases, 3 showed a traffic volume decrease. There was an approximately 2.35% increase in trips on the segment of Dunlawton Avenue from Nova Road to Clyde Morris Boulevard. Based on the most recent traffic counts, the volume to capacity ratio for this roadway segment is 70.95%. There was an approximately 3.06% increase in trips on the segment of Dunlawton Avenue from Clyde Morris Boulevard to I-95, and the most recent traffic counts showing the volume to capacity ratio at 81.80%. Substantial capacity remains on both of these roadway segments, but there are concerns with some turning movements and the general traffic pattern. Staff will continue to monitor traffic volume counts in this area. There was a slight decrease in total trips on the state network within the city from 2016-2017.

County Roads (2017 Data)

Of the 24 county count stations, 12 showed traffic volume increases and 12 showed traffic volume decreases. There is one roadway segment along Williamson Boulevard between Madeline Avenue and Willow Run Boulevard that exceeds the adopted level-of-service and two segments (North City Limits to Madeline Ave. and Willow Run Blvd. to Town West Blvd.) operating slightly below level-of-service. There is also a segment of Taylor Road (Dunlawton Ave. to Clyde Morris Blvd.) that slightly exceeds the adopted level-of-service. The 2017 traffic counts from the County show approximately a 4% decrease in trips on the three segments of Williamson Boulevard from the North City Limits to Town West Boulevard (see Exhibit 3). Despite the decrease, these segments still exceed or are just below the adopted level-of-service. Long-term improvements will need to be programmed for the northerly segments of Williamson Boulevard. By widening this segment, the capacity at the adopted LOS will increase from 17,050 to approximately 37,970 daily trips. The Williamson Boulevard widening project is included in the TPO's 2040 Long Range Transportation Plan, but it is not currently funded. There was an 0.34% increase in total trips on the county network from 2016-2017.

City Roads (2018 Data)

Of the 30 city count stations included in this analysis period, 14 showed traffic volume increases and 16 showed traffic volume decreases. Overall, there was an 13.25% decrease in total trips on the city roadway network from 2016-2018.

Exhibit 3: Roadway Counts, Functional Classification and LOS

ROAD	LOCATION	COUNT STATION	NO. OF LANES	FUNCT. CLASS ^A	ADOPTED LOS STANDARD	ADOPTED LOS CAPACITY	2015 VOLUME	2016 VOLUME	2017 VOLUME	2018 VOLUME	EXISTING LOS	% Change ^B	VC Ratio ^C
Airport Road	Pioneer Trail-Williamson	64	2	CO	E	33,300	7,690	8,430	7,590		B	-11.07%	22.79%
Canal View Blvd.	Nova Rd. to Spruce Creek Rd.	201	2	CO	E	12,744	2,390	2,173		2,606	B	16.62%	20.45%
Central Park Blvd.	Hensel Rd. to Spruce Creek Rd.	2201	2	local	E	12,744	2,543	2,619		2,657	B	1.43%	20.85%
Charles St.	Ridgewood Ave. to FEC Railroad	301	2	local	E	12,744	1,799	2,287		1,802	B	-26.91%	14.14%
Charles St.	FEC Railroad to McDonald Rd.	302	2	local	E	12,744	2,176	2,597		3,875	B	32.98%	30.41%
City Center Pkwy.	Dunlawton Ave. to City Center Cir.	2401	2	local	E	12,744	4,640	6,022		5,461	B	-10.27%	42.85%
City Center Blvd.	Clyde Morris to City Center Cir.	2402	2	local	E	12,744	4,842	7,208		5,479	B	-31.56%	42.99%
City Center Dr.	Herbert St. to City Center Cir.	2403	2	local	E	12,744	2,880	3,010		2,731	B	-10.22%	21.43%
Clyde Morris Blvd.	N. City Limits to Madeline Ave.	335	4	UPA	E	37,970	25,110	20,770	24,230		C	14.28%	63.81%
Clyde Morris Blvd.	Madeline Ave. to Willow Run	333	4	UPA	E	37,970	20,770	22,480	23,240		C	3.27%	61.21%
Clyde Morris Blvd.	Willow Run Blvd. to Dunlawton Ave.	332	4	UPA	E	37,970	21,080	21,990	20,230		C	-8.70%	53.28%
Clyde Morris Blvd.	Dunlawton Ave. to Taylor Rd.	330	2	UMA	E	17,050	8,810	11,220	10,440		C	-7.47%	61.23%
Commonwealth	Spruce Creek Rd. to FEC Railroad	360	2	MA	E	13,640	5,460	5,450	5,530		D	1.45%	40.54%
Commonwealth	FEC Railroad to Ridgewood Ave.	361	2	MA	E	13,640	3,890	3,920	3,840		C	-2.08%	28.15%
Country Ln.	Village Trail to Smokerise Blvd.	601	2	local	E	12,744	4,479	5,786		5,345	B	-8.25%	41.94%
Country Ln.	Smokerise Blvd. to Taylor Rd.	602	2	local	E	12,744	2,512	4,172		4,317	B	3.36%	33.87%
Dunlawton Ave.	Peninsula Dr. to Ridgewood Ave.	427	4	PA	D	39,800	30,000	30,500	22,500		D	-35.56%	56.53%
Dunlawton Ave.	Ridgewood to Spruce Creek Rd.	5181	4	PA	D	39,800	27,000	27,500	28,500		C	3.51%	71.61%
Dunlawton Ave.	Spruce Creek Rd. to Nova Rd.	1015	4	PA	D	39,800	30,500	31,500	33,000		C	4.55%	82.91%
Dunlawton Ave.	Nova Rd. to Clyde Morris Blvd.	1014	6	PA	D	59,900	38,500	41,500	42,500		C	2.35%	70.95%
Dunlawton Ave.	Clyde Morris Blvd. to I-95	517	6	PA	D	59,900	46,000	47,500	49,000		C	3.06%	81.80%
Hensel Rd.	Taylor Rd. to Central Park Blvd.	1001	2	local	E	12,744	5,846	6,860		7,244	B	5.30%	56.84%
Herbert St.	Ridgewood Ave. to McDonald Rd.	902	2	CO	E	12,744	4,865	5,143			B	5.41%	40.36%
Herbert St.	Sixth Street to Nova Rd.	903	2	CO	E	12,744	6,742	7,668		5,885	B	-30.30%	46.18%

Herbert St.	Nova Rd. to City Center Dr.	904	2	CO	E	12,744	8,943	8,456		9,298	B	9.06%	72.96%
Herbert St.	City Center Dr. to Clyde Morris	905	2	CO	E	12,744	7,967	11,037		7,554	B	-46.11%	59.27%
McDonald Rd.	Charles St. to Madeline Ave.	1201	2	local	E	12,744	2,625	2,965		2,997	B	1.07%	23.52%
Madeline Ave.	Sauls Rd. to Nova Rd.	1164/1301	2	MA	E	14,040	4,857	5,180		5,696	C	9.06%	40.57%
Madeline Ave.	Nova Rd. to Clyde Morris Blvd.	1163/1303	2	MA	E	14,040	8,000	9,205		9,044	C	-1.78%	64.42%
Madeline Ave.	Clyde Morris Blvd. to Williamson	1161/1304	2	MA	E	14,040	11,549	12,404		11,784	C	-5.26%	83.93%
Nova Rd.	Madeline Ave. to Dunlawton Ave.	1017	4	UPA	D	39,800	28,000	26,500	27,500		C	3.64%	69.10%
Nova Rd.	Dunlawton to Spruce Creek Rd.	1016	4	UPA	D	39,800	27,000	26,000	29,500		C	11.86%	74.12%
Nova Rd.	Spruce Creek Rd. to Ridgewood Av.	458	4	UPA	D	39,800	17,200	17,800	19,100		C	6.81%	47.99%
Pioneer Trail	Airport-Turnbull Bay Rd.	1465	2	UC	E	13,640	3,730	3,960	5,020		C	21.12%	36.80%
Reed Canal Rd.	Nova Rd-Clyde Morris Rd.	1561	2	UC	E	13,640	5,400	6,570	7,050		D	6.81%	51.69%
Ridgewood Ave.	N. City Limits to Dunlawton Ave.	213	4	UPA	D	39,800	25,000	28,500	25,500		C	-11.76%	64.07%
Ridgewood Ave.	Dunlawton Ave. to Oak St.	5057	4	UPA	D	39,800	21,500	20,500	20,400		C	-0.49%	51.26%
Ridgewood Ave.	Oak St. to Nova Rd.	152	4	UPA	D	39,800	13,800	15,400	15,700		C	1.91%	39.45%
Ridgewood Ave.	Nova Rd. to S. City Limits	13	4	UPA	D	65,600	21,500	25,500	26,000		B	1.92%	39.63%
Spruce Creek Rd.	Central Park Blvd. to Merrimac Dr.	1701	2	CO	E	12,744	8,721	6,880		6,453	B	-6.62%	50.64%
Spruce Creek Rd.	Merrimac Dr. to Taylor Rd.	1702	2	CO	E	12,744	10,599	11,899		10,774	C	-10.44%	84.54%
Spruce Creek Rd.	Taylor Rd. to Nova Rd.	1751	4	UMA	E	37,970	13,420	16,000	15,910		C	-0.57%	41.90%
Spruce Creek Rd.	Commonwealth to Dunlawton Ave.	1755	2	MA	E	13,640	9,210	9,280	9,180		D	-1.09%	67.30%
Spruce Creek Rd.	Dunlawton to Canal View Blvd.	1708	2	CO	E	13,640	6,078	4,774		3,507	B	-36.13%	25.71%
Taylor Rd.	Hensel Rd. to Spruce Creek Road	1826	4	MA	E	37,970	12,610	15,810	15,930		C	0.75%	41.95%
Taylor Rd.	Clyde Morris Blvd. to Hensel Rd.	1824	4	MA	E	37,970	18,220	19,650	20,250		C	2.96%	53.33%
Taylor Rd.	Dunlawton Av. to Clyde Morris Blvd.	1823	2	MA	E	13,640	12,170	13,110	14,100		F	7.02%	103.37%
Taylor Rd.	Williamson Blvd. to I-95	1814	5	UPA	E	47,560	40,210	41,100	41,380		C	0.68%	87.01%
Taylor Rd.	Summer Trees Rd. to Williamson Blvd.	1813	4	UPA	E	37,970	15,560	16,360	15,530		C	-5.34%	40.90%
Taylor Rd.	Crane Lakes Blvd. to Summer Trees Rd.	1812	2	UPA	E	17,050	15,370	15,910	16,120		E	1.30%	94.55%

Town West Blvd.	Williamson Blvd. to Coraci Blvd.	100	2	CO	E	17,900	5,656	5,985		7,025	B	14.80%	39.25%
Town West Blvd.	Coraci Blvd. to Tomoka Farms Rd.	110	2	CO	E	17,900	2,742	2,842		3,654	B	22.22%	20.41%
Victoria Gardens	S. of Dunlawton Ave.	2501	2	local	E	15,930	2,592	4,908		3,449	B	-42.30%	21.65%
Victoria Gardens	E. of Clyde Morris Blvd.	2502	2	local	E	15,930	2,329	2,528		2,602	B	2.84%	16.33%
Village Trail	Dunlawton Ave. to Country Ln.	1901	2	local	E	15,930	7,259	11,247		8,062	B	-39.51%	50.61%
Village Trail	Country Ln. to Nova Rd.	1902	2	local	E	15,930	8,966	9,132		8,486	B	-7.61%	53.27%
Willow Run	Clyde Morris Blvd. to Hidden Lakes	2013	3	CO	E	30,420	10,194	10,103		10,659	B	5.22%	35.04%
Willow Run	Hidden Lakes Dr. to Williamson Blvd.	2010	2	CO	E	14,040	7,523	7,671		7,760	C	1.15%	55.27%
Williamson Blvd.	N. City Limits to Madeline Ave.	1993	2	UPA	E	17,050	15,940	17,440	16,850		E	-3.50%	98.83%
Williamson Blvd.	Madeline Ave. to Willow Run Blvd.	1992	2	UPA	E	17,050	15,770	17,520	17,200		F	-1.86%	100.88%
Williamson Blvd.	Willow Run Blvd. to Town West	1991	2	UPA	E	17,050	16,650	18,260	16,950		E	-7.73%	99.41%
Williamson Blvd.	Town West Blvd. to Taylor Rd.	1990	2	UPA	E	37,970	18,450	20,650	18,620		C	-10.90%	49.04%
Williamson Blvd.	Taylor Rd. to Spruce Creek Bridge	66	4	UPA	E	37,970	20,550	23,310	22,830		D	-2.10%	60.13%
Williamson Blvd.	Spruce Creek Bridge to Airport Rd.	65	4	UPA	D	35,820	17,430	19,250	19,650		D	2.04%	54.86%
Williamson Blvd.	Airport Rd. to Pioneer Trail	1989	4	UPA	D	35,820	1,770	2,080	4,110		C	49.39%	11.47%
Yorktowne Blvd.	North of Dunlawton Ave.	2080	2	CO	E	17,050	10,278	9,258		3,351	C	-176.28%	19.65%
I-95	Beville Rd. to Dunlawton Ave.	492	4	SIS	C	61,500	47,500	49,500	51,500		C	3.88%	83.74%
I-95	Dunlawton Ave. to SR 44	133	4	SIS	C	61,500	37,000	40,700	-		B	9.09%	66.18%
Total City Counts *							169,712	192,019	-	169,557		-13.25%	
Total County Counts**							343,500	370,520	371,780	-		0.34%	
Total State Counts**							410,500	428,900	390,700			-9.78%	
Total of All Roadways							923,712	991,439				6.83%	

Notes to Exhibit 3:

A UPA = Urban Principal Arterial, MA = Minor Arterial, CO/UCO = Collector/Urban Collector (TPO and/or City Sources)

B Percent volume change is from 2017 to 2016 for State and County and from 2018 to 2016 for City.

C Volume to Capacity Ratio compares roadway demand (vehicular volume) with roadway supply (carrying capacity)

Blue = State Facility or Counts; Data derived from Volusia County Traffic Engineering, 2017

Yellow = County Facility or Counts; Data derived from Volusia County Traffic Engineering, 2017

White = City Facility & Counts; Data derived from Traffic Engineering Data Solutions, Inc., 2018

* No City data available for 2017. **County and State data for 2018 will be available in 2019.

Where no data is available the previous year count was used for the purpose of calculating total counts and percent volume change for total counts.

Sources: FDOT 2013 Quality/Level of Service Handbook; Traffic Engineering Data Solutions, Inc., 2018; and Volusia County Traffic Engineering, 2018.

Roadways Currently Not Operating Within Adopted Level-of-Service:

Based on the latest traffic count data, there are two roadway segments on Williamson Boulevard (county thoroughfare road) and Taylor Road (county thoroughfare road) that slightly exceed the adopted level-of-service. The City will continue to monitor the traffic volume on several roadways, such as Dunlawton Avenue, Clyde Morris Boulevard, Taylor Road, and Williamson Boulevard, and will continue to work with FDOT and Volusia County to identify and construct improvements to enhance roadway capacity and LOS.

Public or Private Improvements to the System during the Past Fiscal Year (FY 17/18) and Its Impact on Capacity and LOS:

Roadway improvements completed this past year include Coraci Boulevard between Town West Boulevard and the entrance to the Sanctuary at Westport apartments as shown on Exhibit 4 (see pg. 18).

Proportionate Fair-Share Ordinance

In 2006, the City Council adopted a Proportionate Fair-Share Ordinance. The City has entered into Concurrency and Fair-Share Agreements with several developers. Projects funded through the fair-share process and the status of each of these projects is listed below. A new fair-share project was approved in 2017 for the Yorktowne Boulevard Extension. As of September 30, 2018, the City has collected \$5,786,711 in proportionate fair-share funds.

1. Interstate 95/SR 421 interchange area (phase 1) – ***Project Completed***
2. Clyde Morris Blvd/Dunlawton Avenue intersection - ***Project Completed***
3. Summer Trees Road extension- ***Project Completed***
4. Devon Street/Taylor Road Intersection –***Project Completed***
5. Town West Boulevard/Williamson Boulevard signal – ***Project Completed***
6. Yorktowne Boulevard Extension – ***Partial Design Complete***

Public or Private Improvements to the System during the Current Fiscal Year (FY 18/19) and its Impact on Capacity and LOS:

Roadway improvements programmed in the current fiscal year are listed below and are indicated on the map in Exhibit 4 on page 18.

I-95 Widening

In FY 15 FDOT began widening I-95 from the present four lanes to six lanes from SR 44 to just south of SR 400/I-4. This will complete the widening of I-95 to six lanes throughout the County. The project will include lengthening the entrance and exit ramps at the SR 421 (Dunlawton Avenue) interchange and installing lighting at the interchange to improve safety. The project will not include widening SR 421 (Dunlawton Avenue) in the interchange area.

Capacities Reserved for Approved but Un-built Development:

According to Exhibit 1, there are 1,016 vested but un-built residential units, which are estimated to generate 8,138 average cumulative daily trips.² Residential trips such as these are reserved on the City's roadway system upon being approved or obtaining vesting. A net total of 499,822 square feet of non-residential construction is also vested but un-built.

The City will continue to monitor the traffic volume on several of roadways, such as Dunlawton Avenue, Clyde Morris Boulevard, Taylor Road, and Williamson Boulevard, and continue to work with FDOT and Volusia County to identify and construct improvements to enhance roadway capacity and LOS.

Future Public or Private Improvements to the System and the Impact on Capacity and LOS:

The following improvements will be made to the road network in the future and will improve capacity and LOS. Roadway improvements proposed for future years are listed below and are indicated on the map in Exhibit 4 on page 18.

Dunlawton Avenue Westbound Right Turn Lane at City Center

This project includes the construction of a westbound right turn lane on Dunlawton Avenue at the intersection with City Center Parkway to improve traffic flow and reduce delays for turning vehicles and through vehicles. No additional right-of-way should be needed for this project. The project will add roadway capacity at the intersection and reduce delays for westbound vehicles turning right.

Dunlawton Avenue Westbound Right Turn Lane at Nova Road

This project includes the construction of a westbound right turn lane on Dunlawton Avenue at the intersection with Nova Road to improve traffic flow and reduce delays for turning vehicles and through vehicles. No additional right-of-way should be needed for this project. The project will add roadway capacity at the intersection and reduce delays for westbound vehicles turning right.

Dunlawton Avenue Eastbound Right Turn Lane at Clyde Morris Boulevard

This project includes the construction of an eastbound right turn lane on Dunlawton Avenue at the intersection with Clyde Morris Boulevard to improve traffic flow and reduce delays for turning vehicles and through vehicles. No additional right-of-way should be needed for this project. The project will add roadway capacity at the intersection and reduce delays for eastbound vehicles turning right.

Taylor Road west of Summer Trees Road

The County completed an alignment study of this segment that recommended widening from Summer Trees Road to Spruce Creek Boulevard (Spruce Creek Fly-in entrance). The County completed the final design plans in March 2012 for the widening from Summer Trees Road to Forest Preserve Boulevard; however, construction has not been scheduled due to

² 9.52 trips per day for each single family residential unit, 4.99 per mobile home, 5.81 per duplex or townhouse and 6.65 per multi-family unit. Source: ITE Trip Generation Manual, 9th Edition.

lack of funding. The City will be coordinating with the County to secure right-of-way along this segment as development occurs. This project is included in the TPO's 2040 Long Range Transportation Plan.

Williamson Boulevard (Town West Boulevard to north City Limits)

Long-term improvements will need to be programmed for the northerly segments of Williamson Boulevard north of the Pavilion at Port Orange Shopping Center upon further development of the Planned Community Westside. By widening this segment, the capacity at the adopted LOS will increase from between 17,050 to approximately 37,970 daily trips. This project is included in the TPO's 2040 Long Range Transportation Plan.

Yorktowne Boulevard Extension

There are two segments of Yorktowne Boulevard that remain to be constructed; the central segment and the north segment:

- The central segment is +/- 1,600 feet from Hidden Lake Drive, located at the south end of the former Nautica Lakes site at the B-19 tributary crossing. The right-of-way for this segment has been dedicated to the City. The project is proposed as a 4-lane divided road designed to City standards. The project includes 800 feet of improvements to the existing 2-3 lane section to the south of Hidden Lakes Drive, including turn lanes and transition tapers in the existing Yorktowne Blvd. and Hidden Lakes Dr.
- The north segment is +/-2,000 feet from the B-19 tributary crossing to Willow Run Boulevard. The project is proposed as a 4-lane divided road designed to City standards. In August 2018, the City entered into an agreement with the land owner that this road segment runs through that guarantees the City the land necessary to construct this segment will be dedicated to the City prior to any development on the property, or within 30 days after written notice to the property owner that the City intends to construct the road. The City also obtained the rights to all of the roadway designs, surveys, legal description for the current road alignment and proposed road alignment, and all documents for the active Environmental Resource Permit, for the north segment of the Yorktowne Boulevard. The project also includes improvements to the intersection of Willow Run Boulevard and Yorktowne Boulevard.

Collector Road Connections

Additional traffic volume is anticipated to be placed on Taylor Road and Williamson Boulevard (north of Taylor Road) by future developments. The City has planned a network of collector roads west of I-95 that will be constructed in phases as development occurs within the Planned Community Westside.

Bikeway/Pedestrian Improvements during the Past Fiscal Year:

The following bikeway or pedestrian improvement projects were completed in FY17/18.

- Victoria Gardens Boulevard sidewalk from Applevue Way to Clyde Morris Boulevard
- McDonald Road sidewalk from 6th Street to Sugar House Drive

Future Bikeway/Pedestrian Improvements

The City is proceeding with several improvements to the bikeway/pedestrian network. Many of these improvements were identified in recent Safe-Routes-to-Schools studies developed in conjunction with the Volusia River 2 Sea Transportation Planning Organization. These projects will improve the bicycle and pedestrian levels of service in areas in close proximity to schools, parks, and mobile home parks. Projects being constructed, designed or considered for immediate funding include:

- Street light improvements along Dunlawton Avenue from US1 to Spruce Creek Road – **Construction to begin in Fall 2018**
- Spruce Creek Road sidewalk (east and west sides) from Nova Road to Angelina Court – **Design and permitting complete; Awaiting funding**
- Multi-purpose trail from Ocean Avenue to Rose Bay Bridge - **Awaiting funding**
- Willow Run Boulevard sidewalk (south side) from Clyde Morris Boulevard to Tracy Drive - **Awaiting funding**
- Madeline Avenue Trail from Williamson Boulevard to Nova Road and Bruner Road Sidewalk - **Awaiting funding**
- Sidewalk Gap Project - Filling sidewalk gaps along major roadways - **Awaiting funding**
 1. Herbert Street (south side) from City Center Drive to Gulfsteam Village Driveway
 2. Taylor Road (west side) from Dunlawton Avenue to Journey's End Way.
 3. Ravenwood Drive (north and south side) 300' west of Clyde Morris Boulevard
 4. Woodlake Drive (north and south side) 300' west of Clyde Morris Boulevard

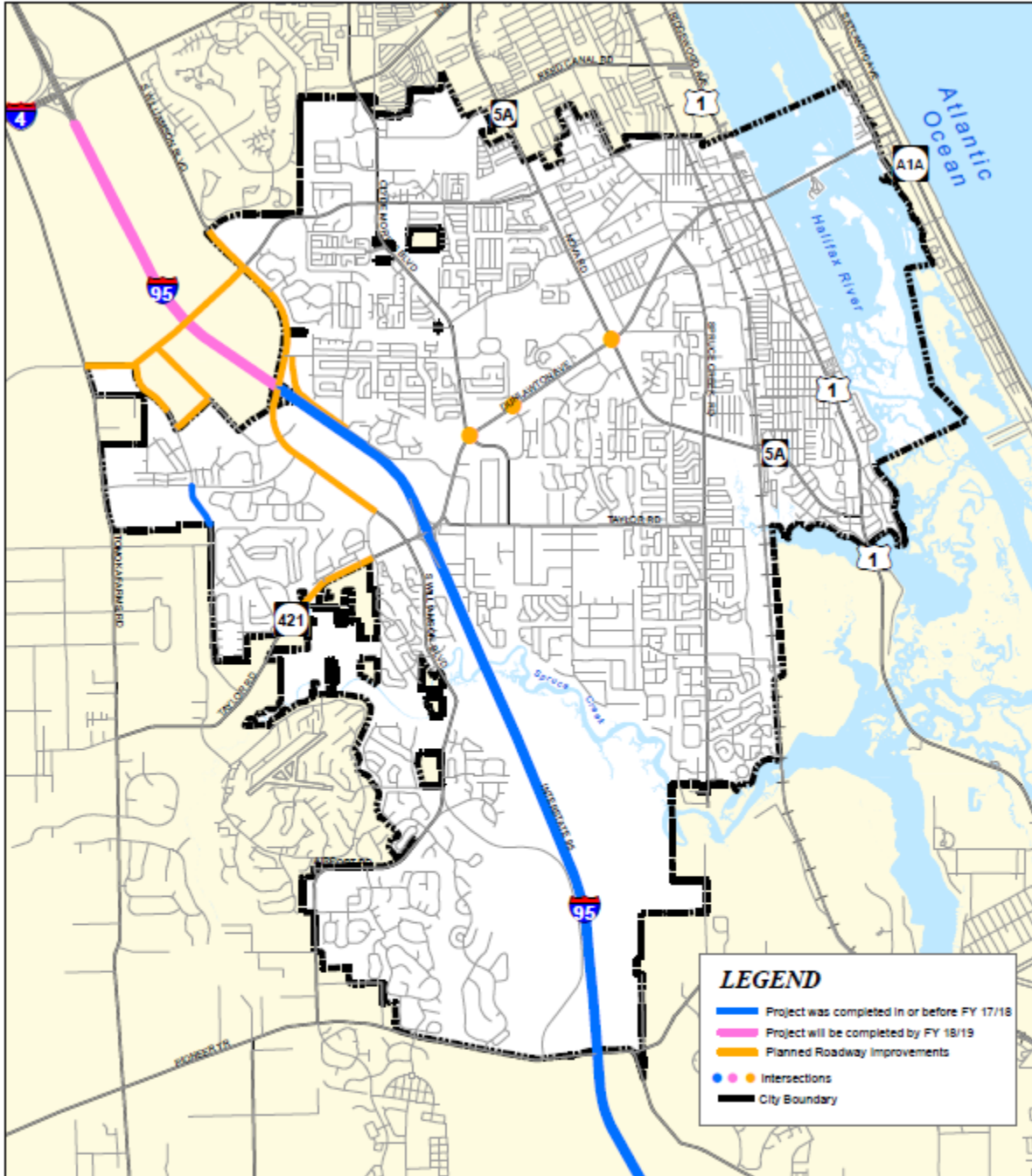


EXHIBIT 4

ROADWAY IMPROVEMENTS TO SYSTEM DURING PAST FY (17/18) OR CURRENT FY (18/19)

CITY OF PORT ORANGE

2018 CONCURRENCY MANAGEMENT REPORT

Department of Community Development

November 2018



0 6,000 12,000



1 inch equals 6,000 feet

SANITARY SEWER

The Port Orange Sanitary Sewer System serves the City of Port Orange, Daytona Beach Shores, Ponce Inlet (wholesale), and other unincorporated areas of East Volusia County. The Port Orange collection system contains 110 standard public pump stations and 24 “grinder” stations and an estimated 354 miles of pipeline. The collectors range in size from 8” to 30” and transmit flow back to the City’s treatment plant through a series of force mains and relatively deep interceptors.

Adopted Level-of-Service Standard:

Residential consumption is 160 gallons per day per Equivalent Living Unit (ELU) and Commercial consumption is 1/10 gallon per sq. ft. per day of commercial, industrial, or institutional development.

Design Capacity of the Wastewater Treatment Plant and Existing LOS:

The Florida Department of Environmental Protection (FDEP) has permitted the Wastewater Treatment Plant with a maximum capacity of 12.0 million gallons per day (MGD). According to the Public Utilities Department, the present total number of sewer connections is 25,609, and the number of permitted ELU’s connected to the system is 46,781. The Wastewater Treatment Plant currently has a committed capacity of 7.49 MGD, based on FDEP permits for development. Using the City’s LOS figure of 160 gallons per ELU, the Wastewater Treatment Plant is capable of providing service to 75,000 ELU’s. Therefore, the sanitary sewer system capacity is sufficient to serve the current committed ELU’s (see Exhibit 5).

Exhibit 5: Capacity of the Wastewater Treatment Plant

	MGD*	ELU**
Maximum Capacity	12.0	75,000
Committed Capacity	7.49	46,781
Remaining Capacity	+4.51	+28,219

*MGD - Million Gallons per Day

**ELU - The water usage equivalent to one single-family dwelling.

Source: Port Orange Public Utilities Department, October 2018 and FDEP Waste Treatment Plant Permit Application.

As indicated in Exhibit 6 and 7 (see next page), wastewater generation rates have generally been increasing since FY 15/16. The increase could be attributed to the recent growth in residential and non-residential development.

Exhibit 6 presents a summary of the actual wastewater generation throughout the entire service area since FY 07/08 and the projections through 2025. The projections are based on population projections in the Comprehensive Plan that was developed in 2006, prior to the recession that began in 2008. Based on the current economic conditions, the City is not anticipating to actually achieve the projected growth at this rate.

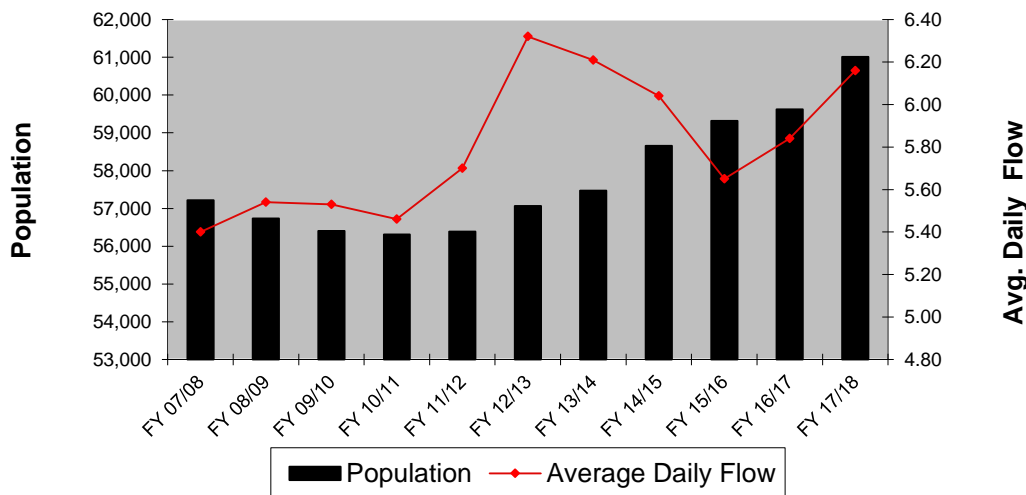
Exhibit 6: Wastewater Generation

YEAR	AVERAGE DAILY FLOW
FY 07/08 (actual)	5.40 MGD
FY 08/09 (actual)	5.54 MGD
FY 09/10 (actual)	5.53 MGD
FY 10/11 (actual)	5.46 MGD
FY 11/12 (actual)	5.70 MGD
FY 12/13 (actual)	6.32 MGD
FY 13/14 (actual)	6.21 MGD
FY 14/15 (actual)	6.04 MGD
FY 15/16 (actual)	5.65 MGD
FY 16/17 (actual)	5.84 MGD
FY 17/18 (actual)	6.16 MGD
2020 (projected)	7.50 MGD
2025 (projected)	8.00 MGD

Source: Port Orange Public Utilities Department, October 2018 and DEP Waste Treatment Plant Permit Application.

Exhibit 7 presents a comparison between the average daily flow and the City's population since 2008.

Exhibit 7: Average Daily Flow Compared to Population Growth



Source: Port Orange Public Utilities Department, October 2018. DEP Waste Treatment Plant Permit Application.

Capacities Reserved for Approved but Unbuilt Development and its Impact on Capacity and LOS:

It is possible to determine the per capita demand for sanitary sewer generated by reserved and vested development, given the generation rate, the future population, and the non-residential building square footage involved. According to Exhibit 1, the vested and reserved capacity includes the volume needed for 1,016 residential units and 499,822 SF of gross leasable non-residential space. Given a per capita generation rate of 160 gallons per day per ELU for residential and 1/10 gallon per square foot of gross building

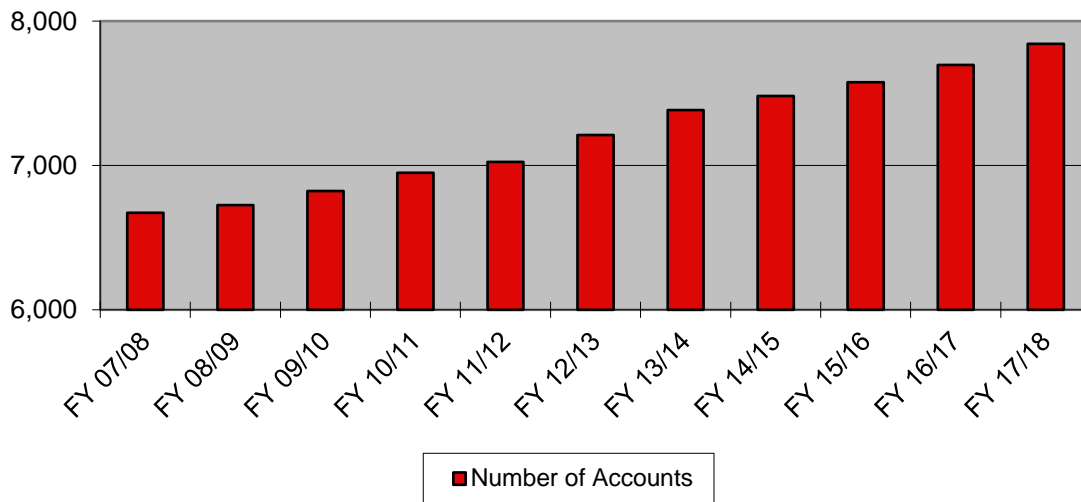
area for non-residential development, the vested and reserved development could increase the total demand by 212,542 gallons per day (0.21 MGD). Therefore, according to Exhibit 5, sufficient capacity exists for the development with vested and reserved capacity (Exhibit 1, page 6). In addition, further demand may also be generated by growth within the service area outside of the City limits.

Reclaimed Water:

Reclaimed water is derived from wastewater that has been collected and treated and is safe to be placed back into the environment. Previously, reclaimed water was discharged into the Halifax River; however, in the early 1990’s the City began to distribute reclaimed water to residents and business for irrigation. Therefore, the use of reclaimed water for irrigation reduces the amount of treated wastewater discharged into the Halifax River and reduces the amount of potable water used for irrigation.

The number of metered reclaimed water accounts within the City has continued to increase over the years with the present total number of reclaimed water accounts at 7,843 (see Exhibit 8).

Exhibit 8: Number of Reclaimed Accounts



Source: City of Port Orange Finance Department, October 2018

The continued increase in reclaimed demand is due to the following factors:

- The City requirement that developers install service connections and connect to reclaimed water lines, where available.
- Potable water irrigation meters are no longer issued.

Proposed Public or Private Improvements to the System in the Current Fiscal Year and its Impact on Capacity and LOS:

- On-going maintenance projects that allow for LOS to be maintained:
 - Replace mechanical equipment in 5 lift stations. This is an ongoing maintenance project to replace 5 lift stations per year.
 - Wastewater plant influent by-pass. Project includes valves, piping, meters to install bypass piping of the influent structure at the treatment plant to enable emergency work as needed on the influent bar screens.
 - Sewer System Rehabilitation to reduce inflow and infiltration (I&I). Project includes cleaning, video, and cured in place lining of various gravity sewer lines identified in previous I&I study.
 - Electrical system upgrades to wastewater treatment plant. Project includes replacing aging and failing underground electrical wiring, conduit, electrical panels, etc.
- Septic to Sewer. This project includes installing new sewer service into various areas of the sewer service area currently served by septic tanks. This is a long-term project. Design of the new sewer system will begin in FY19.
- Rehabilitation of Master Lift Station at Herbert Street and Nova Road. Project includes replacing and increasing the size of the master lift station at Herbert Street and Nova Road.

Potable Water

The Port Orange water utility currently serves the following areas:

- City of Port Orange
- City of Daytona Beach Shores (south of Thames Avenue)
- Town of Ponce Inlet (wholesale account)
- Wilbur-By-The-Sea (unincorporated area)
- Other non-designated unincorporated areas

Adopted Level-of-Service Standard:

- (1) Consumption :
 - Residential is 180 gallons per day per ELU
 - Commercial, industrial, or institutional development is 1/10 gallon per sq. ft. per day
- (2) System Minimum Pressure : 20 pounds per square inch during fire flow
- (3) Storage Provided: 50% of peak daily flow
- (4) Well Capacity: Peak day flow with two wells out of service
- (5) Norm. Operating Pressure: 60-70 pounds per square inch (psi)
- (6) Water Plant Capacity: Adequate for peak daily; three-year lead-time for planned expansion
- (7) High Service Pumping: Peak hour with largest pump out of service
- (8) Water Quality: Meet State/Federal drinking water standards

Design Capacity of Potable Water Treatment Facilities, Consumptive Use Permit, and Existing LOS:

The Garnsey Water Treatment Plant provides the City with a water quality supply that meets all applicable State and Federal standards. The plant was constructed in 1981 and has undergone two upgrades since that time. The plant currently has a capacity of 15.0 MGD and consists of four high-service fixed-speed pumps and two variable-speed pumps that provide adequate water supply to all portions of the service area.

There are two concurrency measures related to potable water: plant capacity and water supply capacity. Regarding plant capacity, there are presently 28,803 potable water connections, equivalent to 40,555 ELUs (Equivalent Living Unit). Based on an LOS standard of 180 gallons per ELU, the capacity currently committed is 7.3 MGD. Therefore, the Water Treatment Plant capacity is sufficient (15.0 MGD) to serve the current number of ELUs at current peak flow rates (see Exhibit 9).

Exhibit 9: Remaining Capacity at the Garnsey Water Treatment Plant

	MGD*	ELU**
Maximum Plant Capacity	15.00	83,333
Committed Capacity	7.3	40,555
Remaining Capacity	7.7	42,778

*MGD- Million Gallons Per Day

**ELU - The water usage equivalent to one single-family dwelling.

Source: Port Orange Public Utilities Department, October 2018

The second measure is water supply capacity. While the City has the technical capability to pump up to 15 million gallons per day from its wells, the Consumptive Use Permit (CUP) issued by the St. John’s River Water Management District limits how much water the City can actually pump out of the ground. The CUP is a 20-year permit that was issued in 2002 and will expire in 2022. The 2019 permitted average daily groundwater withdrawal is 8.85 MGD and the maximum permitted peak day withdrawal is 13.28 MGD. The maximum groundwater withdrawal permitted by the CUP in years 2021 and 2022 is 13.46 MGD.

Exhibit 10 shows the actual average and peak daily flow in 2018 and the permitted average and peak daily flow allowed by the CUP in 2018. Based upon this measure, the City is below the maximum water withdrawal allowed by the CUP.

Exhibit 10: Permitted and Actual Average Daily Flow and Peak Flow

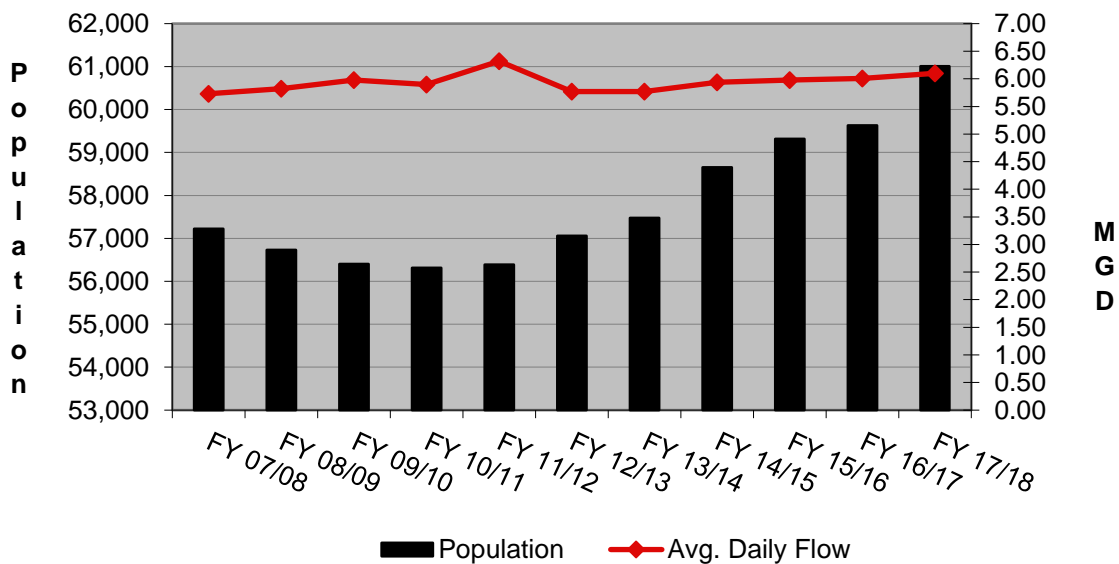
	2018	2019
Permitted Average Daily Flow	8.74 MGD	8.85 MGD
Actual Average Daily Flow	6.1 MGD	N/A
Permitted Peak Daily Flow	13.10 MGD	13.28 MGD
Actual Peak Daily Flow	7.59 MGD	N/A

MGD- Million Gallons per Day

Source: Port Orange Public Utilities Department, October 2018

As indicated in the graph in Exhibit 11, the average daily flow has remained generally constant relative to the increase in the City’s population.

Exhibit 11: Average Daily Flow Compared to Population Growth



Source: Port Orange Public Utilities Department, October 2018

Existing Potable Water Storage Capabilities:

During times of peak flow, portions of the service area, primarily on the barrier island, are subject to greatly increased water demands. Demand requirements are met by ground storage tanks located at the north and south ends of Peninsula Avenue. When demand subsides, water is no longer pumped from the storage tanks and they are refilled to normal operating levels. This allows the peak flow requirements to be met efficiently, so that demand at the treatment plant remains fairly constant. The adopted LOS standard for water storage is 50% of average daily flow. With an average daily flow of 6.1 MGD in 2018, the LOS standard water storage volume would be 3.05 MGD. Present potable water storage facilities for the Port Orange system can accommodate 6 MG. Therefore, the City has sufficient surplus storage capacity to support new development.

Existing Minimum Water Pressure:

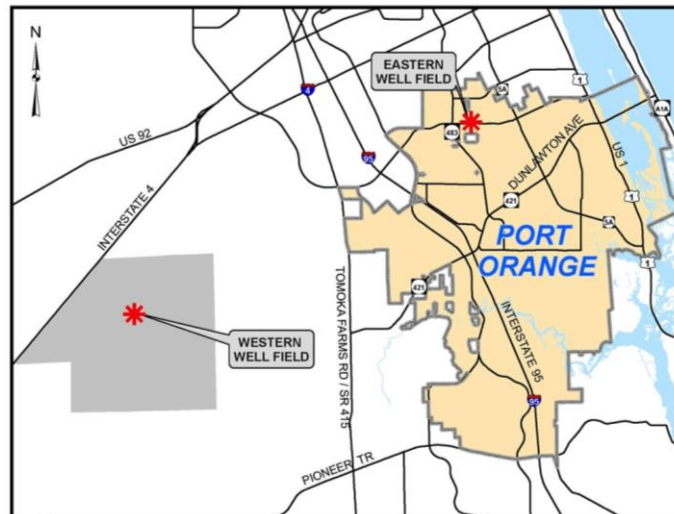
The existing water pressure fluctuates from an absolute low of 40 psi (non-fire flow) to a high of 70 psi with the normal operating pressure being between 60 and 70 psi. The system's minimum pressure during fire flow³ is presently 20 psi, which also meets the City's adopted LOS standards. Therefore, the water pressure meets the adopted LOS.

Existing Well Capacities:

The City has two well fields; The Central Recharge Well Field and the Eastern Well Field, with a cumulative water production capacity of approximately 11.5 MGD (see Exhibit 12):

- The Central Recharge Well Field (Western Well field) is located west of the City, south of I-4 and is the primary source of the City's potable water supply (approximately 87%). This well field contains 27 wells.
- The Eastern City Well Field is located off Clyde Morris Boulevard and contains 9 fully functioning secondary wells. These wells supply approximately 13% of the total flow.

Exhibit 12: Location Map of the City's Well Field Sites



³ Fire flow is the quantity of water measured in gallons per minute (gpm) that is needed to extinguish a fire involving a particular building, block, area or material.

Exhibit 13 shows the number of wells needed to supply the raw water peak daily flow demand in 2019. The number of wells required includes an allowance for two wells out of service, which is within the adopted LOS standard.

Exhibit 13: Raw Water Supply Wells Required for the Port Orange Service Area

Year	Permitted Peak Day Demand	Number of Wells Required*	Wells Available	Excess (+) or Deficiency
2019	13.28 MGD	25	36	11

* Average output for each well is 0.527 MGD

Source: Port Orange Public Utilities Department, October 2018

Capacities Reserved for Approved but Unbuilt Development and its Impact on Capacity and LOS:

According to Exhibit 1, the vested and reserved capacity includes the volume needed for 1,016 residential units and 499,822 SF of gross leasable non-residential space. Given a consumption rate of 180 gallons per day per ELU and 1/10 gallon per square foot of gross building area for non-residential development, the vested and reserved development could increase the total demand by 232,862 gallons per day (0.23 MGD). Therefore, sufficient capacity exists for the vested development indicated in Exhibit 1. In addition, further demand may also be generated by growth within the water service area outside of the City limits.

Proposed Public Improvements to the System in the Current Fiscal Year and its Impact on Capacity and LOS:

- South Commonwealth Water Mains Improvement Project. Design is expected to be completed and out for bid in FY19. This project includes replacing approximately 13,700 linear feet of water mains and services to improve reliability and meet the latest fire protection standards. This project is generally located in the area south of Commonwealth Boulevard, between the FEC railroad and Ridgewood Avenue.
- Installation of the water treatment plant filter backwash and sludge pump. Project includes upgrading the filter backwash system and sludge pumps to replace aging equipment and provide reliability and maintain capacity.
- Meter Replacement project - This project was performed with in-house staff and included a five-year plan to replace over 26,000 water meters with new state-of-the-art radio reading water meters.

STORMWATER DRAINAGE

For the purpose of stormwater management, the City is divided into 13 drainage basins, with each basin divided into a number of sub-basins. The City has utilized both structural and non-structural elements to accomplish the objective of controlling the volume, rate of flow, and pollutant load of post-development runoff. Retention and detention basins are structural elements designed to remove pollutants, attenuate post-development discharge in well-drained areas, and encourage percolation and retention of discharge volume. The City is also implementing non-structural methods of flood-damage mitigation, such as increased regulation of development in flood-prone areas through participation in the National Flood Insurance Program.

Adopted Level-of-Service Standard (Quantity):

The City's adopted level-of-service (LOS) standard for stormwater management is the 25-year, 24-hour storm event. The City adopted this LOS standard in the late 1970's. Since the late 1970's, all drainage facilities must be able to detain the runoff from the 25-year, 24-hour storm without causing flooding or increasing the 25-year, 24-hour discharge rate to the receiving water bodies. Additionally, the City requires that the post-development 100-yr, 24-hour storm event peak discharge from a given piece of property does not exceed the 100-yr, 24-hour pre-development peak flow.

Adopted Level-of-Service Standard (Quality):

The City's adopted level-of-service (LOS) standard for stormwater management also includes the reduction of pollutants to a level compatible with State standards. On October 1, 2013, a Statewide Stormwater Rule went into effect which requires the removal of 80% of the dissolved contaminant Nitrogen and 95% of the dissolved contaminant Phosphorous from the first 1.25 to 1.75 inches of runoff.

Existing Level-of-Service:

The City's Land Development Code provides minimum standards for stormwater management to control runoff, preserve critical water resources, facilitate recharge of the aquifer, and prevent erosion, sedimentation and flooding. This is accomplished through the development review process for new developments to ensure they meet or exceed the minimum LOS standard, responding to citizen complaints, and coordinating with other jurisdictions to identify areas in need of improvements within the Port Orange system.

After a development is approved and built, the on-going maintenance of private stormwater drainage systems is the responsibility of the homeowners or property owners association. The on-going maintenance of these private stormwater drainage systems is regulated by St. Johns Water Management District (SJRWMD).

An assessment of the City's storm water drainage system is needed to provide the necessary data to examine and create prioritized improvement and maintenance programs to enhance the function of the full stormwater system including those areas developed prior to the adoption of the stormwater regulations.

There have been ongoing proactive maintenance activities, such as ditch clearing and pipe replacement. However, replacement of deteriorated stormwater drainage pipes has been reactive to failures.

Public or Private Improvements to the System during the Past Fiscal Year and Impacts on Capacity and LOS:

On-going Maintenance: Staff continued to perform ongoing maintenance of the drainage system including street sweeping, removal of sediment from inlets and pipes, ditch maintenance (including mowing, large plant removal, cleaning, dredging sediment, restoration and seeding), emergency pipe replacement of aging and failed pipes, and erosion repairs.

Cambridge Canal Improvements: Phase 2A of the Cambridge Canal Improvements were completed in December 2017. The Phase 2A improvements consisted of hardening ±5,000 feet of the canal banks from Trailwood Drive to the Cambridge basin to alleviate flooding upstream due to the narrow canal.

Proposed Public Improvements to the System in the Current Fiscal Year and Impacts on Capacity and LOS:

On-going Maintenance: Staff will continue to monitor the drainage system which will include street sweeping, removal of sediment from inlets and pipes, ditch restoration and maintenance, emergency pipe replacement, and erosion repairs.

Virginia Avenue and Monroe Street Drainage Improvement: Virginia Avenue and Monroe Street is a corridor with a mix of residential properties ranging from 0.2 – 1-acre, located between the Halifax River and the FEC Railroad, from Dunlawton to White Place. The area is served by an older stormwater system in need of improvement since there has been flooding and standing water. There has been an analysis of options, recommended improvements, and design plans have been completed. The St. Johns River Water Management District Permit was issued in 2017. Construction is dependent on funding.

City's Stormwater Master Plan Update: The City's Stormwater Master Plan was created in 1990, but has not been updated on a city-wide basis since. Objective 1, Policy 1.1 of the Comprehensive Plan Drainage Sub-Element indicates the City shall update the drainage plan every five years. While updates have been prepared for specific basins, the system as a whole has not been re-examined since 1990 when the plan was first created. The update began in early 2017 and principally consists of data collection and review of record information to later identify corrective measures to alleviate existing deficiencies in the system and proactively plan new improvements needed to accommodate future development. It will help prioritize spending for future capital drainage projects. This is necessary to ensure that level-of-service standards for stormwater drainage are maintained. This initiative is on-going.

Proposed Public Improvements to the System in the Design Phase:

Sleepy Hollow Drainage Improvement: The Sleepy Hollow Subdivision is a platted 60-acre subdivision located south of Jackson Street, west of Woodlake Subdivision and north

and east of Nova Road. The area has historically flooded during past storm events. Structural flooding tends to concentrate along Horseman Drive, west of Tarry Town Terrace; along Tarry Town Terrace, south of Horseman Drive; and Kristina Court, west of Sleepy Hollow Drive. Mitigation of the flooding will include installation of new storm water drainage facilities. An engineering study provided preliminary design, modeling, and cost estimates for various project options in 2018. The design will provide alternative solutions with cost estimates to address the flooding. Construction is unfunded. Maintenance activities have increased in this area.

Identified Public Improvements to the System Pending Design and Funding:

Howes Street Drainage Improvement: Howes Street is located north of Commonwealth Boulevard and west of Ridgewood Avenue in the Allendale area of Port Orange. Howes Street periodically experiences ponding and some flooding. There are no workable stormwater drainage facilities in the area. Engineering design is dependent upon funding. In 2018 some improvement of this area was provided through a private developer who constructed stormwater drainage swales with the development of some infill homesites.

Tumblebrook Drive Drainage Improvement: Tumblebrook Drive is located in Sweetwater Hills Subdivision in central Port Orange. The vicinity tends to flood during storm events. Engineering design is dependent upon funding.

Other Stormwater Programs:

National Pollutant Discharge Elimination System (NPDES): The City is currently in the first year of the fourth five-year permit cycle. The Total Maximum Daily Loads (TMDL) program is part of the statewide Watershed Management Program (WMP) administered by the Florida Department of Environmental Protection (FDEP). The program is based on a five-phase cycle that rotates through Florida's basins. The five phases are: Initial Base Assessment, Coordinated Monitoring, Data Analysis and TMDL Development, Basin Management Plan Development, and Implementation of Basin Management Plan.

FEMA Community Rating System (CRS): The City is one of six percent of local governments nationwide that participate in the Federal Emergency Management Agency (FEMA) Community Rating System (CRS) program. Through participation with FEMA in administering the CRS, the City maintains and supervises an overall floodplain management program that is intended to preserve the function of the floodplain within Port Orange. Participation in the program provides property owners with enhanced floodplain information in compliance with FEMA guidelines. The City's designation changed from 'Class 7' to 'Class 5' on May 1, 2016, which means all Post FIRM residents within the City that currently carry FEMA flood insurance for their properties in the Special Flood Hazard Area (SFHA) qualify to receive a 25% discount on their annual FEMA flood insurance policy premium.

In addition, the City participates in the Volusia County Local Mitigation Strategy (LMS) for flood control. The LMS provides a mitigation action plan that identifies areas within the city that have drainage issues that would benefit from engineered improvements.

SOLID WASTE DISPOSAL

Adopted Level-of-Service (LOS) Standard:

The City's collection standard is 1,535 residential units per curbside collection crew, per day, and a solid waste weight standard of 3.21 lbs. per capita, per day for residential; and 10 lbs. per 1,000 square feet of non-residential development per day.

The amount of solid waste generated by individuals is not something that the City can directly control; however, the City can promote recycling programs to inform residents about the benefits of reducing the amount of waste generated. There is no concurrency review for trash collection; however, the City's ability to collect and dispose of this waste is subject to concurrency review. As long as the City has sufficient financial resources to pay for private waste collection and room is available at the landfill, the City will have fulfilled its obligation to ensure that its waste is collected and disposed, regardless of the LOS standard.

Design Capacity of Solid Waste Disposal Facilities and Existing LOS:

The City of Port Orange is currently in a five-year extension (2016 to 2021) to an existing five-year contract (2011 to 2016) with Waste Pro to provide household solid waste, recycling, and yard waste collection services. The contract provides residents with four weekly pick-ups: two for garbage, one for recyclables, and one for yard waste. The residential and commercial solid waste collected is transported to the Volusia County Tomoka Farms Road Landfill. The capacity at the landfill is projected to be sufficient to accommodate waste from Volusia County until the year 2050. The waste collection numbers for residential and commercial customers are shown in Exhibit 14.

Exhibit 14: Residential and Commercial Waste Generation Figures (FY17/18)

	Residential	Commercial ⁴	Residential and Commercial
Solid Waste	2.14 lb. per capita, per day	1.29 lb. per capita, per day	3.43 lb. per capita, per day
Recycled Items	0.24 lb. per capita, per day	0.15 lb. per capita, per day	0.39 lb. per capita, per day
Yard Waste	0.76 lb. per capita, per day	0.46 lb. per capita, per day	1.22 lb. per capita, per day
Total	3.14 lb. per capita, per day	1.90 lb. per capita, per day	5.04 lb. per capita, per day

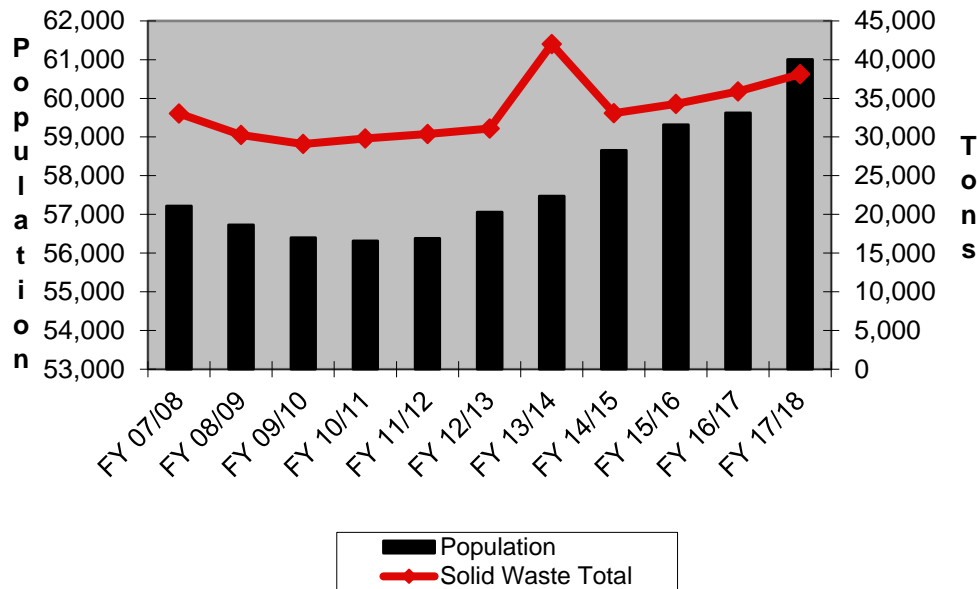
Source: Public Works Department, City of Port Orange, October 2018

Based on the waste collection numbers for residential and commercial customers (estimated population 61,009) from October 1, 2017 through September 30, 2018, each person in Port Orange generated on average 3.43 pounds of solid waste, 0.39 pounds of recycled items, and 1.22 pounds of yard waste every day. The 3.43 pounds per capita, of solid waste generated daily during FY 17/18 is above the LOS standard of 3.21 pounds, and represents a 4% increase from the prior year.

⁴ The amount of commercial recyclable items and yard waste was determined by interpolating the proportion of residential recyclable items and yard waste to the total amount of residential waste disposed.

As indicated in Exhibit 15, the amount of solid waste generated has been increasing since FY 10/11. The City will need to monitor the amount of solid waste generated and explore options to encourage waste reduction. The increase in yard and solid waste may be attributed to debris from Hurricanes Matthew (2016) and Irma (2017). Solid waste from the storms may have included items such as mattresses, carpet, and repair waste from roofs, fences, etc.

Exhibit 15: Solid Waste Collected Compared to Population Growth



Source: Public Works Department, City of Port Orange, October 2018

Capacities Reserved for Approved but Unbuilt Development and its Impact on Capacity and LOS:

The capacity reservations for vested and approved development identified in Exhibit 1 represent approximately 2,286 additional people and 499,822 square-feet of non-residential development. When all residential and commercial projects noted in Exhibit 1 are built, the amount of waste is estimated to increase by approximately 2,251 tons per year. The capacity at the landfill is projected to be sufficient to accommodate waste from Volusia County until the year 2050.

Proposed Public Improvements to the System in the Current Fiscal Year and its Impact on Capacity and LOS:

No significant changes in solid waste collection are anticipated during FY 18/19. The City may want to explore options for encouraging a reduction in solid waste generation and an increase in recycling.

RECREATION AND OPEN SPACE

During FY 17/18, the following improvements were completed to existing parks or facilities:

- Causeway Park: Two fishing piers were replaced and one ADA floating dock was repaired. The work was partially funded through a Florida Inland Navigation District (FIND) grant.
- Spruce Creek Road Park: The small playground was replaced.
- Riverwalk Park: Phase 1B was completed and includes a splash pad, playground pavilions, open event space trail along the river, a concessions building, and restrooms.

Exhibit 16: Pictures of Causeway Park Pier and Riverwalk Park (Phase 1B) Splash Pad



Adopted Level-of-Service Standards:

<u>FACILITY</u>	<u>UNIT OF MEASURE</u>
Parkland	7 acres per 1,000 persons
Ball Fields	1 field per 5,000 persons
Basketball Courts	1 court per 4,000 persons
Multipurpose Fields	1 field per 3,500 persons
Tennis Courts	1 court per 4,000 persons
Neighborhood Centers	1 facility per 15,000 persons

Existing Recreational Facilities and Levels of Service:

The existing acreage of parkland and the number of recreational facilities within the City are identified in the inventory in Exhibit 17 and the status of the recreational facility levels-of-service capacities are outlined in Exhibit 18.

Exhibit 17: Recreational Facility Table

Facility Name	Location	Acreage	Ten.	Bask.	Bb./Soft.	Multi.*	Neigh C.
Regional Facilities							
Causeway Park	93 Dunlawton Avenue	30					
Cypress Head Golf Course	6231 Palm Vista	160					1
Riverwalk Park	3431 Ridgewood Ave.	5					
Sugar Mill Ruins	Herbert St. / Sugar Mill Rd.	10.3					
Community Facilities							
Adult Center Annex	3783 Halifax Dr.	0.3					1
Airport Road Park	6731 Airport Road	25	6	2		1	
Allen Green Civic Center	Clyde Morris Blvd.	10					1
*City Center Complex/YMCA	Dunlawton/Clyde Morris Blvd.	49		4	5	6	3
*Coraci Park	5200 Coraci Blvd.	36			4	6	
Lakeside Comm. Center	1999 City Center Circle	2					1
Riverside Pavilion Park	4331 Ridgewood Ave.	3.5					1
Russell Property	6060 Deer Feed Trail	17					
*Spruce Creek Rec. Area	5959 S Spruce Creek Road	40	6	1	2	2	
White Pl. Park /Senior Center	210 White Pl. (Ridgewood)	5.1			1		1
Neighborhood Facilities							
Buschman Park	4575 Spruce Creek Road	20					
Creekside Middle School	Airport Road	15	2	4		5	
Fredricks St. Park	Fredricks Street	5					
Harbor Oaks	Riverside Drive	10		1			
Ken Bern Park	Canal View Blvd.	5					
Memorial Park	3801 Jackson Street	12.6					
Silver Sands Middle School	1300 Herbert Street	22.9	4	4	3	2	
Southwinds Park	1200 Richel Road	10				2	
Willow Run Park	1351 Schoolhouse Dr.	10	2	6	2	2	
TOTALS		503.7	20	22	17	26	9

Ten. – Tennis Court

Bask. – Basketball Court

Bb./Soft. – Baseball/Softball Field

Multi. – Multipurpose Field (soccer, play, etc.)

Neigh C. – Neighborhood Center

* Baseball/softball fields also function as multipurpose fields and are counted under both categories.

Source: Park & Recreation Department, City of Port Orange, October 2018

Exhibit 18: Public Recreational Facilities Capacities and Level of Service (LOS)

FACILITY	AMOUNT REQUIRED FOR ADOPTED LOS*	CURRENT SUPPLY**	EXCESS (+) OR DEFICIENT (-) CAPACITY
Parkland (acres)	443 acres	503.7 acres	+60.7 acres
Baseball/Softball Fields	13 fields	17 fields	+5 fields
Basketball Courts	16 courts	22 courts	+6 courts
Multipurpose Fields	18 fields	26 fields	+8 fields
Tennis Courts	16 courts	20 courts	+4 courts
Neighborhood Centers	4 centers	9 centers	+5 centers

Notes:

* Estimated City Population = 61,009 based on University of Florida Bureau of Economic and Business Research, and anticipated population increases (2,286) from vested and reserved development. Total population to be served = 63,295

** Refer to Exhibit 18, Recreation Facilities Inventory, for individual facility listings.

Sources: Parks and Recreation Department and Community Development Department, October 2018

Capacities Reserved for Approved but Unbuilt Development and Its Impact on Capacity and LOS:

According to the University of Florida Bureau of Economic and Business Research (BEBR), the 2018 estimated City population is 61,009. Anticipated population increases from vested and reserved residential development is approximately 2,286, which equals a total population to be served of 63,295. As indicated in Exhibit 19, the City is not deficient in any of the recreational facilities categories for the current population or additional population from vested and reserved development.

Proposed Public and Private Improvements to Recreation Facilities in the Current Fiscal Year and its Impact on Capacity and LOS:

The following improvements are planned for FY 18/19:

- *Port Orange Gymnasium* – Renovation and expansion of the gymnasium into a Recreational Educational Cultural (REC) Center. The renovation will include classrooms, exercise rooms, and art rooms. The City is seeking funding through Volusia ECHO.
- *Phase 2 Riverwalk Park* – Phase 2 (along Halifax Dr. from Ocean Ave. to the Adult Activities Center) improvements include a multi-use trail, benches, and landscaping.
- *Spruce Creek Road Park*: Replace the fencing and backstop at one field.

SCHOOLS

Adopted Level-of-Service Standard:

The uniform, district-wide LOS standards are as follows:

- Elementary: 115% of permanent FISH⁵ capacity for the concurrency service area
- K-8: 115% of permanent FISH capacity for the concurrency service area
- Middle: 115% of permanent FISH capacity for the concurrency service area
- High: 120% of permanent FISH capacity for the concurrency service area
- Special Purpose Schools: 100% of permanent FISH capacity for each school

Public or Private Improvements to the System during the Past Fiscal Year and Its Impact on Capacity and LOS:

The school district did not have any capital (capacity-related) projects scheduled in last year's five-year work plan for schools located in Port Orange. Last year's five-year work plan primarily included dollars programmed for renovations at various schools throughout the district.

Existing Facilities:

Exhibit 19 details existing public school facilities operated by the Volusia County School Board within the City's municipal boundaries. For elementary and middle schools, the Concurrency Service Areas (CSAs) are the respective school attendance boundaries. High schools are grouped into five larger CSAs that reflect student movement between schools at this level.

The high schools located in Port Orange are part of the Halifax Planning Area CSA. All of the high schools in this CSA are shown since the LOS standard is applied to the entire CSA. So, although Spruce Creek High School is at 125% utilization, the Halifax Planning Area CSA for high schools still meets the adopted LOS of 120% with an average utilization 99% for the overall Halifax Planning Area CSA. The School District anticipates the utilization to balance out some across the Halifax Planning Area High Schools with the addition of new academy programs that have opened at some of the other High Schools.

As shown in Exhibit 19, one elementary school within Port Orange currently exceeds the LOS standards, Port Orange Elementary. Volusia County School District analysis shows this to be the result of the gifted program that draws students from outside the attendance boundary, and not a result of unplanned residential growth. At the start of the 2013-14 school year, the school district opened a third gifted center in Port Orange at Horizon Elementary in order to address the increase in enrollment at Port Orange Elementary, as well as the anticipated increases at Cypress Creek Elementary due to residential growth. The three gifted centers in Port Orange include: Port Orange Elementary, Cypress Creek Elementary and Horizon Elementary. The capacity of Port Orange Elementary is 344 students, but the enrollment remains between 350 to 425 students, even with the program changes implemented by the School District. The School District will continue to monitor

⁵ **FISH – Florida Inventory of School Houses.** An official inventory report of all district-owned facilities.

the capacity at Port Orange Elementary; however, the capacity level is not considered a concurrency issue because there is minimal new residential growth planned within the school attendance boundary for Port Orange Elementary and the adjacent schools have remaining capacity.

The other elementary schools and middle schools within Port Orange currently meet the LOS standards (115% of permanent FISH capacity). However, it should be noted that all of the elementary and middle schools in Port Orange are considered to be at capacity or have limited capacity and are on the School District's watch list for closely monitoring capacity.

Student Enrollment Trends

Between school years 2007-08 and 2012-13 the Volusia County School District, along with many other school districts in Florida, experienced an unprecedented decline in student enrollment. According to the Volusia County School District, the decline was attributed to the economic recession and the result of families with school aged children moving out of the area in search of employment and an overall decline of in-migration (new people moving here). Starting with the 2013-14 school year, the Volusia County School District has experienced an increase in its student enrollment. Current trends indicate student enrollment growth is slow, largely due to an aging population and lower birth rates. Student enrollment is trending upward, so school district staff is looking closely at its enrollments and other economic indicators prior to releasing student projections.

Proposed Public and Private Improvements to School Facilities in the Current Fiscal Year and its Impact on Capacity and LOS:

There are no capital (capacity-related) projects in the current School District five-year work plan for schools located in Port Orange. The current five-year work plan includes dollars programmed for renovations at various schools throughout the district, as well as one replacement school, master plans for various schools, and two capacity additions. The FY 18/19 work plan reflects the voter approved half cent sales tax extension.

Exhibit 19: PORT ORANGE PUBLIC SCHOOL ENROLLEMENT & CAPACITY SUMMARY REPORT

	Prior Year			Current Year			Projected			Projected			Projected		
	2017/2018			2018/2019			2019/2020			2020/2021			2021/2022		
School	Enroll*	Cap**	Util***	Enroll	Cap	Util	Enroll	Cap	Util	Enroll	Cap	Util	Enroll	Cap	Util
Elementary (LOS = 115%)															
Cypress Creek	812	754	108%	808	754	107%									
Horizon	775	725	107%	790	725	109%									
Port Orange	403	344	117%	398	344	116%									
Spruce Creek	800	805	99%	838	805	104%									
Sugar Mill	656	623	105%	670	623	108%									
Sweetwater	648	725	89%	680	725	94%									
Total	4094	3976	104%	4184	3976	106%									
Middle (LOS = 115%)															
Creekside	1211	1132	107%	1170	1132	103%									
Silver Sands	1168	1161	101%	1221	1161	105%									
Total	2379	2293	104%	2391	2293	104%									
High (LOS = 120% for the overall Halifax Planning Area CSA)															
Atlantic	1274	1380	92%	1351	1380	98%									
Mainland	1943	2375	82%	1896	2375	80%									
Seabreeze	1559	1747	89%	1656	1747	95%									
Spruce Creek	2621	2079	126%	2596	2079	125%									
Total	7397	7581	98%	7499	7581	99%									

Enrollment Projections will not be available from the School District until around January 2019.

Notes: **Red** – over LOS standard

* Student enrollment

** Permanent FISH capacity (does not include portables)

*** Utilization - Percentage of student enrollment to permanent student capacity

Source: Volusia County School District School Capacity Report, October 2018

IV. SUMMARY AND CONCLUSIONS

The data indicates all public facilities and services subject to concurrency review are at sufficient levels for FY 18/19. As new development and redevelopment occurs, the level of service will need to be addressed, along with the monitoring of all City facilities and services to ensure capacity is available.

Traffic volumes within the City have increased on some segments and decreased on other segments over the past year. Roads on the west side of I-95 will likely experience the most traffic growth in the future. The capacity on Williamson Boulevard (North City Limit to Town West Boulevard) and Taylor Road (Dunlawton Avenue to Clyde Morris Boulevard) will need to be monitored as these segments are above their LOS standards. Roadway improvements are planned for the next several years to keep pace with anticipated development.

Sanitary sewer and potable water system capacity exists to support additional growth within the City. The City's Consumptive Use Permit (CUP) limits how much water can actually be withdrawn from the aquifer. As new development and redevelopment occurs, the level of service for potable water will be monitored to ensure that permitted capacity as provided for in the City's CUP is not surpassed.

The stormwater LOS requirement is being met for all drainage facilities constructed after the 1970's (when the City's stormwater regulations were adopted) with respect to being able to treat the runoff from the 25-year, 24-hour storm without causing flooding or polluting the receiving water bodies. The City continues to identify long-term solutions and implement drainage improvement and maintenance programs to enhance the function of the full stormwater system including those areas developed prior to the adoption of the stormwater regulations.

Solid waste generation rates are slightly above the adopted LOS standard. There is no concurrency review for trash collection; however, the City's ability to collect and dispose of this waste is subject to concurrency review. As long as the City has sufficient financial resources to pay for private waste collection and room is available at the landfill, the City will have fulfilled its obligation to ensure that its waste is collected and disposed, regardless of the LOS standard. The amount of solid waste generated by individuals is not something that the City can directly control; however, the City can promote recycling programs to inform residents and businesses about the benefits of reducing the amount of waste generated.

The adopted LOS is being met for all recreational facilities. There are surpluses for each recreation facility that will meet the adopted LOS through the planning horizon (2025).

LOS is being met for all but one of the public schools located in the Port Orange area. Port Orange Elementary continues to exceed the LOS standard; however,

this is due to the gifted program offered at this school that draws students from outside the attendance boundary and not unplanned development. Even with the addition of a third gifted program in the Port Orange area, the enrollment at Port Orange Elementary remains above the capacity of the school. The school district will continue to monitor the capacity at Port Orange Elementary; however, the capacity level is not considered a concurrency issue because there is minimal new residential growth planned within the school attendance boundary and the adjacent schools have remaining capacity.