

April 17, 2020

Mr. William Johnston
City of Gainesville
General Employees' Pension Plan
P.O. Box 490, Station 8
Gainesville, FL 32602

RE: GASB Statement No.67 and No.68 – City of Gainesville Consolidated Police Officers' and Firefighters' Retirement Plan

Dear William:

We are pleased to present the GASB Statement No.67 and No.68 report measured as of September 30, 2019 for the City of Gainesville Consolidated Police Officers' and Firefighters' Retirement Plan.

The calculation of the liability associated with the benefits referenced in this report was performed for satisfying the requirements of GASB No.67 and No.68 and is not applicable for other purposes, such as determining the plan's funding requirements or sufficiency to settle a portion of the plan's liabilities. A calculation of the plan's liability for other purposes may produce significantly different results.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2018. The total pension liability is measured as of September 30, 2019 based on the October 1, 2018 valuation rolled-forward from the valuation date to the measurement date of September 30, 2019 using generally accepted actuarial principles.

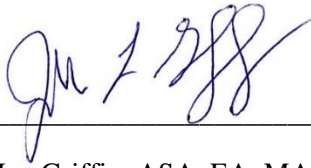
It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No.67 and No.68. Certain schedules should include a 10-year history of information. As provided for in GASB No.67 and No.68, this historical information is only presented for the years in which the information was measured in conformity with the requirements of GASB No.67 and No.68.

To the best of our knowledge, these statements are complete and accurate and are in accordance with generally recognized actuarial practices and methods. The economic and demographic assumptions used were adopted by the Board of Trustees based on an experience study conducted by the prior actuary for the six-year period ending on September 30, 2015. The discount rate was changed from 8.00% to 7.90% to reflect anticipated future trends in investment performance. The Board reviews assumptions based on a detailed study of actual versus expected experience at least once every five years. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuation, we did not perform an analysis of the potential range of such future measurements.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact me at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.

By:  _____

Joe Griffin, ASA, EA, MAAA
Enrolled Actuary #20-6938

 _____

Timothy G. Bowen, EA, MAAA, FCA
Enrolled Actuary #20-7204

Enclosures

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Share Plan Assets	155,688
Equity in Pooled Cash	2,706,066
Total Cash and Equivalents	2,861,754
Total Receivables	0
Total Investments	240,979,338
Total Assets	243,841,092
<u>LIABILITIES</u>	
Payables:	
Accounts Payable	407,628
Wages Payable	1,852
Total Liabilities	409,480
NET POSITION RESTRICTED FOR PENSIONS	243,431,612

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2019
Market Value Basis

ADDITIONS

Contributions:

Employer	4,958,811
Employee	1,946,523
Employee - Through DROP	2,142,302
Transfer from (to) Other funds	0
State - Ins Tax Premiums	0

Total Contributions 9,047,636

Investment Income:

Net Increase in Fair Value of Investments	540,914
Interest & Dividends	3,550,140
Less Investment Expense ¹	(569,082)

Net Investment Income 3,521,972

Other 91,875

Total Additions 12,661,483

DEDUCTIONS

Distributions to Members:

Benefit Payments	15,183,421
Retiree DROP Payouts and Rollovers	2,728,372
Wages and Fringe Benefits	0
Employee Disability	467,745
Retiree DROP Payments	2,142,302
Refund of Contributions	467,507
Share Plan Distributions	691,057

Total Distributions 21,680,404

Administrative Expense 771,292

Total Deductions 22,451,696

Net Increase in Net Position (9,790,213)

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 253,221,825

Adjustment to beginning of year 0

End of the Year 243,431,612

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2019)

Plan Administration

The Plan is a single-employer defined benefit pension plan administered by the Board of Trustees of the Consolidated Plan. The Board of Trustees of the Consolidated Plan is composed of five individuals. Two are appointed by the City Commission, one police officer is elected by active police members, one firefighter is elected by active fire members and a fifth member selected by the other four trustees and confirmed by the City Commission through a ministerial function. This plan and any amendments were adopted through a City Ordinance by the Commission of the City of Gainesville in accordance with State Statute. The Board of Trustees approves Plan amendments.

Plan Membership as of October 1, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	465
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	35
Active Plan Members	393
	893
	893

Benefits Provided

The Plan provides retirement, disability, termination and death benefits.

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the City of Gainesville Consolidated Police Officers and Firefighters Retirement Plan prepared by Foster & Foster Actuaries and Consultants.

Contributions

Member Contributions:

Members are required to contribute 7.5% of gross pay. Effective with the first full pay period following January 1, 2014, firefighters contribute 9.0% of gross pay.

State Contributions:

State premium tax revenue under Chapter 175/185 received annually is used to offset required contributions. Chapter 185 premium tax revenue up to \$558,361.13 will be used to offset annual required contributions with excess amounts going to the Supplemental Retirement Program. Chapter 175 premium tax revenue up to \$580,918.87 will be used to offset annual required contributions with excess amounts going to the Supplemental Retirement Program.

Investments

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2019:

Asset Class	Target Allocation
Large Cap Equity	35.00%
Small Cap Equity	15.00%
International Equity	20.00%
Fixed Income	5.00%
Alternative Credit	15.00%
Real Estate	10.00%
Total	100.00%

Concentrations:

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's Fiduciary Net Position.

Rate of Return:

For the year ended September 30, 2019, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 1.30 percent.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

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Deferred Retirement Option Program ("DROP"):

Eligibility: A Member who has earned at least 25 years of service or age plus service equal 70.

Participation: Members may participate for a maximum of 60 months.

Rate of Return: DROP benefits accumulate with interest at 4.5% per year for police officers and 5.5% per year for firefighters.

Distribution: Lump sum and/or rollover to qualified retirement plan(s) at termination of employment.

Reverse DROP: Members can select a date in the past for participation in the DROP.

The DROP balance as September 30, 2019 is \$6,077,061.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2019 were as follows:

Total Pension Liability	\$ 294,514,116
Plan Fiduciary Net Position	<u>\$ (243,431,612)</u>
Sponsor's Net Pension Liability	<u>\$ 51,082,504</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	82.66%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2018 updated to September 30, 2019 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	7.90%
Investment Rate of Return	7.90%

Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

50% of deaths among active Members are assumed to be service incurred, and 50% are assumed to be nonservice incurred.

Mortality Rate Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2017 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was conducted by the prior actuary Conduent in 2017.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2019 the inflation rate assumption of the investment advisor was 2.00%.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

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Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2019 are summarized in the following table:

<u>Asset Class</u>	<u>Long Term Expected Real Rate of Return¹</u>
Large Cap Equity	4.4%
Small Cap Equity	4.4%
International Equity	4.9%
Fixed Income	1.6%
Alternative Credit	3.3%
Real Estate	4.1%

¹ Based on 10 year Returns

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.90 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

	1% Decrease	Current Discount Rate	1% Increase
	<u>6.90%</u>	<u>7.90%</u>	<u>8.90%</u>
Sponsor's Net Pension Liability	\$ 85,602,092	\$ 51,082,504	\$ 22,476,805

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	09/30/2019	09/30/2018	09/30/2017 ¹
Total Pension Liability			
Service Cost	3,757,740	3,682,078	4,254,335
Interest	22,397,470	21,993,597	21,463,554
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(1,185,483)	(2,419,821)	2,311,687
Changes of assumptions	3,102,805	4,612,282	2,158,450
Benefit Payments, including Refunds of Employee Contributions	(19,538,102)	(19,464,524)	(16,100,144)
Net Change in Total Pension Liability	8,534,430	8,403,612	14,087,882
Total Pension Liability - Beginning	285,979,686	277,576,074	263,488,192
Total Pension Liability - Ending (a)	<u>\$ 294,514,116</u>	<u>\$ 285,979,686</u>	<u>\$ 277,576,074</u>
Plan Fiduciary Net Position			
Contributions - Employer	4,958,811	4,507,892	4,294,312
Contributions - State	-	1,366,304	1,254,172
Contributions - Employee	1,946,523	1,963,471	2,024,693
Net Investment Income	3,521,972	24,056,126	31,854,789
Benefit Payments, including Refunds of Employee Contributions	(19,538,102)	(19,464,524)	(16,100,144)
Administrative Expense	(771,292)	(699,346)	(564,203)
Other	91,875	-	-
Net Change in Plan Fiduciary Net Position	(9,790,213)	11,729,923	22,763,619
Plan Fiduciary Net Position - Beginning	253,221,825	241,763,801	219,000,182
Adjustment to beginning of year	-	(271,899)	-
Plan Fiduciary Net Position - Ending (b)	<u>\$ 243,431,612</u>	<u>\$ 253,221,825</u>	<u>\$ 241,763,801</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 51,082,504</u>	<u>\$ 32,757,861</u>	<u>\$ 35,812,273</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	82.66%	88.55%	87.10%
Covered Payroll	\$ 24,058,071	\$ 25,263,376	\$ 25,501,291
Net Pension Liability as a percentage of Covered Payroll	212.33%	129.67%	140.43%

Notes to Schedule:

¹ The 2017 results were provided by the prior actuary, Conduent Human Resource Services, Atlanta (GA).

Changes of assumptions:

For measurement date 09/30/2019, amounts reported as changes of assumptions resulted from lowering the investment rate of return from 8.00% to 7.90%.

For measurement date 09/30/2018, amounts reported as changes of assumptions resulted from lowering the investment rate of return from 8.10% to 8.00%.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	09/30/2016 ¹	09/30/2015 ¹	09/30/2014 ¹
Total Pension Liability			
Service Cost	3,812,252	4,094,841	3,730,365
Interest	20,156,185	23,375,806	19,299,422
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(6,006,515)	(140,568)	-
Changes of assumptions	2,719,455	2,608,508	2,523,158
Benefit Payments, including Refunds of Employee Contributions	(15,444,821)	(17,602,583)	(12,898,782)
Net Change in Total Pension Liability	5,236,556	12,336,004	12,654,163
Total Pension Liability - Beginning	258,251,636	245,915,632	233,261,469
Total Pension Liability - Ending (a)	<u>\$ 263,488,192</u>	<u>\$ 258,251,636</u>	<u>\$ 245,915,632</u>
Plan Fiduciary Net Position			
Contributions - Employer	3,716,354	3,682,847	3,855,020
Contributions - State	1,242,740	1,269,827	1,259,995
Contributions - Employee	2,093,074	1,972,417	2,067,685
Net Investment Income	22,310,321	(93,259)	21,911,535
Benefit Payments, including Refunds of Employee Contributions	(15,444,821)	(17,602,583)	(12,898,782)
Administrative Expense	(585,416)	(609,229)	(609,264)
Other	-	-	-
Net Change in Plan Fiduciary Net Position	13,332,252	(11,379,980)	15,586,189
Plan Fiduciary Net Position - Beginning	205,667,930	217,047,910	201,461,721
Adjustment to beginning of year	-	-	-
Plan Fiduciary Net Position - Ending (b)	<u>\$ 219,000,182</u>	<u>\$ 205,667,930</u>	<u>\$ 217,047,910</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 44,488,010</u>	<u>\$ 52,583,706</u>	<u>\$ 28,867,722</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	83.12%	79.64%	88.26%
Covered Payroll	\$ 23,885,642	\$ 25,539,198	\$ 24,364,333
Net Pension Liability as a percentage of Covered Payroll	186.25%	205.89%	118.48%

Notes to Schedule:

¹ The 2014-2016 results were provided by the prior actuary, Conduent Human Resource Services, Atlanta (GA).

SCHEDULE OF CITY CONTRIBUTIONS
Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined City Contribution	City Contributions in relation to the Actuarially Determined City Contributions	Contribution Deficiency (Excess)	Covered Payroll	City Contributions as a percentage of Covered Payroll
09/30/2019	\$ 4,958,811	\$ 4,958,811	\$ -	\$ 24,058,071	20.61%
09/30/2018	\$ 4,507,892	\$ 4,507,892	\$ -	\$ 25,263,376	17.84%
09/30/2017 ¹	\$ 4,294,312	\$ 4,294,312	\$ -	\$ 25,501,291	16.84%
09/30/2016 ¹	\$ 3,716,354	\$ 3,716,354	\$ -	\$ 23,885,642	15.56%
09/30/2015 ¹	\$ 3,682,847	\$ 3,682,847	\$ -	\$ 25,539,198	14.42%
09/30/2014 ¹	\$ 3,855,020	\$ 3,855,020	\$ -	\$ 24,364,333	15.82%

¹ The 2014-2017 results were provided by the prior actuary, Conduent Human Resource Services, Atlanta (GA).

Notes to Schedule

Valuation Date: 10/01/2017

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Mortality Rates:

Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

50% of all deaths are assumed to be in the line of duty.

Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2017 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rates: 8.0% per year, compounded annually, net of investment related expenses.

Retirement Rates:

Rates of retirement are shown below.

<u>Service</u>	<u>Firefighters</u>	<u>Police Officers</u>
20	17.50%	25%
21-24	5.00%	5.00%
25	100.00%	100%

Firefighters who entered the plan on or after January 1, 2014 and Police Officers who are not eligible to retire by July 1, 2013 are assumed to retire at a rate of 1% per year once the sum of age and years of Credited Service is at least 70, with 100% assumed to retire upon reaching 25 years of Credited Service. In addition, all Members are assumed to retire no later than age 58.

Disability Rates:

Sample rates of disability are shown below.

<u>Age</u>	<u>Disability Rate</u>
25	0.105%
30	0.144%
35	0.182%
40	0.308%
45	0.434%
50	0.854%
55	1.274%

100% of disablements are assumed to be service related.

Termination Rates:

Sample rates of termination are shown below.

<u>Service</u>	<u>Firefighters</u>	<u>Police Officers</u>
0-5	0.5%	0.7%
6-9	1.5%	3.5%
10-11	0.0%	2.5%
12+	0.0%	0.0%

Non vested members are assumed to withdraw their contributions and vested members are assumed to commence an annuity at age 55.

Salary Increases:

Rates of salary increases are shown below.

<u>Service</u>	<u>Firefighters</u>	<u>Police Officers</u>
0-4	5.0%	6.0%
5-9	4.0%	5.0%
10-14	3.0%	4.0%
15+	2.0%	3.0%

State Contributions:

State premium tax revenue is assumed to be the same as the most recent distribution.

Payroll Increase Rate:

3.0% per year for projecting aggregate payroll to the following fiscal year and for determining amortization payments towards the unfunded accrued liability.

Marital Assumptions:

90% of active members are assumed to be married with males 2 years older than females.

Overtime Pay:

Overtime pay is assumed to equal to 6.5% of non-overtime related pensionable earnings in the years preceding to retirement.

Vacation Payout upon Termination:

Accumulated vacation that is payable upon termination of employment is assumed to be equal to the vacation balance as of July 1, 2013 for police officers and January 1, 2014 for firefighters.

Accumulated Sick Leave:

Accumulated sick leave is assumed to increase benefit service according to the balance as of July 1, 2013 for police officers and January 1, 2014 for firefighters.

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Funding Method:	Entry Age Normal Actuarial Cost Method.						
Asset Allocation Method:	Assets were allocated to police officers and firefighters separately as of October 1, 2012. The allocation was performed based on the accrued actuarial liability of each group (net of DROP accounts) with recognition that certain assets (DROP account and State Premium Tax Revenue) are already designated to each group. Future investment returns are allocated to each group such that the investment return as a percentage will be the same as the return on the total assets by taking into account the cash flow of each group separately.						
Actuarial Asset Method:	Each year, the prior Actuarial Value of Assets (AVA) is projected forward at the assumed interest rate assumption and reflecting actual contributions and benefit payments. One-fifth of the difference between the projected actuarial value and market value is added to the projected actuarial value. The resulting AVA cannot be greater than 120% of the market value or less than 80% of the market value. It is possible that over time this technique will produce an insignificant bias above or below Market Value.						
Amortization Periods:	Changes in unfunded liability are amortized on a level percentage of payroll basis over the following periods: <table><tr><td>Plan Changes</td><td>30 years</td></tr><tr><td>Assumption/Method Changes</td><td>30 years</td></tr><tr><td>Gains or Losses</td><td>30 years</td></tr></table>	Plan Changes	30 years	Assumption/Method Changes	30 years	Gains or Losses	30 years
Plan Changes	30 years						
Assumption/Method Changes	30 years						
Gains or Losses	30 years						

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2019	1.30%
09/30/2018	10.22%
09/30/2017 ¹	11.20%
09/30/2016 ¹	11.20%
09/30/2015 ¹	0.00%
09/30/2014 ¹	11.01%

¹ From 2017 CAFR, City of Gainesville, FL.

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2019)

Plan Description

The Plan is a single-employer defined benefit pension plan administered by the Board of Trustees of the Consolidated Plan. The Board of Trustees of the Consolidated Plan is composed of five individuals. Two are appointed by the City Commission, one police officer is elected by active police members, one firefighter is elected by active fire members and a fifth member selected by the other four trustees and confirmed by the City Commission through a ministerial function. This plan and any amendments were adopted through a City Ordinance by the Commission of the City of Gainesville in accordance with State Statute. The Board of Trustees approves Plan amendments.

Eligible is any full-time regular employee who is certified as a firefighter as a condition of employment in accordance with the provisions of F.S. § 633.35, and whose duty it is to extinguish fires, to protect life, and to protect property, or any full-time regular employee who is certified or required to be certified as a law enforcement officer in compliance with F.S. § 943.14, who is vested with authority to bear arms and make arrests, and whose primary responsibility is the prevention and detection of crime or the enforcement of the penal, criminal, traffic, or highway laws of the state.

Plan Membership as of October 1, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	465
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	35
Active Plan Members	393
	893
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Benefits Provided

The Plan provides retirement, disability, termination and death benefits.

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the City of Gainesville Consolidated Police Officers and Firefighters Retirement Plan prepared by Foster & Foster Actuaries and Consultants.

Contributions

Member Contributions:

Members are required to contribute 7.5% of gross pay. Effective with the first full pay period following January 1, 2014, firefighters contribute 9.0% of gross pay.

State Contributions:

State premium tax revenue under Chapter 175/185 received annually is used to offset required contributions. Chapter 185 premium tax revenue up to \$558,361.13 will be used to offset annual required contributions with excess amounts going to the Supplemental Retirement Program. Chapter 175 premium tax revenue up to \$580,918.87 will be used to offset annual required contributions with excess amounts going to the Supplemental Retirement Program.

Net Pension Liability

The measurement date is September 30, 2019.

The measurement period for the pension expense was October 1, 2018 to September 30, 2019.

The reporting period is October 1, 2018 through September 30, 2019.

The Sponsor's Net Pension Liability was measured as of September 30, 2019.

The Total Pension Liability used to calculate the Net Pension Liability was determined as of that date.

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2018 updated to September 30, 2019 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	7.90%
Investment Rate of Return	7.90%

Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

50% of deaths among active Members are assumed to be service incurred, and 50% are assumed to be nonservice incurred.

Mortality Rate Healthy Inactive Lives:

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The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2017 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was conducted by the prior actuary Conduent in 2017.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2019 the inflation rate assumption of the investment advisor was 2.00%.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2019 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return ¹
Large Cap Equity	35.00%	4.40%
Small Cap Equity	15.00%	4.40%
International Equity	20.00%	4.90%
Fixed Income	5.00%	1.60%
Alternative Credit	15.00%	3.30%
Real Estate	10.00%	4.10%
Total	100.00%	

¹ Based on 10 year Returns

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.90 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a)-(b)
Balances as of September 30, 2018	\$ 285,979,686	\$ 253,221,825	\$ 32,757,861
Adjustment to beginning of year		\$ -	\$ -
Changes for a Year:			
Service Cost	3,757,740	-	3,757,740
Interest	22,397,470	-	22,397,470
Differences between Expected and Actual Experience	(1,185,483)	-	(1,185,483)
Changes of assumptions	3,102,805	-	3,102,805
Changes of benefit terms	-	-	-
Contributions - Employer	-	4,958,811	(4,958,811)
Contributions - State	-	-	-
Contributions - Employee	-	1,946,523	(1,946,523)
Net Investment Income	-	3,521,972	(3,521,972)
Benefit Payments, including Refunds of Employee Contributions	(19,538,102)	(19,538,102)	-
Administrative Expense	-	(771,292)	771,292
Other Changes	-	91,875	(91,875)
Net Changes	8,534,430	(9,790,213)	18,324,643
Balances as of September 30, 2019	\$ 294,514,116	\$ 243,431,612	\$ 51,082,504

Sensitivity of the Net Pension Liability to changes in the Discount Rate.

	Current Discount		
	1% Decrease 6.90%	Rate 7.90%	1% Increase 8.90%
Sponsor's Net Pension Liability	\$ 85,602,092	\$ 51,082,504	\$ 22,476,805

Pension Plan Fiduciary Net Position.

Detailed information about the pension Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED
INFLOWS OF RESOURCES RELATED TO PENSIONS
FISCAL YEAR SEPTEMBER 30, 2019

For the year ended September 30, 2019, the Sponsor will recognize a Pension Expense of \$8,386,974.

On September 30, 2019, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between Expected and Actual Experience	1,003,186	3,920,861
Changes of assumptions	7,036,787	-
Net difference between Projected and Actual Earnings on Pension Plan investments	3,085,045	-
Total	<u>\$ 11,125,018</u>	<u>\$ 3,920,861</u>

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:	
2020	\$ (676,663)
2021	\$ 825,285
2022	\$ 3,317,748
2023	\$ 3,700,193
2024	\$ 37,594
Thereafter	\$ -

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

Reporting Period Ending Measurement date ¹	09/30/2019 09/30/2019	09/30/2018 09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	3,757,740	3,682,078	4,254,335
Interest	22,397,470	21,993,597	21,463,554
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(1,185,483)	(2,419,821)	2,311,687
Changes of assumptions	3,102,805	4,612,282	2,158,450
Benefit Payments, including Refunds of Employee Contributions	(19,538,102)	(19,464,524)	(16,100,144)
Net Change in Total Pension Liability	8,534,430	8,403,612	14,087,882
Total Pension Liability - Beginning	285,979,686	277,576,074	263,488,192
Total Pension Liability - Ending (a)	<u>\$ 294,514,116</u>	<u>\$ 285,979,686</u>	<u>\$ 277,576,074</u>
Plan Fiduciary Net Position			
Contributions - Employer	4,958,811	4,507,892	4,294,312
Contributions - State	-	1,366,304	1,254,172
Contributions - Employee	1,946,523	1,963,471	2,024,693
Net Investment Income	3,521,972	24,056,126	31,854,789
Benefit Payments, including Refunds of Employee Contributions	(19,538,102)	(19,464,524)	(16,100,144)
Administrative Expense	(771,292)	(699,346)	(564,203)
Other	91,875	-	-
Net Change in Plan Fiduciary Net Position	(9,790,213)	11,729,923	22,763,619
Plan Fiduciary Net Position - Beginning	253,221,825	241,763,801	219,000,182
Adjustment to beginning of year	-	(271,899)	-
Plan Fiduciary Net Position - Ending (b)	<u>\$ 243,431,612</u>	<u>\$ 253,221,825</u>	<u>\$ 241,763,801</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 51,082,504</u>	<u>\$ 32,757,861</u>	<u>\$ 35,812,273</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	82.66%	88.55%	87.10%
Covered Payroll	\$ 24,058,071	\$ 25,263,376	\$ 25,501,291
Net Pension Liability as a percentage of Covered Payroll	212.33%	129.67%	140.43%

Notes to Schedule:

¹ The 2014-2017 results were provided by the prior actuary, Conduent Human Resource Services, Atlanta (GA).

Effective for the City's fiscal year ending 09/30/2018, the GASB 68 measurement date of the Pension Expense has been approved and changed from 09/30/2017 to 09/30/2018.

Changes of assumptions:

For measurement date 09/30/2019, amounts reported as changes of assumptions resulted from lowering the investment rate of return from 8.00% to 7.90%.

For measurement date 09/30/2018, amounts reported as changes of assumptions resulted from lowering the investment rate of return from 8.10% to 8.00%.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

Reporting Period Ending	09/30/2017	09/30/2016 ¹	09/30/2015 ¹
Measurement date	09/30/2016 ¹	09/30/2015 ¹	09/30/2014 ¹
Total Pension Liability			
Service Cost	3,812,252	4,094,841	3,730,365
Interest	20,156,185	23,375,806	19,299,422
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(6,006,515)	(140,568)	-
Changes of assumptions	2,719,455	2,608,508	2,523,158
Benefit Payments, including Refunds of Employee Contributions	(15,444,821)	(17,602,583)	(12,898,782)
Net Change in Total Pension Liability	5,236,556	12,336,004	12,654,163
Total Pension Liability - Beginning	258,251,636	245,915,632	233,261,469
Total Pension Liability - Ending (a)	<u>\$ 263,488,192</u>	<u>\$ 258,251,636</u>	<u>\$ 245,915,632</u>
Plan Fiduciary Net Position			
Contributions - Employer	3,716,354	3,682,847	3,855,020
Contributions - State	1,242,740	1,269,827	1,259,995
Contributions - Employee	2,093,074	1,972,417	2,067,685
Net Investment Income	22,310,321	(93,259)	21,911,535
Benefit Payments, including Refunds of Employee Contributions	(15,444,821)	(17,602,583)	(12,898,782)
Administrative Expense	(585,416)	(609,229)	(609,264)
Other	-	-	-
Net Change in Plan Fiduciary Net Position	13,332,252	(11,379,980)	15,586,189
Plan Fiduciary Net Position - Beginning	205,667,930	217,047,910	201,461,721
Adjustment to beginning of year	-	-	-
Plan Fiduciary Net Position - Ending (b)	<u>\$ 219,000,182</u>	<u>\$ 205,667,930</u>	<u>\$ 217,047,910</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 44,488,010</u>	<u>\$ 52,583,706</u>	<u>\$ 28,867,722</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	83.12%	79.64%	88.26%
Covered Payroll	\$ 23,885,642	\$ 25,539,198	\$ 24,364,333
Net Pension Liability as a percentage of Covered Payroll	186.25%	205.89%	118.48%

Notes to Schedule:

¹ The 2014-2017 results were provided by the prior actuary, Conduent Human Resource Services, Atlanta (GA).

SCHEDULE OF CITY CONTRIBUTIONS
Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined City Contribution	City Contributions in relation to the Actuarially Determined City Contributions	Contribution Deficiency (Excess)	Covered Payroll	City Contributions as a percentage of Covered Payroll
09/30/2019	\$ 4,958,811	\$ 4,958,811	\$ -	\$ 24,058,071	20.61%
09/30/2018	\$ 4,507,892	\$ 4,507,892	\$ -	\$ 25,263,376	17.84%
09/30/2017 ¹	\$ 4,294,312	\$ 4,294,312	\$ -	\$ 25,501,291	16.84%
09/30/2016 ¹	\$ 3,716,354	\$ 3,716,354	\$ -	\$ 23,885,642	15.56%
09/30/2015 ¹	\$ 3,682,847	\$ 3,682,847	\$ -	\$ 25,539,198	14.42%
09/30/2014 ¹	\$ 3,855,020	\$ 3,855,020	\$ -	\$ 24,364,333	15.82%

¹ The 2014-2017 results were provided by the prior actuary, Conduent Human Resource Services, Atlanta (GA).

Notes to Schedule

Valuation Date: 10/01/2017

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Mortality Rates:

Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

50% of all deaths are assumed to be in the line of duty.

Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2017 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

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Interest Rates: 8.0% per year, compounded annually, net of investment related expenses.

Retirement Rates: Rates of retirement are shown below.

<u>Service</u>	<u>Firefighters</u>	<u>Police Officers</u>
20	17.5%	25%
21-24	5.0%	5.0%
25	100.0%	100%

Firefighters who entered the plan on or after January 1, 2014 and Police Officers who are not eligible to retire by July 1, 2013 are assumed to retire at a rate of 1% per year once the sum of age and years of Credited Service is at least 70, with 100% assumed to retire upon reaching 25 years of Credited Service. In addition, all Members are assumed to retire no later than age 58.

Disability Rates: Sample rates of disability are shown below.

<u>Age</u>	<u>Disability Rate</u>
25	0.105%
30	0.144%
35	0.182%
40	0.308%
45	0.434%
50	0.854%
55	1.274%

100% of disablements are assumed to be service related.

Termination Rates: Sample rates of termination are shown below.

<u>Service</u>	<u>Firefighters</u>	<u>Police Officers</u>
0-5	0.50%	0.70%
6-9	1.50%	3.50%
10-11	0.00%	2.50%
12+	0.00%	0.00%

Non vested members are assumed to withdraw their contributions and vested members are assumed to commence an annuity at age 55.

Salary Increases: Rates of salary increases are shown below.

<u>Service</u>	<u>Firefighters</u>	<u>Police Officers</u>
0-4	5.0%	6.0%
5-9	4.0%	5.0%
10-14	3.0%	4.0%
15+	2.0%	3.0%

State Contributions: State premium tax revenue is assumed to be the same as the most recent distribution.

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Payroll Increase Rate:	3.0% per year for projecting aggregate payroll to the following fiscal year and for determining amortization payments towards the unfunded accrued liability.						
Marital Assumptions:	90% of active members are assumed to be married with males 2 years older than females.						
Overtime Pay:	Overtime pay is assumed to equal to 6.5% of non-overtime related pensionable earnings in the years preceding to retirement.						
Vacation Payout upon Termination:	Accumulated vacation that is payable upon termination of employment is assumed to be equal to the vacation balance as of July 1, 2013 for police officers and January 1, 2014 for firefighters.						
Accumulated Sick Leave:	Accumulated sick leave is assumed to increase benefit service according to the balance as of July 1, 2013 for police officers and January 1, 2014 for firefighters.						
Funding Method:	Entry Age Normal Actuarial Cost Method.						
Asset Allocation Method:	Assets were allocated to police officers and firefighters separately as of October 1, 2012. The allocation was performed based on the accrued actuarial liability of each group (net of DROP accounts) with recognition that certain assets (DROP account and State Premium Tax Revenue) are already designated to each group. Future investment returns are allocated to each group such that the investment return as a percentage will be the same as the return on the total assets by taking into account the cash flow of each group separately.						
Actuarial Asset Method:	Each year, the prior Actuarial Value of Assets (AVA) is projected forward at the assumed interest rate assumption and reflecting actual contributions and benefit payments. One-fifth of the difference between the projected actuarial value and market value is added to the projected actuarial value. The resulting AVA cannot be greater than 120% of the market value or less than 80% of the market value. It is possible that over time this technique will produce an insignificant bias above or below Market Value.						
Amortization Periods:	Changes in unfunded liability are amortized on a level percentage of payroll basis over the following periods: <table><tr><td>Plan Changes</td><td>30 years</td></tr><tr><td>Assumption/Method Changes</td><td>30 years</td></tr><tr><td>Gains or Losses</td><td>30 years</td></tr></table>	Plan Changes	30 years	Assumption/Method Changes	30 years	Gains or Losses	30 years
Plan Changes	30 years						
Assumption/Method Changes	30 years						
Gains or Losses	30 years						

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

The following information is not required to be disclosed but is provided for informational purposes.

COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2019

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 32,757,861	\$ 19,500,452	\$ 11,808,129	\$ -
Total Pension Liability Factors:				
Service Cost	3,757,740	-	-	3,757,740
Interest	22,397,470	-	-	22,397,470
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(1,185,483)	1,185,483	-	-
Current year amortization of experience difference	-	(1,858,133)	(436,167)	(1,421,966)
Change in assumptions about future economic or demographic factors or other inputs	3,102,805	-	3,102,805	-
Current year amortization of change in assumptions	-	-	(2,917,367)	2,917,367
Benefit Payments, including Refunds of Employee Contributions	(19,538,102)	-	-	-
Net change	<u>8,534,430</u>	<u>(672,650)</u>	<u>(250,729)</u>	<u>27,650,611</u>
Plan Fiduciary Net Position:				
Contributions - Employer	4,958,811	-	-	-
Contributions - State	-	-	-	-
Contributions - Employee	1,946,523	-	-	(1,946,523)
Projected Net Investment Income	19,721,584	-	-	(19,721,584)
Difference between projected and actual earnings on Pension Plan investments	(16,199,612)	-	16,199,612	-
Current year amortization	-	(5,032,298)	(6,757,351)	1,725,053
Benefit Payments, including Refunds of Employee Contributions	(19,538,102)	-	-	-
Administrative Expenses	(771,292)	-	-	771,292
Other	91,875	-	-	(91,875)
Net change	<u>(9,790,213)</u>	<u>(5,032,298)</u>	<u>9,442,261</u>	<u>(19,263,637)</u>
Ending Balance	<u>\$ 51,082,504</u>	<u>\$ 13,795,504</u>	<u>\$ 20,999,661</u>	<u>\$ 8,386,974</u>

AMORTIZATION SCHEDULE - INVESTMENTS

Increase (Decrease) in Pension Expense Arising from the Recognition of the of Differences Between Projected and Actual Earnings on Pension Plan Investments

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2019	\$ 16,199,612	5	\$ 3,239,924	\$ 3,239,922	\$ 3,239,922	\$ 3,239,922	\$ 3,239,922	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (4,863,873)	5	\$ (972,775)	\$ (972,775)	\$ (972,775)	\$ (972,773)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (14,483,967)	5	\$ (2,896,793)	\$ (2,896,793)	\$ (2,896,795)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (5,813,652)	5	\$ (1,162,730)	\$ (1,162,732)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 17,587,139	5	\$ 3,517,427	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 1,725,053	\$ (1,792,378)	\$ (629,648)	\$ 2,267,149	\$ 3,239,922	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions

Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2019	\$ 3,102,805	5.1	\$ 608,394	\$ 608,393	\$ 608,393	\$ 608,393	\$ 608,393	\$ 60,839	\$ -	\$ -	\$ -	\$ -
2018	\$ 4,612,282	5.2	\$ 886,977	\$ 886,977	\$ 886,977	\$ 886,977	\$ 177,397	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 2,158,450	5.3	\$ 407,255	\$ 407,255	\$ 407,255	\$ 122,175	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 2,719,455	5.3	\$ 513,105	\$ 513,105	\$ 153,930	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 2,608,508	5.2	\$ 501,636	\$ 100,328	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 2,917,367	\$ 2,516,058	\$ 2,056,555	\$ 1,617,545	\$ 785,790	\$ 60,839	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience

Plan Year Ending	Differences Between Expected and Actual Experience	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2019	\$ (1,185,483)	5.1	\$ (232,446)	\$ (232,448)	\$ (232,448)	\$ (232,448)	\$ (232,448)	\$ (23,245)	\$ -	\$ -	\$ -	\$ -
2018	\$ (2,419,821)	5.2	\$ (465,350)	\$ (465,350)	\$ (465,350)	\$ (465,350)	\$ (93,071)	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 2,311,687	5.3	\$ 436,167	\$ 436,167	\$ 436,167	\$ 130,852	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (6,006,515)	5.3	\$ (1,133,305)	\$ (1,133,305)	\$ (339,991)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ (140,568)	5.2	\$ (27,032)	\$ (5,407)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (1,421,966)	\$ (1,400,343)	\$ (601,622)	\$ (566,946)	\$ (325,519)	\$ (23,245)	\$ -	\$ -	\$ -	\$ -