

CITY OF PENSACOLA
POLICE OFFICERS' RETIREMENT FUND

ACTUARIAL VALUATION AND REPORT
AS OF OCTOBER 1, 2017

CONTRIBUTIONS APPLICABLE TO THE PLAN/
FISCAL YEAR ENDED SEPTEMBER 30, 2019

March 21, 2018

Board of Trustees
City of Pensacola Police Officers' Retirement Fund
222 West Main Street
Pensacola, FL 32502

Re: City of Pensacola
Police Officers' Retirement Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Pensacola Police Officers' Retirement Fund. Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Please note that these valuations may not be applicable for any other purposes.

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflect laws and regulations issued to date pursuant to the provisions of Chapters 112 and 185, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuations, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience. 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.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the Board of Trustees, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

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, 2017. 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.

The undersigned is familiar with the immediate and long-term aspects of pension valuations, and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.


To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Pensacola, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of City of Pensacola Police Officers' Retirement Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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:



Drew D. Ballard, EA, MAAA
Enrolled Actuary #17-8193

DDB/lke

Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Pensacola Police Officers' Retirement Fund, performed as of October 1, 2017, has been completed, and the results are presented in this Report. The results of this valuation are applicable to the plan/fiscal year ended September 30, 2019.

The contribution requirements developed in this valuation, compared with amounts developed in the October 1, 2015 Actuarial Valuation Report (as performed by Pension Board Consultants, Inc.), are as follows:

Valuation Date	10/1/2017	10/1/2015
Assumed Beginning of Year Contribution Date	10/1/2018	10/1/2016
Applicable Plan/Fiscal Year End	<u>9/30/2019</u>	<u>9/30/2017</u>
 Total Required Contribution	 5,202,559	 5,466,170
Member Contributions (Est.)	218,946	230,041
City and State Required Contribution	4,983,613	5,236,129
State Contribution ¹	542,277	542,277
Balance from City ²	4,441,336	4,693,852

¹ Represents amount received in Calendar 2017.

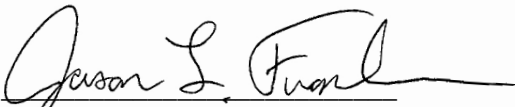
² The required contribution from the combination of City and State sources for the years ending September 30, 2017 and September 30, 2018 is \$5,236,129. The City and State contribution for the fiscal year ending September 30, 2019 is \$4,983,613. These amounts are based on the City's policy of contributing on October 1st. Additionally, the City has access to the September 30, 2017 Contribution Surplus Account Balance of \$775,006.58 to help offset a portion of the above stated requirements for fiscal 2018. Please see pages 15 and 16 of this report for detail of the account balance reconciliation.

As can be seen, the Required Contribution from City and State sources has decreased since the last actuarial valuation. The decrease was attributable to favorable experience realized by the plan, on the basis of the actuarial assumptions. The primary sources of favorable experience during the past two years are as follows: a single 1.50% cost-of-living adjustment compared to the assumed two annual 2.50% adjustments, and 9.18% and 7.25% investment returns (Actuarial Asset basis) for the 2017 and 2016 plan years, respectively, both exceeding the 7.125% assumption. This favorable experience was offset in part by lower than anticipated inactive mortality and unfavorable retirement experience.

The balance of this Report presents additional details of the actuarial valuation and the general operation of the Fund. The undersigned would be pleased to meet with the Board of Trustees in order to discuss the Report and any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.

By: 
Jason L. Franken, FSA, EA, MAAA

By: 
Drew D. Ballard, EA, MAAA

CHANGES SINCE PRIOR VALUATION

Plan Changes

There have been no plan changes since the prior report.

Actuarial Assumption/Method Changes

Pursuant to the provisions of Chapter 2015-157, Laws of Florida, the mortality assumption reflects a change from the rates utilized by the Florida Retirement System in the July 1, 2015 valuation to those utilized in the July 1, 2016 valuation for special risk participants.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2017</u>	<u>10/1/2015</u>
A. Participant Data		
Actives	73	88
Service Retirees	116	91
DROP Retirees	9	21
Beneficiaries	28	31
Disability Retirees	15	16
Terminated Vested	<u>14</u>	<u>13</u>
Total	255	260
Covered Non-DROP Payroll	\$4,048,557	\$4,423,864
Annual Rate of Payments to:		
Service Retirees	5,200,542	3,882,333
DROP Retirees	479,952	1,248,408
Beneficiaries	613,575	639,406
Disability Retirees	261,503	262,192
Terminated Vested	130,199	120,666
B. Assets		
Actuarial Value (AVA) ¹	90,550,803	83,576,423
Market Value (MVA) ¹	93,617,461	80,130,799
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	27,377,156	28,247,086
Disability Benefits	2,780,241	4,041,934
Death Benefits	517,855	510,472
Vested Benefits	705,305	838,197
Refund of Contributions	30,608	50,954
Service Retirees + Beneficiaries	88,708,671	69,448,620
DROP Retirees ¹	9,267,968	26,622,578
Disability Retirees	3,617,795	3,794,232
Terminated Vested	922,287	894,025
Excess State Monies Reserve	<u>0</u>	<u>396,897</u>
Total	133,927,886	134,844,995

C. Liabilities - (Continued)	<u>10/1/2017</u>	<u>10/1/2015</u>
Present Value of Future Salaries	29,191,213	34,815,100
Present Value of Future Member Contributions	1,517,943	1,810,385
Normal Cost (Retirement)	609,385	N/A
Normal Cost (Disability)	120,640	N/A
Normal Cost (Death)	20,592	N/A
Normal Cost (Vesting)	37,167	N/A
Normal Cost (Refunds)	<u>5,342</u>	<u>N/A</u>
Total Normal Cost	793,126	912,596
Present Value of Future Normal Costs	5,661,424	7,075,876
Accrued Liability (Retirement)	22,942,111	23,281,435
Accrued Liability (Disability)	1,906,467	2,739,629
Accrued Liability (Death)	369,973	353,564
Accrued Liability (Vesting)	518,108	455,673
Accrued Liability (Refunds)	13,082	(217,534)
Accrued Liability (Inactives) ¹	102,516,721	100,759,455
Excess State Monies Reserve	<u>0</u>	<u>396,897</u>
Total Actuarial Accrued Liability (EAN AL)	128,266,462	127,769,119
Funded Ratio (AVA / EAN AL)	70.6%	65.4%
Unfunded Actuarial Accrued Liability (UAAL)	37,715,659	44,192,696
Contribution Surplus Account	775,007	806,396
Total Amortization Charge	38,490,666	44,999,092
Amortization Amount	4,139,335	4,483,574

D. Actuarial Present Value of		
Accrued Benefits	<u>10/1/2017</u>	<u>10/1/2015</u>
Vested Accrued Benefits		
Inactives ¹	102,516,721	100,759,455
Actives	13,567,101	16,482,210
Member Contributions	<u>1,296,565</u>	<u>1,103,674</u>
Total	117,380,387	118,345,339
Non-vested Accrued Benefits	<u>3,412,082</u>	<u>1,074,747</u>
Total Present Value		
Accrued Benefits (PVAB)	120,792,469	119,420,086
Funded Ratio (MVA / PVAB)	77.5%	67.1%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	1,169,997	
Benefits Paid	(16,294,701)	
Interest	16,497,087	
Other	<u>0</u>	
Total	1,372,383	

Valuation Date	10/1/2017	10/1/2015
Applicable to Fiscal Year Ending	<u>9/30/2019</u>	<u>9/30/2017</u>

E. Pension Cost

Normal Cost ²	\$824,851	\$912,596
Administrative Expenses ²	72,800	70,000
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 14 years (as of 10/1/2017) ²	4,304,908	4,483,574
Total Required Contribution	5,202,559	5,466,170
Expected Member Contributions ²	218,946	230,041
Expected City and State Contribution	4,983,613	5,236,129

F. Past Contributions

Plan Years Ending:	<u>9/30/2017</u>	<u>9/29/2017</u>
City and State Requirement	5,236,129	4,412,902
Actual Contributions Made:		
Members (excluding buyback)	218,457	227,357
City	4,331,190	3,830,736
State	<u>542,277</u>	<u>533,483</u>
Total	5,091,924	4,591,576

¹ The asset values and liabilities include accumulated DROP Plan Balances as of 9/30/2017 and 9/30/2015.

² Contributions developed as of 10/1/2017 displayed above have been adjusted to account for assumed salary increase and interest components.

H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability as of:

<u>Year</u>	<u>Projected Outstanding Amortization Bases</u>
2017	38,490,666
2018	36,798,863
2019	34,986,519
2022	28,737,254
2025	21,054,774
2028	11,610,383
2031	0

I. (i) 3 Year Comparison of Actual and Assumed Salary Increases

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2017	4.39%	4.00%
Year Ended	9/30/2016	3.03%	4.00%
Year Ended	9/30/2015	4.85%	4.00%

(ii) 3 Year Comparison of Investment Return on Actuarial Value

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2017	9.18%	7.125%
Year Ended	9/30/2016	7.25%	7.125%
Year Ended	9/30/2015	6.23%	7.250%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2017	\$4,130,310
	10/1/2006	7,152,673
(b) Total Increase		-42.26%
(c) Number of Years		11.00
(d) Average Annual Rate		-4.87%

STATEMENT BY ENROLLED ACTUARY

This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.



Drew D. Ballard, EA, MAAA
Enrolled Actuary #17-8193

Please let us know when the report is approved by the Board and unless otherwise directed we will provide copies of the report to the following offices to comply with Chapter 112 Florida Statutes:

Mr. Keith Brinkman
Bureau of Local
Retirement Systems
Post Office Box 9000
Tallahassee, FL 32315-9000

Ms. Sarah Carr
Municipal Police and Fire
Pension Trust Funds
Division of Retirement
Post Office Box 3010
Tallahassee, FL 32315-3010

PROJECTED UNFUNDED ACTUARIAL ACCRUED LIABILITY

<u>Plan Year</u>	<u>Fiscal Year</u>	<u>Expected UAAL</u>	<u>Expected Amortization Payment UAAL</u>	<u>Expected UAAL on 9/30</u>
9/30/2017	9/30/2019	38,490,666	4,139,335	36,798,863
9/30/2018	9/30/2020	36,798,863	4,139,335	34,986,519
9/30/2019	9/30/2021	34,986,519	4,139,335	33,045,046
9/30/2020	9/30/2022	33,045,046	4,139,335	30,965,243
9/30/2021	9/30/2023	30,965,243	4,139,335	28,737,254
9/30/2022	9/30/2024	28,737,254	4,139,335	26,350,521
9/30/2023	9/30/2025	26,350,521	4,139,335	23,793,733
9/30/2024	9/30/2026	23,793,733	4,139,335	21,054,774
9/30/2025	9/30/2027	21,054,774	4,139,335	18,120,664
9/30/2026	9/30/2028	18,120,664	4,139,335	14,977,499
9/30/2027	9/30/2029	14,977,499	4,139,335	11,610,383
9/30/2028	9/30/2030	11,610,383	4,139,335	8,003,360
9/30/2029	9/30/2031	8,003,360	4,139,335	4,139,337
9/30/2030	9/30/2032	4,139,337	4,139,337	0

CONTRIBUTION SURPLUS ACCOUNT RECONCILIATION
October 1, 2015 through September 30, 2016

(1) 9/30/2015 Contribution Surplus Account Balance	806,396.00
(2) Minimum Required City and State Contribution for Plan Year Beginning 10/1/2015	4,412,902.00
(3) City Contributions Deposited on or around 10/1/2015	3,830,736.00
(4) State Contributions Deposited on or around 9/30/2016	533,483.40
(5) Shortfall Contribution Applied from Excess State Monies Reserve {[(2) - (3)] x 1.07125} - (4)	90,161.93
(6) Actual Non-Investment Expenses for Plan Year Beginning 10/1/2015	58,852.90
(7) Expected Non-Investment Expenses for Plan Year Beginning 10/1/2015	70,000.00
(8) Interest at 7.125%	58,249.95
(9) 9/30/2016 Contribution Surplus Account Balance (1) - [(6) - (7)] + (8)	875,793.05

CONTRIBUTION SURPLUS ACCOUNT RECONCILIATION

October 1, 2016 through September 30, 2017

(1) 9/30/2016 Contribution Surplus Account Balance	875,793.05
(2) Minimum Required City and State Contribution for Plan Year Beginning 10/1/2016	5,236,129.00
(3) City Contributions Deposited on or around 10/1/2016	4,331,190.07
(4) State Contributions Deposited on 8/7/2017	542,276.76
(5) Shortfall Contribution Applied from Excess State Monies Reserve	306,733.90
(6) Shortfall Contribution for Plan Year Beginning 10/1/2016 (with interest) $\{[(2) - (3)] \times 1.07125\} - [(4) \times (1 + (0.07125 * (55/365)))] - (5)$	114,583.12
Actual Non-Investment Expenses for	
(7) Plan Year Beginning 10/1/2016	115,370.93
Expected Non-Investment Expenses for	
(8) Plan Year Beginning 10/1/2016	70,000.00
(9) Interest at 7.125%	59,167.58
(10) 9/30/2016 Contribution Surplus Account Balance $(1) - (6) - [(7) - (8)] + (9)$	775,006.58

ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rates

Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy (previously Annuitant) White Collar, Scale BB

Male: RP2000 Generational, 10% Combined Healthy (previously Annuitant) White Collar / 90% Combined Healthy (previously Annuitant) Blue Collar, Scale BB

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 assumptions 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, 2016 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Previously, the special risk rates from the July 1, 2015 FRS actuarial valuation report were used.

Interest Rate

7.125% per year, compounded annually, net of investment related expenses. This assumption is in line with other Florida special risk pension plans

Termination Rates

<u>Age</u>	<u>Probability of Termination</u>
25 – 39	6.00%
40 – 44	2.00%
45 +	0.00%

The assumed rates of termination were utilized by the prior actuary.

Salary Increases

4.00% compounded annually. This assumption was utilized by the prior actuary.

Payroll Growth

None. This is in compliance with Part VII of Chapter 112, Florida Statutes.

Disability Rates

<u>Age</u>	<u>Probability of Disablement</u>
25	0.2387%
30	0.2800%
35	0.3867%
40	0.5733%
45	1.0600%
50	1.8467%
55	3.0600%
60	4.7867%
65	0.0000%

45% of disabilities are assumed to be in Line of Duty. The disability assumptions were utilized by the prior actuary.

Retirement Rates

<u>Service</u>	<u>Age</u>	<u>Probability of Retirement</u>
< 25 Years	45 – 49	5.0%
	50 – 56	10.0%
	57	50%
	58	70%
	59	90%
	60	100%
25 Years	45 – 57	50%
	58	70%
	59	90%
	60	100%
26 – 29 Years	45 – 56	25%
	57	50%
	58	70%
	59	90%
	60	100%
30 + Years	All Ages	100%

The assumed rates of retirement were utilized by the prior actuary.

Administrative Expenses

\$70,000 annually. This assumption was utilized by the prior actuary.

Marriage

80% of active participants are assumed to be married with spouses three years younger. This assumption was utilized by the prior actuary.

Actuarial Asset Method

Five-year smoothing.

Funding Method

Entry Age Normal Actuarial Cost Method.

The following loads are applied for determination of the Sponsor dollar funding requirement for the following year:

Interest – None; assuming an October 1 deposit.

Salary – A full year, based on the current 4.00% assumption.

VALUATION NOTES

Total Annual Payroll is the projected annual rate of pay as of the valuation date for all covered Members.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Total Required Contribution is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over no more than 30 years. The required amount is adjusted for interest according to the timing of contributions during the year.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

- (a) The normal cost accrual rate equals
 - (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
 - (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age .
- (b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.
- (c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.

(d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

Received During <u>Fiscal Year</u>	<u>Amount</u>	Increase from <u>Previous Year</u>
1998	619,399.23	_____%
1999	584,429.37	-5.6%
2000	579,318.13	-0.9%
2001	581,500.95	0.4%
2002	657,853.43	13.1%
2003	717,421.06	9.1%
2004	706,380.19	-1.5%
2005	662,758.94	-6.2%
2006	662,758.94	0.0%
2007	662,758.94	0.0%
2008	662,758.94	0.0%
2009	527,249.04	-20.4%
2010	486,189.84	-7.8%
2011	474,151.54	-2.5%
2012	477,013.80	0.6%
2013	473,910.37	-0.7%
2014	473,282.65	-0.1%
2015	512,807.52	8.4%
2016	533,483.40	4.0%
2017	542,276.76	1.6%

EXCESS STATE MONIES RESERVE

	<u>Actual</u> <u>State Contribution</u>	<u>Applicable</u> <u>"Frozen" Amount</u>	<u>Excess State</u> <u>Monies Reserve</u>
1998	\$619,399.23	\$619,399.23	\$0.00
1999	584,429.37	619,399.23	0.00
2000	579,318.13	619,399.23	0.00
2001	581,500.95	619,399.23	0.00
2002	657,853.43	619,399.23	38,454.20
2003	717,421.06	619,399.23	98,021.83
2004	706,380.19	619,399.23	86,980.96
2005	662,758.94	619,399.23	43,359.71
2006	662,758.94	619,399.23	43,359.71
2007	662,758.94	619,399.23	43,359.71
2008	662,758.94	619,399.23	43,359.71
2009	527,249.04	619,399.23	0.00
2010	486,189.84	619,399.23	0.00
2011	474,151.54	619,399.23	0.00
2012	477,013.80	619,399.23	0.00
2013	473,910.37	619,399.23	0.00
2014	473,282.65	619,399.23	0.00
2015	512,807.52	619,399.23	0.00
2016	533,483.40	619,399.23	0.00
2017	542,276.76	619,399.23	<u>0.00</u>
Equals Current State Monies Reserve			\$396,895.83
Less Amounts Used to Satisfy Minimum Required Contribution for 9/30/2016			(\$90,161.93)
Less Amounts Used to Satisfy Minimum Required Contribution for 9/30/2017			(\$306,733.90)
Equals Total State Monies Reserve			\$0.00

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2016

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	1,299,967
Cash	135,459
Total Cash and Equivalents	1,435,426
Receivables:	
Member Contributions in Transit	4,195
City Contributions in Transit	81
Total Receivable	4,276
Investments:	
U. S. Bonds and Bills	4,240,291
Mortgage Backed Securities	13,015,049
Corporate Bonds	9,405,264
Stocks	47,305,184
Mutual Funds:	
Fixed Income	4,553,363
Pooled/Common/Commingled Funds:	
Real Estate	6,140,708
Total Investments	84,659,859
Total Assets	86,099,561
<u>LIABILITIES</u>	
Payables:	
DROP Distributions	271,679
Other Accounts	87,313
Total Liabilities	358,992
NET POSITION RESTRICTED FOR PENSIONS	85,740,569

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2016
Market Value Basis

ADDITIONS

Contributions:

Member	227,357.00
City	3,830,736.00
State	533,483.40

Total Contributions	4,591,576.40
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Investment Income:

Net Increase in Fair Value of Investments	7,062,255.35
Interest & Dividends	1,970,056.00
Less Investment Expense ¹	(415,636.23)

Net Investment Income	8,616,675.12
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Total Additions	13,208,251.52
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DEDUCTIONS

Distributions to Members:

Benefit Payments	5,093,101.47
Lump Sum DROP Distributions	2,434,932.50
Refunds of Member Contributions	11,594.65

Total Distributions	7,539,628.62
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Administrative Expense	58,852.90
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Total Deductions	7,598,481.52
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Net Increase in Net Position	5,609,770.00
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	80,130,799.00
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End of the Year	85,740,569.00
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¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION
September 30, 2016

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year Ending	Index	<u>Proponents for Calculation of Adjustment Factor</u>			Weighted Value
		Market Yield in Following Year	Growth Factor	Relative Weight	
09/30/2012	100.00	14.05%	1.31693	1	8.78
09/30/2013	114.05	8.78%	1.22934	2	18.69
09/30/2014	124.06	-2.83%	1.14758	3	28.47
09/30/2015	120.55	10.96%	1.07125	4	34.44
09/30/2016	133.76		1.00000	5	44.59
Total				15	134.97

Development of Actuarial Value of Assets

(1) Market Value of Assets, 09/30/2016	85,740,569
(2) Adjustment Factor, 134.97 divided by 133.76	1.0090
(3) Actuarial Value of Assets, 09/30/2016, (1) x (2)	<u>86,516,183</u>
(A) 09/30/2015 Actuarial Assets:	83,576,423
(I) Net Investment Income:	
1. Interest and Dividends	1,970,056
2. Change in Actuarial Value	4,392,245
3. Investment Expenses	(415,636)
Total	<u>5,946,665</u>
(B) 09/30/2016 Actuarial Assets:	86,516,183
Actuarial Assets Rate of Return = $2I/(A+B-I)$:	7.25%
Market Value of Assets Rate of Return:	10.96%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	98,966
10/01/2016 Limited Actuarial Assets:	86,516,183

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
SEPTEMBER 30, 2016
Actuarial Asset Basis

REVENUES

Contributions:		
Member	227,357.00	
City	3,830,736.00	
State	533,483.40	
Total Contributions		4,591,576.40
Earnings from Investments:		
Interest & Dividends	1,970,056.00	
Change in Actuarial Value	4,392,245.05	
Total Earnings and Investment Gains		6,362,301.05
EXPENDITURES		
Distributions to Members:		
Benefit Payments	5,093,101.47	
Lump Sum DROP Distributions	2,434,932.50	
Refunds of Member Contributions	11,594.65	
Total Distributions		7,539,628.62
Expenses:		
Investment related ¹	415,636.23	
Administrative	58,852.90	
Total Expenses		474,489.13
Change in Net Assets for the Year		2,939,759.70
Net Assets Beginning of the Year		83,576,423.00
Net Assets End of the Year ²		86,516,182.70

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

²Net Assets may be limited for actuarial consideration.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2017

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	1,054,781.09	1,054,781.09
Money Market	12.84	12.84
Cash	52,732.29	52,732.29
Total Cash and Equivalents	1,107,526.22	1,107,526.22
Receivables:		
Member Contributions in Transit	4,164.45	4,164.45
City Contributions in Transit	1,368.32	1,368.32
From Broker for Investments Sold	17,875.25	17,875.25
Investment Income	203,750.78	203,750.78
Total Receivable	227,158.80	227,158.80
Investments:		
U. S. Bonds and Bills	8,211,973.82	8,174,297.23
Federal Agency Guaranteed Securities	3,574,590.05	3,605,403.82
Corporate Bonds	12,001,635.40	11,803,828.45
Municipal Obligations	1,355,498.64	1,359,531.10
Stocks	31,612,791.39	41,587,642.31
Mutual Funds:		
Fixed Income	2,648,296.58	2,648,296.58
Equity	13,736,674.43	14,373,557.87
Pooled/Common/Commingled Funds:		
Real Estate	8,025,018.16	9,293,154.77
Total Investments	81,166,478.47	92,845,712.13
Total Assets	82,501,163.49	94,180,397.15
<u>LIABILITIES</u>		
Payables:		
DROP Distributions	432,062.82	432,062.82
Other Accounts	74,239.18	74,239.18
To Broker for Investments Purchased	56,634.26	56,634.26
Total Liabilities	562,936.26	562,936.26
NET POSITION RESTRICTED FOR PENSIONS	81,938,227.23	93,617,460.89

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2017
Market Value Basis

ADDITIONS

Contributions:

Member	218,457.18
Buy-Back	41,367.21
City	4,331,190.07
State	542,276.76

Total Contributions	5,133,291.22
---------------------	--------------

Investment Income:

Net Increase in Fair Value of Investments	9,940,954.92
Interest & Dividends	1,991,106.95
Less Investment Expense ¹	(318,018.29)

Net Investment Income	11,614,043.58
-----------------------	---------------

Total Additions	16,747,334.80
-----------------	---------------

DEDUCTIONS

Distributions to Members:

Benefit Payments	5,756,158.62
Lump Sum DROP Distributions	2,992,547.72
Refunds of Member Contributions	6,365.64

Total Distributions	8,755,071.98
---------------------	--------------

Administrative Expense	115,370.93
------------------------	------------

Total Deductions	8,870,442.91
------------------	--------------

Net Increase in Net Position	7,876,891.89
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	85,740,569.00
-----------------------	---------------

End of the Year	93,617,460.89
-----------------	---------------

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

ACTUARIAL ASSET VALUATION
September 30, 2017

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year Ending	<u>Proponents for Calculation of Adjustment Factor</u>				Weighted Value
	Index	Market Yield in Following Year	Growth Factor	Relative Weight	
09/30/2013	100.00	8.78%	1.31693	1	8.78
09/30/2014	108.78	-2.83%	1.22934	2	17.83
09/30/2015	105.70	10.96%	1.14758	3	24.26
09/30/2016	117.29	13.48%	1.07125	4	33.50
09/30/2017	133.10		1.00000	5	44.37
Total				15	128.74
<u>Development of Actuarial Value of Assets</u>					
(1) Market Value of Assets, 09/30/2017					93,617,461
(2) Adjustment Factor, 128.74 divided by 133.1					0.9672
(3) Actuarial Value of Assets, 09/30/2017, (1) x (2)					90,550,803
(A) 09/30/2016 Actuarial Assets:					86,516,183
(I) Net Investment Income:					
1. Interest and Dividends					1,991,107
2. Change in Actuarial Value					6,098,684
3. Investment Expenses					(318,018)
Total					7,771,772
(B) 09/30/2017 Actuarial Assets:					90,550,803
Actuarial Assets Rate of Return = $2I/(A+B-I)$:					9.18%
Market Value of Assets Rate of Return:					13.48%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)					1,740,630
10/01/2017 Limited Actuarial Assets:					90,550,803

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
SEPTEMBER 30, 2017
Actuarial Asset Basis

REVENUES

Contributions:		
Member	218,457.18	
Buy-Back	41,367.21	
City	4,331,190.07	
State	542,276.76	
Total Contributions		5,133,291.22
Earnings from Investments:		
Interest & Dividends	1,991,106.95	
Change in Actuarial Value	6,098,683.60	
Total Earnings and Investment Gains		8,089,790.55
EXPENDITURES		
Distributions to Members:		
Benefit Payments	5,756,158.62	
Lump Sum DROP Distributions	2,992,547.72	
Refunds of Member Contributions	6,365.64	
Total Distributions		8,755,071.98
Expenses:		
Investment related ¹	318,018.29	
Administrative	115,370.93	
Total Expenses		433,389.22
Change in Net Assets for the Year		4,034,620.57
Net Assets Beginning of the Year		86,516,182.70
Net Assets End of the Year ²		90,550,803.27

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

²Net Assets may be limited for actuarial consideration.

DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2016 to September 30, 2017

Beginning of the Year Balance	2,927,265.98
Plus Additions	619,700.14
Investment Return Earned	61,210.13
Less Distributions	(2,992,547.72)
End of the Year Balance	615,628.53

STATISTICAL DATA

	<u>10/1/2014</u>	<u>10/1/2015</u>	<u>10/1/2017</u>
<u>Actives</u>			
Number	91	88	73
Average Current Age	40.8	41.4	42.2
Average Age at Employment	27.8	27.5	27.2
Average Past Service	13.0	13.9	15.0
Average Annual Salary	\$49,366	\$51,593	\$56,580
<u>Service Retirees</u>			
Number	83	91	116
Average Current Age	65.2	64.3	64.2
Average Annual Benefit	\$40,271	\$42,663	\$44,832
<u>DROP Retirees</u>			
Number	27	21	9
Average Current Age	53.0	54.0	53.1
Average Annual Benefit	\$60,397	\$59,448	\$53,328
<u>Beneficiaries</u>			
Number	33	31	28
Average Current Age	72.2	72.7	73.4
Average Annual Benefit	\$19,753	\$20,626	\$21,913
<u>Disability Retirees</u>			
Number	17	16	15
Average Current Age	68.5	68.4	69.6
Average Annual Benefit	\$15,467	\$16,387	\$17,434
<u>Terminated Vested</u>			
Number	14	13	14
Average Current Age	68.5	68.4	40.7
Average Annual Benefit ¹	\$9,953	\$9,282	\$10,015

¹ The Average Annual Benefit excludes participants awaiting a refund of contributions.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	1	1	0	0	0	0	0	2
30 - 34	0	0	0	0	0	2	5	0	0	0	0	7
35 - 39	0	0	0	0	0	3	10	3	0	0	0	16
40 - 44	0	0	0	0	1	3	4	10	3	0	0	21
45 - 49	0	0	0	0	0	1	3	9	3	2	0	18
50 - 54	0	0	0	0	0	0	1	1	4	1	0	7
55 - 59	0	0	0	0	0	0	0	0	1	0	0	1
60 - 64	0	0	0	0	0	0	0	0	1	0	0	1
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	2	10	23	23	12	3	0	73

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2015	88
b. Terminations	
i. Vested (partial or full) with deferred benefits	(2)
ii. Non-vested or full lump sum distribution received	(3)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(4)
f. DROP	<u>(6)</u>
g. Continuing participants	73
h. New entrants	<u>0</u>
i. Total active life participants in valuation	73

2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested Deferred	<u>Total</u>
a. Number prior valuation	91	21	31	16	13	172
Retired	23	(12)	0	0	(1)	10
DROP	0	0	0	0	0	0
Vested Deferred	0	0	0	0	2	2
Death, With Survivor	0	0	1	(1)	0	0
Death, No Survivor	0	0	(4)	0	0	(4)
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0
Data Corrections	2	0	0	0	0	2
b. Number current valuation	116	9	28	15	14	182

SUMMARY OF PLAN PROVISIONS

<u>Eligibility</u>	Employees who are classified as full-time Police Officers hired prior to January 1, 2013 shall participate in the System as a condition of employment.
<u>Credited Service</u>	Aggregate number of years of service and fractional parts of years of service
<u>Compensation</u>	<p>Total cash compensation, educational incentive pay, court pay, automobile and/or meals and uniform expense, accumulated sick leave at retirement and vacation pay at retirement, special duty pay, shift differential pay, or special bonuses.</p> <p>Effective January 1, 2013, compensation shall be limited to an officer's base pay and senior officer pay exclusive of overtime for earnings on or after January 1, 2013, but shall include overtime which had been earned as of December 21, 2012.</p>
<u>Average Final Compensation</u>	<p>Average Compensation for the best 2 years out of the last 5 years of Credited Service for Members with 20 or more years of Credited Service as of January 1, 2013.</p> <p>Average Compensation for the last 5 years of Credited Service for Members with less than 20 years of Credited Service as of January 1, 2013.</p>
<u>Member Contributions</u>	5.20% of Salary.
<u>City and State Contributions</u>	Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII of Chapter 112, Florida Statutes.
<u>Normal Retirement</u>	
Date	Earlier of (1) Age 55 and 12 years of Credited Service, or (2) 25 years of Credited Service, regardless of Age.
Benefit	3.00% of Average Final Compensation for each full year of Credited Service.
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Eligibility	Age 50 and 12 Years of Credited Service.
Benefit	Accrued benefit, reduced 3% per year for each year preceding age 55.

Vesting

Less than 12 years of
Credited Service

Refund of Member Contributions.

12 or more years of
Credited Service

Accrued benefit payable at the Member's otherwise
Normal Retirement Date
or
Refund of Member Contributions

Disability

Eligibility

Line of Duty

Total and permanent disability.

Non Line of Duty

Total and permanent disability with at least 12 years of
Credited Service.

Benefit

Line of Duty

3.00% of Average Final Compensation for each full year
of Credited Service. Minimum benefit is 42% of AFC.

Non Line of Duty

3.00% of Average Final Compensation for each full year
of Credited Service. Minimum benefit is 25% of AFC.

Form of Benefit

Payable as a 10-year Certain and Life Annuity. Options
available.

Death Benefits

Pre-Retirement

Line of Duty

3.00% of Average Final Compensation for each full year
of Credited Service. Minimum benefit is 42% of AFC.

Non Line of Duty

For members with 12 or more years of Credited Service:
3.00% of Average Final Compensation for each full year
of Credited Service. Minimum benefit is 25% of AFC.

For members with less than 12 years of Credited
Service: Refund of accumulated contributions without
interest.

Post-Retirement

Benefits payable to beneficiary in accordance with
option selected at retirement.

Board of Trustees

- a. Two City Council appointees,
- b. Two Members of the Department elected by the
membership, and
- c. Fifth Member chosen by a majority of the other four
trustees

Deferred Retirement Option Plan

Eligibility	Satisfaction of Retirement requirements.
Participation	Not to exceed 60 months.
Rate of Return	
Members who entered DROP Prior to January 1, 2013	4.00% annual interest.
Members who entered DROP On or after January 1, 2013	1.30% annual interest.
Form of Distribution	Cash lump sum (options available) at termination of employment.

Cost-of-Living Adjustment

Eligibility	All members in payment status.
Increase	Increased annually effective each January 1 st based on Consumer Price Index as of the previous September 30 th , limited to 3.00% per year for retirees and DROP participants. The limit is 2.00% per year after 10 years of benefit payments for retirees who retire on or after January 1, 2013. Additionally, Members who entered the DROP on or after January 1, 2013 shall not receive any cost-of-living adjustments while participating in the DROP.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2017

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	1,054,781
Money Market	13
Cash	52,732
Total Cash and Equivalents	1,107,526
Receivables:	
Member Contributions in Transit	4,165
City Contributions in Transit	1,368
From Broker for Investments Sold	17,875
Investment Income	203,751
Total Receivable	227,159
Investments:	
U. S. Bonds and Bills	8,174,297
Federal Agency Guaranteed Securities	3,605,404
Corporate Bonds	11,803,828
Municipal Obligations	1,359,531
Stocks	41,587,642
Mutual Funds:	
Fixed Income	2,648,297
Equity	14,373,558
Pooled/Common/Commingled Funds:	
Real Estate	9,293,155
Total Investments	92,845,712
Total Assets	94,180,397
<u>LIABILITIES</u>	
Payables:	
DROP Distributions	432,063
Other Accounts	74,239
To Broker for Investments Purchased	56,634
Total Liabilities	562,936
NET POSITION RESTRICTED FOR PENSIONS	93,617,461

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2017
Market Value Basis

ADDITIONS

Contributions:

Member	218,457	
Buy-Back	41,367	
City	4,331,190	
State	542,277	
Total Contributions		5,133,291
Investment Income:		
Net Increase in Fair Value of Investments	9,940,955	
Interest & Dividends	1,991,107	
Less Investment Expense ¹	(318,018)	
Net Investment Income		11,614,044
Total Additions		16,747,335

DEDUCTIONS

Distributions to Members:

Benefit Payments	5,756,158	
Lump Sum DROP Distributions	2,992,548	
Lump Sum Share Distributions	0	
Refunds of Member Contributions	6,366	
Total Distributions		8,755,072
Administrative Expense		115,371
Total Deductions		8,870,443
Net Increase in Net Position		7,876,892
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		85,740,569
End of the Year		93,617,461

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

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2017)

Plan Description

Plan Administration

The Plan is a single-employer defined benefit pension plan administered by the Plan's Board of Trustees comprised of:

- a. Two City Council appointees,
- b. Two Members of the Department elected by the membership, and
- c. Fifth Member chosen by a majority of the other four.

Employees who are classified as full-time Police Officers hired prior to January 1, 2013 shall participate in the System as a condition of employment.

Plan Membership as of October 1, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	168
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	14
Active Plan Members	73
	<hr style="border-top: 1px solid black; border-bottom: 1px solid black; height: 3px; width: 100%;"/>
	255

Benefits Provided

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

Normal Retirement:

Date: Earlier of (1) Age 55 and 12 years of Credited Service, or (2) 25 years of Credited Service, regardless of Age.

Benefit: 3.00% of Average Final Compensation for each full year of Credited Service.

Early Retirement:

Eligibility: Age 50 and 12 Years of Credited Service.

Benefit: Accrued benefit, reduced 3% per year for each year preceding age 55.

Vesting:

Less than 12 years of Credited Service: Refund of Member Contributions.

12 or more years of Credited Service: Accrued benefit payable at the Member's otherwise Normal Retirement Date or Refund of Member Contributions.

Disability:

Eligibility Service Incured: Total and permanent disability.

Eligibility Non-Service Incured: Total and permanent disability with at least 12 years of Credited Service.

Benefit Line of Duty: 3.00% of Average Final Compensation for each full year of Credited Service. Minimum benefit is 42% of AFC.

Benefit Non Line of Duty: 3.00% of Average Final Compensation for each full year of Credited Service. Minimum benefit is 25% of AFC.

Death Benefits Pre-Retirement:

Line of Duty: 3.00% of Average Final Compensation for each full year of Credited Service. Minimum benefit is 42% of AFC.

None Line of Duty: For members with 12 or more years of Credited Service: 3.00% of Average Final Compensation for each full year of Credited Service. Minimum benefit is 25% of AFC. For members with less than 12 years of Credited Service:

Refund of accumulated contributions without interest.

Cost-of-Living Adjustment:

Eligibility: All members in payment status.

Increased annually effective each January 1st based on Consumer Price Index as of the previous September 30th, limited to 3.00% per year for retirees and DROP participants. The limit is 2.00% per year after 10 years of benefit payments for retirees who retire on or after January 1, 2013. Additionally, Members who entered the DROP on or after January 1, 2013 shall not receive any cost-of-living adjustments while participating in the DROP.

Contributions

Member: 5.20% of Salary.

City and State: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII of Chapter 112, Florida Statutes.

Investments

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2017:

<u>Asset Class</u>	<u>Target Allocation</u>
Domestic Equity	45%
International Equity	15%
Broad Market Fixed Income	25%
TIPS	5%
<u>Alternative Investments</u>	<u>10%</u>
Total	<u>100%</u>

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, 2017, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 13.48 percent.

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

Deferred Retirement Option Program

Eligibility: Satisfaction of Normal Retirement requirements.

Participation: Not to exceed 60 months.

Rate of Return Member who entered DROP Prior to January 1, 2013: 4.00% annual interest.

Rate of Return Member who entered DROP On or after January 1, 2013: 1.30% annual interest.

The DROP balance as September 30, 2017 is \$615,629.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2017 were as follows:

Total Pension Liability	\$ 127,993,821
Plan Fiduciary Net Position	\$ (93,617,461)
Less reserve accounts	\$ 775,007
Sponsor's Net Pension Liability	<u>\$ 35,151,367</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	73.14%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2017 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	4.00%
Discount Rate	7.125%
Investment Rate of Return	7.125%

Mortality Rate Healthy Inactive Lives: □

Female: RP 2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP 2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

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.

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 most recent actuarial experience study used to review the other significant assumptions was not available.

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 2017 the inflation rate assumption of the investment advisor was 2.50%.

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, 2017 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	7.5%
International Equity	8.5%
Broad Market Fixed Income	2.5%
TIPS	2.5%
Alternative Investments	5.0%

Discount Rate:
The Discount Rate used to measure the Total Pension Liability was 7.125 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	1% Increase
	6.125%	Discount Rate 7.125%	8.125%
Sponsor's Net Pension Liability	\$ 52,879,640	\$ 35,151,367	\$ 20,760,084

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

	09/30/2017	09/30/2016 ¹	09/30/2015 ¹
Total Pension Liability			
Service Cost	761,793	912,596	818,742
Interest	8,977,910	8,876,315	8,390,513
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(2,653,681)	-	312,274
Changes of assumptions	-	-	6,217,609
Contributions - Buy Back	41,367	-	-
Benefit Payments, including Refunds of Employee Contributions	(8,755,072)	(7,539,629)	(6,446,003)
Net Change in Total Pension Liability	\$ (1,627,683)	\$ 2,249,282	\$ 9,293,135
Total Pension Liability - Beginning	\$ 129,621,504	\$ 127,372,222	\$ 118,079,087
Total Pension Liability - Ending (a)	\$ 127,993,821	\$ 129,621,504	\$ 127,372,222
		-	
Plan Fiduciary Net Position			
Contributions - Employer	4,331,190	3,830,736	3,830,839
Contributions - State	542,277	533,483	512,808
Contributions - Employee	218,457	227,357	240,097
Contributions - Buy Back	41,367	-	-
Net Investment Income	11,614,044	8,651,676	(2,362,487)
Benefit Payments, including Refunds of Employee Contributions	(8,755,072)	(7,539,629)	(6,446,003)
Administrative Expense	(115,371)	(93,853)	(82,441)
Net Change in Plan Fiduciary Net Position	7,876,892	5,609,770	(4,307,187)
Plan Fiduciary Net Position - Beginning	85,740,569	80,130,799	84,437,986
	\$ 93,617,461	\$ 85,740,569	\$ 80,130,799
Less reserve accounts	\$ 775,007	\$ 1,168,510	\$ 1,203,293
Plan Fiduciary Net Position - Ending (b)	\$ 92,842,454	\$ 84,572,059	\$ 78,927,506
Net Pension Liability - Ending (a) - (b)	\$ 35,151,367	\$ 45,049,445	\$ 48,444,716
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	73.14%	65.2%	62.0%
Covered Employee Payroll	\$ 4,201,063	\$ 4,372,250	\$ 4,423,864
Net Pension Liability as a percentage of Covered Employee Payroll	836.73%	2964.6%	2879.2%

Notes to Schedule:

¹ These results were provided by the prior actuary, Pension Board Consultants, Inc., Atlanta, Georgia.

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

	09/30/2014 ¹	09/30/2013 ¹	09/30/2012 ¹
Total Pension Liability			
Service Cost	860,340	1,282,649	1,605,230
Interest	8,151,071	8,164,809	7,835,535
Changes of benefit terms	-	(5,724,271)	-
Differences between Expected and Actual Experience	866,959	1,943,060	(2,734,414)
Changes of assumptions	3,431,350	3,373,204	2,145,252
Contributions - Buy Back	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(5,994,107)	(4,605,472)	(3,967,087)
Net Change in Total Pension Liability	\$ 7,315,613	\$ 4,433,979	\$ 4,884,516
Total Pension Liability - Beginning	\$110,763,474	\$106,329,495	\$101,444,979
Total Pension Liability - Ending (a)	\$118,079,087	\$110,763,474	\$106,329,495
Plan Fiduciary Net Position			
Contributions - Employer	3,825,656	2,485,715	3,025,714
Contributions - State	473,283	473,910	477,014
Contributions - Employee	156,000	61,590	29,199
Contributions - Buy Back	12,024	237,089	763,031
Net Investment Income	6,881,022	9,839,718	11,504,769
Benefit Payments, including Refunds of Employee Contributions	(5,994,107)	(4,605,472)	(3,967,087)
Administrative Expense	(69,051)	(74,488)	(73,465)
Net Change in Plan Fiduciary Net Position	5,284,827	8,418,062	11,759,175
Plan Fiduciary Net Position - Beginning	79,153,159	70,735,097	58,975,922
	\$ 84,437,986	\$ 79,153,159	\$ 70,735,097
Less reserve accounts	\$ 1,097,405	\$ 1,019,927	\$ 847,359
Plan Fiduciary Net Position - Ending (b)	\$ 83,340,581	\$ 78,133,232	\$ 69,887,738
Net Pension Liability - Ending (a) - (b)	\$ 34,738,506	\$ 32,630,242	\$ 36,441,757
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	70.6%	70.5%	65.7%
Covered Employee Payroll	\$ 4,377,970	\$ 4,870,112	\$ 5,296,929
Net Pension Liability as a percentage of Covered Employee Payroll	2697.1%	2274.4%	2007.4%

Notes to Schedule:

¹ These results were provided by the prior actuary, Pension Board Consultants, Inc., Atlanta, Georgia.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a percentage of Covered Employee Payroll
09/30/2017	\$5,236,129	\$5,236,129	\$ -	\$4,201,063	124.64%
09/30/2016 ¹	\$5,256,803	\$5,256,803	\$ -	\$4,372,250	120.23%
09/30/2015 ¹	\$4,452,427	\$4,452,427	\$ -	\$4,423,864	100.65%
09/30/2014 ¹	\$4,298,939	\$4,298,939	\$ -	\$4,466,862	96.24%
09/30/2013 ¹	\$2,832,155	\$2,832,155	\$ -	\$4,870,112	58.15%
09/30/2012 ¹	\$3,356,717	\$3,356,717	\$ -	\$5,296,929	63.37%
09/30/2011 ¹	\$4,017,967	\$4,017,967	\$ -	\$6,766,158	59.38%
09/30/2010 ¹	\$3,133,416	\$3,133,416	\$ -	\$6,966,752	44.98%
09/30/2009 ¹	\$3,278,441	\$3,278,441	\$ -	\$7,093,224	46.22%
09/30/2008 ¹	\$3,484,299	\$3,484,299	\$ -	\$7,577,663	45.98%

¹ These results were provided by the prior actuary, Pension Board Consultants, Inc., Atlanta, Georgia.

Notes to Schedule

Valuation Date: 10/01/2015

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:

Funding Method: Entry Age Normal Actuarial Cost Method.

Assets: Five year Smoothing.

Annual Investment Yield: 7.125% compounded annually.

Salary Scale: 4.0% compounded annually.

Increase in Benefits: 2.5% per year after retirement.

Mortality: Pre- and Post-Retirement:

All using RP-2000 Generational, Scale BB with

Female: 100% Annuitant White Collar

Male: 10% Annuitant White Collar/90% Annuitant Blue collar

Post-Disablement:

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.

Probability of Death: Line of Duty: 15%; Non-Line of Duty: 85%

Turnover: No vested refunds or disability recoveries.

Age	Probability of Disability	Probability of Withdrawal
25-35	0.002387-0.003867	0.060
40	0.005733	0.020
55	0.030600	0.000

Probability of Disability: Line of Duty: 45%; Non-Line of Duty: 55%

Percent Married: 80% of active participants married with spouses three years younger. Inactives and DROP participant status is same as reported tax status.

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Retirement:

The greater of the rates below:

Service	Annual Rate
25 YOS	0.50
26-29 YOS	0.25
30 YOS	1.00

Age	Annual Rate
45-49	0.05
50-56	0.10
57	0.50
58	0.70
59	0.90
60	1.00

SCHEDULE OF INVESTMENT RETURNS

Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2017	13.48%
09/30/2016 ¹	11.11%
09/30/2015 ¹	-2.34%
09/30/2014 ¹	9.00%
09/30/2013 ¹	14.64%
09/30/2012 ¹	20.16%
09/30/2011 ¹	1.77%
09/30/2010 ¹	9.70%
09/30/2009 ¹	0.79%
09/30/2008 ¹	-11.03%
09/30/2007 ¹	12.90%

¹ These results were provided by the prior actuary, Pension Board Consultants, Inc., Atlanta, Georgia.

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2018)

General Information about the Pension Plan

Plan Description

The Plan is a single-employer defined benefit pension plan administered by the Plan's Board of Trustees comprised of:

- a. Two City Council appointees,
- b. Two Members of the Department elected by the membership, and
- c. Fifth Member chosen by a majority of the other four.

Employees who are classified as full-time Police Officers hired prior to January 1, 2013 shall participate in the System as a condition of employment.

Plan Membership as of October 1, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	168
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	14
Active Plan Members	73
	<hr/>
	255
	<hr/>

Benefits Provided

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

Normal Retirement:

Date: Earlier of (1) Age 55 and 12 years of Credited Service, or (2) 25 years of Credited Service, regardless of Age.

Benefit: 3.00% of Average Final Compensation for each full year of Credited Service.

Early Retirement:

Eligibility: Age 50 and 12 Years of Credited Service.

Benefit: Accrued benefit, reduced 3% per year for each year preceding age 55.

Vesting:

Less than 12 years of Credited Service: Refund of Member Contributions.

12 or more years of Credited Service: Accrued benefit payable at the Member's otherwise Normal Retirement Date or Refund of Member Contributions.

Disability:

Eligibility Service Incurred: Total and permanent disability.

Eligibility Non-Service Incurred: Total and permanent disability with at least 12 years of Credited Service.

Benefit Line of Duty: 3.00% of Average Final Compensation for each full year of Credited Service. Minimum benefit is 42% of AFC.

Benefit Non Line of Duty: 3.00% of Average Final Compensation for each full year of Credited Service. Minimum benefit is 25% of AFC.

Death Benefits Pre-Retirement:

Line of Duty: 3.00% of Average Final Compensation for each full year of Credited Service. Minimum benefit is 42% of AFC.

None Line of Duty: For members with 12 or more years of Credited Service: 3.00% of Average Final Compensation for each full year of Credited Service. Minimum benefit is 25% of AFC. For members with less than 12 years of Credited Service: Refund of accumulated contributions without interest.

Cost-of-Living Adjustment:

Eligibility: All members in payment status.

Increased annually effective each January 1st based on Consumer Price Index as of the previous September 30th, limited to 3.00% per year for retirees and DROP participants. The limit is 2.00% per year after 10 years of benefit payments for retirees who retire on or after January 1, 2013. Additionally, Members who entered the DROP on or after January 1, 2013 shall not receive any cost-of-living adjustments while participating in the DROP.

Contributions

Member: 5.20% of Salary.

City and State: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII of Chapter 112, Florida Statutes.

Net Pension Liability

The measurement date is September 30, 2017.

The measurement period for the pension expense was October 1, 2016 to September 30, 2017.

The reporting period is October 1, 2017 through September 30, 2018.

The Sponsor's Net Pension Liability was measured as of September 30, 2017.

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, 2017 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	4.00%
Discount Rate	7.125%
Investment Rate of Return	7.125%

Mortality Rate Healthy Inactive Lives:

Female: RP 2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP 2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

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.

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 most recent actuarial experience study used to review the other significant assumptions was not available.

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 2017 the inflation rate assumption of the investment advisor was 2.50%.

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, 2017 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	45%	7.50%
International Equity	15%	8.50%
Broad Market Fixed Income	25%	2.50%
TIPS	5%	2.50%
Alternative Investments	10%	5.00%
Total	100%	

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.125 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	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Reporting Period Ending September 30, 2017 ¹	\$ 129,621,504	\$ 85,740,569	\$ 43,880,935
Changes for a Year:			
Service Cost	761,793	-	761,793
Interest	8,977,910	-	8,977,910
Differences between Expected and Actual Experience	(2,653,681)	-	(2,653,681)
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	4,331,190	(4,331,190)
Contributions - State	-	542,277	(542,277)
Contributions - Employee	-	218,457	(218,457)
Contributions - Buy Back	41,367	41,367	-
Net Investment Income	-	11,614,044	(11,614,044)
Benefit Payments, including Refunds of Employee Contributions	(8,755,072)	(8,755,072)	-
Administrative Expense	-	(115,371)	115,371
Less reserve accounts	-	(775,007)	775,007
Net Changes	(1,627,683)	7,101,885	(8,729,568)
Reporting Period Ending September 30, 2018	\$ 127,993,821	\$ 92,842,454	\$ 35,151,367

¹ The balance of the Total Pension Liability as of 09/30/2017 is included with the reserve accounts balances of prior measurement date.

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.125%	7.125%	8.125%
Sponsor's Net Pension Liability	\$ 52,879,640	\$ 35,151,367	\$ 20,760,084

Pension Plan Fiduciary Net Position.

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

**FINAL PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED
INFLOWS OF RESOURCES RELATED TO PENSIONS**
FISCAL YEAR SEPTEMBER 30, 2017

For the year ended September 30, 2017, the Sponsor has recognized a Pension Expense of \$7,380,689.

On September 30, 2017, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	381,712	-
Changes of assumptions	3,840,455	-
Net difference between Projected and Actual Earnings on Pension Plan investments	2,505,006	-
Employer and State contributions subsequent to the measurement date	4,873,467	-
Total	<u>\$ 11,600,640</u>	<u>\$ -</u>

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended September 30, 2017.

Other 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:	
2018	\$ 3,738,725
2019	\$ 2,398,144
2020	\$ 1,131,866
2021	\$ (541,562)
2022	\$ -
Thereafter	\$ -

**PRELIMINARY PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND
DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS
FISCAL YEAR SEPTEMBER 30, 2018**

For the year ended September 30, 2018, the Sponsor will recognize a Pension Expense of \$4,993,766.

On September 30, 2018, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	88,165	1,769,120
Changes of assumptions	1,352,629	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	2,962,878
Employer and State contributions subsequent to the measurement date	TBD	-
Total	<u>TBD</u>	<u>\$ 4,731,998</u>

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended September 30, 2018.

Other 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:	
2019	\$ 385,951
2020	\$ (880,327)
2021	\$ (1,669,195)
2022	\$ (1,127,633)
2023	\$ -
Thereafter	\$ -

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

Reporting Period Ending Measurement date	09/30/2018 09/30/2017	09/30/2017 09/30/2016 ¹	09/30/2016 09/30/2015 ¹
Total Pension Liability			
Service Cost	761,793	912,596	818,742
Interest	8,977,910	8,876,315	8,390,513
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(2,653,681)	-	312,274
Changes of assumptions	-	-	6,217,609
Contributions - Buy Back	41,367	-	-
Benefit Payments, including Refunds of Employee Contributions	(8,755,072)	(7,539,629)	(6,446,003)
Net Change in Total Pension Liability	\$ (1,627,683)	\$ 2,249,282	\$ 9,293,135
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Total Pension Liability - Ending (a)	\$ 127,993,821	\$ 129,621,504	\$ 127,372,222
Plan Fiduciary Net Position			
Contributions - Employer	4,331,190	3,830,736	3,830,839
Contributions - State	542,277	533,483	512,808
Contributions - Employee	218,457	227,357	240,097
Contributions - Buy Back	41,367	-	-
Net Investment Income	11,614,044	8,651,676	(2,362,487)
Benefit Payments, including Refunds of Employee Contributions	(8,755,072)	(7,539,629)	(6,446,003)
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Net Pension Liability - Ending (a) - (b)	\$ 35,151,367	\$ 45,049,445	\$ 48,444,716
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	73.14%	65.2%	62.0%
Covered Employee Payroll	\$ 4,201,063	\$ 4,372,250	\$ 4,423,864
Net Pension Liability as a percentage of Covered Employee Payroll	836.73%	2964.6%	2879.2%

Notes to Schedule:¹ These results were provided by the prior actuary, Pension Board Consultants, Inc., Atlanta, Georgia.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

Reporting Period Ending Measurement date	09/30/2015 09/30/2014 ¹	09/30/2014 09/30/2013 ¹	09/30/2013 09/30/2012 ¹
Total Pension Liability			
Service Cost	860,340	1,282,649	1,605,230
Interest	8,151,071	8,164,809	7,835,535
Changes of benefit terms	-	(5,724,271)	-
Differences between Expected and Actual Experience	866,959	1,943,060	(2,734,414)
Changes of assumptions	3,431,350	3,373,204	2,145,252
Contributions - Buy Back	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(5,994,107)	(4,605,472)	(3,967,087)
Net Change in Total Pension Liability	\$ 7,315,613	\$ 4,433,979	\$ 4,884,516
Total Pension Liability - Beginning	\$110,763,474	\$106,329,495	\$101,444,979
Total Pension Liability - Ending (a)	\$118,079,087	\$110,763,474	\$106,329,495
Plan Fiduciary Net Position			
Contributions - Employer	3,825,656	2,485,715	3,025,714
Contributions - State	473,283	473,910	477,014
Contributions - Employee	156,000	61,590	29,199
Contributions - Buy Back	12,024	237,089	763,031
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Administrative Expense	(69,051)	(74,488)	(73,465)
Net Change in Plan Fiduciary Net Position	5,284,827	8,418,062	11,759,175
Plan Fiduciary Net Position - Beginning	79,153,159	70,735,097	58,975,922
	\$ 84,437,986	\$ 79,153,159	\$ 70,735,097
Less reserve accounts	\$ 1,097,405	\$ 1,019,927	\$ 847,359
Plan Fiduciary Net Position - Ending (b)	\$ 83,340,581	\$ 78,133,232	\$ 69,887,738
Net Pension Liability - Ending (a) - (b)	\$ 34,738,506	\$ 32,630,242	\$ 36,441,757
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	70.6%	70.5%	65.7%
Covered Employee Payroll	\$ 4,377,970	\$ 4,870,112	\$ 5,296,929
Net Pension Liability as a percentage of Covered Employee Payroll	2697.1%	2274.4%	2007.4%

Notes to Schedule:¹ These results were provided by the prior actuary, Pension Board Consultants, Inc., Atlanta, Georgia.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a percentage of Covered Employee Payroll
09/30/2017	\$5,236,129	\$5,236,129	\$ -	\$4,201,063	124.64%
09/30/2016 ¹	\$5,256,803	\$5,256,803	\$ -	\$4,372,250	120.23%
09/30/2015 ¹	\$4,452,427	\$4,452,427	\$ -	\$4,423,864	100.65%
09/30/2014 ¹	\$4,298,939	\$4,298,939	\$ -	\$4,466,862	96.24%
09/30/2013 ¹	\$2,832,155	\$2,832,155	\$ -	\$4,870,112	58.15%
09/30/2012 ¹	\$3,356,717	\$3,356,717	\$ -	\$5,296,929	63.37%
09/30/2011 ¹	\$4,017,967	\$4,017,967	\$ -	\$6,766,158	59.38%
09/30/2010 ¹	\$3,133,416	\$3,133,416	\$ -	\$6,966,752	44.98%
09/30/2009 ¹	\$3,278,441	\$3,278,441	\$ -	\$7,093,224	46.22%
09/30/2008 ¹	\$3,484,299	\$3,484,299	\$ -	\$7,577,663	45.98%

¹ These results were provided by the prior actuary, Pension Board Consultants, Inc., Atlanta, Georgia.

Notes to Schedule

Valuation Date: 10/01/2015

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:

Funding Method: Entry Age Normal Actuarial Cost Method.
 Assets: Five year Smoothing.
 Annual Investment Yield: 7.125% compounded annually.
 Salary Scale: 4.0% compounded annually.
 Increase in Benefits: 2.5% per year after retirement.
 Mortality: Pre- and Post-Retirement:
 All using RP-2000 Generational, Scale BB with
 Female: 100% Annuitant White Collar
 Male: 10% Annuitant White Collar/90% Annuitant Blue collar
 Post-Disablement:
 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.
 Probability of Death: Line of Duty: 15%; Non-Line of Duty: 85%
 Turnover: No vested refunds or disability recoveries.

Age	Probability of Disability	Probability of Withdrawal
25-35	0.002387-0.003867	0.060
40	0.005733	0.020
55	0.0306	0.000

Probability of Disability: Line of Duty: 45%; Non-Line of Duty: 55%

Percent Married: 80% of active participants married with spouses three years younger. Inactives and DROP participant status is same as reported tax status.

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Retirement:

The greater of the rates below:

Service	Annual Rate
25 YOS	0.50
26-29 YOS	0.25
30 YOS	1.00

Age	Annual Rate
45-49	0.05
50-56	0.10
57	0.50
58	0.70
59	0.90
60	1.00

FINAL COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2017

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 48,444,716	\$ -	\$ 14,830,115	\$ -
Employer and State Contributions made after 09/30/2016	-	-	4,873,467	-
Total Pension Liability Factors:				
Service Cost	912,596	-	-	912,596
Interest	8,876,315	-	-	8,876,315
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	-	-	-	-
Current year amortization of experience difference	-	-	(293,547)	293,547
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(2,487,826)	2,487,826
Benefit Payments, including Refunds of Employee Contributions	(7,539,629)	-	-	-
Net change	2,249,282	-	2,092,094	12,570,284
Plan Fiduciary Net Position:				
Contributions - Employer	3,830,736	-	(3,830,736)	-
Contributions - State	533,483	-	(533,483)	-
Contributions - Employee	227,357	-	-	(227,357)
Projected Net Investment Income	5,978,658	-	-	(5,978,658)
Difference between projected and actual earnings on Pension Plan investments	2,673,018	-	-	-
Current year amortization	-	-	(957,350)	957,350
Benefit Payments, including Refunds of Employee Contributions	(7,539,629)	-	-	-
Administrative Expenses	(93,853)	-	-	93,853
Other: Change in reserve accounts	34,783	-	-	(34,783)
Net change	5,644,553	-	(5,321,569)	(5,189,595)
Ending Balance	\$ 45,049,445	\$ -	\$ 11,600,640	\$ 7,380,689

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2018

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 45,049,445	\$ -	\$ 11,600,640	\$ -
Employer and State Contributions made after 09/30/2017	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	761,793	-	-	761,793
Interest	8,977,910	-	-	8,977,910
Changes in benefit terms	-	-	-	-
Contributions - Buy Back	41,367	-	-	41,367
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(2,653,681)	2,653,681	-	-
Current year amortization of experience difference	-	(884,561)	(293,547)	(591,014)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(2,487,826)	2,487,826
Benefit Payments, including Refunds of Employee Contributions	(8,755,072)	-	-	-
Net change	<u>(1,627,683)</u>	<u>1,769,120</u>	<u>(2,781,373)</u>	<u>11,677,882</u>
Plan Fiduciary Net Position:				
Contributions - Employer	4,331,190	-	(4,331,190)	-
Contributions - State	542,277	-	(542,277)	-
Contributions - Employee	218,457	-	-	(218,457)
Contributions - Buy Back	41,367	-	-	(41,367)
Projected Net Investment Income	5,975,880	-	-	(5,975,880)
Difference between projected and actual earnings on Pension Plan investments	5,638,164	5,638,164	-	-
Current year amortization	-	(1,127,632)	(957,352)	(170,280)
Benefit Payments, including Refunds of Employee Contributions	(8,755,072)	-	-	-
Administrative Expenses	(115,371)	-	-	115,371
Other: Change in reserve accounts	393,503	-	-	(393,503)
Net change	<u>8,270,395</u>	<u>4,510,532</u>	<u>(5,830,819)</u>	<u>(6,684,116)</u>
Ending Balance	<u>\$ 35,151,367</u>	<u>\$ 6,279,652</u>	<u>TBD</u>	<u>\$ 4,993,766</u>

* Employer and State Contributions subsequent to the measurement date made after September 30, 2017 but made on or before September 30, 2018 need to be added.

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)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2016	\$ (2,505,006)	5	\$ 957,350	\$ 957,352	\$ 957,350	\$ 1,131,866	\$ (541,562)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (5,638,164)	5	\$ -	\$ (1,127,632)	\$ (1,127,633)	\$ (1,127,633)	\$ (1,127,633)	\$ (1,127,633)	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 957,350	\$ (170,280)	\$ (170,283)	\$ 4,233	\$ (1,669,195)	\$ (1,127,633)	\$ -	\$ -	\$ -	\$ -	\$ -

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)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2016	\$ 3,840,455	4	\$ 2,487,826	\$ 2,487,826	\$ 1,352,629	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 2,487,826	\$ 2,487,826	\$ 1,352,629	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

AMORITZATION 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)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2016	\$ 381,712	4	\$ 293,547	\$ 293,547	\$ 88,165	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (2,653,681)	3	\$ -	\$ (884,561)	\$ (884,560)	\$ (884,560)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 293,547	\$ (591,014)	\$ (796,395)	\$ (884,560)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -