

CITY OF NAPLES
POLICE OFFICERS' RETIREMENT TRUST FUND

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2018

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2020

GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2018



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

December 19, 2018

Board of Trustees
City of Naples Police Officers' Retirement Trust Fund
c/o City of Naples Finance Department
735 8th Street South
Naples, FL 34102

Re: City of Naples Police Officers' Retirement Trust Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Naples Police Officers' Retirement Trust 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. Use of the results for other purposes may not be applicable and may produce significantly different results.

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. Due to the limited scope of the valuation, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the City of Naples, 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. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2018 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.

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.

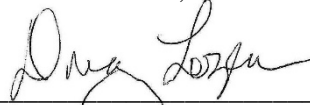
To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Naples, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the City of Naples Police Officers' Retirement Trust 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:



Douglas H. Lozen, EA, MAAA
Enrolled Actuary #17-7778

DHL/lke

Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Naples Police Officers' Retirement Trust Fund, performed as of October 1, 2018, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2020. Funding requirements are projected for a lump sum City deposit on October 1, 2019, based on the Board's adoption of a Beginning of Year Funding Method.

The contribution requirements, compared with those set forth in the October 1, 2017 actuarial valuation report, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2018 <u>9/30/2020</u>	10/1/2017 <u>9/30/2019</u>
Minimum Required Contribution % of Projected Annual Payroll	59.76%	61.48%
Member Contributions (Est.) % of Projected Annual Payroll	4.41%	4.49%
City And State Required Contribution % of Projected Annual Payroll	55.35%	56.99%
State Contribution (Est.) ¹ % of Projected Annual Payroll	\$718,404 16.01%	\$718,404 16.01%
City Required Contribution ² % of Projected Annual Payroll	39.34%	40.98%

¹ Represents the amount received in calendar 2018. As per a Mutual Consent Agreement between the Membership and the City, all State Monies received each year will be available to offset the City's required contribution.


² The required contribution from the combination of City and State sources for the year ending September 30, 2020, is 55.35% of the actual payroll realized in that year. As a budgeting tool, the City may contribute 39.34% of each Member's Salary and then make a one-time adjustment to account for the actual State Monies received. Please note that the City has access to a prepaid contribution of \$86,104.30 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2019.

Experience since the prior valuation has been more favorable than expected on the basis of the Plan's actuarial assumptions. The primary sources of actuarial gain included an 8.78% investment return (Actuarial Asset Basis), exceeding the 7.50% assumption, and favorable turnover experience. Additionally, this valuation of the Plan incorporates method and assumption changes, resulting from a special actuarial experience study.

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: 

Douglas H. Lozen, EA, MAAA

By: 

Sara E. Carlson, ASA, EA, MAAA

CHANGES SINCE PRIOR VALUATION

Plan Changes

There have been no changes in benefits since the prior valuation.

Actuarial Assumption/Method Changes

Assumptions

In conjunction with this valuation of the Plan, all recommended assumption changes from the August 4, 2017 Experience Study have been incorporated. Additionally, the investment return assumption will reduce from 7.5% to 7.0% according to the following schedule:

<u>Valuation Date</u>	<u>Assumption</u>
October 1, 2018	7.4%
October 1, 2019	7.3%
October 1, 2020	7.2%
October 1, 2021	7.1%
October 1, 2022	7.0%

Methods

As of the October 1, 2018 valuation, the remaining amortization period of any component of the Unfunded Actuarial Accrued Liability (UAAL) will not exceed 15 years. Additionally, future changes to the UAAL will be amortized as a level dollar according to the following:

- Experience Gains/Losses – 10 years
- Assumption/Method Changes – 20 years
- Benefit Changes – 30 years

All changes described above were approved by the Board at the April 26, 2018 Workshop, with the exception of the investment return assumption schedule. The proposed investment return reduction was approved by the Board at the December 12, 2018 meeting.

CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2017	38.49%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	2.49%
Change in Normal Cost Rate	-0.70%
Change in Administrative Expense Percentage	-0.15%
Payroll Change Effect on UAAL Amortization	-1.84%
Investment Return (Actuarial Asset Basis)	-1.09%
Salary Increases	0.15%
Active Decrements	-0.43%
Inactive Mortality	0.17%
Assumption/Method Change	3.85%
Greater than Expected UAAL Decrease	-0.70%
Other	<u>-0.91%</u>
Total Change in Contribution	0.84%
(3) Contribution Determined as of October 1, 2018	39.33%

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump New Method <u>10/1/2018</u>	Old Assump Old Method <u>10/1/2018</u>	<u>10/1/2017</u>
A. Participant Data			
Actives	58	58	56
Service Retirees	62	62	59
DROP Retirees	9	9	10
Beneficiaries	7	7	7
Disability Retirees	3	3	3
Terminated Vested	<u>16</u>	<u>16</u>	<u>17</u>
Total	155	155	152
Total Annual Payroll	4,487,912	4,487,912	4,285,903
Annual Rate of Payments to:			
Service Retirees	2,952,894	2,952,894	2,798,937
DROP Retirees	612,091	612,091	658,617
Beneficiaries	161,761	161,761	160,247
Disability Retirees	134,525	134,525	134,525
Terminated Vested	175,328	175,328	211,151
B. Assets			
Actuarial Value (AVA) ¹	52,094,895	52,094,895	48,654,757
Market Value (MVA) ¹	53,954,826	53,954,826	49,670,843
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	19,800,181	18,863,122	18,165,771
Disability Benefits	1,154,877	999,065	959,459
Death Benefits	190,600	163,954	155,430
Vested Benefits	948,156	898,785	964,442
Refund of Contributions	29,310	50,747	42,795
Service Retirees	36,808,751	36,459,449	34,881,482
DROP Retirees ¹	10,488,428	10,394,279	10,611,530
Beneficiaries	1,663,335	1,650,094	1,656,345
Disability Retirees	1,628,939	1,613,586	1,627,572
Terminated Vested	1,497,827	1,477,328	2,208,274
Share Plan Balances ¹	<u>0</u>	<u>0</u>	<u>0</u>
Total	74,210,404	72,570,409	71,273,100

C. Liabilities - (Continued)	New Assump New Method <u>10/1/2018</u>	Old Assump Old Method <u>10/1/2018</u>	<u>10/1/2017</u>
Present Value of Future Salaries	33,156,218	29,450,832	28,867,390
Present Value of Future Member Contributions	1,461,751	1,298,392	1,297,183
Normal Cost (Retirement)	602,628	487,185	496,821
Normal Cost (Disability)	101,972	92,466	85,516
Normal Cost (Death)	10,223	8,249	7,103
Normal Cost (Vesting)	72,522	74,225	74,766
Normal Cost (Refunds)	<u>7,615</u>	<u>11,200</u>	<u>8,659</u>
Total Normal Cost	794,960	673,325	672,865
Present Value of Future Normal Costs	5,307,157	3,998,504	4,040,592
Accrued Liability (Retirement)	15,767,529	15,970,677	15,210,975
Accrued Liability (Disability)	469,113	423,858	417,857
Accrued Liability (Death)	123,492	113,898	111,811
Accrued Liability (Vesting)	454,387	461,409	499,305
Accrued Liability (Refunds)	1,446	7,327	7,357
Accrued Liability (Inactives) ¹	52,087,280	51,594,736	50,985,203
Share Plan Balances ¹	<u>0</u>	<u>0</u>	<u>0</u>
Total Actuarial Accrued Liability (EAN AL)	68,903,247	68,571,905	67,232,508
Unfunded Actuarial Accrued Liability (UAAL)	16,808,352	16,477,010	18,577,751
Funded Ratio (AVA / EAN AL)	75.6%	76.0%	72.4%

D. Actuarial Present Value of	New Assump New Method	Old Assump Old Method	
Accrued Benefits	<u>10/1/2018</u>	<u>10/1/2018</u>	<u>10/1/2017</u>
Vested Accrued Benefits			
Inactives + Share Plan Balances ¹	52,087,280	51,594,736	50,985,203
Actives	11,076,978	11,221,493	10,831,862
Member Contributions	<u>2,709,112</u>	<u>2,709,112</u>	<u>2,590,166</u>
Total	65,873,370	65,525,341	64,407,231
Non-vested Accrued Benefits	<u>1,627,946</u>	<u>1,449,699</u>	<u>1,472,732</u>
Total Present Value			
Accrued Benefits (PVAB)	67,501,316	66,975,040	65,879,963
Funded Ratio (MVA / PVAB)	79.9%	80.6%	75.4%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	526,276	0	
New Accrued Benefits	0	(4,668)	
Benefits Paid	0	(3,702,412)	
Interest	0	4,802,157	
Other	<u>0</u>	<u>0</u>	
Total	526,276	1,095,077	

	New Assump New Method	Old Assump Old Method	
Valuation Date	10/1/2018	10/1/2018	10/1/2017
Applicable to Fiscal Year Ending	<u>9/30/2020</u>	<u>9/30/2020</u>	<u>9/30/2019</u>

E. Pension Cost

Normal Cost (with interest) % of Total Annual Payroll ²	17.71	15.00	15.70
Administrative Expenses (with interest) % of Total Annual Payroll ²	1.95	1.95	2.10
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years (as of 10/1/2018, with interest) % of Total Annual Payroll ²	40.10	38.95	43.68
Minimum Required Contribution % of Total Annual Payroll ²	59.76	55.90	61.48
Expected Member Contributions % of Total Annual Payroll ²	4.41	4.41	4.49
Expected City and State Contribution % of Total Annual Payroll ²	55.35	51.49	56.99

F. Past Contributions

Plan Years Ending:	<u>9/30/2018</u>
City and State Requirement	2,772,066
Actual Contributions Made:	
Members (excluding buyback)	202,166
City	2,053,662
State	<u>718,404</u>
Total	2,974,232

G. Net Actuarial (Gain)/Loss (1,177,824)

¹ The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2018 and 9/30/2017.

² Contributions developed as of 10/1/2018 are expressed as a percentage of total annual payroll at 10/1/2018 of \$4,487,912.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2018	16,808,352
2019	16,119,529
2020	15,379,731
2025	10,773,922
2029	5,853,707
2034	108,270
2038	0

I. (i) 5 Year Comparison of Actual and Assumed Salary Increases

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2018	4.70%	5.05%
Year Ended 9/30/2017	7.18%	5.12%
Year Ended 9/30/2016	3.23%	5.17%
Year Ended 9/30/2015	2.97%	5.08%
Year Ended 9/30/2014	3.70%	6.84%

(ii) 5 Year Comparison of Investment Return on Market Value and Actuarial Value

	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended 9/30/2018	10.21%	8.78%	7.50%
Year Ended 9/30/2017	11.98%	8.89%	7.50%
Year Ended 9/30/2016	7.89%	9.89%	7.50%
Year Ended 9/30/2015	0.79%	9.52%	7.50%
Year Ended 9/30/2014	12.60%	11.38%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2018	\$4,787,128
	10/1/2008	5,434,133
(b) Total Increase		-11.91%
(c) Number of Years		10.00
(d) Average Annual Rate		-1.26%

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.



Douglas H. Lozen, EA, MAAA
Enrolled Actuary #17-7778

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

Mr. Steve Bardin
Municipal Police and Fire
Pension Trust Funds
Division of Retirement
Post Office Box 3010
Tallahassee, FL 32315-3010

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES
(PRIOR ASSUMPTIONS AND AMORTIZATION METHOD)

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2017	\$18,577,751
(2)	Sponsor Normal Cost developed as of October 1, 2017	480,428
(3)	Expected administrative expenses for the year ended September 30, 2018	90,007
(4)	Expected interest on (1), (2) and (3)	1,432,739
(5)	Sponsor contributions to the System during the year ended September 30, 2018	2,772,066
(6)	Expected interest on (5)	154,025
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2018 (1)+(2)+(3)+(4)-(5)-(6)	17,654,834
(8)	Change to UAAL due to Actuarial (Gain)/Loss	(1,177,824)
(9)	Unfunded Actuarial Accrued Liability as of October 1, 2018	16,477,010

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2018 <u>Amount</u>	Amortization <u>Amount</u>
	10/1/1997	9	993,045	144,816
	10/1/1999	11	1,614,838	205,344
	10/1/2000	12	(757,831)	(91,136)
	10/1/2002	14	3,229,710	353,908
	10/1/2003	15	1,808,908	190,629
Actuarial Loss	10/1/2004	16	2,073,665	211,015
Amendment	10/1/2004	16	(7,241)	(737)
Actuarial Gain	10/1/2005	17	(247,743)	(24,429)
Assum. Change	10/1/2005	17	977,733	96,409
Actuarial Gain	10/1/2006	18	(389,021)	(37,284)
Assum. Change	10/1/2006	18	1,038,599	99,540
Actuarial Loss	10/1/2007	19	1,464,464	136,789
Assum./Method Change	10/1/2007	19	106,487	9,946
Amendment	10/1/2007	19	712,093	66,513
Actuarial Loss	10/1/2008	20	3,131,444	285,740
Actuarial Loss	10/1/2009	21	2,361,211	210,926
Assumption Changes	10/1/2009	21	1,726,597	154,236
Actuarial Loss	10/1/2010	22	2,660,939	233,140
Actuarial Loss	10/1/2011	23	3,103,885	267,180
Benefit Changes	10/1/2011	23	(6,020,323)	(518,225)
Actuarial Loss	10/1/2012	24	1,246,565	105,581

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2018 <u>Amount</u>	Amortization <u>Amount</u>
Actuarial Gain	10/1/2013	25	(724,243)	(60,439)
Actuarial Gain	10/1/2014	26	(1,150,045)	(94,678)
Assumption Change	10/1/2014	26	130,099	10,710
Actuarial Gain	10/1/2015	27	(562,151)	(45,705)
Actuarial Gain	10/1/2016	28	(853,480)	(68,600)
Assumption Change	10/1/2016	28	608,106	48,878
Actuarial Gain	10/1/2017	29	(621,476)	(49,428)
Actuarial Gain	10/1/2018	30	<u>(1,177,824)</u>	<u>(92,770)</u>
			16,477,010	1,747,869

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES
(NEW ASSUMPTIONS AND AMORTIZATION METHOD)

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2017	\$18,577,751
(2)	Sponsor Normal Cost developed as of October 1, 2017	480,428
(3)	Expected administrative expenses for the year ended September 30, 2018	90,007
(4)	Expected interest on (1), (2) and (3)	1,432,739
(5)	Sponsor contributions to the System during the year ended September 30, 2018	2,772,066
(6)	Expected interest on (5)	154,025
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2018 (1)+(2)+(3)+(4)-(5)-(6)	17,654,834
(8)	Change to UAAL due to Assumption Change	331,342
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(1,177,824)
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2018	16,808,352

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2018 <u>Amount</u>	Amortization <u>Amount</u>
	10/1/1997	9	993,045	144,341
	10/1/1999	11	1,614,838	204,526
	10/1/2000	12	(757,831)	(90,742)
	10/1/2002	14	3,229,710	352,150
	10/1/2003	15	1,808,908	189,623
Actuarial Loss	10/1/2004	15	2,073,665	217,377
Amendment	10/1/2004	15	(7,241)	(759)
Actuarial Gain	10/1/2005	15	(247,743)	(25,970)
Assum. Change	10/1/2005	15	977,733	102,493
Actuarial Gain	10/1/2006	15	(389,021)	(40,780)
Assum. Change	10/1/2006	15	1,038,599	108,874
Actuarial Loss	10/1/2007	15	1,464,464	153,516
Assum./Method Change	10/1/2007	15	106,487	11,163
Amendment	10/1/2007	15	712,093	74,647
Actuarial Loss	10/1/2008	15	3,131,444	328,261
Actuarial Loss	10/1/2009	15	2,361,211	247,520
Assumption Changes	10/1/2009	15	1,726,597	180,995
Actuarial Loss	10/1/2010	15	2,660,939	278,940
Actuarial Loss	10/1/2011	15	3,103,885	325,372

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2018 <u>Amount</u>	Amortization <u>Amount</u>
Benefit Changes	10/1/2011	15	(6,020,323)	(631,095)
Actuarial Loss	10/1/2012	15	1,246,565	130,674
Actuarial Gain	10/1/2013	15	(724,243)	(75,921)
Actuarial Gain	10/1/2014	15	(1,150,045)	(120,556)
Assumption Change	10/1/2014	15	130,099	13,638
Actuarial Gain	10/1/2015	15	(562,151)	(58,929)
Actuarial Gain	10/1/2016	15	(853,480)	(89,468)
Assumption Change	10/1/2016	15	608,106	63,746
Actuarial Gain	10/1/2017	15	(621,476)	(65,148)
Actuarial Gain	10/1/2018	10	(1,177,824)	(159,041)
Assump Change	10/1/2018	20	<u>331,342</u>	<u>30,033</u>
			16,808,352	1,799,480

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2017	\$18,577,751
(2) Expected UAAL as of October 1, 2018	17,654,834
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(618,718)
Salary Increases	83,335
Active Decrements	(244,854)
Inactive Mortality	96,785
Other	<u>(494,372)</u>
Increase in UAAL due to (Gain)/Loss	(1,177,824)
Assumption Changes	<u>331,342</u>
(4) Actual UAAL as of October 1, 2018	\$16,808,352

ACTUARIAL ASSUMPTIONS AND METHODS

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

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 above assumption rates 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 Milliman's July 1, 2016 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate

7.40% (prior year 7.50%) per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

Salary Increases

See below table. These rates were incorporated with the October 1, 2014 valuation as the result of the October 31, 2014 Experience Study.

<u>Credited Service</u>	<u>Increase</u>
1	6.0%
2-9	5.5%
10-14	5.0%
15-19	4.5%
20+	4.0%

Payroll Growth

None for purposes of amortizing the Unfunded Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.

Funding Method

Entry Age Normal Actuarial Cost Method.

Administrative Expenses

\$87,292 annually, based on actual expenses incurred in the prior fiscal year.

Normal Retirement Age

Hired prior to 4/1/2012: Earlier of 1) age 50 or 2) the completion of 25 years of credited service. See below table for assumed retirement rates.

Age for Members with less than 25 <u>years of service</u>	Assumed retirement <u>rate</u>
50-54	20%
55 and older	100%

100% assumed retirement upon first eligibility for Members with at least 25 years of Credited Service.

Hired after 3/31/2012: 100% assumed retirement upon the earlier of 1) age 60 with completion of 8 years of credited service, or 2) the completion of 30 years of credited service.

The above rates were adopted as the result of the August 4, 2017 Experience Study.

Early Retirement Age

Hired prior to 4/1/2012: Earlier of 1) age 45 or 2) the completion of 20 years of credited service.

Age for Members with less than 20 <u>years of service</u>	Assumed retirement <u>rate</u>
45-49	0%
50 and older	5%

Hired after 3/31/2012: Attainment of age 45 and the completion of 20 years of credited service. Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year.

The above rates were adopted as the result of the August 4, 2017 Experience Study.

Disability

See below table for sample rates. It is assumed that 75% of Disability Retirements are service-related. This assumption is in line with the national average for municipal defined benefit pension programs.

<u>Age</u>	<u>% Becoming disabled during the year</u>
20	0.14%
25	0.15%
30	0.18%
35	0.23%
40	0.30%
45	0.51%
50	1.00%

Termination

<u>Credited Service</u>	<u>Hired prior to 4/1/12</u>	<u>Hired after 3/31/12</u>
0	16%	16%
1	13%	13%
2	13%	13%
3	10%	10%
4	0%	4%
5	4%	4%
6	4%	4%
7	4%	0%
8 or more	4%	4%

The above rates were adopted as the result of the August 4, 2017 Experience Study.

Post-Retirement COLA

3% per year at ages 55 through 62 for Service Retirees and surviving Beneficiaries. No COLA for Disability Retirees, Vested Terminated Members, or Members hired after 3/31/2012.

Actuarial Asset Method

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

GLOSSARY

Total Annual Payroll is the projected annual rate of pay as of the valuation date of 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.

Normal (Current Year's) Cost is determined for each participant as the present value of future benefits, determined as of the Member's entry age, amortized as a level percentage of compensation over the anticipated number of years of participation, determined as of the entry age.

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.

Unfunded Actuarial Accrued Liability (UAAL) is the difference between the actuarial accrued liability (described above) and the actuarial value of assets. Under the Entry Age Normal Actuarial Cost Method, an actuarial gain or loss, based on actual versus expected UAAL, is determined in conjunction with each valuation of the plan.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
1996	438,677.91	_____%
1997	486,936.40	11.0%
1998	500,979.37	2.9%
1999	521,102.07	4.0%
2000	544,431.81	4.5%
2001	578,886.07	6.3%
2002	679,725.72	17.4%
2003	780,142.25	14.8%
2004	784,882.00	0.6%
2005	726,369.64	-7.5%
2006	773,953.70	6.6%
2007	740,322.92	-4.3%
2008	726,369.64	-1.9%
2009	625,279.98	-13.9%
2010	546,848.13	-12.5%
2011	553,719.90	1.3%
2012	519,408.75	-6.2%
2013	512,283.63	-1.4%
2014	540,981.00	5.6%
2015	551,656.38	2.0%
2016	610,146.10	10.6%
2017	792,677.05	29.9%
2018	718,403.79	-9.4%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2018

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Checking Account	1,916.14	1,916.14
Money Market	999,956.00	999,956.00
Cash	43,909.52	43,909.52
Total Cash and Equivalents	1,045,781.66	1,045,781.66
Receivables:		
Member Contributions in Transit	7,217.62	7,217.62
Member Buy-Back Contributions	222.37	222.37
Member Contributions	59.54	59.54
State Contributions	718,403.79	718,403.79
Total Receivable	725,903.32	725,903.32
Investments:		
Fixed Income	8,301,125.14	8,161,828.72
Equities	28,840,177.98	37,206,506.74
Mutual Funds:		
Fixed Income	1,006,897.11	1,016,878.53
Pooled/Common/Commingled Funds:		
Hedge	1,160,000.00	1,330,179.45
Real Estate	3,899,977.64	4,570,830.82
Total Investments	43,208,177.87	52,286,224.26
Total Assets	44,979,862.85	54,057,909.24
<u>LIABILITIES</u>		
Payables:		
Administrative Expenses	16,512.48	16,512.48
Prepaid Member Contribution	466.85	466.85
Prepaid City Contribution	86,104.30	86,104.30
Total Liabilities	103,083.63	103,083.63
NET POSITION RESTRICTED FOR PENSIONS	44,876,779.22	53,954,825.61

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2018
Market Value Basis

ADDITIONS

Contributions:

Member	202,166.37
Buy-Back	2,294.99
City	2,053,662.15
State	718,403.79

Total Contributions	2,976,527.30
---------------------	--------------

Investment Income:

Net Realized Gain (Loss)	2,792,986.76	
Unrealized Gain (Loss)	1,357,633.48	
Net Increase in Fair Value of Investments		4,150,620.24
Interest & Dividends		1,197,238.83
Less Investment Expense ¹		(253,802.98)

Net Investment Income	5,094,056.09
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Metlife Benefit & ADM Fee Reimbursements	3,103.32
--	----------

Total Additions	8,073,686.71
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DEDUCTIONS

Distributions to Members:

Benefit Payments	3,165,643.41
Lump Sum DROP Distributions	479,261.31
Refunds of Member Contributions	57,507.42

Total Distributions	3,702,412.14
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Administrative Expense	87,292.03
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Total Deductions	3,789,704.17
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Net Increase in Net Position	4,283,982.54
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	49,670,843.07
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End of the Year	53,954,825.61
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¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION

September 30, 2018

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. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. 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	Gain/Loss	<u>Gains/(Losses) Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2018	2019	2020	2021	2022
09/30/2014	1,904,870	0	0	0	0	0
09/30/2015	(2,848,714)	(569,742)	0	0	0	0
09/30/2016	207,211	82,885	41,443	0	0	0
09/30/2017	2,062,839	1,237,703	825,135	412,567	0	0
09/30/2018	1,386,356	1,109,085	831,814	554,543	277,272	0
Total		1,859,931	1,698,392	967,110	277,272	0

<u>Development of Investment Gain/(Loss)</u>	
Market Value of Assets, including Prepaid Contributions, 09/30/2017	49,924,654
Contributions Less Benefit Payments & Admin Expenses	(977,313)
Expected Investment Earnings*	3,707,700
Actual Net Investment Earnings	5,094,056
2018 Actuarial Investment Gain/(Loss)	<u>1,386,356</u>

*Expected Investment Earnings = $0.075 * [49,924,654 + 0.5 * (977,313)]$

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2018	53,954,826
(2) Gains/(Losses) Not Yet Recognized	<u>1,859,931</u>
(3) Actuarial Value of Assets, 09/30/2018, (1) - (2)	52,094,895

(A) 09/30/2017 Actuarial Assets, including Prepaid Contributions: 48,908,568

(I) Net Investment Income:	
1. Interest and Dividends	1,197,239
2. Realized Gains (Losses)	2,792,987
3. Change in Actuarial Value	513,788
4. Investment Expenses	<u>(253,803)</u>
Total	4,250,211

(B) 09/30/2018 Actuarial Assets, including Prepaid Contributions: 52,181,466

Actuarial Assets Rate of Return = $2I/(A+B-I)$: 8.78%
Market Value of Assets Rate of Return: 10.21%

Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis) 618,718

10/01/2018 Limited Actuarial Assets (not including Prepaid): 52,094,895

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
SEPTEMBER 30, 2018
Actuarial Asset Basis

REVENUES

Contributions:		
Member	202,166.37	
Buy-Back	2,294.99	
City	2,053,662.15	
State	718,403.79	
Total Contributions		2,976,527.30
Earnings from Investments:		
Interest & Dividends	1,197,238.83	
Net Realized Gain (Loss)	2,792,986.76	
Change in Actuarial Value	513,788.48	
Total Earnings and Investment Gains		4,504,014.07
Metlife Benefit & ADM Fee Reimbursements		3,103.32

EXPENDITURES

Distributions to Members:		
Benefit Payments	3,165,643.41	
Lump Sum DROP Distributions	479,261.31	
Refunds of Member Contributions	57,507.42	
Total Distributions		3,702,412.14
Expenses:		
Investment related ¹	253,802.98	
Administrative	87,292.03	
Total Expenses		341,095.01
Change in Net Assets for the Year		3,440,137.54
Net Assets Beginning of the Year		48,654,757.07
Net Assets End of the Year ²		52,094,894.61

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, 2017 to September 30, 2018

Beginning of the Year Balance	1,567,141.99
Plus Additions	671,942.64
Investment Return Earned	22,769.72
Less Distributions	(479,261.31)
End of the Year Balance	1,782,593.04

RECONCILIATION OF CITY'S SHORTFALL/(PREPAID) CONTRIBUTION
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2018

(1) City and State Required Contribution Rate	61.15%
(2) Pensionable Payroll Derived from Member Contributions	\$4,533,223.13
(3) Required City and State Contribution (1) x (2)	2,772,065.94
(4) Less Allowable State Contribution	<u>(718,403.79)</u>
(5) Equals Required City Contribution for Fiscal 2018	2,053,662.15
(6) Less 2017 Prepaid Contribution	(253,688.45)
(7) Less Actual City Contributions	<u>(1,886,078.00)</u>
(8) Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2018	(\$86,104.30)

STATISTICAL DATA

	<u>10/1/2015</u>	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>
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Actives - Hired on or before March 31, 2012

Number	47	41	39	36
Average Current Age	42.6	42.4	43.3	44.3
Average Age at Employment	29.6	29.2	28.9	28.6
Average Past Service	13.0	13.2	14.4	15.6
Average Annual Salary	\$74,791	\$73,360	\$79,976	\$85,091

Actives - Hired after March 31, 2012

Number	13	17	17	22
Average Current Age	34.0	34.3	35.2	34.7
Average Age at Employment	32.6	32.4	32.6	32.0
Average Past Service	1.4	1.9	2.6	2.7
Average Annual Salary	\$62,402	\$63,215	\$68,637	\$64,756

Service Retirees

Number	57	57	59	62
Average Current Age	61.7	61.9	62.2	62.4
Average Annual Benefit	\$42,914	\$44,004	\$47,440	\$47,627

DROP Retirees

Number	9	12	10	9
Average Current Age	51.3	52.2	52.2	53.2
Average Annual Benefit	\$77,280	\$71,652	\$65,862	\$68,010

Beneficiaries

Number	7	7	7	7
Average Current Age	64.2	65.2	66.2	67.2
Average Annual Benefit	\$22,479	\$22,682	\$22,892	\$23,109

Disability Retirees

Number	2	3	3	3
Average Current Age	50.2	48.4	49.4	50.4
Average Annual Benefit	\$46,307	\$44,842	\$44,842	\$44,842

Terminated Vested

Number	16	15	17	16
Average Current Age ¹	44.5	46.6	59.8	45.4
Average Annual Benefit ²	\$16,087	\$17,232	\$17,596	\$15,939

¹ The Average Current Age excludes participants awaiting a refund of contributions.

² 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	2	0	0	0	0	0	0	0	0	0	0	2
25 - 29	3	0	2	0	1	0	0	0	0	0	0	6
30 - 34	0	1	1	3	0	1	3	0	0	0	0	9
35 - 39	0	0	0	1	0	1	7	0	0	0	0	9
40 - 44	1	1	0	1	0	2	3	1	0	0	0	9
45 - 49	0	0	0	0	1	0	3	4	4	0	0	12
50 - 54	1	0	0	0	0	0	0	5	2	1	0	9
55 - 59	0	0	0	0	0	0	0	1	0	0	0	1
60 - 64	0	0	0	0	0	1	0	0	0	0	0	1
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	7	2	3	5	2	5	16	11	6	1	0	58

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2017	56
b. Terminations	
i. Vested (partial or full) with deferred benefits	(2)
ii. Non-vested or full lump sum distribution received	(2)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(1)
f. DROP	<u>(1)</u>
g. Continuing participants	50
h. New entrants	<u>8</u>
i. Total active life participants in valuation	58

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	59	10	7	3	17	96
Retired	4	(2)	0	0	(1)	1
DROP	0	1	0	0	0	1
Vested Deferred	0	0	0	0	2	2
Death, With Survivor	0	0	0	0	0	0
Death, No Survivor	(1)	0	0	0	0	(1)
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	(1)	(1)
Rehires	0	0	0	0	(1)	(1)
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	62	9	7	3	16	97

POLICE OFFICERS' RETIREMENT TRUST FUND
SUMMARY OF PLAN PROVISIONS

<u>Eligibility</u>	Full-time employees who are classified as full-time sworn Police Officers participate in the Plan as a condition of employment.
<u>Credited Service</u>	Total years and completed months of uninterrupted service with the City as a Police Officer.
<u>Salary</u>	Total pay, plus additional compensation received. Effective 3/31/2012, future accrued leave lump sum payouts shall not exceed the lesser of \$6,700 and the value accrued prior to 10/1/2011.
<u>Final Average Compensation</u>	Average Salary for the best three (3) years of service. Benefits accrued after 3/31/2012 shall be based on Average Salary for the best eight (8) years of service, however, in no event will the future Final Average Compensation be less than the amount determined as of 3/31/2012 under the prior 3 year average definition.
<u>Normal Retirement</u>	
Date	<u>Hired prior to 4/1/2012:</u> Earlier of age 50 or 25 years of Credited Service, regardless of age. <u>Hired after 3/31/2012:</u> Earlier of age 60 with the completion of 8 years of Credited Service, or the completion of 30 years of Credited Service, regardless of age.
Benefit	<u>Hired prior to 4/1/2012:</u> Frozen accrued benefit as of 3/31/2012, plus a future service benefit of 3.0% of Final Average Compensation for each year of Credited Service beyond 3/31/2012 <u>Hired after 3/31/2012:</u> 3.0% of Final Average Compensation for all years of Credited Service.
Form of Benefit	Ten Year Certain and Life Annuity (options available).

Early Retirement

Date	<u>Hired prior to 4/1/2012:</u> Earlier of age 45 or 20 years of Credited Service, regardless of age. <u>Hired after 3/31/2012:</u> Attainment of age 45 and the completion of 20 years of Credited Service.
Benefit	Accrued benefit, reduced 3% (5% for Members hired after 3/31/2012) for each year prior to Normal Retirement.

Vesting

Schedule	100% after 5 years (8 years for Members hired after 3/31/2012) of Credited Service.
Benefit Amount	Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date. Non-vested members receive a refund of member contributions accumulated with 5.5% interest.

Disability

Eligibility	Total and permanent as determined by the Board of Trustees. Members are covered from Date of Employment.
Benefit	Accrued benefit to date of disability but not less than 42% of Final Average Compensation (Service Incurred), or 25% of Final Average Compensation (Non-Service Incurred).
Duration	Payable for life with 10 years certain or until recovery (as determined by the Board).

Death Benefits

Pre-Retirement

Vested

Actuarially reduced accrued benefit payable to designated beneficiary for life with 10 years certain.

Non-Vested

Refund of member contributions, with 5.5% interest.

Post-Retirement

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

Member Contributions

5.0% of Salary. Members hired after 3/31/2012 contribute 3.0% of Salary.

City and State Contributions

Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, over 30 years.

Cost of Living Adjustment

Eligibility

Normal and Early service Retirees and Beneficiaries. COLA is not payable to Disability, Vested Terminated Retirees, or any Member hired after 3/31/2012.

Amount

3.0% increase per year following one year of payments and the retiree's 55th birthday, ceasing on the retiree's 62nd birthday.

Chapter 185 Share Plan

Established by way of Mutual Consent between the Membership and City. The Share Plan is not currently funded.

Board of Trustees

Two Council appointees, two Members of the Plan elected by the membership, and a fifth Member elected by other 4 and appointed by Council as a ministerial duty.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2018

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Checking Account	1,916
Money Market	999,956
Cash	43,910
Total Cash and Equivalents	1,045,782
Receivables:	
Member Contributions in Transit	7,218
Member Buy-Back Contributions	222
Member Contributions	59
State Contributions	718,404
Total Receivable	725,903
Investments:	
Fixed Income	8,161,829
Equities	37,206,507
Mutual Funds:	
Fixed Income	1,016,878
Pooled/Common/Commingled Funds:	
Fixed Income	0
Hedge	1,330,179
Real Estate	4,570,831
Total Investments	52,286,224
Total Assets	54,057,909
<u>LIABILITIES</u>	
Payables:	
Administrative Expenses	16,512
Total Liabilities	16,512
NET POSITION RESTRICTED FOR PENSIONS	54,041,397

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2018
Market Value Basis

ADDITIONS

Contributions:

Member	202,511	
Buy-Back	2,295	
City	1,886,078	
State	718,404	
Total Contributions		2,809,288
Investment Income:		
Net Increase in Fair Value of Investments	4,150,620	
Interest & Dividends	1,197,239	
Less Investment Expense ¹	(253,803)	
Net Investment Income		5,094,056
Other		3,103
Total Additions		7,906,447

DEDUCTIONS

Distributions to Members:

Benefit Payments	3,165,643	
Lump Sum DROP Distributions	479,261	
Refunds of Member Contributions	57,508	
Total Distributions		3,702,412
Administrative Expense		87,292
Total Deductions		3,789,704
Net Increase in Net Position		4,116,743
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		49,924,654
End of the Year		54,041,397

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

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2018)

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 Council appointees;
- b. Two Members of the Plan elected by the Membership, and a
- c. Fifth Member elected by other four and appointed by Council as a ministerial duty.

Plan Membership as of October 1, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	79
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	17
Active Plan Members	56
	152

Benefits Provided

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

Normal Retirement:

Date: Hired prior to 4/1/2012: Earlier of age 50 or 25 years of Credited Service, regardless of age.

Hired after 3/31/2012: Earlier of age 60 with the completion of 8 years of Credited Service, or the completion of 30 years of Credited Service, regardless of age.

Benefit: Hired prior to 4/1/2012: Frozen accrued benefit as of 3/31/2012, plus a future service benefit of 3.0% of Final Average Compensation for each year of Credited Service beyond 3/31/2012.

Hired after 3/31/2012: 3.0% of Final Average Compensation for all years of Credited Service.

Early Retirement:

Date: Hired prior to 4/1/2012: Earlier of age 45 or 20 years of Credited Service, regardless of age.

Hired after 3/31/2012: Attainment of age 45 and the completion of 20 years of Credited Service.

Benefit: Accrued benefit, reduced 3% (5% for Members hired after 3/31/2012) for each year prior to Normal Retirement.

Vesting:

Schedule: 100% after 5 years (8 years for Members hired after 3/31/2012) of Credited Service.

Benefit: Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Non-vested members receive a refund of member contributions accumulated with 5.5% interest.

Disability:

Eligibility: Total and permanent as determined by the Board of Trustees. Members are covered from Date of

Benefit: Accrued benefit to date of disability but not less than 42% of Final Average Compensation (Service Incurred), or 25% of Final Average Compensation (Non-Service Incurred).

Pre-Retirement Death Benefits:

Vested: Actuarially reduced accrued benefit payable to designated beneficiary for life with 10 years certain.

Non-Vested: Refund of Member contributions, with 5.5% interest.

Cost of Living Adjustment:

Eligibility: Normal and Early service Retirees and Beneficiaries. COLA is not payable to Disability, Vested Terminated Retirees, or any Member hired after 3/31/2012.

Amount: 3.0% increase per year following one year of payments and the retiree's 55th birthday, ceasing on the retiree's 62nd birthday.

Contributions

Member Contributions: 5.0% of Salary. Members hired after 3/31/2012 contribute 3.0% of Salary.

City and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, over 30 years.

Investments

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2018:

<u>Asset Class</u>	<u>Target Allocation</u>
Domestic Equity	52.50%
International Equity	10.00%
Fixed Income	17.50%
Real Estate	10.00%
Hedge Funds	5.00%
MLPs	5.00%
<u>Total</u>	<u>100.00%</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, 2018, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 10.21 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: Police officers hired prior to April 1, 2012 shall be eligible to participate in the DROP upon attaining age 50 or 25 years of credited service.

Participation: Not to exceed 60 months.

Rate of Return: A Member's DROP account will earn interest at the rate of 1.3 percent per annum, compounded monthly. The DROP balance as September 30, 2018 is \$1,782,593.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2018 were as follows:

Total Pension Liability	\$ 68,951,868
Plan Fiduciary Net Position	\$ (54,041,397)
Sponsor's Net Pension Liability	<u>\$ 14,910,471</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	78.38%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2017 updated to September 30, 2018 using the following actuarial assumptions:

Inflation	2.30%
Salary Increases	Service based
Discount Rate	7.40%
Investment Rate of Return	7.40%

Mortality Rate Healthy 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 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 most recent actuarial experience study used to review the other significant assumptions was dated August 4, 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 2018 the inflation rate assumption of the investment advisor was 2.10%.

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, 2018 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	6.66%
International Equity	6.10%
Fixed Income	2.42%
Real Estate	3.36%
Hedge Funds	3.00%
MLPs	5.25%

Discount Rate:
The Discount Rate used to measure the Total Pension Liability was 7.40 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
	6.40%	7.40%	8.40%
Sponsor's Net Pension Liability	\$ 22,622,265	\$ 14,910,471	\$ 8,481,838

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

	09/30/2018	09/30/2017	09/30/2016
Total Pension Liability			
Service Cost	802,255	765,046	943,492
Interest	4,907,047	4,773,491	4,579,101
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(69,061)	148,418	163,041
Changes of assumptions	535,504	-	653,912
Contributions - Buy Back	2,295	32,551	-
Benefit Payments, including Refunds of Employee Contributions	(3,702,412)	(4,249,528)	(2,888,940)
Net Change in Total Pension Liability	2,475,628	1,469,978	3,450,606
Total Pension Liability - Beginning	66,476,240	65,006,262	61,555,656
Total Pension Liability - Ending (a)	<u>\$ 68,951,868</u>	<u>\$ 66,476,240</u>	<u>\$ 65,006,262</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,886,078	2,057,366	1,985,560
Contributions - State	718,404	792,677	610,146
Contributions - Employee	202,511	199,870	211,259
Contributions - Buy Back	2,295	32,551	-
Net Investment Income	5,094,056	5,445,778	3,396,084
Benefit Payments, including Refunds of Employee Contributions	(3,702,412)	(4,249,528)	(2,888,940)
Administrative Expense	(87,292)	(90,007)	(85,620)
Other	3,103	3,103	3,639
Net Change in Plan Fiduciary Net Position	4,116,743	4,191,810	3,232,128
Plan Fiduciary Net Position - Beginning	49,924,654	45,732,844	42,500,716
Plan Fiduciary Net Position - Ending (b)	<u>\$ 54,041,397</u>	<u>\$ 49,924,654</u>	<u>\$ 45,732,844</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 14,910,471</u>	<u>\$ 16,551,586</u>	<u>\$ 19,273,418</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	78.38%	75.10%	70.35%
Covered Employee Payroll ¹	\$ 4,533,223	\$ 4,429,884	\$ 4,597,424
Net Pension Liability as a percentage of Covered Employee Payroll	328.92%	373.63%	419.22%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

Changes of assumptions:

For measurement date 09/30/2018, all recommended assumption changes from the August 4, 2017 Experience Study have been incorporated. Additionally, the investment return assumption will reduce from 7.5% to 7.0% according to the following schedule:

<u>Valuation Date</u>	<u>Assumption</u>
October 1, 2018	7.4%
October 1, 2019	7.3%
October 1, 2020	7.2%
October 1, 2021	7.1%
October 1, 2022	7.0%

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Continued Changes of assumptions:

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System for special risk employees.

The inflation assumption rate was lowered from 3.00% to 2.30%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

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

	09/30/2015	09/30/2014
Total Pension Liability		
Service Cost	1,007,847	944,053
Interest	4,448,873	4,254,147
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(860,949)	-
Changes of assumptions	-	-
Contributions - Buy Back	-	-
Benefit Payments, including Refunds of Employee Contributions	(2,701,145)	(2,630,150)
Net Change in Total Pension Liability	1,894,626	2,568,050
Total Pension Liability - Beginning	59,661,030	57,092,980
Total Pension Liability - Ending (a)	<u>\$ 61,555,656</u>	<u>\$ 59,661,030</u>
Plan Fiduciary Net Position		
Contributions - Employer	1,737,998	1,672,462
Contributions - State	551,656	540,981
Contributions - Employee	211,290	229,089
Contributions - Buy Back	-	-
Net Investment Income	335,023	4,746,677
Benefit Payments, including Refunds of Employee Contributions	(2,701,145)	(2,630,150)
Administrative Expense	(107,547)	(73,395)
Other	5,198	5,556
Net Change in Plan Fiduciary Net Position	32,473	4,491,220
Plan Fiduciary Net Position - Beginning	42,468,243	37,977,023
Plan Fiduciary Net Position - Ending (b)	<u>\$ 42,500,716</u>	<u>\$ 42,468,243</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 19,054,940</u>	<u>\$ 17,192,787</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	69.04%	71.18%
Covered Employee Payroll ¹	\$ 5,164,848	\$ 4,786,859
Net Pension Liability as a percentage of Covered Employee Payroll	368.94%	359.17%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

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 ¹	Contributions as a percentage of Covered Employee Payroll
09/30/2018	\$ 2,772,066	\$ 2,604,482	\$ 167,584	\$ 4,533,223	57.45%
09/30/2017	\$ 2,596,355	\$ 2,850,043	\$ (253,688)	\$ 4,429,884	64.34%
09/30/2016	\$ 2,595,706	\$ 2,595,706	\$ -	\$ 4,597,424	56.46%
09/30/2015	\$ 2,289,654	\$ 2,289,654	\$ -	\$ 5,164,848	44.33%
09/30/2014	\$ 2,213,443	\$ 2,213,443	\$ -	\$ 4,786,859	46.24%

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

Notes to Schedule

Valuation Date: 10/01/2016

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 Lives:

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

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

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 above assumption rates 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 Milliman's July 1, 2015 FRS valuation report. We feel this assumption sufficiently accommodates future mortality improvements.

Normal Retirement Age:

Hired prior to 4/1/2012:

Earlier of 1) age 50 or 2) the completion of 25 years of credited service. The retirement rate for Members who have reached 25 years of service is 100%. See table on next page for additional rates.

These rates were incorporated with the October 1, 2007 valuation as the result of a prior Experience Study

Hired after 3/31/2012:

Earlier of 1) age 60 with completion of 8 years of credited service, or 2) the completion of 30 years of credited service. The retirement rate for Members who have reached 30 years of service is 100%. See table on next page for additional rates.

These rates were adopted in conjunction with the October 1, 2012 valuation. This assumption is reasonable, based on Plan provisions.

Early Retirement Age:

Hired prior to 4/1/2012:

Earlier of 1) age 45 or 2) the completion of 20 years of credited service. Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year.

These rates were incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

Hired after 3/31/2012:

Attainment of age 45 and the completion of 20 years of credited service. Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year.

These rates were adopted in conjunction with the October 1, 2012 valuation. This assumption is reasonable, based on Plan provisions.

Termination Rates:

See table on following page. These rates were incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

Disability Rates:

See on following page. This assumption is in line with the national average for municipal defined benefit pension programs.

Interest Rate:

7.50% per year, compounded annually, net of investment related expenses. This assumption was adopted by the Board in conjunction with a revision to the October 1, 2009 valuation.

Salary Increases:

See table below. These rates were incorporated with the October 1, 2014 valuation as the result of an Experience Study.

Post Retirement COLA:

3% per year at ages 55 through 62 for Service Retirees and surviving Beneficiaries. No COLA for Disability Retirees, Vested Terminated Members, or Members hired after 3/31/2012.

Payroll Growth:

0.0% per year for amortization of the Unfunded Actuarial Accrued Liability. The assumption was 0.7% for the 10/1/2015 valuation.

Actuarial Asset Method:

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

% Increase in Salary:

Years of Service	Increase
1	6.0%
2 - 9	5.5%
10 - 14	5.0%
15 - 19	4.5%
20+	4.0%

Disability Rates:

Age	% Becoming Disabled During the Year
20	0.14%
25	0.15%
30	0.18%
35	0.23%
40	0.30%
45	0.51%
50	1.00%

It is assumed that 75% of disablements and active Member deaths are service related.

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Retirement Rates:

Number of Years After First Eligibility For Normal Retirement	Probability of Normal Retirement
0	30%
1	30%
2	30%
3	30%
4	30%
5	100%

Termination Rates:

Sample Ages	Years of Service	% of Active Members Separating Within Next Year
ALL	0	20.0%
	1	16.0%
	2	14.0%
	3	12.0%
	4	10.0%
20	5+	10.0%
25		10.0%
30		8.8%
35		6.8%
40		4.8%
45+		3.2%

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2018	10.21%
09/30/2017	11.98%
09/30/2016	7.89%
09/30/2015	0.79%
09/30/2014	12.60%

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2019)

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 Council appointees;
- b. Two Members of the Plan elected by the Membership, and a
- c. Fifth Member elected by other four and appointed by Council as a ministerial duty.

Full-time employees who are classified as full-time sworn Police Officers participate in the Plan as a condition of employment.

Plan Membership as of October 1, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	79
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	17
Active Plan Members	56
	152

Benefits Provided

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

Normal Retirement:

Date: Hired prior to 4/1/2012: Earlier of age 50 or 25 years of Credited Service, regardless of age.

Hired after 3/31/2012: Earlier of age 60 with the completion of 8 years of Credited Service, or the completion of 30 years of Credited Service, regardless of age.

Benefit: Hired prior to 4/1/2012: Frozen accrued benefit as of 3/31/2012, plus a future service benefit of 3.0% of Final Average Compensation for each year of Credited Service beyond 3/31/2012.

Hired after 3/31/2012: 3.0% of Final Average Compensation for all years of Credited Service.

Early Retirement:

Date: Hired prior to 4/1/2012: Earlier of age 45 or 20 years of Credited Service, regardless of age.

Hired after 3/31/2012: Attainment of age 45 and the completion of 20 years of Credited Service.

Benefit: Accrued benefit, reduced 3% (5% for Members hired after 3/31/2012) for each year prior to Normal Retirement.

Vesting:

Schedule: 100% after 5 years (8 years for Members hired after 3/31/2012) of Credited Service.

Benefit: Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Non-vested members receive a refund of member contributions accumulated with 5.5% interest.

Disability:

Eligibility: Total and permanent as determined by the Board of Trustees. Members are covered from Date of Employment.

Benefit: Accrued benefit to date of disability but not less than 42% of Final Average Compensation (Service Incurred), or 25% of Final Average Compensation (Non-Service Incurred).

Pre-Retirement Death Benefits:

Vested: Actuarially reduced accrued benefit payable to designated beneficiary for life with 10 years certain.

Non-Vested: Refund of Member contributions, with 5.5% interest.

Cost of Living Adjustment:

Eligibility: Normal and Early service Retirees and Beneficiaries. COLA is not payable to Disability, Vested Terminated Retirees, or any Member hired after 3/31/2012.

Amount: 3.0% increase per year following one year of payments and the retiree's 55th birthday, ceasing on the retiree's 62nd birthday.

Contributions

Member Contributions: 5.0% of Salary. Members hired after 3/31/2012 contribute 3.0% of Salary.

City and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, over 30 years.

Net Pension Liability

The measurement date is September 30, 2018.

The measurement period for the pension expense was October 1, 2017 to September 30, 2018.

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

The Sponsor's Net Pension Liability was measured as of September 30, 2018.

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 updated to September 30, 2018 using the following actuarial assumptions:

Inflation	2.30%
Salary Increases	Service based
Discount Rate	7.40%
Investment Rate of Return	7.40%

Mortality Rate Healthy 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 most recent actuarial experience study used to review the other significant assumptions was dated August 4, 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 2018 the inflation rate assumption of the investment advisor was 2.10%.

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, 2018 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	52.50%	6.66%
International Equity	10.00%	6.10%
Fixed Income	17.50%	2.42%
Real Estate	10.00%	3.36%
Hedge Funds	5.00%	3.00%
MLPs	5.00%	5.25%
Total	100.00%	

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.40 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, 2018	\$ 66,476,240	\$ 49,924,654	\$ 16,551,586
Changes for a Year:			
Service Cost	802,255	-	802,255
Interest	4,907,047	-	4,907,047
Differences between Expected and Actual Experience	(69,061)	-	(69,061)
Changes of assumptions	535,504	-	535,504
Changes of benefit terms	-	-	-
Contributions - Employer	-	1,886,078	(1,886,078)
Contributions - State	-	718,404	(718,404)
Contributions - Employee	-	202,511	(202,511)
Contributions - Buy Back	2,295	2,295	-
Net Investment Income	-	5,094,056	(5,094,056)
Benefit Payments, including Refunds of Employee Contributions	(3,702,412)	(3,702,412)	-
Administrative Expense	-	(87,292)	87,292
Other Changes	-	3,103	(3,103)
Net Changes	2,475,628	4,116,743	(1,641,115)
Reporting Period Ending September 30, 2019	\$ 68,951,868	\$ 54,041,397	\$ 14,910,471

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.40%	7.40%	8.40%
Sponsor's Net Pension Liability	\$ 22,622,265	\$ 14,910,471	\$ 8,481,838

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, 2018**

For the year ended September 30, 2018, the Sponsor has recognized a Pension Expense of \$1,808,074.

On September 30, 2018, 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	153,293	-
Changes of assumptions	217,971	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	1,025,469
Employer and State contributions subsequent to the measurement date	2,604,482	-
Total	<u>\$ 2,975,746</u>	<u>\$ 1,025,469</u>

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State contributions subsequent to the measurement date has been 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	\$ 52,310
2020	\$ 161,630
2021	\$ (455,554)
2022	\$ (412,591)
2023	\$ -
Thereafter	\$ -

**PRELIMINARY 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 \$1,813,895.

On September 30, 2019, 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	49,473	46,040
Changes of assumptions	357,002	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	1,865,168
Employer and State contributions subsequent to the measurement date	TBD	-
Total	<u>TBD</u>	<u>\$ 1,911,208</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, 2019.

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:	
2020	\$ 39,816
2021	\$ (577,368)
2022	\$ (689,886)
2023	\$ (277,295)
2024	\$ -
Thereafter	\$ -

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

Reporting Period Ending Measurement Date	09/30/2019 09/30/2018	09/30/2018 09/30/2017	09/30/2017 09/30/2016
Total Pension Liability			
Service Cost	802,255	765,046	943,492
Interest	4,907,047	4,773,491	4,579,101
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(69,061)	148,418	163,041
Changes of assumptions	535,504	-	653,912
Contributions - Buy Back	2,295	32,551	-
Benefit Payments, including Refunds of Employee Contributions	(3,702,412)	(4,249,528)	(2,888,940)
Net Change in Total Pension Liability	2,475,628	1,469,978	3,450,606
Total Pension Liability - Beginning	66,476,240	65,006,262	61,555,656
Total Pension Liability - Ending (a)	<u>\$ 68,951,868</u>	<u>\$ 66,476,240</u>	<u>\$ 65,006,262</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,886,078	2,057,366	1,985,560
Contributions - State	718,404	792,677	610,146
Contributions - Employee	202,511	199,870	211,259
Contributions - Buy Back	2,295	32,551	-
Net Investment Income	5,094,056	5,445,778	3,396,084
Benefit Payments, including Refunds of Employee Contributions	(3,702,412)	(4,249,528)	(2,888,940)
Administrative Expense	(87,292)	(90,007)	(85,620)
Other	3,103	3,103	3,639
Net Change in Plan Fiduciary Net Position	4,116,743	4,191,810	3,232,128
Plan Fiduciary Net Position - Beginning	49,924,654	45,732,844	42,500,716
Plan Fiduciary Net Position - Ending (b)	<u>\$ 54,041,397</u>	<u>\$ 49,924,654</u>	<u>\$ 45,732,844</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 14,910,471</u>	<u>\$ 16,551,586</u>	<u>\$ 19,273,418</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	78.38%	75.10%	70.35%
Covered Employee Payroll ¹	\$ 4,533,223	\$ 4,429,884	\$ 4,597,424
Net Pension Liability as a percentage of Covered Employee Payroll	328.92%	373.63%	419.22%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

Changes of assumptions:

For measurement date 09/30/2018, all recommended assumption changes from the August 4, 2017 Experience Study have been incorporated. Additionally, the investment return assumption will reduce from 7.5% to 7.0% according to the following schedule:

Valuation Date	Assumption
October 1, 2018	7.4%
October 1, 2019	7.3%
October 1, 2020	7.2%
October 1, 2021	7.1%
October 1, 2022	7.0%

Continued Changes of assumptions:

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System for special risk employees.

The inflation assumption rate was lowered from 3.00% to 2.30%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

Reporting Period Ending Measurement Date	09/30/2016 09/30/2015	09/30/2015 09/30/2014
Total Pension Liability		
Service Cost	1,007,847	944,053
Interest	4,448,873	4,254,147
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(860,949)	-
Changes of assumptions	-	-
Contributions - Buy Back	-	-
Benefit Payments, including Refunds of Employee Contributions	(2,701,145)	(2,630,150)
Net Change in Total Pension Liability	1,894,626	2,568,050
Total Pension Liability - Beginning	59,661,030	57,092,980
Total Pension Liability - Ending (a)	<u>\$ 61,555,656</u>	<u>\$ 59,661,030</u>
Plan Fiduciary Net Position		
Contributions - Employer	1,737,998	1,672,462
Contributions - State	551,656	540,981
Contributions - Employee	211,290	229,089
Contributions - Buy Back	-	-
Net Investment Income	335,023	4,746,677
Benefit Payments, including Refunds of Employee Contributions	(2,701,145)	(2,630,150)
Administrative Expense	(107,547)	(73,395)
Other	5,198	5,556
Net Change in Plan Fiduciary Net Position	32,473	4,491,220
Plan Fiduciary Net Position - Beginning	42,468,243	37,977,023
Plan Fiduciary Net Position - Ending (b)	<u>\$ 42,500,716</u>	<u>\$ 42,468,243</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 19,054,940</u>	<u>\$ 17,192,787</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	69.04%	71.18%
Covered Employee Payroll ¹	\$ 5,164,848	\$ 4,786,859
Net Pension Liability as a percentage of Covered Employee Payroll	368.94%	359.17%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

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 ¹	Contributions as a percentage of Covered Employee Payroll
09/30/2018	\$ 2,772,066	\$ 2,604,482	\$ 167,584	\$ 4,533,223	57.45%
09/30/2017	\$ 2,596,355	\$ 2,850,043	\$ (253,688)	\$ 4,429,884	64.34%
09/30/2016	\$ 2,595,706	\$ 2,595,706	\$ -	\$ 4,597,424	56.46%
09/30/2015	\$ 2,289,654	\$ 2,289,654	\$ -	\$ 5,164,848	44.33%
09/30/2014	\$ 2,213,443	\$ 2,213,443	\$ -	\$ 4,786,859	46.24%

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

Notes to Schedule

Valuation Date: 10/01/2016

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 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 above assumption rates 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 Milliman's July 1, 2015 FRS valuation report. We feel this assumption sufficiently accommodates future mortality improvements.

Normal Retirement Age:

Hired prior to 4/1/2012:

Earlier of 1) age 50 or 2) the completion of 25 years of credited service. The retirement rate for Members who have reached 25 years of service is 100%. See table on next page for additional rates.

These rates were incorporated with the October 1, 2007 valuation as the result of a prior Experience Study

Hired after 3/31/2012:

Earlier of 1) age 60 with completion of 8 years of credited service, or 2) the completion of 30 years of credited service. The retirement rate for Members who have reached 30 years of service is 100%. See table on next page for additional rates.

These rates were adopted in conjunction with the October 1, 2012 valuation. This assumption is reasonable, based on Plan provisions.

Early Retirement Age:

Hired prior to 4/1/2012:

Earlier of 1) age 45 or 2) the completion of 20 years of credited service. Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. These rates were incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

Hired after 3/31/2012:

Attainment of age 45 and the completion of 20 years of credited service. Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. These rates were adopted in conjunction with the October 1, 2012 valuation. This assumption is reasonable, based on Plan provisions.

Termination Rates:

See table on following page. These rates were incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

Disability Rates:

See on following page. This assumption is in line with the national average for municipal defined benefit pension programs.

Interest Rate:

7.50% per year, compounded annually, net of investment related expenses. This assumption was adopted by the Board in conjunction with a revision to the October 1, 2009 valuation.

Salary Increases:

See table below. These rates were incorporated with the October 1, 2014 valuation as the result of an Experience Study.

Post Retirement COLA:

3% per year at ages 55 through 62 for Service Retirees and surviving Beneficiaries. No COLA for Disability Retirees, Vested Terminated Members, or Members hired after 3/31/2012.

Payroll Growth:

0.0% per year for amortization of the Unfunded Actuarial Accrued Liability. The assumption was 0.7% for the 10/1/2015 valuation.

Actuarial Asset Method:

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

% Increase in Salary:

Years of Service	Increase
1	6.00%
2 - 9	5.50%
10 - 14	5.00%
15 - 19	4.50%
20+	4.00%

Disability Rates:

Age	% Becoming Disabled During the Year
20	0.14%
25	0.15%
30	0.18%
35	0.23%
40	0.30%
45	0.51%
50	1.00%

It is assumed that 75% of disablements and active Member deaths are service related.

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Retirement Rates:

Number of Years After First Eligibility For Normal	Probability of Normal Retirement
0	30.00%
1	30.00%
2	30.00%
3	30.00%
4	30.00%
5	100.00%

Termination Rates:

Sample Ages	Years of Service	% of Active Members Separating Within Next Year
ALL	0	20.00%
	1	16.00%
	2	14.00%
	3	12.00%
	4	10.00%
20	5+	10.00%
25		10.00%
30		8.80%
35		6.80%
40		4.80%
45+		3.20%

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

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

FINAL COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2018

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 19,273,418	\$ 1,222,111	\$ 5,097,812	\$ -
Employer and State Contributions made after 09/30/2017	-	-	2,604,482	-
Total Pension Liability Factors:				
Service Cost	765,046	-	-	765,046
Interest	4,773,491	-	-	4,773,491
Changes in benefit terms	-	-	-	-
Contributions - Buy Back	32,551	-	-	32,551
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	148,418	-	148,418	-
Current year amortization of experience difference	-	(286,983)	(103,819)	(183,164)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(217,971)	217,971
Benefit Payments, including Refunds of Employee Contributions	(4,249,528)	-	-	-
Net change	1,469,978	(286,983)	2,431,110	5,605,895
Plan Fiduciary Net Position:				
Contributions - Employer	2,057,366	-	(2,057,366)	-
Contributions - State	792,677	-	(792,677)	-
Contributions - Employee	199,870	-	-	(199,870)
Contributions - Buy Back	32,551	-	-	(32,551)
Projected Net Investment Income	3,382,823	-	-	(3,382,823)
Difference between projected and actual earnings on Pension Plan investments	2,062,955	2,062,955	-	-
Current year amortization	-	(837,192)	(567,711)	(269,481)
Benefit Payments, including Refunds of Employee Contributions	(4,249,528)	-	-	-
Administrative Expenses	(90,007)	-	-	90,007
Other	3,103	-	-	(3,103)
Net change	4,191,810	1,225,763	(3,417,754)	(3,797,821)
Ending Balance	\$ 16,551,586	\$ 2,160,891	\$ 4,111,168	\$ 1,808,074

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2019

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 16,551,586	\$ 2,160,891	\$ 4,111,168	\$ -
Employer and State Contributions made after 09/30/2018	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	802,255	-	-	802,255
Interest	4,907,047	-	-	4,907,047
Changes in benefit terms	-	-	-	-
Contributions - Buy Back	2,295	-	-	2,295
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(69,061)	69,061	-	-
Current year amortization of experience difference	-	(23,021)	(103,820)	80,799
Change in assumptions about future economic or demographic factors or other inputs	535,504	-	535,504	-
Current year amortization of change in assumptions	-	-	(396,473)	396,473
Benefit Payments, including Refunds of Employee Contributions	(3,702,412)	-	-	-
Net change	<u>2,475,628</u>	<u>46,040</u>	<u>35,211</u>	<u>6,188,869</u>
Plan Fiduciary Net Position:				
Contributions - Employer	1,886,078	-	(1,886,078)	-
Contributions - State	718,404	-	(718,404)	-
Contributions - Employee	202,511	-	-	(202,511)
Contributions - Buy Back	2,295	-	-	(2,295)
Projected Net Investment Income	3,707,583	-	-	(3,707,583)
Difference between projected and actual earnings on Pension Plan investments	1,386,473	1,386,473	-	-
Current year amortization	-	(1,114,485)	(567,711)	(546,774)
Benefit Payments, including Refunds of Employee Contributions	(3,702,412)	-	-	-
Administrative Expenses	(87,292)	-	-	87,292
Other	3,103	-	-	(3,103)
Net change	<u>4,116,743</u>	<u>271,988</u>	<u>(3,172,193)</u>	<u>(4,374,974)</u>
Ending Balance	<u>\$ 14,910,471</u>	<u>\$ 2,478,919</u>	<u>TBD</u>	<u>\$ 1,813,895</u>

* Employer and State Contributions subsequent to the measurement date made after September 30, 2018 but made on or before September 30, 2019 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)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2014	\$ (1,908,189)	5	\$ (381,638)	\$ (381,638)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 2,838,555	5	\$ 567,711	\$ 567,711	\$ 567,711	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (214,815)	5	\$ (42,963)	\$ (42,963)	\$ (42,963)	\$ (42,963)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (2,062,955)	5	\$ (412,591)	\$ (412,591)	\$ (412,591)	\$ (412,591)	\$ (412,591)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (1,386,473)	5	\$ -	\$ (277,293)	\$ (277,295)	\$ (277,295)	\$ (277,295)	\$ (277,295)	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (269,481)	\$ (546,774)	\$ (165,138)	\$ (732,849)	\$ (689,886)	\$ (277,295)	\$ -	\$ -	\$ -	\$ -	\$ -

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)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2016	\$ 653,912	3	\$ 217,971	\$ 217,971	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ 535,504	3	\$ -	\$ 178,502	\$ 178,501	\$ 178,501	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 217,971	\$ 396,473	\$ 178,501	\$ 178,501	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

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)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2015	\$ (860,949)	3	\$ (286,983)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 163,041	3	\$ 54,347	\$ 54,347	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 148,418	3	\$ 49,472	\$ 49,473	\$ 49,473	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (69,061)	3	\$ -	\$ (23,021)	\$ (23,020)	\$ (23,020)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (183,164)	\$ 80,799	\$ 26,453	\$ (23,020)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -