

CITY OF FORT LAUDERDALE
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

ACTUARIAL VALUATION REPORT
AS OF OCTOBER 1, 2017

March 13, 2018

Board of Trustees
City of Fort Lauderdale
Police and Firefighters' Retirement System
888 South Andrews Ave., Suite 202
Fort Lauderdale, FL 33316

Re: City of Fort Lauderdale
Police and Firefighters' Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Fort Lauderdale Police and Firefighters' Retirement System. 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 this valuation may not be applicable for any other purposes.

The valuation has 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 reflects laws and regulations issued to date pursuant to the provisions of Chapters 112, 175, and 185, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in this valuation, 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 valuation, we have relied on personnel, plan design, financial reports, and asset information supplied by the Board of Trustees, in addition to 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, 2016. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2017 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 opinion.

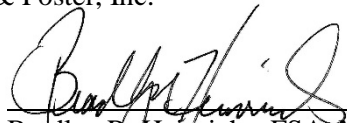
To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Fort Lauderdale, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the City of Fort Lauderdale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



Bradley R. Heinrichs, FSA, MAAA
Enrolled Actuary #17-6901

BRH/lke

Enclosures

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SUMMARY OF REPORT

The annual actuarial valuation of the City of Fort Lauderdale Police and Firefighters’ Retirement System, performed as of October 1, 2017, has been completed, and the results are presented in this Report. The contribution amounts developed in this valuation are applicable to the pension fund plan year and City fiscal year ending September 30, 2019.

The contribution requirements, compared with amounts developed in the October 1, 2016 actuarial valuation, are as follows:

Valuation Date	10/1/2017	10/1/2016
Applicable Pension Fund Plan Year Ended	9/30/2019	9/30/2018
Applicable City Fiscal Year Ended	<u>9/30/2019</u>	<u>9/30/2018</u>
Assumed City Contribution Date	October 1, 2018	October 1, 2017
Total Required Contribution	\$30,320,177	\$29,769,073
Less Expected Member Contributions	6,332,830	6,255,102
Equals Expected City and State Required Contribution	23,987,347	23,513,971
Less Expected State Contribution ¹	4,427,449	4,427,449
Equals Expected Balance from City ²	\$19,559,898	\$19,086,522
As % of Covered Payroll ³	26.8%	26.5%
As % of Total Payroll (incl. DROP) ³	23.5%	23.1%

¹ Reflects updated per capita amounts based on recent premium tax distributions.

² The required Sponsor (City and State) contribution will be \$23,987,347 for the pension fund’s plan year ended September 30, 2019. The precise City requirement will be this amount, less actual allowable State contributions. Similarly, the required Sponsor contribution will be \$23,513,971 for the pension fund’s plan year ended September 30, 2018. It is important to keep in mind that a slight adjustment to the City’s bottom line funding requirement may be necessary, based on actual allowable State Monies received.

³ Please note the percentage-of-payroll rates included in the table shown above are for illustration purposes only. The City should budget based on the actual dollar contribution requirements.

During the past year, there was net favorable actuarial experience, on the basis of the actuarial assumptions. The principal components of actuarial gain included an 8.61% investment return (Actuarial Asset basis) which exceeded the 7.50% assumed rate and average increases in pensionable earnings which were below the assumed rate. These gains were partially offset by unfavorable retirement and turnover experience.

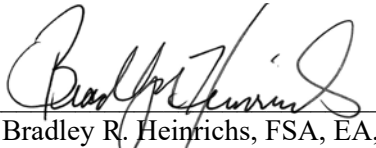
As can be seen on the previous page, the Total Required Contribution has increased by approximately \$550,000 since the previous valuation. This increase is due to a reduction in the investment return assumption from 7.50% to 7.40% per year, as approved by the Board of Trustees. Had the investment return assumption remained unchanged, the favorable actuarial experience discussed above would have contributed to a decrease in the funding requirements.

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 to discuss the Report and answer any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.

By: 
Drew D. Ballard, EA, MAAA

By: 
Bradley R. Heinrichs, FSA, EA, MAAA

CHANGES SINCE PRIOR REPORT

1. Benefit Provisions

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

2. Actuarial Assumptions/Methods

As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed from the rates used by the Florida Retirement System actuary in the July 1, 2015 actuarial valuation to the rates used in the July 1, 2016 actuarial valuation for special risk lives.

Additionally, the Board approved to lower the investment return assumption from 7.50% to 7.40% per year, net of investment related expenses. The Board also approved lowering the investment return assumption by 5 basis points in subsequent valuations until an ultimate assumed rate of 7.00% per year is reached.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump <u>10/1/2017</u>	Old Assump <u>10/1/2017</u>	<u>10/1/2016</u>
A. Participant Data			
Actives	786	786	779
Service Retirees	768	768	761
DROP Retirees	113	113	102
Beneficiaries	156	156	159
Disability Retirees	26	26	28
Terminated Vested	<u>25</u>	<u>25</u>	<u>20</u>
Total	1,874	1,874	1,849
Total Annual Payroll	\$73,231,488	\$73,231,488	\$72,145,101
Payroll Under Assumed Ret. Age	73,080,224	73,080,224	71,994,703
Annual Rate of Payments to:			
Service Retirees	36,872,495	36,872,495	35,955,354
DROP Retirees	8,556,708	8,556,708	7,637,496
Beneficiaries	3,729,295	3,729,295	3,736,164
Disability Retirees	1,111,063	1,111,063	1,192,734
Terminated Vested	558,342	558,342	507,960
B. Assets			
Actuarial Value (AVA)	824,951,911	824,951,911	778,211,946
Market Value (MVA)	857,734,650	857,734,650	783,398,728
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	439,964,410	424,534,786	415,870,550
Disability Benefits	8,624,008	8,435,416	8,464,252
Death Benefits	6,055,061	11,888,519	11,926,577
Vested Benefits	12,328,964	11,951,963	12,059,984
Refund of Contributions	708,551	705,010	720,696
Service Retirees	403,313,303	399,798,385	392,159,938
DROP Retirees	141,131,382	140,009,857	122,741,851
Beneficiaries	32,522,931	32,282,339	32,267,951
Disability Retirees	12,583,157	12,467,742	13,560,527
Terminated Vested	<u>5,263,011</u>	<u>5,188,290</u>	<u>4,369,098</u>
Total	1,062,494,778	1,047,262,307	1,014,141,424

C. Liabilities - (Continued)	New Assump <u>10/1/2017</u>	Old Assump <u>10/1/2017</u>	<u>10/1/2016</u>
Present Value of Future Salaries	617,867,139	609,007,143	607,716,373
Normal Cost (Retirement)	17,902,523	17,113,084	17,017,500
Normal Cost (Disability)	929,240	915,568	925,741
Normal Cost (Death)	513,820	1,082,957	1,079,956
Normal Cost (Vesting)	830,592	803,329	813,436
Normal Cost (Refunds)	<u>141,581</u>	<u>141,403</u>	<u>147,997</u>
Total Normal Cost	20,317,756	20,056,341	19,984,630
Present Value of Future Normal Costs	165,634,238	161,276,816	163,213,734
Accrued Liability (Retirement)	291,328,468	284,414,031	273,985,298
Accrued Liability (Disability)	2,276,459	2,252,484	2,288,543
Accrued Liability (Death)	1,763,461	3,025,931	3,006,999
Accrued Liability (Vesting)	6,575,659	6,443,665	6,441,536
Accrued Liability (Refunds)	102,709	102,767	105,949
Accrued Liability (Inactives)	<u>594,813,784</u>	<u>589,746,613</u>	<u>565,099,365</u>
Total Actuarial Accrued Liability (EAN AL)	896,860,540	885,985,491	850,927,690
Unfunded Actuarial Accrued Liability (UAAL)	71,908,629	61,033,580	72,715,744
Funded Ratio (AVA / EAN AL)	92.0%	93.1%	91.5%

D. Actuarial Present Value of Accrued Benefits	New Assump <u>10/1/2017</u>	Old Assump <u>10/1/2017</u>	<u>10/1/2016</u>
Vested Accrued Benefits			
Inactives	594,813,784	589,746,613	565,099,365
Actives	149,047,885	148,561,224	138,001,531
Member Contributions	<u>53,266,545</u>	<u>53,266,545</u>	<u>51,647,728</u>
Total	797,128,214	791,574,382	754,748,624
Non-vested Accrued Benefits	<u>41,756,476</u>	<u>40,445,099</u>	<u>41,627,067</u>
Total Present Value Accrued Benefits (PVAB)	838,884,690	832,019,481	796,375,691
Funded Ratio (MVA / PVAB)	102.2%	103.1%	98.4%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	6,865,209	0	
New Accrued Benefits	0	24,225,954	
Benefits Paid	0	(46,564,184)	
Interest	0	57,982,020	
Other	<u>0</u>	<u>0</u>	
Total	6,865,209	35,643,790	

	New Assump	Old Assump	
Valuation Date	10/1/2017	10/1/2017	10/1/2016
Applicable Pension Fund Plan Year Ending	9/30/2019	9/30/2019	9/30/2018
Applicable to Fiscal Year Ending	<u>9/30/2019</u>	<u>9/30/2019</u>	<u>9/30/2018</u>

Assumed City Contribution Date	October 1, 2018	October 1, 2018	October 1, 2017
E. Pension Cost			
Normal Cost ¹	\$21,191,420	\$20,918,764	\$20,923,908
Administrative Expenses ¹	603,897	603,897	637,623
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years ¹	8,524,860	7,670,566	8,207,542
Applicable Interest ¹	0	0	0
Total Required Contribution	30,320,177	29,193,227	29,769,073
Expected Member Contributions ¹	6,332,830	6,332,830	6,255,102
Expected City and State Contribution	23,987,347	22,860,397	23,513,971
Less Expected State Contributions ²	4,427,449	4,427,449	4,427,449
Equals Expected City Required Contribution	\$19,559,898	\$18,432,948	\$19,086,522

F. Past Contributions

Plan Years Ending: 9/30/2017

City and State Requirement 21,265,207

Actual Contributions Made:

Members (excluding buyback)	5,901,141
City	17,325,393
State	<u>4,279,014</u>
Total	27,505,548

G. Net Actuarial (Gain)/Loss (9,924,966)

¹ Contribution requirements developed above have been adjusted to account for an applicable assumed salary increase component. Additionally, the above stated requirements reflect no interest as a result of the assumed beginning of year City contribution date. If the required contributions are deposited at a later date, additional interest at the assumed 7.4% annual rate must be added.

² Reflects updated per capita amounts based on recent premium tax distributions.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2017	71,908,629
2018	68,451,633
2019	64,563,253
2024	41,991,203
2028	27,172,367
2033	12,252,200
2037	0

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

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2017	3.34%	4.68%
Year Ended	9/30/2016	4.95%	4.67%
Year Ended	9/30/2015	3.00%	4.65%

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

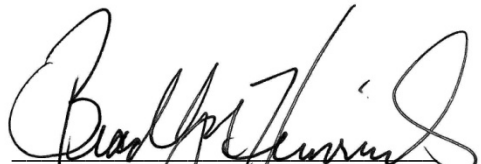
		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2017	8.61%	7.50%
Year Ended	9/30/2016	7.67%	7.50%
Year Ended	9/30/2015	6.33%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2017	\$73,231,488
	10/1/2007	N/A
(b) Total Increase		N/A
(c) Number of Years		10.00
(d) Average Annual Rate		N/A

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.



Bradley R. Heinrichs, FSA, EA, MAAA
Enrolled Actuary #17-6901

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

(1) Unfunded Actuarial Accrued Liability as of October 1, 2016	\$72,715,744
(2) Sponsor Normal Cost developed as of October 1, 2016	14,010,321
(3) Expected administrative expenses for the year ended September 30, 2017	609,000
(4) Expected interest on (1), (2) and (3)	6,527,292
(5) Sponsor contributions to the System during the year ended September 30, 2017	21,604,407
(6) Expected interest on (5)	1,299,404
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2017 (1)+(2)+(3)+(4)-(5)-(6)	70,958,546
(8) Change to UAAL due to Assumption Change	10,875,049
(9) Change to UAAL due to Actuarial (Gain)/Loss	(9,924,966)
(10) Unfunded Actuarial Accrued Liability as of October 1, 2017	71,908,629

<u>Type of Base</u>	<u>Date Established</u>	<u>Years Remaining</u>	<u>10/1/2017 Amount</u>	<u>Amortization Amount</u>
Re-italized Base	1/1/2003	5.25	8,882,460	1,882,367
Actuarial Loss	1/1/2004	6.25	3,748,534	683,850
Software Change	1/1/2005	7.25	(440,642)	(71,004)
Actuarial Loss	1/1/2005	7.25	3,478,373	560,494
Share Plan Gain	1/1/2006	8.25	(51,103)	(7,413)
Actuarial Loss	1/1/2006	8.25	1,445,193	209,634
Actuarial Loss	1/1/2007	9.25	546,679	72,434
Actuarial Gain	1/1/2008	10.25	(31,902)	(3,906)
Assum Change	1/1/2008	10.25	548,845	67,196
Asset Smooth Change	1/1/2008	10.25	(4,144,612)	(507,434)
Actuarial Loss	1/1/2009	11.25	13,142,024	1,500,725
Plan Amendment	1/1/2010	12.25	831,242	89,220
Actuarial Loss	1/1/2010	12.25	5,615,156	602,690
Actuarial Gain	1/1/2011	13.25	(181,816)	(18,462)
Actuarial Loss	1/1/2012	14.25	3,078,624	297,360
Assum Change	1/1/2012	14.25	3,920,974	378,721
Actuarial Gain	1/1/2013	15.25	(11,396,193)	(1,052,023)
Assum Change	1/1/2013	15.25	(418,321)	(38,617)
Actuarial Gain	10/1/2013	16	(1,648,958)	(147,540)

Type of Base	Date Established	Years Remaining	10/1/2017 Amount	Amortization Amount
Plan Amendment	10/1/2013	16	(27,098)	(2,425)
Actuarial Gain	10/1/2014	17	(9,294,303)	(800,239)
Plan Amendment	10/1/2014	17	1,224,008	105,387
Actuarial Loss	10/1/2015	18	5,194,930	431,815
Assum/Method Changes	10/1/2015	18	33,650,134	2,797,081
Actuarial Gain	10/1/2016	19	(3,519,569)	(283,252)
Assum Change	10/1/2016	19	16,805,887	1,352,525
Actuarial Gain	10/1/2017	20	(9,924,966)	(775,339)
Assum. Change	10/1/2017	20	<u>10,875,049</u>	<u>849,559</u>
			71,908,629	8,173,404

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2016	\$72,715,744
(2) Expected UAAL as of October 1, 2017	70,958,546
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(8,908,866)
Salary Increases	(3,144,902)
Active Decrements	2,134,520
Inactive Mortality	(851,051)
Other	<u>845,333</u>
Increase in UAAL due to (Gain)/Loss	(9,924,966)
Assumption Changes	<u>10,875,049</u>
(4) Actual UAAL as of October 1, 2017	\$71,908,629

DETERMINATION OF CUMULATIVE GAIN/(LOSS) EXPERIENCE POSITION

<u>Valuation Date</u>	<u>Year Ended</u>	<u>Gain/(Loss)</u>	<u>Balance</u>
1/1/1995	12/31/1994	(7,367,475)	(7,367,475)
1/1/1996	12/31/1995	5,757,825	(1,609,650)
1/1/1997	12/31/1996	8,249,398	6,639,748
1/1/1998	12/31/1997	14,303,191	20,942,939
1/1/1999	12/31/1998	26,177,594	47,120,533
1/1/2000	12/31/1999	26,361,263	73,481,796
1/1/2001	12/31/2000	18,708,226	92,190,022
1/1/2002	12/31/2001	(15,137,682)	77,052,340
1/1/2003	12/31/2002	(51,423,738)	25,628,602
1/1/2004	12/31/2003	(28,715,070)	(3,086,468)
1/1/2005	12/31/2004	(23,810,048)	(26,896,516)
1/1/2006	12/31/2005	(8,656,358)	(35,552,874)
1/1/2007	12/31/2006	(3,123,728)	(38,676,602)
1/1/2008	12/31/2007	169,648	(38,506,954)
1/1/2009	12/31/2008	(66,572,825)	(105,079,779)
1/1/2010	12/31/2009	(27,303,032)	(132,382,811)
1/1/2011	12/31/2010	854,077	(131,528,734)
1/1/2012	12/31/2011	(14,047,611)	(145,576,345)
1/1/2013	12/31/2012	12,807,830	(132,768,515)
10/1/2013	9/30/2013	1,811,169	(130,957,346)
10/1/2014	9/30/2014	9,867,338	(121,090,008)
10/1/2015	9/30/2015	(4,973,675)	(126,063,683)
10/1/2016	9/30/2016	3,492,745	(122,570,938)
10/1/2017	9/30/2017	9,924,966	(112,645,972)

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.

Interest Rate

7.40% (previously 7.50%) per year compounded annually, net of investment related expenses. We believe this is reasonable based on the target asset allocation of the trust and the expected long-term return by asset class.

Salary Increases

Service	Annual % Increase*
1 – 6	3.0%
7 – 10	2.5
11 – 25	1.0
26+	0.5

Expected increase in annual salary in addition to 2.75% inflationary component. The assumed rates of salary received approval from the Division of Retirement based on historical data and long-term expectations.

Retirement Rates

Service	Probability of Retirement (Police)	Probability of Retirement (Fire)
10 – 19	5%	5%
20	30	25
21	30	35
22	30	45
23	50	50
24	80	50
25 – 34	10	20
35+	100	100

No Members are expected to take reduced Early Retirement. The assumed rates of retirement were approved in conjunction with an actuarial experience study dated July 10, 2015.

Cost of Living Adjustments

None.

Funding Method

Entry Age Normal Actuarial Cost Method. Beginning with the pension fund’s plan year ended September 30, 2015, a full year salary load based on the current 4.3% assumption is utilized under the projection funding method, as mandated by the Division of Retirement.

Payroll Increases

2.0% per year. We feel this is reasonable based on long-term expectations and historical increases in inflation.

Administrative Expenses

Equal to prior year’s expense amount.

Termination Rates

Age	Years of Service	% Separating from Employment Within the Next Year	
		<u>Police</u>	<u>Fire</u>
All Ages	0	15.0%	15.0%
	1	5.0	5.0
	2	3.0	1.0
	3	3.0	1.0
	4	3.0	1.0
<50	5+	1.5	1.0
50+	5+	0.0	0.0

The assumed rates of termination were approved in conjunction with an actuarial experience study dated July 10, 2015.

Disability Rates

Age	% Become Disabled within Next Year	
	<u>Police</u>	<u>Fire</u>
20	0.07%	0.14%
25	0.08	0.15
30	0.09	0.18
35	0.12	0.23
40	0.15	0.30
45	0.26	0.51
50	0.50	1.00
55	0.78	1.55

It is assumed that 75% of disablements and active Member deaths are service related. The assumed rates of disablement were approved in conjunction with an actuarial experience study dated July 10, 2015.

Marital Status

All employed Members and all retired Members are assumed to be married. Females are assumed to be 3 years younger than males. This assumption was approved in conjunction with an actuarial experience study dated July 10, 2015.

Actuarial Value of Assets

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

VALUATION NOTES

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.

Individual Entry Age Normal Actuarial Cost Method (Level Percent of Compensation) is the method used to determine required contributions under the Plan. The use of this method involves the systematic funding of the Normal Cost (described above) and the Unfunded Accrued (Past Service) Liability. The actuarial accrued liability for active participants is the difference between the present value of future benefits and the present value of future Normal Costs. The actuarial accrued liability for inactive participants is the present value of future benefits.

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.

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.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2017

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Money Market	13,289,317.00
Cash and Short Term Investments	3,257.00
Total Cash and Equivalents	13,292,574.00
Receivables:	
State Contributions	18,742.94
From Broker for Investments Sold	586,280.00
Investment Income	2,426,418.00
Total Receivable	3,031,440.94
Investments:	
U. S. Bonds and Bills	63,755,193.00
Federal Agency Guaranteed Securities	352,869.00
Corporate Bonds and Other Fixed Income	145,326,162.00
Real Estate	119,178,626.00
Fund of Funds	37,857,277.00
Stocks	103,231,721.00
Venture Capital and Partnerships	11,039,745.00
Mutual Funds	194,907,421.00
Pooled/Common/Commingled Funds	206,128,887.00
Total Investments	881,777,901.00
Total Assets	898,101,915.94
 <u>LIABILITIES</u>	
Payables:	
PLOP Distributions	0.00
Accounts Payable and Accrued Liabilities	284,402.00
To City of Fort Lauderdale	2,586,413.00
Total Liabilities	5,331,440.00
Net Assets:	
Active and Retired Members' Equity	857,734,649.62
Share Plan Benefits	35,035,826.32
 NET POSITION RESTRICTED FOR PENSIONS	 892,770,475.94

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

ADDITIONS

Contributions:

Member	5,901,141.36
Buy-Back	24,749.42
City	17,325,393.00
State for Share Plan	1,653,052.77
State for Contribution	4,279,014.87

Total Contributions 29,183,351.42

Investment Income:

Miscellaneous Income	6,495,561.00	
Net Realized and Unrealized Gain (Loss)	79,872,796.80	
Net Increase in Fair Value of Investments		86,368,357.80
Interest & Dividends		12,807,167.00
Less Investment Expense ¹		(2,665,185.00)

Net Investment Income 96,510,339.80

Total Additions 125,693,691.22

DEDUCTIONS

Distributions to Members:

Benefit Payments	41,573,912.57
Lump Sum DROP Distributions	3,964,700.10
Lump Sum Share Distributions	922,570.33
Refunds of Member Contributions	103,001.00

Total Distributions 46,564,184.00

Administrative Expense 578,614.62

Administrative Expense for Share 40,960.38

Share Account Net Change 4,174,010.23

Total Deductions 51,357,769.23

Net Increase in Net Position 74,335,921.99

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 783,398,727.63

End of the Year 857,734,649.62

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. 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				
		2017	2018	2019	2020	2021
09/30/2016	6,483,477	3,890,087	2,593,392	1,296,697	0	0
09/30/2017	36,115,815	28,892,652	21,669,489	14,446,326	7,223,163	0
Total		32,782,739	24,262,881	15,743,023	7,223,163	0

<u>Development of Investment Gain/(Loss)</u>	
Market Value of Assets, including Share Account, 09/30/2016	814,260,544
Contributions Less Benefit Payments & Admin Expenses	(18,000,408)
Expected Investment Earnings*	60,394,525
Actual Net Investment Earnings	96,510,340
2017 Actuarial Investment Gain/(Loss)	<u>36,115,815</u>

*Expected Investment Earnings = 0.075 * [814,260,544 + 0.5 * (18,000,408)]

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, net of Share, 09/30/2017	857,734,650
(2) Gains/(Losses) Not Yet Recognized	32,782,739
(3) Actuarial Value of Assets, net of Share, 09/30/2017, (1) - (2)	<u>824,951,911</u>
(A) 09/30/2016 Actuarial Assets, including Share:	809,073,762
(I) Net Investment Income:	
1. Interest, Dividends and Other Income	19,302,728
2. Change in Actuarial Value	52,276,840
3. Investment Expenses	(2,665,185)
Total	<u>68,914,383</u>
(B) 09/30/2017 Actuarial Assets, including Share:	859,987,737
Actuarial Asset Rate of Return = 2I/(A+B-I):	8.61%
Market Value of Assets Rate of Return:	11.98%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	8,908,866
10/01/2017 Limited Net Actuarial Assets (not including Share):	824,951,911

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

REVENUES

Contributions:		
Member	5,901,141.36	
Buy-Back	24,749.42	
City	17,325,393.00	
State for Share Plan	1,653,052.77	
State for Contribution	4,279,014.87	
 Total Contributions		 29,183,351.42
Earnings from Investments:		
Interest & Dividends	12,807,167.00	
Miscellaneous Income	6,495,561.00	
Change in Actuarial Value	52,276,839.80	
 Total Earnings and Investment Gains		 71,579,567.80

EXPENDITURES

Distributions to Members:		
Benefit Payments	41,573,912.57	
Lump Sum DROP Distributions	3,964,700.10	
Lump Sum Share Distributions	922,570.33	
Refunds of Member Contributions	103,001.00	
 Total Distributions		 46,564,184.00
Expenses:		
Investment related ¹	2,665,185.00	
Administrative	578,614.62	
Administrative for Share	40,960.38	
 Total Expenses		 3,284,760.00
Share Account Net Change		4,174,010.23
Change in Net Assets for the Year		46,739,964.99
Net Assets Beginning of the Year		778,211,945.63
Net Assets End of the Year ²		824,951,910.62

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

²Net Assets may be limited for actuarial consideration.

STATISTICAL DATA

10/1/2016 10/1/2017

Actives - Hired before 10/1/2014

Number	724	689
Average Current Age	40.1	40.7
Average Age at Employment	28.2	28.1
Average Past Service	11.9	12.6
Average Annual Salary	\$95,133	\$97,726

Actives - Hired on or after 10/1/2014

Number	55	97
Average Current Age	28.8	29.2
Average Age at Employment	28.0	27.9
Average Past Service	0.8	1.3
Average Annual Salary	\$59,437	\$60,807

Service Retirees

Number	761	768
Average Current Age	66.1	66.6
Average Annual Benefit	\$47,248	\$48,011

DROP Retirees

Number	102	113
Average Current Age	51.8	52.3
Average Annual Benefit	\$74,877	\$75,723

Beneficiaries

Number	159	156
Average Current Age	73.9	73.6
Average Annual Benefit	\$23,498	\$23,906

Disability Retirees

Number	28	26
Average Current Age	53.4	54.2
Average Annual Benefit	\$42,598	\$42,733

STATISTICAL DATA
(Police Only)

10/1/2016 10/1/2017

Actives - Hired before 10/1/2014

Number	402	385
Average Current Age	39.4	40.2
Average Age at Employment	28.2	28.3
Average Past Service	11.2	11.9
Average Annual Salary	\$92,685	\$95,799

Actives - Hired on or after 10/1/2014

Number	40	50
Average Current Age	28.2	28.1
Average Age at Employment	27.4	26.7
Average Past Service	0.8	1.4
Average Annual Salary	\$58,729	\$62,053

STATISTICAL DATA
(Fire Only)

10/1/2016 10/1/2017

Actives - Hired before 10/1/2014

Number	322	304
Average Current Age	41.0	41.4
Average Age at Employment	28.2	28.1
Average Past Service	12.8	13.3
Average Annual Salary	\$98,189	\$100,167

Actives - Hired on or after 10/1/2014

Number	15	47
Average Current Age	30.4	30.4
Average Age at Employment	29.6	29.3
Average Past Service	0.8	1.1
Average Annual Salary	\$61,325	\$59,481

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	13	5	1	0	0	0	0	0	0	0	0	19
25 - 29	16	17	8	19	4	17	0	0	0	0	0	81
30 - 34	13	8	1	18	10	70	30	0	0	0	0	150
35 - 39	5	4	1	5	1	46	71	19	0	0	0	152
40 - 44	0	0	1	1	2	24	48	66	11	0	0	153
45 - 49	2	2	0	1	3	12	26	71	31	0	0	148
50 - 54	0	0	0	0	0	9	9	27	11	0	0	56
55 - 59	0	0	0	0	0	2	2	15	3	0	0	22
60 - 64	0	0	0	0	0	1	1	2	0	0	1	5
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	49	36	12	44	20	181	187	200	56	0	1	786

AGE AND SERVICE DISTRIBUTION
(Police Only)

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	6	4	1	0	0	0	0	0	0	0	0	11
25 - 29	7	11	8	9	2	14	0	0	0	0	0	51
30 - 34	2	5	1	9	6	43	18	0	0	0	0	84
35 - 39	1	1	1	1	1	30	41	13	0	0	0	89
40 - 44	0	0	1	1	2	17	28	30	6	0	0	85
45 - 49	0	1	0	0	1	9	14	26	22	0	0	73
50 - 54	0	0	0	0	0	7	8	10	4	0	0	29
55 - 59	0	0	0	0	0	2	1	8	0	0	0	11
60 - 64	0	0	0	0	0	0	0	1	0	0	1	2
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	16	22	12	20	12	122	110	88	32	1	1	435

AGE AND SERVICE DISTRIBUTION
(Fire Only)

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	7	1	0	0	0	0	0	0	0	0	0	8
25 - 29	9	6	0	10	2	3	0	0	0	0	0	30
30 - 34	11	3	0	9	4	27	12	0	0	0	0	66
35 - 39	4	3	0	4	0	16	30	6	0	0	0	63
40 - 44	0	0	0	0	0	7	20	36	5	0	0	68
45 - 49	2	1	0	1	2	3	12	45	9	0	0	75
50 - 54	0	0	0	0	0	2	1	17	7	0	0	27
55 - 59	0	0	0	0	0	0	1	7	3	0	0	11
60 - 64	0	0	0	0	0	1	1	1	0	0	0	3
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	33	14	0	24	8	59	77	112	24	0	0	351

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2016	779
b. Terminations	
i. Vested (partial or full) with deferred benefits	(6)
ii. Non-vested or full lump sum distribution received	(6)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(3)
f. DROP	<u>(27)</u>
g. Continuing participants	737
h. New entrants	<u>49</u>
i. Total active life participants in valuation	786

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

	Service Retirees, Vested Receiving	DROP Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested Deferred	Total
	<u>Benefits</u>	<u>Benefits</u>	<u>Benefits</u>	<u>Benefits</u>	<u>Benefits</u>	<u>Benefits</u>
a. Number prior valuation	761	102	159	28	20	1,070
Retired	20	(15)	0	0	(2)	3
DROP	0	27	0	0	0	27
Vested Deferred	0	0	0	(1)	9	8
Death, With Survivor	(7)	(1)	8	0	0	0
Death, No Survivor	(6)	0	(11)	(1)	0	(18)
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	(2)	(2)
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	768	113	156	26	25	1,088

SUMMARY OF PLAN PROVISIONS

<u>Membership</u>	Police officers and firefighters.
<u>Credited Service</u>	Total years and fractional parts of years of years of service of any Member, from the date he first entered employment as a Police Officer or Firefighter until either the date of his DROP Retirement or the date his employment shall be terminated by death, retirement, or discharge.
<u>Compensation</u>	Base pay, assignment pay, and longevity bonuses, including pick-up contributions, and up to forty (40) hours of overtime for police officers.
<u>Average Final Compensation</u>	<p><i>Firefighters hired prior October 1, 2014:</i> Average Compensation during the highest 2 years of Credited Service.</p> <p><i>Firefighters hired after September 30, 2014:</i> Average Compensation during the highest 5 years of Credited Service.</p> <p><i>Police Officers hired prior to April 1, 2014:</i> Average Compensation during the highest 2 years of Credited Service.</p> <p><i>Police Officers hired after March 31, 2014:</i> Average Compensation during the highest 5 years of Credited Service.</p>
<u>Member Contributions</u>	8.25% of Compensation. 8.50% for Members hired after April 18, 2010.
<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, Chapter 112, F.S.
<u>Normal Retirement</u>	
Date	Earlier of: 1) Age 55 with 10 years of Credited Service, or 2) attainment of 20 years of Credited Service, regardless of Age.
Plan 1 Benefit	
Firefighters	<i>Hired prior to October 1, 2014:</i> 3.38% of Average Final Compensation times Credited Service, with a maximum of 81% of Average Final Compensation. Firefighters with 25 or more years of Credited Service

on October 1, 2002 are subject to a maximum of 91.26% of Average Final Compensation. Firefighters employed before December 11, 1993 receive an additional 2.0% of Average Final Compensation (excluded from the 81% maximum percentage).

Hired after September 30, 2014: 3.00% of Average Final Compensation times Credited Service, with a maximum of 75% of Average Final Compensation.

Police Officers

Hired prior to April 1, 2014: 3.38% of Average Final Compensation times Credited Service, with a maximum of 81% of Average Final Compensation. Police Officers with 25 or more years of Credited Service on January 1, 2002 are subject to a maximum of 91.26%.

Hired after March 31, 2014: 3.00% of Average Final Compensation times Credited Service, with a maximum of 75% of Average Final Compensation.

Plan 2 Benefit

3.0% of Average Final Compensation for the first 20 years of Credited Service, plus 2.0% of Average Final Compensation for each year in excess of 20. Firefighters employed before December 11, 1993 receive an additional 2.0% of Average Final Compensation.

Form of Benefit

Firefighters hired prior to October 1, 2014: 60% Joint and Survivor, with an additional 40% death benefit during the first year of retirement (Optional forms available).

Firefighters hired after September 30, 2014: 10-Year Certain and Life (Optional forms available).

Police Officers hired prior to April 1, 2014: 60% Joint and Survivor, with an additional 40% death benefit during the first year of retirement (Optional forms available).

Police Officers hired after March 31, 2014: 10-Year Certain and Life (Optional forms available).

Early Retirement (Firefighters Only)

Eligibility

Age 50 with 10 years of Credited Service.

Benefit

Accrued benefit, reduced 3.0% per year that the benefit commencement date precedes the Normal Retirement date.

Vesting

Less than 10 Years of Credited Service

Refund of Member contributions. For Police Officers who separate employment with the City on or after December 3, 2013 and Firefighters who separate employment with the City on or after October 1, 2014, no interest will be credited when determining the refund amount.

10 years of Credited Service

Accrued benefit deferred to Normal Retirement date.

Disability

Eligibility

Covered from Date of Employment.

Exclusions

Disability resulting from use of drugs, illegal participation in riots, service in military, etc.

Benefit

Non-Service Connected

50% of Average Final Compensation offset by 100% of Social Security Disability benefits, Workers' Compensation benefits, and earned income.

Service Connected

65% of Average Final Compensation.

Duration

Payable for life or until recovery.

Death Benefits

Eligibility

Covered from Date of Employment.

Benefit

Non-Service Connected

50% of the Member's monthly Compensation for eight (8) years. For a Member with at least 10 years of Credited Service, not less than the benefits otherwise payable at early or normal retirement age. The minimum benefit payable is four (4) times the rate of the Member's annual compensation.

Service Connected

50% of Member's monthly Compensation to spouse until death or remarriage. Children's benefits of 10% of Member's monthly benefits per child (50% maximum) until age 18, and a maximum of 80% to spouse and children. For Members who are not married and have no children, a 10-year benefit will be paid to the designated beneficiary. The minimum benefit payable is

four (4) times the rate of the Member's annual compensation.

COLA

Adjustment Date

July 1st

Eligibility

Receipt of retirement benefits for one year. Additionally, must have entered Retirement status prior to July 1, 2008.

Amount

Lesser of 1) percentage not greater than CPI (all Urban Consumers) for preceding calendar year, or 2) percentage increase limited to present value of which can be funded by excess gains for preceding calendar year. Maximum cost-of-living adjustment is 5.0%.

The COLA increase may be granted only if the System remains in a net positive experience position, determined on a cumulative basis from January 1, 1987 (in State Statute – not in Ordinance)

DROP

Members eligible for Normal Retirement may elect either a Deferred Retirement Option Plan for up to 96 months or a Benefit Actuarially Calculated Deferred Retirement Option Program for up to 36 months, but not both. For Police Officers hired after March 31, 2014 and Firefighters hired after September 30, 2014, each month a Member delays entry into DROP following completion of 25 years of Credited Service, the 96 month maximum DROP participation period shall be correspondingly reduced by one month.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2017

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Money Market	13,289,317
Cash and Short Term Investments	3,257
Total Cash and Equivalents	13,292,574
Receivables:	
State Contributions	18,743
From Broker for Investments Sold	586,280
Investment Income	2,426,418
Total Receivable	3,031,441
Investments:	
U. S. Bonds and Bills	63,755,193
Federal Agency Guaranteed Securities	352,869
Corporate Bonds and Other Fixed Income	145,326,162
Real Estate	119,178,626
Fund of Funds	37,857,277
Stocks	103,231,721
Venture Capital and Partnerships	11,039,745
Mutual Funds	194,907,421
Pooled/Common/Commingled Funds	206,128,887
Total Investments	881,777,901
Total Assets	898,101,916
<u>LIABILITIES</u>	
Payables:	
To Broker for Investments Purchased	2,460,625
Accounts Payable and Accrued Liabilities	284,402
To City of Fort Lauderdale	2,586,413
Total Liabilities	5,331,440
NET POSITION RESTRICTED FOR PENSIONS	892,770,476

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

ADDITIONS

Contributions:

Member	5,901,141	
Buy-Back	24,749	
City	17,325,393	
State for Share Plan	1,653,053	
State for Contribution	4,279,015	
 Total Contributions		 29,183,351
 Investment Income:		
Net Increase in Fair Value of Investments	86,368,358	
Interest & Dividends	12,807,167	
Less Investment Expense ¹	(2,665,185)	
 Net Investment Income		 96,510,340
 Total Additions		 125,693,691

DEDUCTIONS

Distributions to Members:

Benefit Payments	41,573,913	
Lump Sum DROP Distributions	3,964,700	
Lump Sum Share Distributions	922,570	
Refunds of Member Contributions	103,001	
 Total Distributions		 46,564,184
 Administrative Expense		 619,575
 Total Deductions		 47,183,759
 Net Increase in Net Position		 78,509,932
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		814,260,544
 End of the Year		 892,770,476

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: Two of the three appointive Members shall be appointed by the City Commission, each of whom must be a legal resident of the City. The two above appointive Members appointed after September 18, 2012 shall serve as trustee for a period of 4 years, unless sooner replaced by the City Commission at whose pleasure they shall serve. The third appointive Member shall be chosen by a majority of the previous six Members and such person's name shall be submitted to the City Commission. Upon receipt of the seventh person's name, the City Commission shall, as a ministerial duty, appoint such person to the Board of Trustees as its seventh Member. The seventh Member shall have the same rights as each of the other six Members appointed or elected as herein provided, shall serve on the Board for a period of four years, and may succeed himself or herself in office. The term of office of the seventh Member appointed after September 18, 2012 shall be four years.

Plan Membership as of October 1, 2016:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	1,050
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	20
Active Plan Members	779
	1,849

Benefits Provided

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

Normal Retirement:

Earlier of: 1) Age 55 with 10 years of Credited Service, or 2) attainment of 20 years of Credited Service, regardless of Age.

Plan 1 Benefit Firefighters:

Hired prior to October 1, 2014:

3.38% of Average Final Compensation times Credited Service, with a maximum of 81% of Average Final Compensation.

Firefighters with 25 or more years of Credited Service on October 1, 2002 are subject to a maximum of 91.26% of Average Final Compensation. Firefighters employed before December 11, 1993 receive an additional 2.00% of Average Final Compensation (excluded from the 81% maximum percentage).

Hired after September 30, 2014:

3.00% of Average Final Compensation times Credited Service, with a maximum of 75% of Average Final Compensation.

Plan 1 Benefit Police Officers:

Hired prior to April 1, 2014:

3.38% of Average Final Compensation times Credited Service, with a maximum of 81% of Average Final Compensation. Police Officers with 25 or more years of Credited Service on January 1, 2002 are subject to a maximum of 91.26%.

Hired after March 31, 2014:

3.00% of Average Final Compensation times Credited Service, with a maximum of 75% of Average Final Compensation.

Plan 2 Benefit: 3.00% of Average Final Compensation for the first 20 years of Credited Service, plus 2.00% of Average Final Compensation for each year in excess of 20. Firefighters employed before December 11, 1993 receive an additional 2.00% of Average Final Compensation.

Early Retirement (Firefighters Only):

Age 50 and 10 Years of Credited Service.

Accrued benefit, reduced 3.00% per year that the benefit commencement date precedes the Normal Retirement date.

Vesting:

Less than 10 Years of Credited Service: Refund of Member contributions. For Police Officers who separate employment with the City on or after December 3, 2013 and Firefighters who separate employment with the City on or after October 1, 2014, no interest will be credited when determining the refund amount.

10 Years of Credited Service: Accrued benefit deferred to Normal Retirement date.

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Disability:

Covered from Date of Employment.

Non-Service Connected: 50% of Average Final Compensation offset by 100% of Social Security Disability benefits and Workers' Compensation benefits, and earned income.

Service Connected: 65% of Average Final Compensation offset by Workers' Compensation benefits and earned income.

Death Benefits:

Covered from Date of Employment.

Non-Service Connected: 50% of the Member's monthly Compensation for eight years. For a Member with at least 10 years of Credited Service, not less than the benefits otherwise payable at early or normal retirement age. The minimum benefit payable is four (4) times the rate of the Member's annual compensation.

Service Connected: 50% of Member's monthly Compensation to spouse until death or remarriage. Children's benefits of 10% of Member's monthly benefits per child (50% maximum) until age 18, and a maximum of 80% to spouse and children. For Members who are not married and have no children, a 10-year benefit will be paid to the designated beneficiary. The minimum benefit payable is four (4) times the rate of the Member's annual compensation.

COLA

Adjustment Date: July 1st.

Eligibility: Receipt of retirement benefits for one year. Additionally, must have entered Retirement status prior to July 1, 2008.

Amount: Lesser of 1) percentage not greater than CPI (all Urban Consumers) for preceding calendar year, or 2) percentage increase limited to present value of which can be funded by excess gains for preceding calendar year. Maximum cost-of-living adjustment is 5.0%. The COLA increase may be granted only if the System remains in a net positive experience position, determined on a cumulative basis from January 1, 1987 (in State Statute – not in Ordinance).

Contributions

Member Contributions: 8.25% of Compensation. 8.50% for Members hired after April 18, 2010.

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

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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	30.00%
International Equity	15.00%
Domestic Bonds	30.00%
Real Estate	12.50%
Other	12.50%
<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, 2017, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 11.98 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

Members eligible for Normal Retirement may elect either a Deferred Retirement Option Plan for up to 96 months or a Benefit Actuarially Calculated Deferred Retirement Option Program for up to 36 months, but not both. For Police Officers hired after March 31, 2014 and Firefighters hired after September 30, 2014, each month a Member delays entry into DROP following completion of 25 years of Credited Service, the 96 month maximum DROP participation period shall be correspondingly reduced by one month.

The DROP balance as September 30, 2017 is \$32,721,166.

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	\$ 928,971,000
Plan Fiduciary Net Position	\$ (892,770,476)
Sponsor's Net Pension Liability	<u>\$ 36,200,524</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	96.10%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2016 updated to September 30, 2017 using the following actuarial assumptions:

Inflation	2.75%
Salary Increases	0.50% - 3.00% *Expected increase in annual salary in addition to 2.75% inflationary component.
Discount Rate	7.40%
Investment Rate of Return	7.40%

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 dated July 10, 2015.

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 2.30%.

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 arithmetic 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:

<u>Asset Class</u>	<u>Long Term Expected Real Rate of Return*</u>
Domestic Equity	6.90%
International Equity	6.80%
Domestic Bonds	1.80%
Real Estate	4.50%
Other	3.30%

*10 Year Long-term projections

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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	\$ 137,999,522	\$ 36,200,524	\$ (48,085,239)

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

	09/30/2017	09/30/2016	09/30/2015
Total Pension Liability			
Service Cost	20,106,284	19,199,538	18,531,300
Interest	65,765,964	62,181,617	60,367,031
Change in Excess State Money	-	-	-
Share Plan Allocation	1,653,054	1,732,185	1,826,197
Changes of benefit terms	-	-	1,097,988
Differences between Expected and Actual Experience	(2,762,831)	(5,100,657)	(7,319,054)
Changes of assumptions	10,692,637	16,504,779	(2,194,981)
Contributions - Buy Back	24,749	73,763	43,865
Contributions - Transfer from General Plan	-	-	26,692
Benefit Payments, including Refunds of Employee Contributions	(46,564,184)	(48,849,184)	(46,660,430)
Net Change in Total Pension Liability	48,915,673	45,742,041	25,718,608
Total Pension Liability - Beginning	880,055,327	834,313,286	808,594,678
Total Pension Liability - Ending (a)	<u>\$ 928,971,000</u>	<u>\$ 880,055,327</u>	<u>\$ 834,313,286</u>
Plan Fiduciary Net Position			
Contributions - Employer	17,325,393	13,867,934	15,599,916
Contributions - State	5,932,068	5,860,782	5,799,228
Contributions - Employee	5,901,141	5,732,925	5,584,263
Contributions - Buy Back	24,749	73,763	43,865
Contributions - Transfer from General Plan	-	-	26,692
Net Investment Income	96,510,340	63,676,002	5,969,880
Benefit Payments, including Refunds of Employee Contributions	(46,564,184)	(48,849,184)	(46,660,430)
Administrative Expense	(619,575)	(651,146)	(692,348)
Other	-	-	-
Net Change in Plan Fiduciary Net Position	78,509,932	39,711,076	(14,328,934)
Plan Fiduciary Net Position - Beginning	814,260,544	774,549,468	788,878,402
Plan Fiduciary Net Position - Ending (b)	<u>\$ 892,770,476</u>	<u>\$ 814,260,544</u>	<u>\$ 774,549,468</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 36,200,524</u>	<u>\$ 65,794,783</u>	<u>\$ 59,763,818</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	96.10%	92.52%	92.84%
Covered Employee Payroll ¹	\$ 71,050,792	\$ 69,471,501	\$ 68,064,001
Net Pension Liability as a percentage of Covered Employee Payroll	50.95%	94.71%	87.81%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

Changes of benefit terms:

For measurement date 09/30/2015, amounts reported as changes of benefit terms were resulted from:

- 1) For Firefighters hired on or after October 1, 2014:
 - a. The Average Monthly Earnings period will be increased from 2 to 5 years.
 - b. The benefit accrual rate will be decreased from 3.38% to 3.0% for each year of Credited Service.
 - c. The maximum accrual rate will be decreased from 81.0% to 75.0% of Average Monthly Earnings.
 - d. For each month a Firefighter delays entry into DROP following completion of 25 years of Credited Service, the 96 month maximum DROP participation period shall be correspondingly reduced by one month.
 - e. The Normal Form of Benefit will be changed from 60% joint and contingent survivor to 10-Year Certain and Life.
- 2) Eliminating the interest component on refunds of Member Contributions for all Firefighters who separate employment with the City on or after October 1, 2014.
- 3) Amending the definition of Salary to provide that pensionable earnings for Firefighters will be increased from 144 hours to 159 hours for each 21-day period.
- 4) Implementing a special formula to determine the amount of Chapter 175 premium tax revenues that the City will be able to utilize to offset its funding requirements, effective for the plan year beginning on October 1, 2014.

For the impact these changes had on the valuation results, please refer to our September 10, 2015 Revised Actuarial Impact Statement.

Changes of assumptions:

For measurement date 09/30/2017, as required by Chapter 2015-157, Laws of Florida, the assumed rates of mortality have been changed from those in the July 1, 2015 FRS valuation report to those used in the July 1, 2016 FRS valuation report.

Additionally, the investment rate of return was lowered from 7.50% to 7.40%, net of investment related expenses.

Finally, the inflation rate assumption has been updated from 2.30% to 2.75% to match the long-term inflation rate assumption of the valuation report.

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.

For measurement date 09/30/2015, amounts reported as assumption changes were resulted from an actuarial experience study dated July 10, 2015 the Board approved numerous changes to the actuarial assumptions and methods in conjunction with the 10/01/2015 Valuation. The below assumptions/methods have been changed, and the specifics of the approved assumptions are displayed in the actuarial assumptions and methods section of the 10/01/2015 Valuation.

- 1) Asset Valuation Method (with a "Fresh Start")
- 2) Retirement Rates
- 3) Withdrawal Rates
- 4) Disability Rates (Police only)

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

	<u>09/30/2014</u>	<u>09/30/2013</u>
Total Pension Liability		
Service Cost	18,025,712	16,768,104
Interest	57,797,227	55,119,489
Change in Excess State Money	(1,223,158)	-
Share Plan Allocation	2,561,814	-
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Contributions - Buy Back	-	-
Contributions - Transfer from General Plan	-	-
Benefit Payments, including Refunds of Employee Contributions	(44,137,555)	(31,351,671)
Net Change in Total Pension Liability	33,024,040	40,535,922
Total Pension Liability - Beginning	775,570,638	735,034,716
Total Pension Liability - Ending (a)	<u>\$808,594,678</u>	<u>\$775,570,638</u>
Plan Fiduciary Net Position		
Contributions - Employer	14,498,457	11,219,401
Contributions - State	5,875,363	6,053,952
Contributions - Employee	5,581,044	4,113,451
Contributions - Buy Back	-	-
Contributions - Transfer from General Plan	-	-
Net Investment Income	59,358,824	69,488,348
Benefit Payments, including Refunds of Employee Contributions	(44,137,555)	(31,351,671)
Administrative Expense	(647,397)	(507,376)
Other	4,000,034	-
Net Change in Plan Fiduciary Net Position	44,528,770	59,016,105
Plan Fiduciary Net Position - Beginning	744,349,632	685,333,527
Plan Fiduciary Net Position - Ending (b)	<u>\$788,878,402</u>	<u>\$744,349,632</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 19,716,276</u>	<u>\$ 31,221,006</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	97.56%	95.97%
Covered Employee Payroll ¹	\$ 67,279,327	\$ 65,886,733
Net Pension Liability as a percentage of Covered Employee Payroll	29.31%	47.39%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

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Changes of benefit terms:

For measurement date 09/30/2014, a number of benefits were amended for Police Officers hired on or after April 1, 2014. Additionally, the entire balance of the Chapter 185 premium tax revenues reserve account in the Plan as of December 31, 2013 was applied to reduce the City's annual required contribution for the October 15, 2014 payment. Additionally, all future Chapter 185 premium tax revenues received shall be available to reduce the City's annual contribution requirements. For the specific changes made to the Police Officers' benefit structure and the impact these changes had on the valuation results, please refer to our March 14, 2014 Actuarial Impact Statement.

SCHEDULE OF CONTRIBUTIONS
Last 10 Fiscal Years

	09/30/2017	09/30/2016	09/30/2015	09/30/2014	09/30/2013
Actuarially Determined Contribution	21,265,207	17,665,942	18,913,469	19,012,474	14,208,593
Contributions in relation to the Actuarially Determined Contributions	21,604,408	17,665,942	18,913,469	19,012,474	14,208,593
Contribution Deficiency (Excess)	\$ (339,201)	\$ -	\$ -	\$ -	\$ -
Covered Employee Payroll ¹	\$ 71,050,792	\$ 69,471,501	\$ 67,279,327	\$ 67,279,327	\$ 65,886,733
Contributions as a percentage of Covered Employee Payroll	30.41%	25.43%	28.11%	28.26%	21.57%

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

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:

Actuarial Cost Method: Entry Age Normal Actuarial Cost Method. Beginning with the pension fund’s plan year ended September 30, 2015, a full year salary load based on the current 4.6% assumption is utilized under the projection funding method, as mandated by the Division of Retirement.

Amortization Method: Level Percentage of Pay, Closed.

Remaining Amortization Period: 20 Years.

Mortality Rates: RP-2000 Table projected by Scale AA to 2012.

Disabled Mortality Rates: RP-2000 Disabled Table projected by Scale AA to 2012.
We feel the assumed rates of mortality sufficiently accommodates expected mortality improvements.

Interest Rate: 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.

Retirement Rates:

<u>Service</u>	<u>Probability of</u>	
	<u>Retirement (Police)</u>	<u>Retirement (Fire)</u>
10-19	5%	5%
20	30%	25%
21	30%	35%
22	30%	45%
23	50%	50%
24	80%	50%
25-34	10%	20%
35+	100%	100%

No Members are expected to take reduced Early Retirement. The assumed rates of retirement were approved in conjunction with an actuarial experience study dated July 10, 2015.

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Salary Increases:	<u>Service</u>	<u>Annual % Increase</u>
	1 - 6	3.00%
	7 - 10	2.50%
	11 - 25	1.00%
	26+	0.50%

Expected increase in annual salary in addition to 2.75% inflationary component. The assumed rates of salary received approval from the Division of Retirement based on historical data and long-term expectations.

Cost of Living Adjustments: None.

2.0% per year. We feel this is reasonable based on long-term expectations and historical increases in inflation.

Payroll Increases:

Termination Rates:	<u>Age</u>	<u>Years of Service</u>	<u>% Separating from Employment within the Next Year</u>	
			<u>Police</u>	<u>Fire</u>
	All Ages	0	15.00%	15.00%
		1	5.00%	5.00%
		2	3.00%	1.00%
		3	3.00%	1.00%
		4	3.00%	1.00%
	<50	5+	1.50%	1.00%
	50+	5+	0.00%	0.00%

The assumed rates of termination were approved in conjunction with an actuarial experience study dated July 10, 2015.

Disability Rates:	<u>Age</u>	<u>% Becoming Disabled within Next Year</u>	
		<u>Police</u>	<u>Fire</u>
	20	0.07%	0.14%
	25	0.08%	0.15%
	30	0.09%	0.18%
	35	0.12%	0.23%
	40	15.00%	0.30%
	45	0.26%	0.51%
	50	0.50%	1.00%
	55	0.78%	1.55%

It is assumed that 75% of disablements and active Member deaths are service related. The assumed rates of disablement were approved in conjunction with an actuarial experience study dated July 10, 2015.

Marital Status: All employed Members and all retired Members are assumed to be married. Females are assumed to be 3 years younger than males. This assumption was approved in conjunction with an actuarial experience study dated July 10, 2015.

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

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

	<u>09/30/2017</u>	<u>09/30/2016</u>	<u>09/30/2015</u>	<u>09/30/2014</u>	<u>09/30/2013</u>
Annual Money-Weighted Rate of Return					
Net of Investment Expense	11.98%	8.35%	0.77%	8.60%	10.10%

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2017)

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: Two of the three appointive Members shall be appointed by the City Commission, each of whom must be a legal resident of the City. The two above appointive Members appointed after September 18, 2012 shall serve as trustee for a period of 4 years, unless sooner replaced by the City Commission at whose pleasure they shall serve. The third appointive Member shall be chosen by a majority of the previous six Members and such person's name shall be submitted to the City Commission. Upon receipt of the seventh person's name, the City Commission shall, as a ministerial duty, appoint such person to the Board of Trustees as its seventh Member. The seventh Member shall have the same rights as each of the other six Members appointed or elected as herein provided, shall serve on the Board for a period of four years, and may succeed himself or herself in office. The term of office of the seventh Member appointed after September 18, 2012 shall be four years.

The Plan provides pensions for each sworn police officer and firefighter of the City who is eligible to participate in the Plan and who fulfills the prescribed eligibility requirements is considered a Member of the Plan.

Plan Membership as of October 1, 2016:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	1,050
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	20
Active Plan Members	779
	1,849

Benefits Provided

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

Normal Retirement:

Earlier of: 1) Age 55 with 10 years of Credited Service, or 2) attainment of 20 years of Credited Service, regardless of Age.

Plan 1 Benefit Firefighters:

Hired prior to October 1, 2014:

3.38% of Average Final Compensation times Credited Service, with a maximum of 81% of Average Final Compensation. Firefighters with 25 or more years of Credited Service on October 1, 2002 are subject to a maximum of 91.26% of Average Final Compensation. Firefighters employed before December 11, 1993 receive an additional 2.00% of Average Final Compensation (excluded from the 81% maximum percentage).

Hired after September 30, 2014:

3.00% of Average Final Compensation times Credited Service, with a maximum of 75% of Average Final Compensation.

Plan 1 Benefit Police Officers:

Hired prior to April 1, 2014:

3.38% of Average Final Compensation times Credited Service, with a maximum of 81% of Average Final Compensation. Police Officers with 25 or more years of Credited Service on January 1, 2002 are subject to a maximum of 91.26%.

Hired after March 31, 2014:

3.00% of Average Final Compensation times Credited Service, with a maximum of 75% of Average Final Compensation.

Plan 2 Benefit: 3.00% of Average Final Compensation for the first 20 years of Credited Service, plus 2.00% of Average Final Compensation for each year in excess of 20. Firefighters employed before December 11, 1993 receive an additional 2.00% of Average Final Compensation.

Early Retirement (Firefighters Only):

Age 50 and 10 Years of Credited Service.

Accrued benefit, reduced 3.00% per year that the benefit commencement date precedes the Normal Retirement date.

Vesting:

Less than 10 Years of Credited Service: Refund of Member contributions. For Police Officers who separate employment with the City on or after December 3, 2013 and Firefighters who separate employment with the City on or after October 1, 2014, no interest will be credited when determining the refund amount.

10 Years of Credited Service: Accrued benefit deferred to Normal Retirement date.

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Disability:

Covered from Date of Employment.

Non-Service Connected: 50% of Average Final Compensation offset by 100% of Social Security Disability benefits and Workers' Compensation benefits, and earned income.

Service Connected: 65% of Average Final Compensation offset by Workers' Compensation benefits and earned income.

Death Benefits:

Covered from Date of Employment.

Non-Service Connected: 50% of the Member's monthly Compensation for eight years. For a Member with at least 10 years of Credited Service, not less than the benefits otherwise payable at early or normal retirement age. The minimum benefit payable is four (4) times the rate of the Member's annual compensation.

Service Connected: 50% of Member's monthly Compensation to spouse until death or remarriage. Children's benefits of 10% of Member's monthly benefits per child (50% maximum) until age 18, and a maximum of 80% to spouse and children. For Members who are not married and have no children, a 10-year benefit will be paid to the designated beneficiary. The minimum benefit payable is four (4) times the rate of the Member's annual compensation.

COLA

Adjustment Date: July 1st.

Eligibility: Receipt of retirement benefits for one year. Additionally, must have entered Retirement status prior to July 1, 2008.

Amount: Lesser of 1) percentage not greater than CPI (all Urban Consumers) for preceding calendar year, or 2) percentage increase limited to present value of which can be funded by excess gains for preceding calendar year. Maximum cost-of-living adjustment is 5.0%. The COLA increase may be granted only if the System remains in a net positive experience position, determined on a cumulative basis from January 1, 1987 (in State Statute – not in Ordinance).

Contributions

Member Contributions: 8.25% of Compensation. 8.50% for Members hired after April 18, 2010.

City and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided for in Part VII in 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, 2016 through September 30, 2017.

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, 2016 updated to September 30, 2017 using the following actuarial assumptions:

Inflation	2.75%
Salary Increases	0.50% - 3.00% *Expected increase in annual salary in addition to 2.75% inflationary component.
Discount Rate	7.40%
Investment Rate of Return	7.40%

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 dated July 10, 2015.

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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 2.30%.

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 arithmetic 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	30.00%	6.90%
International Equity	15.00%	6.80%
Domestic Bonds	30.00%	1.80%
Real Estate	12.50%	4.50%
Other	12.50%	3.30%
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	Plan Fiduciary	Net Pension
	Liability	Net Position	Liability
	(a)	(b)	(a)-(b)
Balance at September 30, 2016	\$ 880,055,327	\$ 814,260,544	\$ 65,794,783
Changes for a Year:			
Service Cost	20,106,284	-	20,106,284
Interest	65,765,964	-	65,765,964
Share Plan Allocation	1,653,054	-	1,653,054
Differences between Expected and Actual Experience	(2,762,831)	-	(2,762,831)
Changes of assumptions	10,692,637	-	10,692,637
Changes of benefit terms	-	-	-
Contributions - Employer	-	17,325,393	(17,325,393)
Contributions - State	-	5,932,068	(5,932,068)
Contributions - Employee	-	5,901,141	(5,901,141)
Contributions - Buy Back	24,749	24,749	-
Net Investment Income	-	96,510,340	(96,510,340)
Benefit Payments, including Refunds of Employee Contributions	(46,564,184)	(46,564,184)	-
Administrative Expense	-	(619,575)	619,575
Net Changes	48,915,673	78,509,932	(29,594,259)
Balance at September 30, 2017	\$ 928,971,000	\$ 892,770,476	\$ 36,200,524

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	\$ 137,999,522	\$ 36,200,524	\$ (48,085,239)

Pension Plan Fiduciary Net Position.

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

**PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED
INFLOWS OF RESOURCES RELATED TO PENSIONS**

For the year ended September 30, 2017, the Sponsor will recognize a Pension Expense of \$25,780,290.

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	-	8,198,279
Changes of assumptions	18,456,976	877,992
Net difference between Projected and Actual Earnings on Pension Plan investments	-	11,808,819
Total	\$ 18,456,976	\$ 20,885,090

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	\$ 3,931,080
2019	\$ 3,931,080
2020	\$ (4,653,072)
2021	\$ (5,637,202)
2022	\$ -
Thereafter	\$ -

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

	09/30/2017	09/30/2016	09/30/2015
Total Pension Liability			
Service Cost	20,106,284	19,199,538	18,531,300
Interest	65,765,964	62,181,617	60,367,031
Change in Excess State Money	-	-	-
Share Plan Allocation	1,653,054	1,732,185	1,826,197
Changes of benefit terms	-	-	1,097,988
Differences between Expected and Actual Experience	(2,762,831)	(5,100,657)	(7,319,054)
Changes of assumptions	10,692,637	16,504,779	(2,194,981)
Contributions - Buy Back	24,749	73,763	43,865
Contributions - Transfer from General Plan	-	-	26,692
Benefit Payments, including Refunds of Employee Contributions	(46,564,184)	(48,849,184)	(46,660,430)
Net Change in Total Pension Liability	48,915,673	45,742,041	25,718,608
Total Pension Liability - Beginning	880,055,327	834,313,286	808,594,678
Total Pension Liability - Ending (a)	<u>\$928,971,000</u>	<u>\$880,055,327</u>	<u>\$834,313,286</u>
Plan Fiduciary Net Position			
Contributions - Employer	17,325,393	13,867,934	15,599,916
Contributions - State	5,932,068	5,860,782	5,799,228
Contributions - Employee	5,901,141	5,732,925	5,584,263
Contributions - Buy Back	24,749	73,763	43,865
Contributions - Transfer from General Plan	-	-	26,692
Net Investment Income	96,510,340	63,676,002	5,969,880
Benefit Payments, including Refunds of Employee Contributions	(46,564,184)	(48,849,184)	(46,660,430)
Administrative Expense	(619,575)	(651,146)	(692,348)
Other	-	-	-
Net Change in Plan Fiduciary Net Position	78,509,932	39,711,076	(14,328,934)
Plan Fiduciary Net Position - Beginning	814,260,544	774,549,468	788,878,402
Plan Fiduciary Net Position - Ending (b)	<u>\$892,770,476</u>	<u>\$814,260,544</u>	<u>\$774,549,468</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 36,200,524</u>	<u>\$ 65,794,783</u>	<u>\$ 59,763,818</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	96.10%	92.52%	92.84%
Covered Employee Payroll ¹	\$ 71,050,792	\$ 69,471,501	\$ 68,064,001
Net Pension Liability as a percentage of Covered Employee Payroll	50.95%	94.71%	87.81%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

Changes of benefit terms:

For measurement date 09/30/2015, amounts reported as changes of benefit terms were resulted from:

- 1) For Firefighters hired on or after October 1, 2014:
 - a. The Average Monthly Earnings period will be increased from 2 to 5 years.
 - b. The benefit accrual rate will be decreased from 3.38% to 3.0% for each year of Credited Service.
 - c. The maximum accrual rate will be decreased from 81.0% to 75.0% of Average Monthly Earnings.
 - d. For each month a Firefighter delays entry into DROP following completion of 25 years of Credited Service, the 96 month maximum DROP participation period shall be correspondingly reduced by one month.
 - e. The Normal Form of Benefit will be changed from 60% joint and contingent survivor to 10-Year Certain and Life.
- 2) Eliminating the interest component on refunds of Member Contributions for all Firefighters who separate employment with the City on or after October 1, 2014.
- 3) Amending the definition of Salary to provide that pensionable earnings for Firefighters will be increased from 144 hours to 159 hours for each 21-day period.
- 4) Implementing a special formula to determine the amount of Chapter 175 premium tax revenues that the City will be able to utilize to offset its funding requirements, effective for the plan year beginning on October 1, 2014.

For the impact these changes had on the valuation results, please refer to our September 10, 2015 Revised Actuarial Impact Statement.

Changes of assumptions:

For measurement date 09/30/2017, as required by Chapter 2015-157, Laws of Florida, the assumed rates of mortality have been changed from those in the July 1, 2015 FRS valuation report to those used in the July 1, 2016 FRS valuation report. Additionally, the investment rate of return was lowered from 7.50% to 7.40%, net of investment related expenses. Finally, the inflation rate assumption has been updated from 2.30% to 2.75% to match the long-term inflation rate assumption of the valuation report.

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.

For measurement date 09/30/2015, amounts reported as assumption changes were resulted from an actuarial experience study dated July 10, 2015 the Board approved numerous changes to the actuarial assumptions and methods in conjunction with the 10/01/2015 Valuation. The below assumptions/methods have been changed, and the specifics of the approved assumptions are displayed in the actuarial assumptions and methods section of the 10/01/2015 Valuation.

- 1) Asset Valuation Method (with a "Fresh Start")
- 2) Retirement Rates
- 3) Withdrawal Rates
- 4) Disability Rates (Police only)

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

	09/30/2014	09/30/2013
Total Pension Liability		
Service Cost	18,025,712	16,768,104
Interest	57,797,227	55,119,489
Change in Excess State Money	(1,223,158)	-
Share Plan Allocation	2,561,814	-
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Contributions - Buy Back	-	-
Contributions - Transfer from General Plan	-	-
Benefit Payments, including Refunds of Employee Contributions	(44,137,555)	(31,351,671)
Net Change in Total Pension Liability	33,024,040	40,535,922
Total Pension Liability - Beginning	775,570,638	735,034,716
Total Pension Liability - Ending (a)	\$808,594,678	\$775,570,638
Contributions - Employer	14,498,457	11,219,401
Contributions - State	5,875,363	6,053,952
Contributions - Employee	5,581,044	4,113,451
Contributions - Buy Back	-	-
Contributions - Transfer from General Plan	-	-
Net Investment Income	59,358,824	69,488,348
Benefit Payments, including Refunds of Employee Contributions	(44,137,555)	(31,351,671)
Administrative Expense	(647,397)	(507,376)
Other	4,000,034	-
Net Change in Plan Fiduciary Net Position	44,528,770	59,016,105
Plan Fiduciary Net Position - Beginning	744,349,632	685,333,527
Plan Fiduciary Net Position - Ending (b)	\$788,878,402	\$744,349,632
Net Pension Liability - Ending (a) - (b)	\$ 19,716,276	\$ 31,221,006
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	97.56%	95.97%
Covered Employee Payroll ¹	\$ 67,279,327	\$ 65,886,733
Net Pension Liability as a percentage of Covered Employee Payroll	29.31%	47.39%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

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Changes of benefit terms:

For measurement date 09/30/2014, a number of benefits were amended for Police Officers hired on or after April 1, 2014. Additionally, the entire balance of the Chapter 185 premium tax revenues reserve account in the Plan as of December 31, 2013 was applied to reduce the City's annual required contribution for the October 15, 2014 payment. Additionally, all future Chapter 185 premium tax revenues received shall be available to reduce the City's annual contribution requirements. For the specific changes made to the Police Officers' benefit structure and the impact these changes had on the valuation results, please refer to our March 14, 2014 Actuarial Impact Statement.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	09/30/2017	09/30/2016	09/30/2015	09/30/2014	09/30/2013
Actuarially Determined Contribution	21,265,207	17,665,942	18,913,469	19,012,474	14,208,593
Contributions in relation to the					
Actuarially Determined Contributions	21,604,408	17,665,942	18,913,469	19,012,474	14,208,593
Contribution Deficiency (Excess)	\$ (339,201)	\$ -	\$ -	\$ -	\$ -
Covered Employee Payroll ¹	\$ 71,050,792	\$ 69,471,501	\$ 67,279,327	\$ 67,279,327	\$ 65,886,733
Contributions as a percentage of					
Covered Employee Payroll	30.41%	25.43%	28.11%	28.26%	21.57%

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

Notes to Schedule

Valuation Date: 10/01/2015 (AIS 01/00/1900)
 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:

Actuarial Cost Method: Entry Age Normal Actuarial Cost Method. Beginning with the pension fund’s plan year ended September 30, 2015, a full year salary load based on the current 4.6% assumption is utilized under the projection funding method, as mandated by the Division of Retirement.

Amortization Method: Level Percentage of Pay, Closed.

Remaining Amortization Period: 20 Years.

Mortality Rates: RP-2000 Table projected by Scale AA to 2012.

Disabled Mortality Rates: RP-2000 Disabled Table projected by Scale AA to 2012.
 We feel the assumed rates of mortality sufficiently accommodates expected mortality improvements.

Interest Rate: 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.

Retirement Rates:	<u>Probability of</u>	<u>Probability of</u>
	<u>Retirement</u>	<u>Retirement</u>
<u>Service</u>	<u>(Police)</u>	<u>(Fire)</u>
10-19	5%	5%
20	30%	25%
21	30%	35%
22	30%	45%
23	50%	50%
24	80%	50%
25-34	10%	20%
35+	100%	100%

No Members are expected to take reduced Early Retirement. The assumed rates of retirement were approved in conjunction with an actuarial experience study dated July 10, 2015.

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Salary Increases:	<u>Service</u>	<u>Annual % Increase</u>
	1 - 6	3.00%
	7 - 10	2.50%
	11 - 25	1.00%
	26+	0.50%

Expected increase in annual salary in addition to 2.75% inflationary component. The assumed rates of salary received approval from the Division of Retirement based on historical data and long-term expectations.

Cost of Living Adjustments:
Payroll Increases:

None.
2.0% per year. We feel this is reasonable based on long-term expectations and historical increases in inflation.

Termination Rates:

<u>Age</u>	<u>Years of Service</u>	<u>% Separating from Employment within the Next Year</u>	
		<u>Police</u>	<u>Fire</u>
All Ages	0	15.00%	15.00%
	1	5.00%	5.00%
	2	3.00%	1.00%
	3	3.00%	1.00%
	4	3.00%	1.00%
<50	5+	1.50%	1.00%
50+	5+		

The assumed rates of termination were approved in conjunction with an actuarial experience study dated July 10, 2015.

Disability Rates:

<u>Age</u>	<u>% Becoming Disabled within Next Year</u>	
	<u>Police</u>	<u>Fire</u>
20	0.07%	0.14%
25	0.08%	0.15%
30	0.09%	0.18%
35	0.12%	0.23%
40	15.00%	0.30%
45	0.26%	0.51%
50	0.50%	1.00%
55	0.78%	1.55%

It is assumed that 75% of disablements and active Member deaths are service related. The assumed rates of disablement were approved in conjunction with an actuarial experience study dated July 10, 2015.

Marital Status:

All employed Members and all retired Members are assumed to be married. Females are assumed to be 3 years younger than males. This assumption was approved in conjunction with an actuarial experience study dated July 10, 2015.

Actuarial Value of Assets:

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

COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2017

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Balance at September 30, 2016	\$ 65,794,783	\$ 14,975,727	\$ 44,664,701	\$ -
Total Pension Liability Factors:				
Service Cost	20,106,284	-	-	20,106,284
Interest	65,765,964	-	-	65,765,964
Share Plan Allocation	1,653,054	-	-	1,653,054
Changes in benefit terms	-	-	-	-
Contributions - Buy Back	24,749	-	-	24,749
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(2,762,831)	2,762,831	-	-
Current year amortization of experience difference	-	(3,036,510)	-	(3,036,510)
Change in assumptions about future economic or demographic factors or other inputs	10,692,637	-	10,692,637	-
Current year amortization of change in assumptions	-	(438,996)	(5,439,485)	5,000,489
Benefit Payments, including Refunds of Employee Contributions	(46,564,184)	-	-	-
Net change	<u>48,915,673</u>	<u>(712,675)</u>	<u>5,253,152</u>	<u>89,514,030</u>
Plan Fiduciary Net Position:				
Contributions - Employer	17,325,393	-	-	-
Contributions - State	5,932,068	-	-	-
Contributions - Employee	5,901,141	-	-	(5,901,141)
Contributions - Buy Back	24,749	-	-	(24,749)
Contributions - Transfer from General Plan	-	-	-	-
Projected Net Investment Income	60,394,526	-	-	(60,394,526)
Difference between projected and actual earnings on Pension Plan investments	36,115,814	36,115,814	-	-
Current year amortization	-	(8,519,858)	(10,486,959)	1,967,101
Benefit Payments, including Refunds of Employee Contributions	(46,564,184)	-	-	-
Administrative Expenses	(619,575)	-	-	619,575
Net change	<u>78,509,932</u>	<u>27,595,956</u>	<u>(10,486,959)</u>	<u>(63,733,740)</u>
Balance at September 30, 2017	<u>\$ 36,200,524</u>	<u>\$ 41,859,008</u>	<u>\$ 39,430,894</u>	<u>\$ 25,780,290</u>

AMORTIZATION SCHEDULE - INVESTMENTS

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

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2015	\$ 52,434,795	5	\$10,486,959	\$10,486,959	\$10,486,959	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (6,483,477)	5	\$ (1,296,696)	\$ (1,296,695)	\$ (1,296,695)	\$ (1,296,695)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (36,115,814)	5	\$ (7,223,162)	\$ (7,223,163)	\$ (7,223,163)	\$ (7,223,163)	\$ (7,223,163)	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 1,967,101	\$ 1,967,101	\$ 1,967,101	\$ (8,519,858)	\$ (7,223,163)	\$ -	\$ -	\$ -	\$ -	\$ -

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
2015	\$ (2,194,981)	5	\$ (438,996)	\$ (438,996)	\$ (438,996)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 16,504,779	5	\$ 3,300,956	\$ 3,300,956	\$ 3,300,956	\$ 3,300,956	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 10,692,637	5	\$ 2,138,529	\$ 2,138,527	\$ 2,138,527	\$ 2,138,527	\$ 2,138,527	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 5,000,489	\$ 5,000,487	\$ 5,000,487	\$ 5,439,483	\$ 2,138,527	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

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)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2015	\$ (7,319,054)	5	\$(1,463,811)	\$(1,463,811)	\$(1,463,811)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (5,100,657)	5	\$(1,020,132)	\$(1,020,131)	\$(1,020,131)	\$(1,020,131)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (2,762,831)	5	\$ (552,567)	\$ (552,566)	\$ (552,566)	\$ (552,566)	\$ (552,566)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$(3,036,510)	\$(3,036,508)	\$(3,036,508)	\$(1,572,697)	\$ (552,566)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -