

CITY OF VENICE  
MUNICIPAL POLICE OFFICERS' PENSION TRUST FUND  
ACTUARIAL VALUATION  
AS OF OCTOBER 1, 2018  
CONTRIBUTIONS APPLICABLE TO THE  
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2020  
GASB 67/68 DISCLOSURE INFORMATION  
AS OF SEPTEMBER 30, 2018



**FOSTER & FOSTER**  
ACTUARIES AND CONSULTANTS

December 12, 2018

Board of Trustees  
City of Venice  
Municipal Police Officers' Pension Trust Fund  
4100 Center Pointe Dr., Suite 108  
Ft. Myers, FL 33916

Re: City of Venice Municipal Police Officers' Pension Trust Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Venice Municipal Police Officers' Pension Trust Fund. Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflect laws and regulations issued to date pursuant to the provisions of Chapters 112 and 185, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuations, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuation, we did not perform an analysis of the potential range of such future measurements.

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

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2017. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2018 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.


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

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

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

Respectfully submitted,

Foster & Foster, Inc.

By:   
Christine M. O'Neal, FSA, EA, MAAA  
Enrolled Actuary #17-7916

CMO/lke  
Enclosures

## TABLE OF CONTENTS

Section	Title	Page
I	Introduction	
	a. Summary of Report	5
	b. Changes Since Prior Valuation	7
	c. Comparative Summary of Principal Valuation Results	8
II	Valuation Information	
	a. Reconciliation of Unfunded Actuarial Accrued Liabilities	14
	b. Detailed Actuarial (Gain)/Loss Analysis	16
	c. Actuarial Assumptions and Methods	17
	d. Glossary	20
	e. Partial History of Premium Tax Refunds	22
III	Trust Fund	23
IV	Member Statistics	
	a. Statistical Data	28
	b. Age and Service Distribution	29
	c. Valuation Participant Reconciliation	30
V	Summary of Current Plan	31
VI	Governmental Accounting Standards Board Statements No. 67 and No. 68 Disclosure Information	34

SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Venice Municipal Police Officers' Pension Trust Fund, performed as of October 1, 2018, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2020.

The contribution requirements, compared with those set forth in the June 7, 2018 Actuarial Impact Statement (determined as of October 1, 2017), are as follows:

Valuation Date	10/1/2018	10/1/2017
Applicable to Fiscal Year Ending	<u>9/30/2020</u>	<u>9/30/2019</u>
Minimum Required Contribution	\$1,439,986	\$1,749,709
Member Contributions (Est.)	24,142	36,137
City And State Required Contribution	1,415,844	1,713,572
State Contribution (Est.) <sup>1</sup>	231,096	231,096
City Required Contribution	\$1,184,748	\$1,482,476

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

As you can see, the Total Recommended Contribution has decreased since the previous valuation. This decrease is due to City contributions in excess of the required amount, a decrease in the Normal Cost and favorable experience during the past 12 months. Sources of favorable experience included an investment return of 7.84% (Actuarial Asset Basis) which exceeded the 7.00% assumption, more inactive mortality than expected, and an average salary increase of 2.88%, which fell short of the 5.50% assumption. There were no significant sources of unfavorable experience.

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

Respectfully submitted,

FOSTER & FOSTER, INC.

By:   
Christine M. O'Neal, FSA, EA, MAAA

By:   
Sara E. Carlson, ASA, EA, MAAA

## CHANGES SINCE PRIOR VALUATION

### Plan Changes

Effective October 1, 2017, the monthly benefit currently being received by every retiree who has been receiving benefit payments for at least one year as of October 1, 2017, including service and disability retirees and DROP participants, their joint pensioners or beneficiaries, shall be increased by one percent for each full year of retirement, up to a maximum increase of ten percent. Eligible retirees must have been retired for at least one full year as of October 1, 2017. This is a one-time increase in benefits and does not include vested terminated persons.

The impact of this change can be found in our June 7, 2018 Actuarial Impact Statement.

### Actuarial Assumption/Method Changes

There have been no changes of actuarial assumptions or methods since the prior valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2018</u>	<u>10/1/2017</u>
<b>A. Participant Data</b>		
Actives	5	6
Service Retirees	38	35
DROP Retirees	3	6
Beneficiaries	9	9
Disability Retirees	7	7
Terminated Vested	<u>32</u>	<u>32</u>
 Total	 94	 95
 Total Annual Payroll	 \$392,456	 \$472,781
Payroll Under Assumed Ret. Age	315,845	472,781
 Annual Rate of Payments to:		
Service Retirees	2,255,189	2,040,779
DROP Retirees	241,571	438,361
Beneficiaries	346,012	333,558
Disability Retirees	239,407	239,417
Terminated Vested	575,224	575,224
 <b>B. Assets</b>		
Actuarial Value (AVA) <sup>1</sup>	36,873,710	36,007,624
Market Value (MVA) <sup>1</sup>	38,966,127	36,180,611
 <b>C. Liabilities</b>		
Present Value of Benefits		
Actives		
Retirement Benefits	2,616,949	3,121,601
Disability Benefits	88,963	107,804
Death Benefits	9,352	11,412
Vested Benefits	231,444	252,958
Refund of Contributions	0	0
Service Retirees	26,881,252	24,241,358
DROP Retirees <sup>1</sup>	4,498,522	7,425,869
Beneficiaries	3,325,287	3,195,478
Disability Retirees	2,785,342	2,808,924
Terminated Vested	4,196,437	3,910,185
Share Plan Balances <sup>1</sup>	<u>0</u>	<u>0</u>
 Total	 44,633,548	 45,075,589



C. Liabilities - (Continued)	<u>10/1/2018</u>	<u>10/1/2017</u>
Present Value of Future Salaries	1,757,428	2,008,332
Present Value of Future Member Contributions	123,020	140,583
Normal Cost (Retirement)	47,736	74,791
Normal Cost (Disability)	10,211	17,239
Normal Cost (Death)	1,231	2,277
Normal Cost (Vesting)	20,979	26,784
Normal Cost (Refunds)	<u>0</u>	<u>0</u>
Total Normal Cost	80,157	121,091
Present Value of Future Normal Costs	367,742	442,304
Accrued Liability (Retirement)	2,399,249	2,855,271
Accrued Liability (Disability)	41,709	49,686
Accrued Liability (Death)	3,991	4,502
Accrued Liability (Vesting)	134,017	142,012
Accrued Liability (Refunds)	0	0
Accrued Liability (Inactives) <sup>1</sup>	41,686,840	41,581,814
Share Plan Balances <sup>1</sup>	<u>0</u>	<u>0</u>
Total Actuarial Accrued Liability (EAN AL)	44,265,806	44,633,285
Unfunded Actuarial Accrued Liability (UAAL)	7,392,096	8,625,661
Funded Ratio (AVA / EAN AL)	83.3%	80.7%

D. Actuarial Present Value of Accrued Benefits	<u>10/1/2018</u>	<u>10/1/2017</u>
Vested Accrued Benefits		
Inactives + Share Plan Balances <sup>1</sup>	41,686,840	41,581,814
Actives	1,601,453	2,329,684
Member Contributions	<u>380,624</u>	<u>443,592</u>
Total	43,668,917	44,355,090
Non-vested Accrued Benefits	<u>0</u>	<u>0</u>
Total Present Value Accrued Benefits (PVAB)	43,668,917	44,355,090
Funded Ratio (MVA / PVAB)	89.2%	81.6%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	(281,136)	
Benefits Paid	(3,391,201)	
Interest	2,986,164	
Other	<u>0</u>	
Total	(686,173)	

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

E. Pension Cost

Normal Cost <sup>2</sup>	\$87,525	\$132,222
Administrative Expenses <sup>2</sup>	76,120	66,028
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 26 years (as of 10/1/2018) <sup>2</sup>	1,276,341	1,551,459
Minimum Required Contribution	1,439,986	1,749,709
Expected Member Contributions <sup>2</sup>	24,142	36,137
Expected City and State Contribution	1,415,844	1,713,572

F. Past Contributions

Plan Years Ending:	<u>9/30/2018</u>
City and State Requirement	1,524,378
Actual Contributions Made:	
Members (excluding buyback)	28,738
City	1,316,647
State	<u>231,096</u>
Total	1,576,481

G. Net Actuarial (Gain)/Loss (400,099)

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

<sup>2</sup> Contributions developed as of 10/1/2018 displayed above have been adjusted to account for assumed salary increase and interest components.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2018	7,392,096
2019	6,658,828
2020	6,272,326
2026	4,728,845
2032	1,358,598
2035	38,689
2044	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2018	2.88%	5.50%
Year Ended 9/30/2017	3.91%	6.10%
Year Ended 9/30/2016	4.02%	6.00%
Year Ended 9/30/2015	1.80%	6.42%
Year Ended 9/30/2014	5.38%	7.40%

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

	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended 9/30/2018	13.13%	7.84%	7.00%
Year Ended 9/30/2017	13.34%	7.47%	7.00%
Year Ended 9/30/2016	10.80%	6.98%	7.00%
Year Ended 9/30/2015	-4.79%	8.73%	7.00%
Year Ended 9/30/2014	11.57%	10.05%	7.90%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2018	\$392,456
	10/1/2008	2,856,283
(b) Total Increase		-86.26%
(c) Number of Years		10.00
(d) Average Annual Rate		-18.00%

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.



Christine M. O'Neal, FSA, EA, MAAA  
Enrolled Actuary #17-7916

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, 2017	\$8,625,661
(2) Sponsor Normal Cost developed as of October 1, 2017	87,996
(3) Expected administrative expenses for the year ended September 30, 2018	60,469
(4) Expected interest on (1), (2) and (3)	612,072
(5) Sponsor contributions to the System during the year ended September 30, 2018	1,547,743
(6) Expected interest on (5)	46,260
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2018 (1)+(2)+(3)+(4)-(5)-(6)	7,792,195
(8) Change to UAAL due to Assumption Change	0
(9) Change to UAAL due to Actuarial (Gain)/Loss	(400,099)
(10) Unfunded Actuarial Accrued Liability as of October 1, 2018	7,392,096

<u>Type of Base</u>	<u>Date Established</u>	<u>Years Remaining</u>	<u>10/1/2018 Amount</u>	<u>Amortization Amount</u>
	10/1/1991	3	143,719	51,182
	10/1/1993	5	242,798	55,342
	10/1/1998	10	144,646	19,247
	10/1/1999	11	204,959	25,545
	10/1/2000	12	190,519	22,417
	10/1/2001	13	497,219	55,601
method	10/1/2002	14	1,109,881	118,607
loss	10/1/2002	10	962,156	128,027
gain	10/1/2003	10	(206,689)	(27,503)
loss	10/1/2004	10	1,671,994	222,481
gain	10/1/2005	10	(771,513)	(102,660)
benefit	10/1/2006	18	512,044	47,573
loss	10/1/2006	10	239,081	31,813
gain	10/1/2007	10	(1,314,057)	(174,852)
method	10/1/2008	10	(32,751)	(4,358)
loss	10/1/2009	1	372,051	372,051
loss	10/1/2010	2	254,328	131,464
assum	10/1/2010	12	205,439	24,173
loss	10/1/2011	3	369,567	131,611

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2018 <u>Amount</u>	Amortization <u>Amount</u>
assum	10/1/2011	13	(385,149)	(43,069)
gain	10/1/2012	4	(88,567)	(24,437)
benefit	10/1/2012	24	(44,089)	(3,593)
gain	10/1/2013	5	(305,499)	(69,634)
benefit	10/1/2013	25	(1,109,130)	(88,949)
gain	10/1/2014	6	(707,961)	(138,811)
benefit	10/1/2014	26	64,929	5,131
assum	10/1/2014	16	2,549,127	252,191
gain	10/1/2015	7	(1,312,198)	(227,554)
assum	10/1/2016	18	1,276,973	118,642
loss	10/1/2016	8	364,421	57,036
benefit	10/1/2017	19	2,433,314	220,028
loss	10/1/2017	9	260,633	37,387
gain	10/1/2018	10	(400,099)	(53,238)
			7,392,096	1,168,891

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2017	\$8,625,661
(2) Expected UAAL as of October 1, 2018	7,792,195
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(294,698)
Salary Increases	(34,343)
Active Decrements	20,153
Inactive Mortality	(58,744)
Other	<u>(32,467)</u>
Increase in UAAL due to (Gain)/Loss	(400,099)
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2018	\$7,392,096



## ACTUARIAL ASSUMPTIONS AND METHODS

### Mortality Rate

#### *Healthy Active Lives:*

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

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

#### *Healthy Inactive Lives:*

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

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

#### *Disabled Lives:*

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

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

The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2016 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

### Interest Rate

7.00% per year compounded annually, net of investment related expenses. This assumption is consistent with the Plan's investment policy and long-term expected returns by asset class. Additionally, the 7.0% assumption was mandated by the Florida Division of Retirement's Reviewing Actuary in conjunction with the Plan's closure to new entrants beginning October 1, 2014.

### Salary Increases

10.0% for Members with less than 10 years of service, and 5.5% with 10 or more years of service. These rates were adopted in conjunction with the October 1, 2011 valuation, based on results of an Experience Study for the period October 1, 1991 through October 1, 2010.

Additionally, projected salary at retirement is increased according to the table on the following page for lump sum payments in the year of termination. These rates are averages, based on census data provided by the City.

<u>Service as of 10/1/2012</u>	<u>Final Salary Load</u>
10 or more years	20.0%
More than 1, less than 10 years	10.0%
Less than 1 year	0.0%

Payroll Growth

0.00% for purposes of amortizing the Unfunded Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.

Administrative Expenses

\$69,712 annually, based on actual expenses incurred in the prior fiscal year.

Retirement Age

Earlier of age 52 and 10 years of service or 25 years of service regardless of age. Also, any member who has reached Normal Retirement Age is assumed to retire at a rate of 25% for the first three years upon attaining first eligibility, and a rate of 100% thereafter. These rates were adopted in conjunction with the October 1, 2011 valuation, based on results of an Experience Study for the period October 1, 1991 through October 1, 2010.

Early Retirement

Commencing at the member's eligibility for Early Retirement (20 years of Credited Service), members are assumed to retire with an immediate, subsidized benefit at the rate of 10% per year. This assumption was adopted in conjunction with the October 1, 2011 valuation, based on results of an Experience Study for the period October 1, 1991 through October 1, 2010.

Termination Rates

See Table on the following page (1304). These rates were adopted in conjunction with the October 1, 2011 valuation, based on results of an Experience Study for the period October 1, 1991 through October 1, 2010.

Disability Rates

See Table on the following page (1205). It is assumed that 75% of disablements and active deaths that occur are service-related. These assumptions are consistent with those utilized by other Florida municipal special risk retirement programs.

Inflation Rate

2.50% per year. This assumption is reasonable, based on long-term experience and input from the plan's investment consultant.

Asset Smoothing Methodology

The Actuarial Value of Assets is brought forward using the historical four-year geometric average of Market Value Returns (net-of-fees). Over time, this may result in a de minimis bias that is above or below the Market Value of Assets.

Funding Method

Entry Age Normal Actuarial Cost Method. The following loads are applied for determination of the Sponsor dollar funding requirement:

Interest – A half year, based on the current 7.00% assumption.

Salary – A full year, based on the current 5.50% assumption.

<u>Age</u>	<u>% Terminating During the Year</u>	<u>% Becoming Disabled During the Year</u>
20	15.0%	0.14%
30	11.0	0.18
40	7.0	0.30

## GLOSSARY

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

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

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

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

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

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

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

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.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
1998	149,125.30	_____%
1999	150,211.03	0.7%
2000	145,710.81	-3.0%
2001	152,605.61	4.7%
2002	169,449.57	11.0%
2003	195,076.84	15.1%
2004	199,191.27	2.1%
2005	205,363.65	3.1%
2006	219,537.20	6.9%
2007	220,584.55	0.5%
2008	205,363.65	-6.9%
2009	208,681.06	1.6%
2010	186,897.62	-10.4%
2011	185,320.86	-0.8%
2012	175,757.64	-5.2%
2013	175,165.97	-0.3%
2014	178,616.68	2.0%
2015	189,276.27	6.0%
2016	207,730.71	9.8%
2017	214,703.94	3.4%
2018	231,095.59	7.6%

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2018

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	1,134,575.14	1,134,575.14
Cash	7,265.33	7,265.33
Total Cash and Equivalents	1,141,840.47	1,141,840.47
Receivables:		
Investment Income	45,149.99	45,149.99
Total Receivable	45,149.99	45,149.99
Investments:		
U. S. Bonds and Bills	3,321,858.61	3,272,466.65
Federal Agency Guaranteed Securities	554,016.12	530,056.65
Corporate Bonds	2,921,132.47	2,925,016.85
Stocks	19,151,729.35	23,467,497.95
Mutual Funds:		
Equity	3,289,225.96	3,870,556.73
Pooled/Common/Commingled Funds:		
Real Estate	3,500,000.00	3,713,541.62
Total Investments	32,737,962.51	37,779,136.45
Total Assets	33,924,952.97	38,966,126.91
<u>LIABILITIES</u>		
Total Liabilities	0.00	0.00
NET POSITION RESTRICTED FOR PENSIONS	33,924,952.97	38,966,126.91

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

ADDITIONS

Contributions:			
Member		28,738.31	
City		1,316,647.02	
State		231,095.59	
Total Contributions			1,576,480.92
Investment Income:			
Net Realized Gain (Loss)	2,557,367.84		
Unrealized Gain (Loss)	1,407,625.58		
Net Increase in Fair Value of Investments		3,964,993.42	
Interest & Dividends		897,884.28	
Less Investment Expense <sup>1</sup>		(192,930.27)	
Net Investment Income			4,669,947.43
Total Additions			6,246,428.35

DEDUCTIONS

Distributions to Members:			
Benefit Payments		2,666,054.44	
Lump Sum DROP Distributions		725,146.64	
Refunds of Member Contributions		0.00	
Total Distributions			3,391,201.08
Administrative Expense			69,711.55
Total Deductions			3,460,912.63
Net Increase in Net Position			2,785,515.72
NET POSITION RESTRICTED FOR PENSIONS			
Beginning of the Year			36,180,611.19
End of the Year			38,966,126.91

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.



ACTUARIAL ASSET VALUATION  
SEPTEMBER 30, 2018

Actuarial Assets for funding purposes are developed by increasing the Actuarial Assets used in the most recent actuarial valuation of the Fund by the average annual market value rate of return (net of investment related expenses) for the past four years. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Details of the derivation are set forth as follows:

Plan Year End	Rate of Return <sup>1</sup>	
09/30/2015	-4.79%	
09/30/2016	10.80%	
09/30/2017	13.34%	
09/30/2018	13.13%	
Annualized Rate of Return for prior four (4) years:		7.84%
(A) 10/01/2017 Actuarial Assets:		\$36,007,624.32
(I) Net Investment Income:		
1. Interest and Dividends	897,884.28	
2. Realized Gains (Losses)	2,557,367.84	
3. Change in Actuarial Value	(511,804.92)	
4. Investment Related Expenses	(192,930.27)	
Total		2,750,516.93
(B) 10/01/2018 Actuarial Assets:		\$36,873,709.54
Actuarial Asset Rate of Return = 2I/(A+B-I):		7.84%
10/01/2018 Limited Actuarial Assets:		\$36,873,709.54
10/01/2018 Market Value of Assets:		\$38,966,126.91
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)		\$294,698.24

<sup>1</sup>Market Value Basis, net of investment related expenses.

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

REVENUES

Contributions:		
Member	28,738.31	
City	1,316,647.02	
State	231,095.59	
 Total Contributions		 1,576,480.92
Earnings from Investments:		
Interest & Dividends	897,884.28	
Net Realized Gain (Loss)	2,557,367.84	
Change in Actuarial Value	(511,804.92)	
 Total Earnings and Investment Gains		 2,943,447.20

EXPENDITURES

Distributions to Members:		
Benefit Payments	2,666,054.44	
Lump Sum DROP Distributions	725,146.64	
Refunds of Member Contributions	0.00	
 Total Distributions		 3,391,201.08
Expenses:		
Investment related <sup>1</sup>	192,930.27	
Administrative	69,711.55	
 Total Expenses		 262,641.82
 Change in Net Assets for the Year		 866,085.22
 Net Assets Beginning of the Year		 36,007,624.32
 Net Assets End of the Year <sup>2</sup>		 36,873,709.54

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

<sup>2</sup>Net Assets may be limited for actuarial consideration.

DEFERRED RETIREMENT OPTION PLAN ACTIVITY  
October 1, 2017 to September 30, 2018

Beginning of the Year Balance	1,447,818.49
Plus Additions	398,935.81
Investment Return Earned	91,596.17
Less Distributions	(725,146.64)
End of the Year Balance	1,213,203.83

STATISTICAL DATA

	<u>10/1/2015</u>	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>
<u>Actives</u>				
Number	8	7	6	5
Average Current Age	43.6	45.5	45.8	45.4
Average Age at Employment	27.9	28.5	29.1	28.0
Average Past Service	15.7	17.0	16.7	17.4
Average Annual Salary	\$78,555	\$82,823	\$78,797	\$78,491
<u>Service Retirees</u>				
Number	34	35	35	38
Average Current Age	62.4	62.9	63.9	63.7
Average Annual Benefit	\$51,690	\$53,817	\$58,308	\$59,347
<u>DROP Retirees</u>				
Number	7	5	6	3
Average Current Age	52.9	52.9	53.4	53.2
Average Annual Benefit	\$69,352	\$66,132	\$73,060	\$80,524
<u>Beneficiaries</u>				
Number	8	9	9	9
Average Current Age	72.0	72.4	73.4	72.9
Average Annual Benefit	\$34,385	\$33,749	\$37,062	\$38,446
<u>Disability Retirees</u>				
Number	6	7	7	7
Average Current Age	54.4	53.0	54.0	55.0
Average Annual Benefit	\$29,322	\$30,430	\$34,202	\$34,201
<u>Terminated Vested</u>				
Number	32	32	32	32
Average Current Age <sup>1</sup>	35.8	36.8	37.8	38.8
Average Annual Benefit <sup>1</sup>	\$17,337	\$19,835	\$19,835	\$19,835

<sup>1</sup> The Average Current Age and Annual Benefit excludes participants awaiting a refund of contributions.

## AGE AND SERVICE DISTRIBUTION

### PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	0	0	0	0	0	0	0
30 - 34	0	0	0	0	0	0	0	0	0	0	0	0
35 - 39	0	0	0	0	0	0	1	0	0	0	0	1
40 - 44	0	0	0	0	0	0	0	1	0	0	0	1
45 - 49	0	0	0	0	0	0	0	0	1	0	0	1
50 - 54	0	0	0	0	0	0	1	0	1	0	0	2
55 - 59	0	0	0	0	0	0	0	0	0	0	0	0
60 - 64	0	0	0	0	0	0	0	0	0	0	0	0
65+	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	0	0	0	0	0	0	2	1	2	0	0	5

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2017	6
b. Terminations	
i. Vested (partial or full) with deferred benefits	0
ii. Non-vested or full lump sum distribution received	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(1)
f. DROP	<u>0</u>
g. Continuing participants	5
h. New entrants	<u>0</u>
i. Total active life participants in valuation	5

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

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested <u>Deferred</u>	<u>Total</u>
a. Number prior valuation	35	6	9	7	32	89
Retired	4	(3)	0	0	0	1
DROP	0	0	0	0	0	0
Vested Deferred	0	0	0	0	0	0
Death, With Survivor	(1)	0	1	0	0	0
Death, No Survivor	0	0	(1)	0	0	(1)
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	38	3	9	7	32	89

SUMMARY OF CURRENT PLAN  
(Through Ordinance No. 2015-17)

<u>Eligibility</u>	Full-time, sworn police officers shall participate in the System as a condition of employment. Officers hired after September 30, 2014 shall participate in the Florida Retirement System. Members active on September 30, 2014 had the option of participating prospectively in the Florida Retirement System.
<u>Credited Service</u>	Total years and fractional parts of years of service with the City as a police officer.
<u>Salary</u>	Salary will include the lesser of the amount of sick or annual leave time accrued on the effective date (July 1, 2011) or the actual amount of sick or annual leave time for which the retiree receives payment at the time of retirement, regardless of whether the amount of sick or annual leave was, at some time prior to retirement, reduced below the amount on the effective date. Notwithstanding the foregoing, effective October 1, 2014 for members who are employed, have not reached normal retirement eligibility on that date and elect to continue participating in this system, salary shall mean base pay, excluding overtime and all other compensation; provided, the foregoing provisions regarding the inclusion of unused sick or annual leave time in the salary of members employed prior to the effective date shall continue to apply.
<u>Average Final Compensation</u>	Average Salary for the best 5 years during the 10 years immediately preceding termination.
<u>Member Contributions</u>	7.00% of Salary.
<u>City and State Contributions</u>	Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, over 30 years. In no event will City contributions be less than 12% of the total Salary of the members.
<u>Normal Retirement</u>	
Date	Earlier of age 52 and 10 years of Credited Service, or 25 years of Credited Service.
Benefit	3.50% of Average Final Compensation times Credited Service through September 30, 2014, plus 2.75% of Average Final Compensation times Credited Service on and after October 1, 2014, plus a \$175 monthly supplement.

Members eligible for Normal Retirement as of October 1, 2014 will continue to accrue benefits under Plan provisions in effect prior to Ordinance No. 2014-23.

Form of Benefit

Ten Year Certain and Life Annuity (options available).

Early Retirement

Eligibility

20 years of Credited Service, regardless of age. There is no Early Retirement option for Members with less than 10 years of Credited Service as of October 1, 2014.

Benefit

Accrued benefit, reduced 2% per year preceding Normal Retirement Date.

Vesting

Members are 100% vested in benefits accrued prior to October 1, 2014.

Disability

Eligibility

Total and Permanent as determined by the Board.

Service Incurred

Covered from Date of Employment.

Non-Service Incurred

5 years of Credited Service.

Benefit

62.5% (Service Incurred), or 50% (Non-Service Incurred) of Salary (base hourly pay, plus shift differential plus incentive pay) at time of disability plus \$175 per month. Paid as a 100% Joint and Survivor Annuity.

Death Benefits

Pre-Retirement

Service Incurred

Covered from Date of Employment. 62.5% of earnings paid to spouse until death, or, if no spouse, in equal shares to dependent children.

Non-Service Incurred

Eligible after 5 years of Credited Service. 50% of earnings paid to spouse until death or remarriage, or, if no spouse, in equal shares to dependent children.

Post-Retirement

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



Board of Trustees

- a) Two Council appointees,
- b) Two Members of the Department elected by the membership, and
- c) Fifth Member elected by other 4 and appointed by Council.

Deferred Retirement Option Plan

Eligibility

Satisfaction of Normal Retirement requirements (earlier of 1) Age 50 and 10 years of Credited Service, or 2) 25 years of Credited Service.)

Participation

Not to exceed 60 months

Rate of Return

At member's election:

- a) an effective annual rate of 6.5%, or
- b) Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs) credited each fiscal quarter.

Form of Distribution

Cash lump sum (options available) at termination of employment.

Chapter 185 Share Account

Pursuant to Chapter 2015-39, Laws of Florida, a share plan exists but is currently not funded as the City and Membership mutually consented to allow the City to use all annual State Monies to offset its funding requirements.

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2018

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	1,134,575
Cash	7,265
Total Cash and Equivalents	1,141,840
Receivables:	
Investment Income	45,150
Total Receivable	45,150
Investments:	
U. S. Bonds and Bills	3,272,467
Federal Agency Guaranteed Securities	530,057
Corporate Bonds	2,925,017
Stocks	23,467,498
Mutual Funds:	
Equity	3,870,557
Real Estate	3,713,541
Total Investments	37,779,137
Total Assets	38,966,127
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	38,966,127

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

ADDITIONS

## Contributions:

Member	28,738	
City	1,316,647	
State	231,096	
 Total Contributions		 1,576,481
 Investment Income:		
Net Increase in Fair Value of Investments	3,964,994	
Interest & Dividends	897,884	
Less Investment Expense <sup>1</sup>	(192,930)	
 Net Investment Income		 4,669,948
 Total Additions		 6,246,429

DEDUCTIONS

## Distributions to Members:

Benefit Payments	2,666,054	
Lump Sum DROP Distributions	725,147	
Refunds of Member Contributions	0	
 Total Distributions		 3,391,201
 Administrative Expense		 69,712
 Total Deductions		 3,460,913
 Net Increase in Net Position		 2,785,516
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		36,180,611
 End of the Year		 38,966,127

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

NOTES TO THE FINANCIAL STATEMENTS  
(For the Year Ended September 30, 2018)

Plan Description

*Plan Administration*

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

- a) Two Council appointees,
- b) Two Members of the Department elected by the membership, and
- c) Fifth Member elected by other 4 and appointed by Council.

Full-time, sworn police officers shall participate in the System as a condition of employment. Officers hired after September 30, 2014 shall participate in the Florida Retirement System. Members active on September 30, 2014 have the option of participating prospectively in the Florida Retirement System.

*Plan Membership as of October 1, 2017:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	57
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	32
Active Plan Members	6
	95
	95

*Benefits Provided*

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

Normal Retirement:

Date: Earlier of age 52 and 10 years of Credited Service, or 25 years of Credited Service.

Benefit: 3.50% of Average Final Compensation times Credited Service through September 30, 2014, plus 2.75% of Average Final Compensation times Credited Service on and after October 1, 2014, plus \$175 per month supplement.

Members eligible for Normal Retirement as of October 1, 2014 will continue to accrue benefits under Plan provisions in effect prior to Ordinance No. 2014-23.

Early Retirement:

Date: 20 years of Credited Service, regardless of age. There is no Early Retirement option for Members with less than 10 years of Credited Service as of October 1, 2014.

Benefit: Accrued benefit, reduced 2% per year preceding Normal Retirement Date.

Vesting (Termination):

Members are 100% vested in benefits accrued prior to October 1, 2014.

Disability:

Eligibility: Total and Permanent as determined by the Board.

Service Incurred: Covered from Date of Employment.

Non-Service Incurred: 5 years of Credited Service.

Benefit: 62.5% (Service Incurred), or 50% (Non-Service Incurred) of Salary (base hourly pay, plus shift differential plus incentive pay) at time of disability plus \$175 per month. Paid as a 100% Joint and Survivor Annuity.

Pre-Retirement Death Benefits:

Service Incurred: Covered from Date of Employment. 62.5% of earnings paid to spouse until death, or, if no spouse, in equal shares to dependent children.

Non-Service Incurred: Eligible after 5 years of Credited Service. 50% of earnings paid to spouse until death or remarriage, or, if no spouse, in equal shares to dependent children.

Chapter 185 Share Account:

Pursuant to Chapter 2015-39, Laws of Florida, a share plan exists but is currently not funded as the City and Membership mutually consented to allow the City to use all annual State Monies to offset its funding requirements.

*Contributions*

Member Contributions: 7.00% of Salary.

City and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, over 30 years. In no event will City contributions be less than 12% of the total Salary of the Members.

## GASB 67

### Investments

#### *Investment Policy:*

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

<u>Asset Class</u>	<u>Target Allocation</u>
Domestic Equity	50.00%
International Equity	15.00%
Broad Market Fixed Income	25.00%
Real Estate	10.00%
<u>Total</u>	<u>100.00%</u>

#### *Concentrations:*

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

#### *Rate of Return:*

For the year ended September 30, 2018, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 13.13 percent.

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

#### Deferred Retirement Option Program

Eligibility: Satisfaction of Normal Retirement requirements (earlier of 1) Age 50 and 10 years of Credited Service, or 2) 25 years of Credited Service.)

Participation: Not to exceed 60 months.

Rate of Return: At member's election:

a) an effective annual rate of 6.5%, or

b) Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs) credited each fiscal quarter.

The DROP balance as September 30, 2018 is \$1,213,204.

NET PENSION LIABILITY OF THE SPONSOR

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

Total Pension Liability	\$ 44,273,781
Plan Fiduciary Net Position	\$ (38,966,127)
Sponsor's Net Pension Liability	<u>\$ 5,307,654</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	<u>88.01%</u>

*Actuarial Assumptions:*

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

Inflation	2.50%
Salary Increases	5.50% - 10.00%
Discount Rate	7.00%
Investment Rate of Return	7.00%

*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 Healthy Inactive Lives:*

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

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

*Mortality Rate Disabled Lives:*

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

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

The most recent actuarial experience study used to review the other significant assumptions was dated December 9, 2011.

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

For 2018 the inflation rate assumption of the investment advisor was 2.50%.

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

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2018 are summarized in the following table:

<u>Asset Class</u>	<u>Long Term Expected Real Rate of Return</u>
Domestic Equity	7.50%
International Equity	8.50%
Broad Market Fixed Income	2.50%
Real Estate	4.50%

## GASB 67

### Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.00 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 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
Sponsor's Net Pension Liability	\$ 10,162,864	\$ 5,307,654	\$ 1,273,638

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

	09/30/2018	09/30/2017	09/30/2016
Total Pension Liability			
Service Cost	160,319	196,691	203,840
Interest	2,974,942	2,766,512	2,751,065
Changes of benefit terms	2,467,573	-	-
Differences between Expected and Actual Experience	495,274	486,909	(1,512,423)
Changes of assumptions	-	-	1,343,437
Contributions - Buy Back	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(3,391,201)	(2,416,303)	(2,699,899)
Net Change in Total Pension Liability	2,706,907	1,033,809	86,020
Total Pension Liability - Beginning	41,566,874	40,533,065	40,447,045
Total Pension Liability - Ending (a)	<u>\$ 44,273,781</u>	<u>\$ 41,566,874</u>	<u>\$ 40,533,065</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,316,647	1,337,865	2,108,231
Contributions - State	231,096	214,704	207,731
Contributions - Employee	28,738	35,922	38,297
Contributions - Buy Back	-	-	-
Net Investment Income	4,669,948	4,303,140	3,176,622
Benefit Payments, including Refunds of Employee Contributions	(3,391,201)	(2,416,303)	(2,699,899)
Administrative Expense	(69,712)	(60,469)	(85,428)
Net Change in Plan Fiduciary Net Position	2,785,516	3,414,859	2,745,554
Plan Fiduciary Net Position - Beginning	36,180,611	32,765,752	30,020,198
Plan Fiduciary Net Position - Ending (b)	<u>\$ 38,966,127</u>	<u>\$ 36,180,611</u>	<u>\$ 32,765,752</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 5,307,654</u>	<u>\$ 5,386,263</u>	<u>\$ 7,767,313</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	88.01%	87.04%	80.84%
Covered Employee Payroll	\$ 410,497	\$ 547,100	\$ 547,100
Net Pension Liability as a percentage of Covered Employee Payroll	1292.98%	984.51%	1419.72%

**Notes to Schedule:**

*Changes of benefit terms:*

For measurement date, 09/30/2018, amounts reported as changes of benefit terms resulted from the following:  
Effective October 1, 2017, the monthly benefit currently being received by every retiree who has been receiving benefit payments for at least one year as of October 1, 2017, including service and disability retirees and DROP participants, their joint pensioners or beneficiaries, shall be increased by one percent for each full year of retirement, up to a maximum increase of ten percent. Eligible retirees must have been retired for at least one full year as of October 1, 2017.  
This is a one-time increase in benefits and does not include vested terminated persons.

*Changes of assumptions:*

For measurement date 09/30/2016, amounts reported as changes of assumptions were resulted from the new mortality assumption under Chapter 2015-157, Florida Statutes.  
The inflation assumption rate was lowered from 3.00% to 2.50%, matching the long-term inflation assumption utilized by the Plan's investment consultant.



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

	<u>09/30/2015</u>	<u>09/30/2014</u>
Total Pension Liability		
Service Cost	597,047	560,060
Interest	2,850,130	2,760,145
Changes of benefit terms	174,206	(1,837,786)
Differences between Expected and Actual Experience	(638,090)	-
Changes of assumptions	3,277,827	-
Contributions - Buy Back	-	17,465
Benefit Payments, including Refunds of Employee Contributions	(2,240,847)	(2,578,773)
Net Change in Total Pension Liability	<u>4,020,273</u>	<u>(1,078,889)</u>
Total Pension Liability - Beginning	<u>36,426,772</u>	<u>37,505,661</u>
Total Pension Liability - Ending (a)	<u><u>\$ 40,447,045</u></u>	<u><u>\$ 36,426,772</u></u>
Plan Fiduciary Net Position		
Contributions - Employer	1,753,275	1,651,993
Contributions - State	189,276	178,617
Contributions - Employee	40,508	205,801
Contributions - Buy Back	-	17,465
Net Investment Income	(1,481,414)	3,307,423
Benefit Payments, including Refunds of Employee Contributions	(2,240,847)	(2,578,773)
Administrative Expense	(73,554)	(62,991)
Net Change in Plan Fiduciary Net Position	<u>(1,812,756)</u>	<u>2,719,535</u>
Plan Fiduciary Net Position - Beginning	<u>31,832,954</u>	<u>29,113,419</u>
Plan Fiduciary Net Position - Ending (b)	<u><u>\$ 30,020,198</u></u>	<u><u>\$ 31,832,954</u></u>
Net Pension Liability - Ending (a) - (b)	<u><u>\$ 10,426,846</u></u>	<u><u>\$ 4,593,818</u></u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	74.22%	87.39%
Covered Employee Payroll	N/A	\$ 2,838,631
Net Pension Liability as a percentage of Covered Employee Payroll	N/A	161.83%

**Notes to Schedule:***Changes of benefit terms:*

For measurement date 09/30/2015, amounts reported as changes of benefit terms were resulted from the Ordinance 2015-17, adopted and effective June 23, 2015, amended the definition of Salary, in addition to providing 100% vesting in benefits accrued prior to October 1, 2014.

For measurement date 09/30/2014, amounts reported as changes of benefit terms were resulted from the March 6, 2015 Actuarial Impact Statement.

*Changes of assumptions:*

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

- The net-of-fees investment return assumption was lowered from 7.9% to 7.0%.
- The Final Salary Load assumption was increased from 0% to the below table, based on census data provided by the City:

Service as of 10/1/2012 Final Salary Load

10 or more years 20.0%

More than 1, less than 10 years 10.0%

Less than 1 year 0.0%

**SCHEDULE OF CONTRIBUTIONS**  
Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Employee Payroll <sup>1</sup>	Contributions as a percentage of Covered Employee Payroll
09/30/2018	\$ 1,524,378	\$ 1,547,743	\$ (23,365)	\$ 410,497	377.04%
09/30/2017	\$ 1,527,141	\$ 1,552,569	\$ (25,428)	\$ 513,171	302.54%
09/30/2016	\$ 2,268,143	\$ 2,315,962	\$ (47,819)	\$ 547,100	423.32%
09/30/2015	\$ 1,942,551	\$ 1,942,551	\$ -	\$ 761,681	255.03%
09/30/2014	\$ 1,818,711	\$ 1,830,610	\$ (11,899)	\$ 2,838,631	64.49%

Notes to Schedule

Valuation Date: 10/01/2016  
Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Mortality Rate: *Healthy Lives:*  
Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.  
Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.  
*Disabled Lives:*  
Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.  
Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.  
The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman’s July 1, 2015 FRS valuation report. We feel this assumption sufficiently accommodates future mortality improvements.

Termination Rates: See table on following page (1304). These rates were adopted in conjunction with the October 1, 2011 valuation, based on results of an Experience Study for the period October 1, 1991 through October 1, 2010.

Disability Rates: See table on following page (1205). It is assumed that 75% of disablements and active deaths that occur are service-related. These assumptions are consistent with those utilized by other Florida municipal special risk retirement programs.

Retirement Age: Earlier of age 52 and 10 years of service or 25 years of service regardless of age. Also, any member who has reached Normal Retirement Age is assumed to retire at a rate of 25% for the first three years upon attaining first eligibility, and a rate of 100% thereafter. These rates were adopted in conjunction with the October 1, 2011 valuation, based on results of an Experience Study for the period October 1, 1991 through October 1, 2010.

Early Retirement: Commencing at the member’s eligibility for Early Retirement (20 years of Credited Service), members are assumed to retire with an immediate, subsidized benefit at the rate of 10% per year. This assumption was adopted in conjunction with the October 1, 2011 valuation, based on results of an Experience Study for the period October 1, 1991 through October 1, 2010.

**GASB 67**

Interest Rate: 7.0%, compounded annually, net of investment related expenses. This assumption is consistent with the Plan’s investment policy and long-term expected returns by asset class. Additionally, the 7.0% assumption was mandated by the Florida Division of Retirement’s Reviewing Actuary in conjunction with the Plan’s closure to new entrants beginning October 1, 2014.

Inflation Rate: 2.50% per year. This assumption is reasonable, based on long-term experience.

Payroll Growth: None.

Asset Smoothing Methodology: The Actuarial Value of Assets is brought forward using the historical four-year geometric average of Market Value Returns (net-of-fees). Over time, this may result in a deminis bias that is above or below the Market Value of Assets.

Funding Method: Entry Age Normal Actuarial Cost Method. The following loads are applied for determination of the Sponsor dollar funding requirement:  
 Interest – A half year, based on the current 7.00% assumption.  
 Salary – A full year, based on the current 5.97%

Salary Increases: 10.0% for Members with less than 10 years of service, and 5.5% with 10 or more years of service. These rates were adopted in conjunction with the October 1, 2011 valuation, based on results of an Experience Study for the period October 1, 1991 through October 1, 2010.  
 Additionally, projected salary at retirement is increased according to the below table for lump sum payments in the year of termination. These rates are averages, based on census data provided by the City.

Service as of 10/01/2012	Final Salary Load
10 or more years	20.0%
More than 1, less than 10 years	10.0%
Less than 1 year	0.0%

Termination and Disability Rate Table:

Age	% Terminating During the Year	% Becoming Disabled During the Year
20	15.0%	0.14%
30	11.0%	0.18%
40	7.0%	0.30%

SCHEDULE OF INVESTMENT RETURNS  
Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2018	13.13%
09/30/2017	13.34%
09/30/2016	10.80%
09/30/2015	-4.79%
09/30/2014	11.57%

NOTES TO THE FINANCIAL STATEMENTS  
(For the Year Ended September 30, 2018)

General Information about the Pension Plan

*Plan Description*

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

- a) Two Council appointees,
- b) Two Members of the Department elected by the membership, and
- c) Fifth Member elected by other 4 and appointed by Council.

Full-time, sworn police officers shall participate in the System as a condition of employment. Officers hired after September 30, 2014 shall participate in the Florida Retirement System. Members active on September 30, 2014 have the option of participating prospectively in the Florida Retirement System.

*Plan Membership as of October 1, 2017:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	57
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	32
Active Plan Members	6
	95
	95

*Benefits Provided*

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

Normal Retirement:

Date: Earlier of age 52 and 10 years of Credited Service, or 25 years of Credited Service.

Benefit: 3.50% of Average Final Compensation times Credited Service through September 30, 2014, plus 2.75% of Average Final Compensation times Credited Service on and after October 1, 2014, plus \$175 per month supplement.

Members eligible for Normal Retirement as of October 1, 2014 will continue to accrue benefits under Plan provisions in effect prior to Ordinance No. 2014-23.

Early Retirement:

Date: 20 years of Credited Service, regardless of age. There is no Early Retirement option for Members with less than 10 years of Credited Service as of October 1, 2014.

Benefit: Accrued benefit, reduced 2% per year preceding Normal Retirement Date.

Vesting (Termination):

Members are 100% vested in benefits accrued prior to October 1, 2014.

Disability:

Eligibility: Total and Permanent as determined by the Board.

Service Incurred: Covered from Date of Employment.

Non-Service Incurred: 5 years of Credited Service.

Benefit: 62.5% (Service Incurred), or 50% (Non-Service Incurred) of Salary (base hourly pay, plus shift differential plus incentive pay) at time of disability plus \$175 per month. Paid as a 100% Joint and Survivor Annuity.

Pre-Retirement Death Benefits:

Service Incurred: Covered from Date of Employment. 62.5% of earnings paid to spouse until death, or, if no spouse, in equal shares to dependent children.

Non-Service Incurred: Eligible after 5 years of Credited Service. 50% of earnings paid to spouse until death or remarriage, or, if no spouse, in equal shares to dependent children.

*Contributions*

Member Contributions: 7.00% of Salary.

City and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, over 30 years. In no event will City contributions be less than 12% of the total Salary of the Members.

Net Pension Liability

The measurement date is September 30, 2018.

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

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

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

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

*Actuarial Assumptions:*

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

Inflation	2.50%
Salary Increases	5.50% - 10.00%
Discount Rate	7.00%
Investment Rate of Return	7.00%

*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 Healthy Inactive Lives:*

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

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

*Mortality Rate Disabled Lives:*

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

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

The most recent actuarial experience study used to review the other significant assumptions was dated December 9, 2011.

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

For 2018 the inflation rate assumption of the investment advisor was 2.50%.

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

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2018 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	50.00%	7.50%
International Equity	15.00%	8.50%
Broad Market Fixed Income	25.00%	2.50%
Real Estate	10.00%	4.50%
Total	100.00%	

## GASB 68

### Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.00 percent.

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

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances at September 30, 2017	\$ 41,566,874	\$ 36,180,611	\$ 5,386,263
Changes for a Year:			
Service Cost	160,319	-	160,319
Interest	2,974,942	-	2,974,942
Differences between Expected and Actual Experience	495,274	-	495,274
Changes of assumptions	-	-	-
Changes of benefit terms	2,467,573	-	2,467,573
Contributions - Employer	-	1,316,647	(1,316,647)
Contributions - State	-	231,096	(231,096)
Contributions - Employee	-	28,738	(28,738)
Net Investment Income	-	4,669,948	(4,669,948)
Benefit Payments, including Refunds of Employee Contributions	(3,391,201)	(3,391,201)	-
Administrative Expense	-	(69,712)	69,712
Net Changes	2,706,907	2,785,516	(78,609)
Balances at September 30, 2018	\$ 44,273,781	\$ 38,966,127	\$ 5,307,654

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.00%	7.00%	8.00%
Sponsor's Net Pension Liability	\$ 10,162,864	\$ 5,307,654	\$ 1,273,638

*Pension Plan Fiduciary Net Position.*

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



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

For the year ended September 30, 2018, the Sponsor will recognize a Pension Expense of \$3,196,047.

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

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	2,626,475
<b>Total</b>	<b>\$ -</b>	<b>\$ 2,626,475</b>

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

Year ended September 30:			
2019	\$	(270,210)	
2020	\$	(1,066,836)	
2021	\$	(848,777)	
2022	\$	(440,652)	
2023	\$	-	
Thereafter	\$	-	

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

Measurement Date <sup>1</sup>	09/30/2018	09/30/2017	09/30/2016
Total Pension Liability			
Service Cost	160,319	196,691	203,840
Interest	2,974,942	2,766,512	2,751,065
Changes of benefit terms	2,467,573	-	-
Differences between Expected and Actual Experience	495,274	486,909	(1,512,423)
Changes of assumptions	-	-	1,343,437
Contributions - Buy Back	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(3,391,201)	(2,416,303)	(2,699,899)
Net Change in Total Pension Liability	2,706,907	1,033,809	86,020
Total Pension Liability - Beginning	41,566,874	40,533,065	40,447,045
Total Pension Liability - Ending (a)	<u>\$ 44,273,781</u>	<u>\$ 41,566,874</u>	<u>\$ 40,533,065</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,316,647	1,337,865	2,108,231
Contributions - State	231,096	214,704	207,731
Contributions - Employee	28,738	35,922	38,297
Net Investment Income	4,669,948	4,303,140	3,176,622
Benefit Payments, including Refunds of Employee Contributions	(3,391,201)	(2,416,303)	(2,699,899)
Administrative Expense	(69,712)	(60,469)	(85,428)
Net Change in Plan Fiduciary Net Position	2,785,516	3,414,859	2,745,554
Plan Fiduciary Net Position - Beginning	36,180,611	32,765,752	30,020,198
Plan Fiduciary Net Position - Ending (b)	<u>\$ 38,966,127</u>	<u>\$ 36,180,611</u>	<u>\$ 32,765,752</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 5,307,654</u>	<u>\$ 5,386,263</u>	<u>\$ 7,767,313</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	88.01%	87.04%	80.84%
Covered Employee Payroll	\$ 410,497	\$ 547,100	\$ 547,100
Net Pension Liability as a percentage of Covered Employee Payroll	1292.98%	984.51%	1419.72%

**Notes to Schedule:**

<sup>1</sup> Effective for the City's fiscal year ending 09/30/2018, the GASB 68 measurement date of the Pension Expense has been changed from 09/30/2017 to 09/30/2018.

*Changes of benefit terms:*

For measurement date, 09/30/2018, amounts reported as changes of benefit terms resulted from the following: Effective October 1, 2017, the monthly benefit currently being received by every retiree who has been receiving benefit payments for at least one year as of October 1, 2017, including service and disability retirees and DROP participants, their joint pensioners or beneficiaries, shall be increased by one percent for each full year of retirement, up to a maximum increase of ten percent. Eligible retirees must have been retired for at least one full year as of October 1, 2017. This is a one-time increase in benefits and does not include vested terminated persons.

*Changes of assumptions:*

For measurement date 09/30/2016, amounts reported as changes of assumptions were resulted from the new mortality assumption under Chapter 2015-157, Florida Statutes. The inflation assumption rate was lowered from 3.00% to 2.50%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

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

	09/30/2015	09/30/2014
Measurement Date <sup>1</sup>		
Total Pension Liability		
Service Cost	597,047	560,060
Interest	2,850,130	2,760,145
Changes of benefit terms	174,206	(1,837,786)
Differences between Expected and Actual Experience	(638,090)	-
Changes of assumptions	3,277,827	-
Contributions - Buy Back	-	17,465
Benefit Payments, including Refunds of Employee Contributions	(2,240,847)	(2,578,773)
Net Change in Total Pension Liability	4,020,273	(1,078,889)
Total Pension Liability - Beginning	36,426,772	37,505,661
Total Pension Liability - Ending (a)	\$ 40,447,045	\$ 36,426,772
Plan Fiduciary Net Position		
Contributions - Employer	1,753,275	1,651,993
Contributions - State	189,276	178,617
Contributions - Employee	40,508	205,801
Net Investment Income	(1,481,414)	3,307,423
Benefit Payments, including Refunds of Employee Contributions	(2,240,847)	(2,578,773)
Administrative Expense	(73,554)	(62,991)
Net Change in Plan Fiduciary Net Position	(1,812,756)	2,719,535
Plan Fiduciary Net Position - Beginning	31,832,954	29,113,419
Plan Fiduciary Net Position - Ending (b)	\$ 30,020,198	\$ 31,832,954
Net Pension Liability - Ending (a) - (b)	\$ 10,426,846	\$ 4,593,818
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	74.22%	87.39%
Covered Employee Payroll	N/A	\$ 2,838,631
Net Pension Liability as a percentage of Covered Employee Payroll	N/A	161.83%

**Notes to Schedule:**

<sup>1</sup> Effective for the City's fiscal year ending 09/30/2018, the GASB 68 measurement date of the Pension Expense has been changed from 09/30/2017 to 09/30/2018.

*Changes of benefit terms:*

For measurement date 09/30/2015, amounts reported as changes of benefit terms were resulted from the Ordinance 2015-17, adopted and effective June 23, 2015, amended the definition of Salary, in addition to providing 100% vesting in benefits accrued prior to October 1, 2014.

For measurement date 09/30/2014, amounts reported as changes of benefit terms were resulted from the March 6, 2015 Actuarial Impact Statement.

*Changes of assumptions:*

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

- The net-of-fees investment return assumption was lowered from 7.9% to 7.0%.
  - The Final Salary Load assumption was increased from 0% to the below table, based on census data provided by the City:
- |   |
|---|
| Service as of 10/1/2012 Final Salary Load |
| 10 or more years 20.0%                    |
| More than 1, less than 10 years 10.0%     |

**SCHEDULE OF CONTRIBUTIONS**  
Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Employee Payroll <sup>1</sup>	Contributions as a percentage of Covered Employee Payroll
09/30/2018	\$ 1,524,378	\$ 1,547,743	\$ (23,365)	\$ 410,497	377.04%
09/30/2017	\$ 1,527,141	\$ 1,552,569	\$ (25,428)	\$ 513,171	302.54%
09/30/2016	\$ 2,268,143	\$ 2,315,962	\$ (47,819)	\$ 547,100	423.32%
09/30/2015	\$ 1,942,551	\$ 1,942,551	\$ -	\$ 761,681	255.03%
09/30/2014	\$ 1,818,711	\$ 1,830,610	\$ (11,899)	\$ 2,838,631	64.49%

Notes to Schedule

Valuation Date: 10/01/2016

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

Methods and assumptions used to determine contribution rates:

Mortality Rate:

*Healthy Lives:*

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

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

*Disabled Lives:*

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

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

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

Termination Rates:

See table on following page (1304). These rates were adopted in conjunction with the October 1, 2011 valuation, based on results of an Experience Study for the period October 1, 1991 through October 1, 2010.

Disability Rates:

See table on following page (1205). It is assumed that 75% of disablements and active deaths that occur are service-related. These assumptions are consistent with those utilized by other Florida municipal special risk retirement programs.

Retirement Age:

Earlier of age 52 and 10 years of service or 25 years of service regardless of age. Also, any member who has reached Normal Retirement Age is assumed to retire at a rate of 25% for the first three years upon attaining first eligibility, and a rate of 100% thereafter. These rates were adopted in conjunction with the October 1, 2011 valuation, based on results of an Experience Study for the period October 1, 1991 through October 1, 2010.

Early Retirement:

Commencing at the member's eligibility for Early Retirement (20 years of Credited Service), members are assumed to retire with an immediate, subsidized benefit at the rate of 10% per year. This assumption was adopted in conjunction with the October 1, 2011 valuation, based on results of an Experience Study for the period October 1, 1991 through October 1, 2010.

**GASB 68**

**Interest Rate:** 7.0%, compounded annually, net of investment related expenses. This assumption is consistent with the Plan’s investment policy and long-term expected returns by asset class. Additionally, the 7.0% assumption was mandated by the Florida Division of Retirement’s Reviewing Actuary in conjunction with the Plan’s closure to new entrants beginning October 1, 2014.

**Inflation Rate:** 2.50% per year. This assumption is reasonable, based on long-term experience.

**Payroll Growth:** None.

**Asset Smoothing Methodology:** The Actuarial Value of Assets is brought forward using the historical four-year geometric average of Market Value Returns (net-of-fees). Over time, this may result in a deminis bias that is above or below the Market Value of Assets.

**Funding Method:** Entry Age Normal Actuarial Cost Method. The following loads are applied for determination of the Sponsor dollar funding requirement:  
 Interest – A half year, based on the current 7.00% assumption.  
 Salary – A full year, based on the current 5.97% assumption.

**Salary Increases:** 10.0% for Members with less than 10 years of service, and 5.5% with 10 or more years of service. These rates were adopted in conjunction with the October 1, 2011 valuation, based on results of an Experience Study for the period October 1, 1991 through October 1, 2010.  
 Additionally, projected salary at retirement is increased according to the below table for lump sum payments in the year of termination. These rates are averages, based on census data provided by the City.

Service as of 10/01/2012	Final Salary Load
10 or more years	20%
More than 1, less than 10 years	10%
Less than 1 year	0%

**Termination and Disability Rate Table:**

Age	% Terminating During the Year	Disabled During the Year
20	15.00%	0.14%
30	11.00%	0.18%
40	7.00%	0.30%

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

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

**COMPONENTS OF PENSION EXPENSE.**  
**FISCAL YEAR SEPTEMBER 30, 2018**

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 5,386,263	\$ 2,492,814	\$ 1,593,252	\$ -
Total Pension Liability Factors:				
Service Cost	160,319	-	-	160,319
Interest	2,974,942	-	-	2,974,942
Changes in benefit terms	2,467,573	-	-	2,467,573
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	495,274	-	495,274	-
Current year amortization of experience difference	-	-	(495,274)	495,274
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(3,391,201)	-	-	-
Net change	<u>2,706,907</u>	<u>-</u>	<u>-</u>	<u>6,098,108</u>
Plan Fiduciary Net Position:				
Contributions - Employer	1,316,647	-	-	-
Contributions - State	231,096	-	-	-
Contributions - Employee	28,738	-	-	(28,738)
Projected Net Investment Income	2,466,688	-	-	(2,466,688)
Difference between projected and actual earnings on Pension Plan investments	2,203,260	2,203,260	-	-
Current year amortization	-	(1,272,973)	(796,626)	(476,347)
Benefit Payments, including Refunds of Employee Contributions	(3,391,201)	-	-	-
Administrative Expenses	(69,712)	-	-	69,712
Net change	<u>2,785,516</u>	<u>930,287</u>	<u>(796,626)</u>	<u>(2,902,061)</u>
Ending Balance	<u>\$ 5,307,654</u>	<u>\$ 3,423,101</u>	<u>\$ 796,626</u>	<u>\$ 3,196,047</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)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2014	\$ (1,030,684)	5	\$ (206,137)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 3,983,129	5	\$ 796,626	\$ 796,626	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (1,090,296)	5	\$ (218,059)	\$ (218,059)	\$ (218,059)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (2,040,627)	5	\$ (408,125)	\$ (408,125)	\$ (408,125)	\$ (408,125)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (2,203,260)	5	\$ (440,652)	\$ (440,652)	\$ (440,652)	\$ (440,652)	\$ (440,652)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (476,347)	\$ (270,210)	\$ (1,066,836)	\$ (848,777)	\$ (440,652)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



AMORTIZATION SCHEDULE - EXPERIENCE

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

Plan Year Ending	Differences Between Expected and Actual Experience	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2018	\$ 495,274	1	\$ 495,274	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 495,274	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -