

CITY OF VENICE
MUNICIPAL FIREFIGHTERS' PENSION TRUST FUND
ACTUARIAL VALUATION
AS OF OCTOBER 1, 2019
CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2021
GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2019



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

December 5, 2019

Board of Trustees
City of Venice
Municipal Firefighters' Pension Board

Re: City of Venice Municipal Firefighters' 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 Firefighters' 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 175, 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, 2018. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2019 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.


The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet 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 Firefighters' 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 us at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.

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

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Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Venice Municipal Firefighters' Pension Trust Fund, performed as of October 1, 2019, 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, 2021.

The contribution requirements, compared with those set forth in the October 1, 2018 actuarial valuation report, are as follows:

Valuation Date	10/1/2019	10/1/2018
Applicable to Fiscal Year Ending	<u>9/30/2021</u>	<u>9/30/2020</u>
Minimum Required Contribution	\$2,517,301	\$2,579,532
Member Contributions (Est.)	145,208	140,380
City And State Required Contribution	2,372,093	2,439,152
State Contribution (Est.) ¹	173,349	173,349
City Required Contribution	\$2,198,744	\$2,265,803

¹ Represents the amount received in calendar 2019. As per a Mutual Consent Agreement between the Membership and the City, all State Monies received up to \$296,00 each year will be available to offset the City's required contribution.

As you can see, the Minimum Required Contribution shows a decrease when compared to the results determined in the October 1, 2018 actuarial valuation report. The decrease is primarily due to a decrease in the Normal Cost.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. The primary source of actuarial loss was mortality. This loss was offset in part by a gain associated with an average salary increase of 3.50% which fell short of the 5.90% assumption. and an investment return of 7.16% (Actuarial Asset Basis) which exceeded the 7.00% assumption.

CHANGES SINCE PRIOR VALUATION

Plan Changes

Chapter 2019-21, Laws of Florida was signed into effect granting certain disability benefits to firefighters participating in an employer-sponsored retirement plan. Effective July 1, 2019, "the retirement plan must consider the firefighter totally and permanently disabled in the line of duty if he or she meets the retirement plan's definition of totally and permanently disabled due to the diagnosis of cancer or circumstances that arise out of the treatment of cancer." For this purpose, "cancer" is as defined in Section 112.1816(1), Florida Statutes.

Please note that the benefit changes only relate to the disability benefits for the Pension Fund and do not provide for other additional benefits that are provided for in Florida Statutes Section 112.1816.

Additionally, ordinance 2019-10 was adopted which implemented a Share Plan with half of the Excess State Monies Reserve as of September 30, 2018 and will be funded with State Monies in excess of \$296,000.

Actuarial Assumption/Method Changes

There have been no changes of actuarial assumptions or methods since the prior valuation except to change the assumption of in-line of duty disablements and deaths from 75% to 90% (note this has no impact on the liabilities).

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2019</u>	<u>10/1/2018</u>
A. Participant Data		
Actives	22	22
Service Retirees	29	30
Beneficiaries	9	8
Disability Retirees	4	4
Terminated Vested	<u>15</u>	<u>15</u>
 Total	 79	 79
 Total Annual Payroll	 \$1,893,125	 \$1,829,660
Payroll Under Assumed Ret. Age	1,893,125	1,829,660
 Annual Rate of Payments to:		
Service Retirees	1,964,086	1,990,334
Beneficiaries	199,345	140,517
Disability Retirees	75,650	75,650
Terminated Vested	296,413	296,413
 B. Assets		
Actuarial Value (AVA) ¹	27,122,406	25,122,791
Market Value (MVA) ¹	26,316,843	25,638,236
 C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	15,309,396	14,118,722
Disability Benefits	353,707	383,684
Death Benefits	90,018	98,763
Vested Benefits	866,870	1,004,480
Refund of Contributions	0	0
Service Retirees	24,546,497	25,288,237
Beneficiaries	1,654,932	1,139,278
Disability Retirees	923,327	931,752
Terminated Vested	2,103,575	1,958,639
Share Plan Balances ¹	4,515	0
Excess State Monies Reserve	<u>0</u>	<u>8,861</u>
 Total	 45,852,837	 44,932,416

C. Liabilities - (Continued)	<u>10/1/2019</u>	<u>10/1/2018</u>
Present Value of Future Salaries	7,857,107	8,623,621
Present Value of Future Member Contributions	549,997	603,653
Normal Cost (Retirement)	378,446	362,944
Normal Cost (Disability)	42,144	39,907
Normal Cost (Death)	14,076	13,316
Normal Cost (Vesting)	191,522	245,290
Normal Cost (Refunds)	<u>0</u>	<u>0</u>
Total Normal Cost	626,188	661,457
Present Value of Future Normal Costs	2,278,927	2,615,661
Accrued Liability (Retirement)	13,965,879	12,596,246
Accrued Liability (Disability)	204,233	215,891
Accrued Liability (Death)	39,030	41,833
Accrued Liability (Vesting)	131,922	136,018
Accrued Liability (Refunds)	0	0
Accrued Liability (Inactives)	29,228,331	29,317,906
Share Plan Balances ¹	4,515	0
Excess State Monies Reserve	<u>0</u>	<u>8,861</u>
Total Actuarial Accrued Liability (EAN AL)	43,573,910	42,316,755
Unfunded Actuarial Accrued Liability (UAAL)	16,451,504	17,193,964
Funded Ratio (AVA / EAN AL)	62.2%	59.4%

D. Actuarial Present Value of	<u>10/1/2019</u>	<u>10/1/2018</u>
Accrued Benefits		
Vested Accrued Benefits		
Inactives + Share Plan Balances ¹	29,232,846	29,317,906
Actives	10,025,445	8,600,100
Member Contributions	<u>2,290,197</u>	<u>2,165,022</u>
Total	41,548,488	40,083,028
Non-vested Accrued Benefits	<u>0</u>	<u>0</u>
Total Present Value		
Accrued Benefits (PVAB)	41,548,488	40,083,028
Funded Ratio (MVA / PVAB)	63.3%	64.0%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	1,164,973	
Benefits Paid	(2,420,604)	
Interest	2,721,091	
Other	<u>0</u>	
Total	1,465,460	

Valuation Date	10/1/2019	10/1/2018
Applicable to Fiscal Year Ending	<u>9/30/2021</u>	<u>9/30/2020</u>

E. Pension Cost

Normal Cost ²	\$686,148	\$725,000
Administrative Expenses ²	64,314	65,217
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 25 years (as of 10/1/2019) ²	1,766,839	1,789,315
Minimum Required Contribution	2,517,301	2,579,532
Expected Member Contributions ²	145,208	140,380
Expected City and State Contribution	2,372,093	2,439,152

F. Past Contributions

Plan Years Ending:	<u>9/30/2019</u>
City and State Requirement	2,546,069
Actual Contributions Made:	
Members (excluding buyback)	125,174
City	2,372,720
State	<u>173,349</u>
Total	2,671,243

G. Net Actuarial (Gain)/Loss 52,171

¹ The asset values and liabilities include accumulated Share Plan Balances as of 9/30/2019 and 9/30/2018.

² Contributions developed as of 10/1/2019 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>
2019	16,451,504
2020	15,877,799
2021	15,263,932
2027	10,430,398
2033	4,433,525
2038	1,292,915
2044	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2019	3.50%	5.90%
Year Ended 9/30/2018	2.45%	6.00%
Year Ended 9/30/2017	3.51%	6.25%
Year Ended 9/30/2016	3.82%	6.30%
Year Ended 9/30/2015	4.23%	6.94%

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

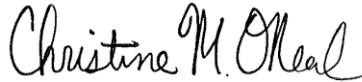
	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended 9/30/2019	1.90%	7.16%	7.00%
Year Ended 9/30/2018	8.68%	6.67%	7.00%
Year Ended 9/30/2017	11.00%	7.09%	7.00%
Year Ended 9/30/2016	7.29%	7.22%	7.00%
Year Ended 9/30/2015	0.05%	9.19%	7.00%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2019	\$1,893,125
	10/1/2009	3,016,684
(b) Total Increase		-37.24%
(c) Number of Years		10.00
(d) Average Annual Rate		-4.55%

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, 2018	\$17,193,964
(2) Sponsor Normal Cost developed as of October 1, 2018	533,381
(3) Expected administrative expenses for the year ended September 30, 2019	59,501
(4) Expected interest on (1), (2) and (3)	1,242,997
(5) Sponsor contributions to the System during the year ended September 30, 2019	2,546,069
(6) Expected interest on (5)	84,441
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2019 (1)+(2)+(3)+(4)-(5)-(6)	16,399,333
(8) Change to UAAL due to Assumption Change	0
(9) Change to UAAL due to Actuarial (Gain)/Loss	52,171
(10) Unfunded Actuarial Accrued Liability as of October 1, 2019	16,451,504

<u>Type of Base</u>	<u>Date Established</u>	<u>Years Remaining</u>	<u>10/1/2019 Amount</u>	<u>Amortization Amount</u>
	10/1/1991	2	(34,121)	(17,637)
	10/1/1998	9	347,858	49,899
	10/1/1999	10	379,175	50,454
	10/1/2000	11	904,992	112,792
method change	10/1/2002	13	1,658,693	185,480
prior losses	10/1/2002	13	1,658,693	185,480
actuarial loss	10/1/2003	14	852,515	91,104
actuarial loss	10/1/2004	15	1,735,267	178,059
actuarial loss	10/1/2005	16	1,112,386	110,051
actuarial loss	10/1/2006	17	313,618	30,021
actuarial loss	10/1/2007	18	291,143	27,050
actuarial loss	10/1/2008	19	1,103,653	99,796
method change	10/1/2008	19	415,953	37,612
assum. change	10/1/2009	10	(362,957)	(48,296)
actuarial loss	10/1/2009	20	2,378,082	209,789
actuarial loss	10/1/2010	21	1,084,090	93,504
assum. change	10/1/2010	11	360,890	44,979
actuarial loss	10/1/2011	22	1,458,549	123,235
actuarial loss	10/1/2012	23	1,275,848	105,781

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2019 <u>Amount</u>	Amortization <u>Amount</u>
actuarial loss	10/1/2013	24	442,568	36,063
software change	10/1/2013	24	1,206,271	98,293
benefit change	10/1/2013	24	(2,847,930)	(232,064)
actuarial gain	10/1/2014	25	(677,994)	(54,373)
assum. change	10/1/2014	25	2,815,261	225,775
benefit change	10/1/2014	25	(678,065)	(54,379)
actuarial gain	10/1/2015	16	(1,668,838)	(165,102)
actuarial gain	10/1/2016	17	(178,895)	(17,125)
assum. change	10/1/2016	17	1,143,581	109,469
actuarial loss	10/1/2017	18	142,208	13,212
actuarial gain	10/1/2018	19	(233,161)	(21,083)
actuarial loss	10/1/2019	20	<u>52,171</u>	<u>4,602</u>
			16,451,504	1,612,441

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2018	\$17,193,964
(2) Expected UAAL as of October 1, 2019	16,399,333
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(40,377)
Salary Increases	(283,644)
Active Decrements	17,870
Inactive Mortality	126,487
Other	<u>231,835</u>
Increase in UAAL due to (Gain)/Loss	52,171
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2019	\$16,451,504

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, 2018 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 is supported by the target asset allocation of the trust and the expected long-term return by asset class.

Salary Increases

<u>Years of Service</u>	<u>% Increase in Salary</u>
Less than 10	10.0%
10-15	6.5
15-20	5.5
20 and greater	5.0

The assumed rates of salary increases were approved by the Board in conjunction with an actuarial experience study dated May 3, 2010.

Additionally, projected salary at retirement in increased based on individual accruals in order to account for lump sum accrued sick and vacation leave payouts.

Payroll Growth

0.00% for purposes of amortizing the Unfunded Actuarial Accrued Liability.

Retirement Age

Earlier of age 55 and 10 years of service or 25 years of service, regardless of age. Also, any Member who reaches Normal Retirement is assumed to continue employment for one additional year. We feel this assumption is reasonable based upon the plan provisions.

Early Retirement

Commencing with eligibility for Early Retirement Age (Earlier of age 50 with 10 years of service or 20 years of service, regardless of age), Members are assumed to retire with an immediate subsidized benefit at the rate of 15% per year. There is no Early Retirement assumption for Members with less than 10 years of Credited Service as of October 1, 2014. This assumption was approved by the Board in conjunction with an actuarial experience study dated May 3, 2010.

Disability Rate

D1205. See sample rates on below. It is assumed that 90% (prior 75%) of disablements and active deaths that occur are service related. This assumption was developed from those used by other plans containing Florida municipal firefighters.

Termination Rate

W1304. See sample rates below. This assumption was developed from those used by other plans containing Florida municipal firefighters.

Cost-of-Living Adjustment

3% per year from retirement to age 65. Benefits based on Credited Service after September 30, 2014 are not subject to the COLA.

Turnover and Disability Rates

<u>Age</u>	<u>% Terminating During the Year</u>	<u>% Becoming Disabled During the Year</u>
20	12.4%	0.14%
30	11.1	0.18
40	6.8	0.30
50	2.2	1.00

Asset Valuation Method

Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric four-year average Market Value return (net of fees). It is possible that over time this technique will produce an insignificant bias above or below 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 5.87% assumption.

Administrative Expenses

\$58,694 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Amortization Method

New UAAL amortization bases are established according to the following amortization periods:

Experience: 20 Years.

Assumption/Method Changes: 20 Years.

Benefit Changes: 20 Years.

GLOSSARY

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

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

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

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

- (a) The normal cost accrual rate equals:
 - (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
 - (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.
- (b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.
- (c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.
- (d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

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

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.

DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined using various actuarial assumptions. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- Investment Return: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.
- Salary Increases: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.
- Demographic Assumptions: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, closed plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature closed plans with a substantial inactive liability. Similarly, mature closed plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled “Plan Maturity Measures and Other Risk Metrics”. Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has stayed about the same from October 1, 2016 to October 1, 2019, indicating that the plan's maturity level has not significantly changed during the period.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 67.1%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors have a bigger impact.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 52.0% on October 1, 2016 to 62.2% on October 1, 2019, due to net favorable experience realized by the plan and extra contributions to pay down the unfunded liability during the period.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, decreased from 4.6% on October 1, 2016 to 0.7% on October 1, 2019. The current Net Cash Flow Ratio of 0.7% indicates that contributions are generally covering the plan's benefit payments and administrative expenses.

It is important to note that the actuary has identified the risks in this section as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Support Ratio</u>				
Total Actives	22	22	22	22
Total Inactives ¹	59	59	57	57
Actives / Inactives ¹	37.3%	37.3%	38.6%	38.6%
 <u>Asset Volatility Ratio</u>				
Market Value of Assets (MVA)	19,973,427	22,991,416	25,638,236	26,316,843
Total Annual Payroll	1,731,061	1,787,588	1,829,660	1,893,125
MVA / Total Annual Payroll	1,153.8%	1,286.2%	1,401.3%	1,390.1%
 <u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	29,103,805	29,495,358	29,317,906	29,228,331
Total Accrued Liability (EAN)	39,719,568	41,246,684	42,316,755	43,573,910
Inactive AL / Total AL	73.3%	71.5%	69.3%	67.1%
 <u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	20,666,901	22,935,682	25,122,791	27,122,406
Total Accrued Liability (EAN)	39,719,568	41,246,684	42,316,755	43,573,910
AVA / Total Accrued Liability (EAN)	52.0%	55.6%	59.4%	62.2%
 <u>Net Cash Flow Ratio</u>				
Net Cash Flow ²	927,928	776,065	634,983	192,753
Market Value of Assets (MVA)	19,973,427	22,991,416	25,638,236	26,316,843
Ratio	4.6%	3.4%	2.5%	0.7%

¹ Excludes terminated participants awaiting a refund of member contributions.

² Determined as total contributions minus benefit payments and administrative expenses.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
1998	143,012.28	_____%
1999	125,041.12	-12.6%
2000	177,255.46	41.8%
2001	176,495.28	-0.4%
2002	194,519.07	10.2%
2003	166,236.19	-14.5%
2004	180,446.49	8.5%
2005	192,363.23	6.6%
2006	239,238.99	24.4%
2007	355,709.22	48.7%
2008	391,694.05	10.1%
2009	233,461.64	-40.4%
2010	262,094.82	12.3%
2011	251,217.11	-4.2%
2012	272,498.46	8.5%
2013	270,222.11	-0.8%
2014	304,801.85	12.8%
2015	272,353.29	-10.6%
2016	246,275.58	-9.6%
2017	193,289.58	-21.5%
2018	180,163.45	-6.8%
2019	173,349.35	-3.8%

EXCESS STATE MONIES RESERVE

	Regular Distribution			Special Distribution		
	<u>Actual State Contribution</u>	<u>Applicable "Frozen" Amount</u>	<u>Excess State Monies Reserve</u>	<u>Actual State Contribution</u>	<u>Applicable "Frozen" Amount</u>	<u>Excess State Monies Reserve</u>
2000	\$135,265.80	*	*	\$77,180.94	*	*
2001	99,314.14	*	*	33,696.73	*	*
2002	112,368.90	*	*	48,453.44	*	*
2003	114,616.26	*	*	51,619.93	*	*
2004	121,493.22	*	*	58,953.27	*	*
2005	126,006.48	*	*	66,356.75	*	*
2006	158,450.40	*	*	80,788.59	*	*
2007	192,101.23	192,101.23	0.00	163,607.99	103,839.77	59,768.22
2008	219,446.87	219,446.87	0.00	172,247.18	76,494.13	95,753.05
2009	177,169.38	177,169.38	0.00	56,292.26	118,771.62	0.00
2010	203,986.50	203,986.50	0.00	58,108.32	91,954.50	0.00
2011	197,656.20	197,656.20	0.00	53,560.91	98,284.80	0.00
2012	182,513.76	182,513.76	0.00	89,984.70	113,427.24	0.00
2013	175,358.35	175,358.35	0.00	94,863.76	120,582.65	0.00
2014	196,261.87	196,261.87	0.00	108,539.98	99,679.13	8,860.85
2015	189,697.45	189,697.45	0.00	82,655.84	106,243.55	0.00
2016	196,721.06	196,721.06	0.00	49,554.52	99,219.94	0.00
2017	183,315.81	183,315.81	0.00	9,973.77	112,625.19	0.00
2018	173,020.90	173,020.90	0.00	7,142.55	122,920.10	0.00
2019	173,349.35	296,000.00	<u>0.00</u>	0.00	0.00	<u>0.00</u>
			0.00			164,382.12
Accumulated Regular Excess			0.00			
Accumulated Special Excess			<u>164,382.12</u>			
Total Excess State Monies			164,382.12			
Less amount available to City as a prepaid contribution for Fiscal 2015			(155,521.27)			
Total Excess Reserve			<u>8,860.85</u>			
Allocation to Share plan			(4,430.43)			
Allocation to City as Prepaid			<u>(4,430.42)</u>			
Equals Current State Monies Reserve			0			

* The actual State Monies never exceeded the "Frozen" amount.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	496,599.29	496,599.29
Cash	(79.41)	(79.41)
Total Cash and Equivalents	496,519.88	496,519.88
Receivables:		
Investment Income	39,559.98	39,559.98
Total Receivable	39,599.85	39,599.85
Investments:		
U. S. Bonds and Bills	3,329,827.77	3,467,353.10
Federal Agency Guaranteed Securities	22,513.87	21,880.48
Corporate Bonds	2,545,084.42	2,566,274.60
Stocks	5,331,905.96	5,607,925.88
Mutual Funds:		
Fixed Income	1,502,953.34	1,268,558.11
Equity	8,713,883.36	10,159,307.69
Pooled/Common/Commingled Funds:		
Real Estate	2,550,638.00	2,703,818.82
Total Investments	23,996,806.72	25,795,118.68
Total Assets	24,532,926.45	26,331,238.41
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	12,406.95	12,406.95
Administrative Expenses	1,988.95	1,988.95
Total Liabilities	14,395.90	14,395.90
NET POSITION RESTRICTED FOR PENSIONS	24,518,530.55	26,316,842.51

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

ADDITIONS

Contributions:		
Member		125,174.03
City		2,372,719.76
State		173,349.35
Total Contributions		2,671,243.14
Investment Income:		
Net Realized Gain (Loss)	(433,367.75)	
Unrealized Gain (Loss)	(182,300.16)	
Net Increase in Fair Value of Investments		(615,667.91)
Interest & Dividends		1,208,017.81
Less Investment Expense ¹		(106,496.53)
Net Investment Income		485,853.37
Total Additions		3,157,096.51

DEDUCTIONS

Distributions to Members:		
Benefit Payments		2,212,833.27
Lump Sum PLOP Distributions		207,770.70
Refunds of Member Contributions		0.00
Total Distributions		2,420,603.97
Administrative Expense		57,886.49
Total Deductions		2,478,490.46
Net Increase in Net Position		678,606.05

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year		25,638,236.46
End of the Year		26,316,842.51

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

ACTUARIAL ASSET VALUATION
SEPTEMBER 30, 2019

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 ¹	
09/30/2016	7.29%	
09/30/2017	11.00%	
09/30/2018	8.68%	
09/30/2019	1.90%	
Annualized Rate of Return for prior four (4) years:		7.16%
(A) 10/01/2018 Actuarial Assets:		\$25,122,790.72
(I) Net Investment Income:		
1. Interest and Dividends	1,208,017.81	
2. Realized Gains (Losses)	(433,367.75)	
3. Unrealized Gains (Losses)	(182,300.16)	
4. Change in Actuarial Value	1,321,009.17	
5. Investment Related Expenses	(106,496.53)	
Total		1,806,862.54
(B) 10/01/2019 Actuarial Assets:		\$27,122,405.94
Actuarial Asset Rate of Return = 2I/(A+B-I):		7.16%
10/01/2019 Limited Actuarial Assets:		\$27,122,405.94
10/01/2019 Market Value of Assets:		\$26,316,842.51
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)		\$40,376.82

¹Market Value Basis, net of investment related expenses.

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
 SEPTEMBER 30, 2019
 Actuarial Asset Basis

REVENUES

Contributions:		
Member	125,174.03	
City	2,372,719.76	
State	173,349.35	
 Total Contributions		 2,671,243.14
Earnings from Investments:		
Interest & Dividends	1,208,017.81	
Net Realized Gain (Loss)	(433,367.75)	
Unrealized Gain (Loss)	(182,300.16)	
Change in Actuarial Value	1,321,009.17	
 Total Earnings and Investment Gains		 1,913,359.07

EXPENDITURES

Distributions to Members:		
Benefit Payments	2,212,833.27	
Lump Sum PLOP Distributions	207,770.70	
Refunds of Member Contributions	0.00	
 Total Distributions		 2,420,603.97
Expenses:		
Investment related ¹	106,496.53	
Administrative	57,886.49	
 Total Expenses		 164,383.02
 Change in Net Assets for the Year		 1,999,615.22
 Net Assets Beginning of the Year		 25,122,790.72
 Net Assets End of the Year ²		 27,122,405.94

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

²Net Assets may be limited for actuarial consideration.

SUPPLEMENTAL CHAPTER 175 SHARE PLAN ACTIVITY
October 1, 2018 through September 30, 2019

9/30/2018 Balance	4,430.43
Prior Year Adjustment	0.00
Plus Additions	0.00
Investment Return Earned (est.)	84.18
Administrative Fees	0.00
Less Distributions	0.00
9/30/2019 Balance (est)	4,514.61

CITY CONTRIBUTIONS IN EXCESS OF MINIMUM REQUIREMENT
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2019

(1) Required City and State Contributions	\$2,546,069.00
(2) Less Allowable State Contribution	<u>(173,349.35)</u>
(3) Required City Contribution for Fiscal 2019	2,372,719.65
(4) Less 2018 Prepaid Contribution	0.00
(5) Less Actual City Contributions	<u>(2,372,719.76)</u>
(6) City Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2019	(\$0.11)

STATISTICAL DATA

	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Actives</u>				
Number	22	22	22	22
Average Current Age	43.0	44.0	45.1	46.1
Average Age at Employment	27.9	27.9	28.0	28.0
Average Past Service	15.1	16.1	17.1	18.1
Average Annual Salary	\$78,685	\$81,254	\$83,166	\$86,051
<u>Service Retirees</u>				
Number	30	30	30	29
Average Current Age	62.4	63.4	63.4	64.1
Average Annual Benefit	\$62,477	\$63,732	\$66,344	\$66,604
<u>Beneficiaries</u>				
Number	8	8	8	9
Average Current Age	71.3	72.3	78.8	79.0
Average Annual Benefit	\$18,182	\$18,182	\$17,565	\$22,149
<u>Disability Retirees</u>				
Number	4	4	4	4
Average Current Age	55.8	56.8	57.8	58.8
Average Annual Benefit	\$18,913	\$18,913	\$18,913	\$18,913
<u>Terminated Vested</u>				
Number	17	17	15	15
Average Current Age	38.0	39.0	39.6	40.6
Average Annual Benefit	\$22,103	\$22,103	\$19,761	\$19,761

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	1	1	0	0	0	0	2
35 - 39	0	0	0	0	0	0	0	1	0	0	0	1
40 - 44	0	0	0	0	0	0	0	3	1	0	0	4
45 - 49	0	0	0	0	0	0	0	5	5	0	0	10
50 - 54	0	0	0	0	0	0	0	3	2	0	0	5
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
Total	0	0	0	0	0	1	1	12	8	0	0	22

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2018	22
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	0
iii. Refund of member contributions or full lump sum distributio	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. Continuing participants	22
g. New entrants	<u>0</u>
h. Total active life participants in valuation	22

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

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	30	8	4	15	0	57
Retired	0	0	0	0	0	0
Vested (Deferred Annuity)	0	0	0	0	0	0
Vested (Due Refund)	0	0	0	0	0	0
Hired/Terminated in Same Year	0	0	0	0	0	0
Death, With Survivor	(1)	1	0	0	0	0
Death, No Survivor	0	0	0	0	0	0
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	29	9	4	15	0	57

SUMMARY OF CURRENT PLAN
(Ordinance 2019-20)

<u>Original Effective Date</u>	October 1, 1961
<u>Latest Amendment</u>	February 20, 2019
<u>Eligibility</u>	Full-time employment with the City as a Firefighter. The Plan is closed to Firefighters hired after September 30, 2014.
<u>Credited Service</u>	Total number of years and fractional parts of years of service with the City as a Firefighter.
<u>Average Final Compensation</u>	Average W-2 Salary (plus tax deferred and tax sheltered income) during the 5 highest years of the last 10 for Members eligible for Normal Retirement as of October 1, 2014. Salary for all other Members shall be base pay applicable for service after October 1, 2014. Notwithstanding the foregoing, effective October 1, 2014, sick or vacation time which is accrued, but for which a member has not been paid prior to October 1, 2014, shall not be considered in determining the value of any future retirement benefit, including the calculation of any frozen benefit.

Normal Retirement

Eligibility	Earlier of age 55 and 10 years of Credited Service, or 25 years of Credited Service.
Benefit Amount	3.50% of Average Final Compensation times Years of Credited Service, plus \$175 per month, for Members eligible for Normal Retirement as of October 1, 2014. The benefit accrual rate is 2.75% for Credited Service on and after October 1, 2014 for Members not eligible for Normal Retirement as of that date.
Form of Benefit	10 Years Certain and Life thereafter. Optional forms are available.

Early Retirement

Eligibility	Earlier of age 50 and 10 years of Credited Service, or the completion of 20 years of Credited Service regardless of age for Members with 10 or more years of Credited Service as of October 1, 2014. Early Retirement is not available for Members with less than 10 years of Credited Service as of that date.
Benefit	Deferred benefit payable at Normal Retirement Date or reduced 2% per year and payable immediately.

Disability

Eligibility	Total and Permanent as determined by the Board. Members are covered from date of employment for service-incurred disabilities and after five (5) years of service for non-service disabilities.
Benefit Amount	Greater of 2% times Average Final Compensation times Credited Service, or 50% of Average Final Compensation. Benefits are payable as a 100% Joint and Survivor Annuity to spouse or children. Optional forms are available.

Pre-Retirement Death

Eligibility	Coverage in effect from date of employment for service incurred deaths and after five (5) years of service for non-service incurred.
Benefit	50% of Average Final Compensation paid to spouse until death, if service incurred, or until death or remarriage, if non-service incurred.
Minimum Benefit for Vested Members	Accrued benefit, less any spouse or surviving children benefits payable.

Cost of Living Adjustment

Normal and Early service retirees who retire after October 1, 1998 receive a 3.0% increase each year after retirement through age 65. For Members not eligible for Normal Retirement as of October 1, 2014, no cost-of-living adjustments are applicable to benefits based on Credited Service after that date.

Vesting (Termination)

Less than 10 years of Contributing Service	Refund of Member Contributions.
10 years or more	Accrued benefit payable at Early Retirement Age or later if Member contributions left in Fund; otherwise, Refund of Member Contributions. Additionally, members are 100% vested for benefits accrued prior to October 1, 2014, regardless of accrued service as of that date.

Contributions

Employee	7.00% of Salary.
State	Premium tax refund.
City	Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability as provided in Part VII of Florida Statutes Chapter 112.

Board of Trustees

Two City Council appointees who are City residents, two elected Members of the Fire Department, and a fifth Member elected by the other four and appointed by Council (as a ministerial duty).

Share Plan

Funded using half the excess State Monies Reserve as of September 30, 2018. Future allocations of State Monies in excess of \$296,000.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	496,599
Cash	(79)
Total Cash and Equivalents	496,520
Receivables:	
Member Contributions in Transit	40
Investment Income	39,560
Total Receivable	39,600
Investments:	
U. S. Bonds and Bills	3,467,353
Federal Agency Guaranteed Securities	21,880
Corporate Bonds	2,566,275
Stocks	5,607,926
Mutual Funds:	
Fixed Income	1,268,558
Equity	10,159,308
Pooled/Common/Commingled Funds:	
Real Estate	2,703,819
Total Investments	25,795,119
Total Assets	26,331,239
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	12,407
Administrative Expenses	1,989
Total Liabilities	14,396
NET POSITION RESTRICTED FOR PENSIONS	26,316,843

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

ADDITIONS

Contributions:

Member	125,174	
City	2,372,720	
State	173,349	
 Total Contributions		 2,671,243
 Investment Income:		
Net Increase in Fair Value of Investments	(615,668)	
Interest & Dividends	1,208,018	
Less Investment Expense ¹	(106,496)	
 Net Investment Income		 485,854
 Total Additions		 3,157,097

DEDUCTIONS

Distributions to Members:

Benefit Payments	2,212,833	
Lump Sum PLOP Distributions	207,771	
Refunds of Member Contributions	0	
 Total Distributions		 2,420,604
 Administrative Expense		 57,886
 Total Deductions		 2,478,490
 Net Increase in Net Position		 678,607
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		25,638,236
 End of the Year		 26,316,843

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

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

Plan Description

Plan Administration

The Plan is a single employer defined benefit pension plan administered by a Board of Trustees comprised of: Two City Council appointees who are City residents, two elected Members of the Fire Department, and a fifth Member elected by the other four and appointed by Council (as a ministerial duty).

Eligible are full-time employment with the City as a Firefighter. The Plan is closed to Firefighters hired after September 30, 2014.

Plan Membership as of October 1, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	42
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	15
Active Plan Members	22
	79

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the City of Venice Municipal Firefighters' Pension Trust Fund prepared by Foster & Foster Actuaries and Consultants.

Contributions

Employee: 7.00% of Salary.

State: Premium tax refund.

City: Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability, as provided in Part VII of Florida Statutes Chapter 112.

Investments

Investment Policy:

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

Asset Class	Target Allocation
Domestic Equity	45.0%
International Equity	15.0%
Broad Market Fixed Income	25.0%
Global Fixed income	5.0%
Real Estate	10.0%
Total	100.0%

Concentrations:

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

Rate of Return:

For the year ended September 30, 2019, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 1.90 percent.

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

NET PENSION LIABILITY OF THE SPONSOR

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

Total Pension Liability	\$ 42,695,317
Plan Fiduciary Net Position	\$ (26,316,843)
Sponsor's Net Pension Liability	\$ 16,378,474
Plan Fiduciary Net Position as a percentage of Total Pension Liability	61.64%

Actuarial Assumptions:

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

Inflation	2.50%
Salary Increases	Service Based
Discount Rate	7.00%
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 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 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.

The most recent actuarial experience study used to review the other significant assumptions was dated May 3, 2010.

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

For 2019 the inflation rate assumption of the investment advisor was 2.50%.

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, 2019 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	7.50%
International Equity	8.50%
Broad Market Fixed Income	2.50%
Global Fixed income	3.50%
Real Estate	4.50%

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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	Current Discount Rate	1% Increase
	6.00%	7.00%	8.00%
Sponsor's Net Pension Liability	\$ 21,381,369	\$ 16,378,474	\$ 12,202,925

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

	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	763,821	756,801	756,425
Interest	2,897,034	2,798,028	2,719,112
Change in Excess State Money	(8,861)	-	-
Share Plan Allocation	4,431	-	-
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(382,046)	131,239	(232,436)
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(2,420,604)	(2,136,820)	(2,095,414)
Net Change in Total Pension Liability	853,775	1,549,248	1,147,687
Total Pension Liability - Beginning	41,841,542	40,292,294	39,144,607
Total Pension Liability - Ending (a)	<u>42,695,317</u>	<u>\$ 41,841,542</u>	<u>\$ 40,292,294</u>
Plan Fiduciary Net Position			
Contributions - Employer	2,372,720	2,530,184	2,350,314
Contributions - State	173,349	180,163	193,290
Contributions - Employee	125,174	120,956	118,053
Net Investment Income	485,854	2,011,838	2,241,924
Benefit Payments, including Refunds of Employee Contributions	(2,420,604)	(2,136,820)	(2,095,414)
Administrative Expense	(57,886)	(59,501)	(61,907)
Net Change in Plan Fiduciary Net Position	678,607	2,646,820	2,746,260
Plan Fiduciary Net Position - Beginning	25,638,236	22,991,416	20,245,156
Plan Fiduciary Net Position - Ending (b)	<u>\$ 26,316,843</u>	<u>\$ 25,638,236</u>	<u>\$ 22,991,416</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 16,378,474</u>	<u>\$ 16,203,306</u>	<u>\$ 17,300,878</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	61.64%	61.27%	57.06%
Covered Payroll	\$ 1,788,140	\$ 1,727,707	\$ 1,686,471
Net Pension Liability as a percentage of Covered Payroll	915.95%	937.85%	1025.86%

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

	<u>09/30/2016</u>	<u>09/30/2015</u>
Total Pension Liability		
Service Cost	702,057	1,139,410
Interest	2,661,396	2,653,780
Change in Excess State Money	(155,521)	-
Share Plan Allocation	-	-
Changes of benefit terms	-	(797,774)
Differences between Expected and Actual Experience	(1,795,453)	(473,564)
Changes of assumptions	1,320,858	2,961,891
Benefit Payments, including Refunds of Employee Contributions	(2,141,983)	(1,991,123)
Net Change in Total Pension Liability	<u>591,354</u>	<u>3,492,620</u>
Total Pension Liability - Beginning	<u>38,553,253</u>	<u>35,060,633</u>
Total Pension Liability - Ending (a)	<u><u>\$ 39,144,607</u></u>	<u><u>\$ 38,553,253</u></u>
Plan Fiduciary Net Position		
Contributions - Employer	3,047,697	756,197
Contributions - State	246,276	272,353
Contributions - Employee	114,049	116,523
Net Investment Income	1,321,617	9,360
Benefit Payments, including Refunds of Employee Contributions	(2,141,983)	(1,991,123)
Administrative Expense	(66,382)	(67,814)
Net Change in Plan Fiduciary Net Position	<u>2,521,274</u>	<u>(904,504)</u>
Plan Fiduciary Net Position - Beginning	<u>17,723,882</u>	<u>18,628,386</u>
Plan Fiduciary Net Position - Ending (b)	<u><u>\$ 20,245,156</u></u>	<u><u>\$ 17,723,882</u></u>
Net Pension Liability - Ending (a) - (b)	<u><u>\$ 18,899,451</u></u>	<u><u>\$ 20,829,371</u></u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	51.72%	45.97%
Covered Payroll	\$ 1,629,271	\$ 1,710,697
Net Pension Liability as a percentage of Covered Payroll	1159.99%	1217.60%

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	672,304	623,948
Interest	2,581,984	2,487,337
Change in Excess State Money	8,861	-
Share Plan Allocation	-	-
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	<u>(2,003,310)</u>	<u>(1,873,445)</u>
Net Change in Total Pension Liability	1,259,839	1,237,840
Total Pension Liability - Beginning	<u>33,800,794</u>	<u>32,562,954</u>
Total Pension Liability - Ending (a)	<u>\$ 35,060,633</u>	<u>\$ 33,800,794</u>
Plan Fiduciary Net Position		
Contributions - Employer	1,674,244	1,451,786
Contributions - State	304,802	270,222
Contributions - Employee	269,968	269,835
Net Investment Income	1,727,970	1,723,100
Benefit Payments, including Refunds of Employee Contributions	<u>(2,003,310)</u>	<u>(1,873,445)</u>
Administrative Expense	<u>(42,307)</u>	<u>(42,357)</u>
Net Change in Plan Fiduciary Net Position	1,931,366	1,799,141
Plan Fiduciary Net Position - Beginning	<u>16,697,020</u>	<u>14,897,879</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 18,628,386</u>	<u>\$ 16,697,020</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 16,432,247</u>	<u>\$ 17,103,774</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	53.13%	49.40%
Covered Payroll	\$ 2,768,905	\$ 2,767,537
Net Pension Liability as a percentage of Covered Payroll	593.46%	618.01%

Notes to Schedule of Changes in Net Pension Liability and Related Ratios*Changes of benefit terms:*

For year ending 09/30/2015, amounts reported as changes of and effective August 26, 2014, amended certain Plan provisions for current Firefighters, in addition to the closure of the Plan to Firefighters hired after September 30, 2014. Details of the impact of these changes are set forth in our August 18, 2014 Actuarial Impact Statement.

Furthermore as outlined in our December 7, 2015 Actuarial Impact Statement below changes were included as well:

- 100% vesting for benefits accrued prior to October 1, 2014.
- A Salary definition using Base Pay, effective October 1, 2014 for Members not eligible for Normal Retirement as of that date. This definition is applicable only for service after October 1, 2014. Notwithstanding the foregoing, effective October 1, 2014, sick or vacation time which is accrued, but for which a member has not been paid prior to shall not be considered in determining the value of any future retirement benefit, including the calculation of any frozen

Changes of assumptions:

For year ending 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 2.50%, matching the long-term inflation assumption utilized by Plan's investment consultant.

For year ending 09/30/2015, amounts reported as changes of assumptions were resulted from a reduction in the investment return assumption from 7.75% to 7.00%. Plus a change in funding method from percent of payroll to dollar funding.

The load assumption for the projected salary at retirement to account for lump sum accrued sick and vacation leave payouts was modified from a fixed 0% per individual to an amount equal to their individual accrual, as provided by the City.

It is important to point out that the load assumption will be subject to further modification based on future experience.

Subsequent changes will be reflected in future actuarial valuations.

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 Payroll	Contributions as a percentage of Covered Payroll
09/30/2019	\$ 2,546,069	\$ 2,546,069	\$ -	\$ 1,788,140	142.39%
09/30/2018	\$ 2,619,397	\$ 2,710,347	\$ (90,950)	\$ 1,727,707	156.88%
09/30/2017	\$ 2,596,590	\$ 2,543,604	\$ 52,986	\$ 1,686,471	150.82%
09/30/2016	\$ 3,022,244	\$ 3,293,973	\$ (271,729)	\$ 1,629,271	202.17%
09/30/2015	\$ 1,184,071	\$ 1,184,071	\$ -	\$ 1,710,697	69.22%
09/30/2014	\$ 1,960,108	\$ 1,960,108	\$ -	\$ 2,768,905	70.79%
09/30/2013	\$ 1,692,902	\$ 1,692,902	\$ -	\$ 2,767,537	61.17%

Notes to Schedule

Valuation Date: 10/01/2017

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

Methods and assumptions used to determine contribution rates:

Mortality:

Healthy Active Lives:

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

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% 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 assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2016 FRS actuarial 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 was required by the reviewing actuary at the Division of Retirement in conjunction with the plan closure. Additionally, this is supported by the target asset allocation of the trust and the expected long-term return by asset class.

Retirement Age:

Earlier of age 55 and 10 years of service or 25 years of service, regardless of age. Also, any Member who reaches Normal Retirement is assumed to continue employment for one additional year. We feel this assumption is reasonable based upon the plan provisions.

Early Retirement: Commencing with eligibility for Early Retirement Age (Earlier of age 50 with 10 years of service or 20 years of service, regardless of age), Members are assumed to retire with an immediate subsidized benefit at the rate of 15% per year. There is no Early Retirement assumption for Members with less than 10 years of Credited Service as of October 1, 2014. This assumption was approved by the Board in conjunction with an actuarial experience study dated May 3, 2010.

Disability Rates: D1205. See sample rates below. It is assumed that 75% of disablements and active deaths that occur are service related. This assumption was developed from those used by other plans containing Florida municipal firefighters.

Termination Rates: W1304. See sample rates below. This assumption was developed from those used by other plans containing Florida municipal firefighters.

Payroll Growth: None.

Cost-of-Living Adjustment: 3% per year from retirement to age 65. Benefits based on Credited Service after September 30, 2014 are not subject to the COLA.

Asset Valuation Method: Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric four-year average Market Value return (net of fees). It is possible that over time this technique will produce an insignificant bias above or below 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 7.0% assumption.
 Salary – A full year, based on the current 6.0% assumption.

Salary Increases:

Years of Service	% Increase in Salary
Less than 10	10.0%
10-15	6.5%
15-20	5.5%
20 and greater	5.0%

The assumed rates of salary increases were approved by the Board in conjunction with an actuarial experience study dated May 3, 2010. Additionally, projected salary at retirement in increased based on individual accruals in order to account for lump sum accrued sick and vacation leave payouts.

Turnover and Disability Rates:

Age	% Terminating During the Year	% Becoming Disabled During the Year
20	12.4%	0.14%
30	11.1%	0.18%
40	6.8%	0.30%
50	2.2%	1.00%

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2019	1.90%
09/30/2018	8.68%
09/30/2017	11.00%
09/30/2016	7.29%
09/30/2015	0.05%
09/30/2014	10.38%
09/30/2013	11.54%

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(technically not
required if disclosed
in separate
statements)

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

General Information about the Pension Plan

Plan Description

The Plan is a single employer defined benefit pension plan administered by a Board of Trustees comprised of: Two City Council appointees who are City residents, two elected Members of the Fire Department, and a fifth Member elected by the other four and appointed by Council (as a ministerial duty).
Eligible are full-time employment with the City as a Firefighter. The Plan is closed to Firefighters hired after September 30, 2014.

Plan Membership as of October 1, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	42
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	15
Active Plan Members	22
	79
	79

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the City of Venice Municipal Firefighters' Pension Trust Fund prepared by Foster & Foster Actuaries and Consultants.

No changes then

Contributions

Employee: 7.00% of Salary.

State: Premium tax refund.

City: Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability, as provided in Part VII of Florida Statutes Chapter 112.

Net Pension Liability

The measurement date is September 30, 2019.

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

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

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

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

Actuarial Assumptions:

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

Inflation	2.50%
Salary Increases	Service Based
Discount Rate	7.00%
Investment Rate of Return	7.00%

active and inactive

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 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 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.

The most recent actuarial experience study used to review the other significant assumptions was dated May 3, 2010.

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

For 2019 the inflation rate assumption of the investment advisor was 2.50%.

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, 2019 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	45.0%	7.50%
International Equity	15.0%	8.50%
Broad Market Fixed Income	25.0%	2.50%
Global Fixed income	5.0%	3.50%
Real Estate	10.0%	4.50%
Total	100.0%	

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 (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a)-(b)
Balances at September 30, 2018	\$ 41,841,542	\$ 25,638,236	\$ 16,203,306
Changes for a Year:			
Service Cost	763,821	-	763,821
Interest	2,897,034	-	2,897,034
Change in Excess State Money	(8,861)	-	(8,861)
Share Plan Allocation	4,431	-	4,431
Differences between Expected and Actual Experience	(382,046)	-	(382,046)
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	2,372,720	(2,372,720)
Contributions - State	-	173,349	(173,349)
Contributions - Employee	-	125,174	(125,174)
Net Investment Income	-	485,854	(485,854)
Benefit Payments, including Refunds of Employee Contributions	(2,420,604)	(2,420,604)	-
Administrative Expense	-	(57,886)	57,886
Net Changes	853,775	678,607	175,168
Balances at September 30, 2019	\$ 42,695,317	\$ 26,316,843	\$ 16,378,474

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

	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
Sponsor's Net Pension Liability	\$ 21,381,369	\$ 16,378,474	\$ 12,202,925

Pension Plan Fiduciary Net Position.

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

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

For the year ended September 30, 2019, the Sponsor will recognize a Pension Expense of \$1,959,954.
On September 30, 2019, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	-	191,023
Changes of assumptions	-	-
Net difference between Projected and Actual Earnings on Pension Plan investments	493,692	-
Total	\$ 493,692	\$ 191,023

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

Year ended September 30:				
2020		\$	(173,165)	
2021		\$	25,649	
2022		\$	187,071	
2023		\$	263,114	
2024		\$	-	
Thereafter		\$	-	

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



Measurement Date ¹	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	763,821	756,801	756,425
Interest	2,897,034	2,798,028	2,719,112
Change in Excess State Money	(8,861)	-	-
Share Plan Allocation	4,431	-	-
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(382,046)	131,239	(232,436)
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(2,420,604)	(2,136,820)	(2,095,414)
Net Change in Total Pension Liability	853,775	1,549,248	1,147,687
Total Pension Liability - Beginning	41,841,542	40,292,294	39,144,607
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Contributions - Employer	2,372,720	2,530,184	2,350,314
Contributions - State	173,349	180,163	193,290
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Administrative Expense	(57,886)	(59,501)	(61,907)
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Plan Fiduciary Net Position - Beginning	25,638,236	22,991,416	20,245,156
Plan Fiduciary Net Position - Ending (b)	<u>\$ 26,316,843</u>	<u>\$ 25,638,236</u>	<u>\$ 22,991,416</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 16,378,474</u>	<u>\$ 16,203,306</u>	<u>\$ 17,300,878</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	61.64%	61.27%	57.06%
Covered Payroll	\$ 1,788,140	\$ 1,727,707	\$ 1,686,471
Net Pension Liability as a percentage of Covered Payroll	915.95%	937.85%	1025.86%

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

Measurement Date	09/30/2016	09/30/2015
Total Pension Liability		
Service Cost	702,057	1,139,410
Interest	2,661,396	2,653,780
Change in Excess State Money	(155,521)	-
Share Plan Allocation	-	-
Changes of benefit terms	-	(797,774)
Differences between Expected and Actual Experience	(1,795,453)	(473,564)
Changes of assumptions	1,320,858	2,961,891
Benefit Payments, including Refunds of Employee Contributions	(2,141,983)	(1,991,123)
Net Change in Total Pension Liability	591,354	3,492,620
Total Pension Liability - Beginning	38,553,253	35,060,633
Total Pension Liability - Ending (a)	\$ 39,144,607	\$ 38,553,253
Plan Fiduciary Net Position		
Contributions - Employer	3,047,697	756,197
Contributions - State	246,276	272,353
Contributions - Employee	114,049	116,523
Net Investment Income	1,321,617	9,360
Benefit Payments, including Refunds of Employee Contributions	(2,141,983)	(1,991,123)
Administrative Expense	(66,382)	(67,814)
Net Change in Plan Fiduciary Net Position	2,521,274	(904,504)
Plan Fiduciary Net Position - Beginning	17,723,882	18,628,386
Plan Fiduciary Net Position - Ending (b)	\$ 20,245,156	\$ 17,723,882
Net Pension Liability - Ending (a) - (b)	\$ 18,899,451	\$ 20,829,371
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	51.72%	45.97%
Covered Payroll	\$ 1,629,271	\$ 1,710,697
Net Pension Liability as a percentage of Covered Payroll	1159.99%	1217.60%

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

Measurement Date	<u>09/30/2014</u>	<u>09/30/2013</u>
Total Pension Liability		
Service Cost	672,304	623,948
Interest	2,581,984	2,487,337
Change in Excess State Money	8,861	-
Share Plan Allocation	-	-
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	<u>(2,003,310)</u>	<u>(1,873,445)</u>
Net Change in Total Pension Liability	1,259,839	1,237,840
Total Pension Liability - Beginning	<u>33,800,794</u>	<u>32,562,954</u>
Total Pension Liability - Ending (a)	<u>\$ 35,060,633</u>	<u>\$ 33,800,794</u>
Plan Fiduciary Net Position		
Contributions - Employer	1,674,244	1,451,786
Contributions - State	304,802	270,222
Contributions - Employee	269,968	269,835
Net Investment Income	1,727,970	1,723,100
Benefit Payments, including Refunds of Employee Contributions	<u>(2,003,310)</u>	<u>(1,873,445)</u>
Administrative Expense	<u>(42,307)</u>	<u>(42,357)</u>
Net Change in Plan Fiduciary Net Position	1,931,366	1,799,141
Plan Fiduciary Net Position - Beginning	<u>16,697,020</u>	<u>14,897,879</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 18,628,386</u>	<u>\$ 16,697,020</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 16,432,247</u>	<u>\$ 17,103,774</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	53.13%	49.40%
Covered Payroll	\$ 2,768,905	\$ 2,767,537
Net Pension Liability as a percentage of Covered Payroll	593.46%	618.01%

Notes to Schedule of Changes in Net Pension Liability and Related Ratios

¹ 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 year ending 09/30/2015, amounts reported as changes of missing parts and effective August 26, 2014, amended certain Plan provisions for current Firefighters, in addition to the closure of the Plan to Firefighters hired after September 30, 2014. Details of the impact of these changes are set forth in our August 18, 2014 Actuarial Impact Statement.

Furthermore as outlined in our December 7, 2015 Actuarial Impact Statement below changes were included as well:

- 100% vesting for benefits accrued prior to October 1, 2014.
- A Salary definition using Base Pay, effective October 1, 2014 for Members not eligible for Normal Retirement as of that date. This definition is applicable only for service after October 1, 2014. Notwithstanding the foregoing, effective October 1, 2014, sick or vacation time which is accrued, but for which a member has not been paid prior to shall not be considered in determining the value of any future retirement benefit, including the calculation of any frozen

Changes of assumptions:

For year ending 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 2.50%, matching the long-term inflation assumption utilized by Plan's investment consultant.

For year ending 09/30/2015, amounts reported as changes of assumptions were resulted from a reduction in the investment return assumption from 7.75% to 7.00%. Plus a change in funding method from percent of payroll to dollar funding.

The load assumption for the projected salary at retirement to account for lump sum accrued sick and vacation leave payouts was modified from a fixed 0% per individual to an amount equal to their individual accrual, as provided by the City.

It is important to point out that the load assumption will be subject to further modification based on future experience.

Subsequent changes will be reflected in future actuarial valuations.

Note: Shrunk these disclosures in CAFR to minimum required; fully presented in separate FS's

SCHEDULE OF CONTRIBUTIONS
Last 10 Fiscal Years

To CAFR RSI, sch #2

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
09/30/2019	\$ 2,546,069	\$ 2,546,069	\$ -	\$ 1,788,140	142.39%
09/30/2018	\$ 2,619,397	\$ 2,710,347	\$ (90,950)	\$ 1,727,707	156.88%
09/30/2017	\$ 2,596,590	\$ 2,543,604	\$ 52,986	\$ 1,686,471	150.82%
09/30/2016	\$ 3,022,244	\$ 3,293,973	\$ (271,729)	\$ 1,629,271	202.17%
09/30/2015	\$ 1,184,071	\$ 1,184,071	\$ -	\$ 1,710,697	69.22%
09/30/2014	\$ 1,960,108	\$ 1,960,108	\$ -	\$ 2,768,905	70.79%
09/30/2013	\$ 1,692,902	\$ 1,692,902	\$ -	\$ 2,767,537	61.17%

Notes to Schedule

Valuation Date: 10/01/2017

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

Methods and assumptions used to determine contribution rates:

Mortality:

Healthy Active Lives:

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

Male: RP2000 Generational, 10% ~~Combined Healthy~~ White Collar / 90% ~~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 assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2016 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate:

1st sentence only

7.00% per year compounded annually, net of investment-related expenses. This was required by the reviewing actuary at the Division of Retirement in conjunction with the plan closure. Additionally, this is supported by the target asset allocation of the trust and the expected long-term return by asset class.

Retirement Age:

Earlier of age 55 and 10 years of service or 25 years of service, regardless of age. Also, any Member who reaches Normal Retirement is assumed to continue employment for one additional year. We feel this assumption is reasonable based upon the plan provisions.

Comb healthy

Combine into one "healthy lives" disclosure. Ignore rest.

Early Retirement: Commencing with eligibility for Early Retirement Age (Earlier of age 50 with 10 years of service or 20 years of service, regardless of age), Members are assumed to retire with an immediate subsidized benefit at the rate of 15% per year. There is no Early Retirement assumption for Members with less than 10 years of Credited Service as of October 1, 2014. ~~This assumption was approved by the Board in conjunction with an actuarial experience study dated May 3, 2010.~~

Disability Rates: D1205. See sample rates below. It is assumed that 75% of disablements and active deaths that occur are service related. This assumption was developed from those used by other plans containing Florida municipal firefighters.

Termination Rates: W1304. See sample rates below. This assumption was developed from those used by other plans containing Florida municipal firefighters.

Payroll Growth: None.

Cost-of-Living Adjustment: 3% per year from retirement to age 65. Benefits based on Credited Service after September 30, 2014 are not subject to the COLA.

Asset Valuation Method: Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric four-year average Market Value return (net of fees). It is possible that over time this technique will produce an insignificant bias above or below 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 7.0% assumption.

Salary – A full year, based on the current 6.0% assumption.

Salary Increases:

Years of Service	% Increase in Salary
Less than 10	10.00%
10-15	6.50%
15-20	5.50%
20 and greater	5.00%

The assumed rates of salary increases were approved by the Board in conjunction with an actuarial experience study dated May 3, 2010.

Additionally, projected salary at retirement is increased based on individual accruals in order to account for lump sum accrued sick and vacation leave payouts.

Turnover and Disability Rates:

Not considered necessary

Age	% Terminating During the Year	% Becoming Disabled During the Year
20	12.4%	0.14%
30	11.1%	0.18%
40	6.8%	0.30%
50	2.2%	1.00%

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

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

COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2019

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 16,203,306	\$ 804,020	\$ 345,406	\$ -
Total Pension Liability Factors:				
Service Cost	763,821	-	-	763,821
Interest	2,897,034	-	-	2,897,034
Change in Excess State Money	(8,861)	-	-	(8,861)
Share Plan Allocation	4,431	-	-	4,431
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(382,046)	382,046	-	-
Current year amortization of experience difference	-	(191,023)	(65,620)	(125,403)
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	(2,420,604)	-	-	-
Net change	<u>853,775</u>	<u>191,023</u>	<u>(65,620)</u>	<u>3,531,022</u>
Plan Fiduciary Net Position:				
Contributions - Employer	2,372,720	-	-	-
Contributions - State	173,349	-	-	-
Contributions - Employee	125,174	-	-	(125,174)
Projected Net Investment Income	1,801,423	-	-	(1,801,423)
Difference between projected and actual earnings on Pension Plan investments	(1,315,569)	-	1,315,569	-
Current year amortization	-	(245,256)	(542,899)	297,643
Benefit Payments, including Refunds of Employee Contributions	(2,420,604)	-	-	-
Administrative Expenses	(57,886)	-	-	57,886
Net change	<u>678,607</u>	<u>(245,256)</u>	<u>772,670</u>	<u>(1,571,068)</u>
Ending Balance	<u>\$ 16,378,474</u>	<u>\$ 749,787</u>	<u>\$ 1,052,456</u>	<u>\$ 1,959,954</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		Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Earnings													
2019	\$	1,315,569	5	\$ 263,113	\$ 263,114	\$ 263,114	\$ 263,114	\$ 263,114	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$	(380,215)	5	\$ (76,043)	\$ (76,043)	\$ (76,043)	\$ (76,043)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$	(807,111)	5	\$ (161,422)	\$ (161,422)	\$ (161,422)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$	(38,957)	5	\$ (7,791)	\$ (7,791)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$	1,398,928	5	\$ 279,786	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense				\$ 297,643	\$ 17,858	\$ 25,649	\$ 187,071	\$ 263,114	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

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

Plan Year Ending	Differences Between Expected and Actual Experience	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2019	\$ (382,046)	2	\$ (191,023)	\$ (191,023)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ 131,239	2	\$ 65,620	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (125,403)	\$ (191,023)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -