

CITY OF NORTH PORT
FIREFIGHTERS' PENSION - LOCAL OPTION TRUST FUND
ACTUARIAL VALUATION
AS OF OCTOBER 1, 2020
CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2022
GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2020



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

December 8, 2020

Board of Trustees
City of North Port
Firefighters' Pension Board

Re: City of North Port Firefighters' Pension - Local Option Trust Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of North Port Firefighters' Pension - Local Option 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.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities. 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 valuations, 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 North Port, 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, 2019. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2020 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 North Port, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Firefighters' Pension - Local Option 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: 

Douglas H. Lozen, EA, MAAA
Enrolled Actuary #20-7778

By: 

Tyler A. Koftan, EA, MAAA
Enrolled Actuary #20-8685

DHL/lke

Enclosures

TABLE OF CONTENTS

Section	Title	Page
I	Introduction	
	a. Summary of Report	6
	b. Changes Since Prior Valuation	8
	c. Comparative Summary of Principal Valuation Results	9
II	Valuation Information	
	a. Reconciliation of Unfunded Actuarial Accrued Liabilities	15
	b. Detailed Actuarial (Gain)/Loss Analysis	16
	c. History of Funding Progress	17
	d. Actuarial Assumptions and Methods	18
	e. Glossary	21
	f. Discussion of Risk	23
	g. Partial History of Premium Tax Refunds	26
III	Trust Fund	27
IV	Member Statistics	
	a. Statistical Data	35
	b. Age and Service Distribution	36
	c. Valuation Participant Reconciliation	37
V	Summary of Current Plan	38
VI	Governmental Accounting Standards Board Statements No. 67 and No. 68 Disclosure Information	41

SUMMARY OF REPORT

The regular annual actuarial valuation of the City of North Port Firefighters' Pension - Local Option Trust Fund, performed as of October 1, 2020, 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, 2022.

The contribution requirements, compared with those set forth in the October 1, 2019 actuarial valuation report, are as follows:

Valuation Date	10/1/2020	10/1/2019
Applicable to Fiscal Year Ending	<u>9/30/2022</u>	<u>9/30/2021</u>
Minimum Required Contribution	\$1,461,443	
% of Projected Annual Payroll		32.59%
Member Contributions (Est.)	441,039	
% of Projected Annual Payroll		10.60%
City And State Required Contribution	1,020,404	
% of Projected Annual Payroll		21.99%
State Contribution (Est.) ¹	250,000	250,000
% of Projected Annual Payroll		6.22%
Preliminary City Required Contribution ¹	\$770,404	
% of Projected Annual Payroll	19.53%	15.77%
Balance from City ^{1 2}	\$770,404	
% of Projected Annual Payroll	19.53%	18.00%

¹ The City may use up to \$250,000 in State Contributions for determining its minimum funding requirements (per Mutual Consent established between the City and the Membership). However, by Local Ordinance, the City's minimum required contribution is 18.00% of Active Member Pensionable Payroll.

² Please note that a shortfall contribution of \$75,737.87 is due in addition to the above stated requirements for the fiscal year ending September 30, 2021.

As you can see, the Minimum Required Contribution shows an increase as a percentage of payroll when compared to the results determined in the October 1, 2019 actuarial valuation report. The increase is primarily attributable to a change of assumptions. The increase was offset in part by net favorable experience realized by the plan during the year, and the fact that last year's requirement was subject to a minimum of 18.00% of Active Member Pensionable Payroll, which caused the requirement to be higher than it would have been if there had been no minimum.

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial gain included an investment return of 8.21% (Actuarial Asset Basis) which exceeded the 7.25% assumption and an average salary increase of 3.98% which fell short of the 5.41% assumption. These gains were offset in part by a loss associated with less turnover than expected.

CHANGES SINCE PRIOR VALUATION

Plan Changes

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

Actuarial Assumption/Method Changes

The following assumption changes were made in conjunction with this valuation:

- As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the rates used in Milliman's July 1, 2019 FRS valuation report for special risk employees, with appropriate risk and collar adjustments made based on plan demographics.
- The investment return assumption was reduced from 7.25% to 7.00% per year, net of investment-related expenses.

Additionally, the plan's method for determining the contribution requirements was changed from a percentage of payroll method to a dollar basis.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Asmp/Mthd <u>10/1/2020</u>	Old Asmp/Mthd <u>10/1/2020</u>	<u>10/1/2019</u>
A. Participant Data			
Actives	38	38	38
Service Retirees	26	26	25
DROP Retirees	2	2	3
Beneficiaries	3	3	2
Disability Retirees	3	3	2
Terminated Vested	<u>36</u>	<u>36</u>	<u>38</u>
 Total	 108	 108	 108
 Total Annual Payroll	 \$3,813,721	 \$3,813,721	 \$3,672,140
Payroll Under Assumed Ret. Age	3,813,721	3,813,721	3,672,140
Annual Rate of Payments to:			
Service Retirees	1,480,452	1,480,452	1,422,596
DROP Retirees	152,017	152,017	175,164
Beneficiaries	188,630	188,630	162,408
Disability Retirees	116,517	116,517	81,494
Terminated Vested	516,266	516,266	599,628
B. Assets			
Actuarial Value (AVA) ¹	54,977,253	54,977,253	51,179,068
Market Value (MVA) ¹	55,434,805	55,434,805	51,201,586
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	23,325,686	22,206,286	19,847,629
Disability Benefits	228,612	211,121	204,122
Death Benefits	103,000	166,869	160,757
Vested Benefits	5,810,918	5,446,859	5,467,769
Refund of Contributions	1,545	1,545	7,854
Service Retirees	20,106,853	19,776,495	19,302,123
DROP Retirees ¹	2,762,327	2,716,511	2,907,917
Beneficiaries	2,384,902	2,339,091	2,066,058
Disability Retirees	1,359,867	1,291,800	880,713
Terminated Vested	6,101,153	5,899,262	6,548,055
Share Plan Balances ¹	<u>2,080,588</u>	<u>2,080,588</u>	<u>1,806,009</u>
 Total	 64,265,451	 62,136,427	 59,199,006

C. Liabilities - (Continued)	New Asmp/Mthd <u>10/1/2020</u>	Old Asmp/Mthd <u>10/1/2020</u>	<u>10/1/2019</u>
Present Value of Future Salaries	26,948,098	26,601,101	27,280,964
Present Value of Future Member Contributions	2,856,498	2,819,717	2,891,782
Normal Cost (Retirement)	643,371	600,791	576,822
Normal Cost (Disability)	15,274	14,074	13,412
Normal Cost (Death)	4,103	6,566	6,310
Normal Cost (Vesting)	271,590	250,477	254,389
Normal Cost (Refunds)	<u>975</u>	<u>972</u>	<u>3,482</u>
Total Normal Cost	935,313	872,880	854,415
Present Value of Future Normal Costs	6,204,323	5,716,573	5,918,349
Accrued Liability (Retirement)	18,957,133	18,180,445	15,701,684
Accrued Liability (Disability)	126,036	118,013	108,898
Accrued Liability (Death)	74,320	122,235	114,963
Accrued Liability (Vesting)	4,107,379	3,894,841	3,840,870
Accrued Liability (Refunds)	570	573	3,367
Accrued Liability (Inactives) ¹	32,715,102	32,023,159	31,704,866
Share Plan Balances ¹	<u>2,080,588</u>	<u>2,080,588</u>	<u>1,806,009</u>
Total Actuarial Accrued Liability (EAN AL)	58,061,128	56,419,854	53,280,657
Unfunded Actuarial Accrued Liability (UAAL)	3,083,875	1,442,601	2,101,589
Funded Ratio (AVA / EAN AL)	94.7%	97.4%	96.1%

D. Actuarial Present Value of Accrued Benefits	New Asmp/Mthd <u>10/1/2020</u>	Old Asmp/Mthd <u>10/1/2020</u>	<u>10/1/2019</u>
Vested Accrued Benefits			
Inactives + Share Plan Balances ¹	34,795,690	34,103,747	33,510,875
Actives	10,730,819	10,073,021	7,968,276
Member Contributions	<u>4,171,710</u>	<u>4,171,710</u>	<u>3,788,219</u>
Total	49,698,219	48,348,478	45,267,370
Non-vested Accrued Benefits	<u>600,457</u>	<u>572,593</u>	<u>667,997</u>
Total Present Value			
Accrued Benefits (PVAB)	50,298,676	48,921,071	45,935,367
Funded Ratio (MVA / PVAB)	110.2%	113.3%	111.5%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	1,377,605	0	
Plan Experience	0	1,495,985	
Benefits Paid	0	(1,776,208)	
Interest	0	3,265,927	
Other	<u>0</u>	<u>0</u>	
Total	1,377,605	2,985,704	

	New Asmp/Mthd	Old Asmp/Mthd	
Valuation Date	10/1/2020	10/1/2020	10/1/2019
Applicable to Fiscal Year Ending	<u>9/30/2022</u>	<u>9/30/2022</u>	<u>9/30/2021</u>

E. Pension Cost

Normal Cost ²	\$1,020,420		
% of Total Annual Payroll ²		23.72	24.11
Administrative Expenses ²	83,334		
% of Total Annual Payroll ²		2.08	2.23
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 15 years (as of 10/1/2020) ²	357,689		
% of Total Annual Payroll ²		4.38	6.25
Minimum Required Contribution	1,461,443		
% of Total Annual Payroll ²		30.18	32.59
Expected Member Contributions ²	441,039		
% of Total Annual Payroll ²		10.60	10.60
Expected City and State Contribution	1,020,404		
% of Total Annual Payroll ²		19.58	21.99

F. Past Contributions

Plan Years Ending:	<u>9/30/2020</u>
City Minimum Requirement per Ordinance	651,211
Actual Contributions Made:	
Members (excluding buyback)	383,491
City	651,211
State	<u>250,000</u>
Total	1,284,702

G. Net Actuarial (Gain)/Loss (468,165)

¹ The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2020 and 9/30/2019.

² Contributions developed as of 10/1/2020 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>
2020	3,083,875
2021	2,948,940
2022	2,804,559
2025	2,307,899
2029	1,467,628
2032	670,101
2035	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2020	3.98%	5.41%
Year Ended 9/30/2019	4.74%	5.62%
Year Ended 9/30/2018	8.90%	5.68%
Year Ended 9/30/2017	6.52%	7.50%
Year Ended 9/30/2016	2.94%	7.50%

(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 9/30/2020	9.11%	8.21%	7.25%
Year Ended 9/30/2019	3.75%	7.74%	7.50%
Year Ended 9/30/2018	9.32%	7.04%	7.50%
Year Ended 9/30/2017	10.78%	6.92%	8.00%
Year Ended 9/30/2016	7.24%	7.76%	8.00%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2020	\$3,813,721
	10/1/2010	5,619,179
(b) Total Increase		-32.13%
(c) Number of Years		10.00
(d) Average Annual Rate		-3.80%

STATEMENT BY ENROLLED ACTUARY

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



Douglas H. Lozen, EA, MAAA
Enrolled Actuary #20-7778

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

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

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

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

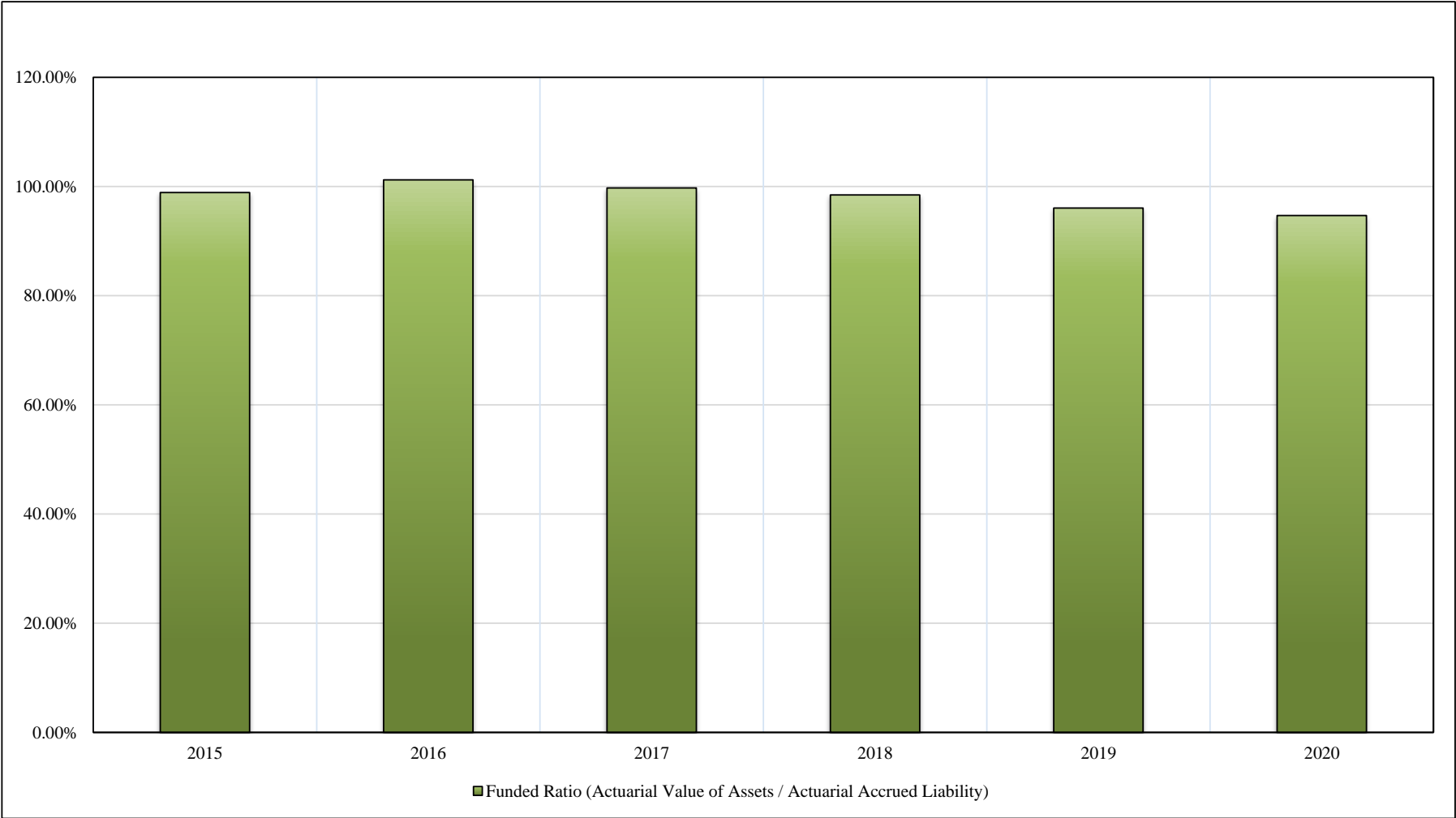
(1)	Unfunded Actuarial Accrued Liability as of October 1, 2019	\$2,101,589
(2)	Sponsor Normal Cost developed as of October 1, 2019	465,168
(3)	Expected administrative expenses for the year ended September 30, 2020	79,152
(4)	Expected interest on (1), (2) and (3)	188,959
(5)	Sponsor contributions to the System during the year ended September 30, 2020	901,211
(6)	Expected interest on (5)	22,891
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2020 (1)+(2)+(3)+(4)-(5)-(6)	1,910,766
(8)	Change to UAAL due to Assumption Change	1,641,274
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(468,165)
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2020	3,083,875

<u>Type of Base</u>	<u>Date Established</u>	<u>Years Remaining</u>	<u>10/1/2020 Amount</u>	<u>Amortization Amount</u>
Consolidation	10/1/2018	13	667,980	74,696
Benefit Change	10/1/2018	13	(4,901)	(548)
Actuarial Loss	10/1/2019	14	60,033	6,415
Reconciliation Base	10/1/2019	14	(287,657)	(30,740)
Assump Change	10/1/2019	14	1,475,311	157,658
Actuarial Gain	10/1/2020	15	(468,165)	(48,039)
Assump Change	10/1/2020	15	<u>1,641,274</u>	<u>168,414</u>
			<u>3,083,875</u>	<u>327,856</u>

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2019	\$2,101,589
(2) Expected UAAL as of October 1, 2020	1,910,766
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(489,259)
Salary Increases	(349,672)
Active Decrements	546,603
Inactive Mortality	(140,737)
Other	<u>(35,100)</u>
Increase in UAAL due to (Gain)/Loss	(468,165)
Assumption Changes	<u>1,641,274</u>
(4) Actual UAAL as of October 1, 2020	\$3,083,875

HISTORY OF FUNDING PROGRESS



ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

Female: PubS.H-2010 for Employees, set forward one year. Prior year assumption: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: PubS.H-2010 for Employees, set forward one year. Prior year assumption: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

Healthy Retiree Lives:

Female: PubS.H-2010 for Healthy Retirees, set forward one year. Prior year assumption: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: PubS.H-2010 for Healthy Retirees, set forward one year. Prior year assumption: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Beneficiary Lives:

Female: PubG.H-2010 for Healthy Retirees. Prior year assumption: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: PubG.H-2010 for Healthy Retirees, set back one year. Prior year assumption: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Disabled Lives:

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

Prior year assumption (Female): 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale

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

All rates are projected generationally with Mortality Improvement Scale MP-2018.

The previously described mortality 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, 2019 FRS valuation report for special risk employees, with appropriate risk and collar adjustments made based on plan demographics. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate

7.00% (prior year 7.25%) per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

Salary Increases

See table later in this section. This assumption was adopted with the May 10, 2017 actuarial experience study.

Projected salary at retirement is increased by the frozen dollar value of sick and annual leave as of July 5, 2012.

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

\$76,384 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Amortization Method

New UAAL amortization bases are amortized over 15 years.

Retirement Age

See table later in this section. This assumption was adopted in conjunction with the May 10, 2017 actuarial experience study.

Termination Rate

See table later in this section. This assumption was adopted in conjunction with the May 10, 2017 actuarial experience study.

Disability Rate

See table later in this section. These rates are consistent with the other Florida municipal special risk retirement Plans and was determined reasonable with the May 10, 2017 actuarial experience study. It is assumed that 90% of disablements are service related.

Asset Valuation Method

Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value return. It is possible that over time this technique will produce an insignificant bias above or below Market Value.

Funding Method

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

Interest – A half year, based on the 7.00% assumption
Salary – A full year, based on the current 5.41% average assumption

Assumption Tables

% Terminating During the Year (0-4 Years of Service)		% Terminating During the Year (>= 5 Years of Service)	
Age	Rate	Age	Rate
20-24	10.0%	20-44	6.0%
25-29	7.0%	45-49	5.0%
30-49	6.0%	50-54	1.0%
50-54	1.0%	55+	0.1%
55+	0.1%		

% Becoming Disabled During the Year		Salary Scale	
Age	Rate	Service	Rate
20	0.03%	<10	7.00%
30	0.04%	10-14	5.50%
40	0.07%	15-19	5.00%
50	0.18%	20+	4.50%

% Retiring During the Year (10-24 Years of Service)		% Retiring During the Year (>= 25 Years of Service)	
Age	Rate	Age	Rate
50-51	10.0%	50	5.0%
52-53	25.0%	51	50.0%
54-57	50.0%	52+	100.0%
58+	100.0%		

GLOSSARY

Actuarial Value of Assets is the asset value used in the valuation to determine contribution requirements. It represents the plan's Market Value of Assets (see below), with adjustments according to the plan's Actuarial Asset Method. These adjustments produce a "smoothed" value that is likely to be less volatile from year to year than the Market Value of Assets.

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.

Market Value of Assets is the fair market value of plan assets as of the valuation date. This amount may be adjusted to produce an Actuarial Value of Assets for plan funding purposes.

Normal (Current Year's) Cost is the current year's cost for benefits yet to be funded. Under the Entry Age Normal cost method, it 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.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current plan participants.

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

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.

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.

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 decreased from 390.5% on October 1, 2010 to 77.6% on October 1, 2020, indicating that the plan has been maturing 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 56.3%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in larger increases in contribution requirements than would be needed for a less mature plan. Please note Chapter 112, Florida Statutes, requires that the plan sponsor contributes the minimum required contribution; thus, there is minimal solvency risk to the plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 82.9% on October 1, 2010 to 94.7% on October 1, 2020.
- 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 7.3% on October 1, 2010 to -0.7% on October 1, 2020. The current Net Cash Flow Ratio of -0.7% indicates that contributions are not currently 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>10/1/2010</u>	<u>10/1/2015</u>	<u>10/1/2019</u>	<u>10/1/2020</u>
<u>Support Ratio</u>				
Total Actives	82	79	38	38
Total Inactives ¹	21	29	49	49
Actives / Inactives ¹	390.5%	272.4%	77.6%	77.6%
 <u>Asset Volatility Ratio</u>				
Market Value of Assets (MVA)	21,738,462	38,809,499	51,201,586	55,434,805
Total Annual Payroll	5,619,179	5,764,271	3,672,140	3,813,721
MVA / Total Annual Payroll	386.9%	673.3%	1,394.3%	1,453.6%
 <u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	9,023,721	16,522,502	31,704,866	32,715,102
Total Accrued Liability (EAN)	27,975,235	39,768,868	53,280,657	58,061,128
Inactive AL / Total AL	32.3%	41.5%	59.5%	56.3%
 <u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	23,177,547	39,330,432	51,179,068	54,977,253
Total Accrued Liability (EAN)	27,975,235	39,768,868	53,280,657	58,061,128
AVA / Total Accrued Liability (EAN)	82.9%	98.9%	96.1%	94.7%
 <u>Net Cash Flow Ratio</u>				
Net Cash Flow ²	1,577,845	672,188	(1,136,643)	(385,995)
Market Value of Assets (MVA)	21,738,462	38,809,499	51,201,586	55,434,805
Ratio	7.3%	1.7%	-2.2%	-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	52,606.60	_____%
1999	55,358.60	5.2%
2000	68,338.10	23.4%
2001	68,311.30	0.0%
2002	92,515.40	35.4%
2003	101,562.23	9.8%
2004	127,554.50	25.6%
2005	166,534.47	30.6%
2006	242,082.84	45.4%
2007	284,870.08	17.7%
2008	486,956.22	70.9%
2009	388,871.03	-20.1%
2010	400,984.42	3.1%
2011	399,175.25	-0.5%
2012	425,380.30	6.6%
2013	403,183.26	-5.2%
2014	387,316.25	-3.9%
2015	376,215.34	-2.9%
2016	371,775.04	-1.2%
2017	376,129.17	1.2%
2018	414,503.01	10.2%
2019	419,797.03	1.3%
2020	436,173.63	3.9%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2020

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	444,337.02	444,337.02
Total Cash and Equivalents	444,337.02	444,337.02
Receivables:		
City Contributions in Transit	152,967.69	152,967.69
Additional City Contributions	75,737.87	75,737.87
Total Receivable	228,705.56	228,705.56
Investments:		
Mutual Funds:		
Fixed Income	16,374,403.87	16,664,685.91
Equity	25,141,808.46	32,715,566.55
Pooled/Common/Commingled Funds:		
Real Estate	4,652,397.97	5,391,334.57
Total Investments	46,168,610.30	54,771,587.03
Total Assets	46,841,652.88	55,444,629.61
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	7,473.69	7,473.69
Administrative Expenses	1,014.00	1,014.00
Prior Refund Payable	1,337.11	1,337.11
Total Liabilities	9,824.80	9,824.80
NET POSITION RESTRICTED FOR PENSIONS	46,831,828.08	55,434,804.81

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2020
Market Value Basis

ADDITIONS

Contributions:			
Member		383,490.96	
City		651,211.07	
State		436,173.63	
Total Contributions			1,470,875.66
Investment Income:			
Net Realized Gain (Loss)	220,766.47		
Unrealized Gain (Loss)	2,805,958.21		
Net Increase in Fair Value of Investments		3,026,724.68	
Interest & Dividends		1,702,777.76	
Less Investment Expense ¹		(110,287.89)	
Net Investment Income			4,619,214.55
Total Additions			6,090,090.21

DEDUCTIONS

Distributions to Members:			
Benefit Payments		1,715,187.30	
Lump Sum DROP Distributions		0.00	
Lump Sum Share Distributions		61,020.75	
Refunds of Member Contributions		0.00	
Total Distributions			1,776,208.05
Administrative Expense			80,663.13
Total Deductions			1,856,871.18
Net Increase in Net Position			4,233,219.03
NET POSITION RESTRICTED FOR PENSIONS			
Beginning of the Year			51,201,585.78
End of the Year			55,434,804.81

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

ACTUARIAL ASSET VALUATION
SEPTEMBER 30, 2020

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	
09/30/2017	10.78%	
09/30/2018	9.32%	
09/30/2019	3.75%	
09/30/2020	9.11%	
Annualized Rate of Return for prior four (4) years:		8.21%
(A) 10/01/2019 Actuarial Assets:		\$51,179,068.35
(I) Net Investment Income:		
1. Interest and Dividends	1,702,777.76	
2. Realized Gain (Loss)	220,766.47	
3. Unrealized Gain (Loss)	2,805,958.21	
4. Change in Actuarial Value	(435,034.86)	
5. Investment Related Expenses	(110,287.89)	
Total		4,184,179.69
(B) 10/01/2020 Actuarial Assets:		\$54,977,252.52
Actuarial Asset Rate of Return = 2I/(A+B-I):		8.21%
10/01/2020 Limited Actuarial Assets:		\$54,977,252.52
10/01/2020 Market Value of Assets:		\$55,434,804.81
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)		\$489,258.53

¹Market Value Basis, net of investment related expenses.

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
 SEPTEMBER 30, 2020
 Actuarial Asset Basis

REVENUES

Contributions:		
Member	383,490.96	
City	651,211.07	
State	436,173.63	
 Total Contributions		 1,470,875.66
Earnings from Investments:		
Interest & Dividends	1,702,777.76	
Net Realized Gain (Loss)	220,766.47	
Unrealized Gain (Loss)	2,805,958.21	
Change in Actuarial Value	(435,034.86)	
 Total Earnings and Investment Gains		 4,294,467.58

EXPENDITURES

Distributions to Members:		
Benefit Payments	1,715,187.30	
Lump Sum DROP Distributions	0.00	
Lump Sum Share Distributions	61,020.75	
Refunds of Member Contributions	0.00	
 Total Distributions		 1,776,208.05
Expenses:		
Investment related ¹	110,287.89	
Administrative	80,663.13	
 Total Expenses		 190,951.02
 Change in Net Assets for the Year		 3,798,184.16
 Net Assets Beginning of the Year		 51,179,068.35
 Net Assets End of the Year ²		 54,977,252.52

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

²Net Assets may be limited for actuarial consideration.

DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2019 to September 30, 2020

Beginning of the Year Balance	273,361.26
Plus Additions	175,164.00
Investment Return Earned	40,160.65
Less Distributions	0.00
End of the Year Balance	488,685.91

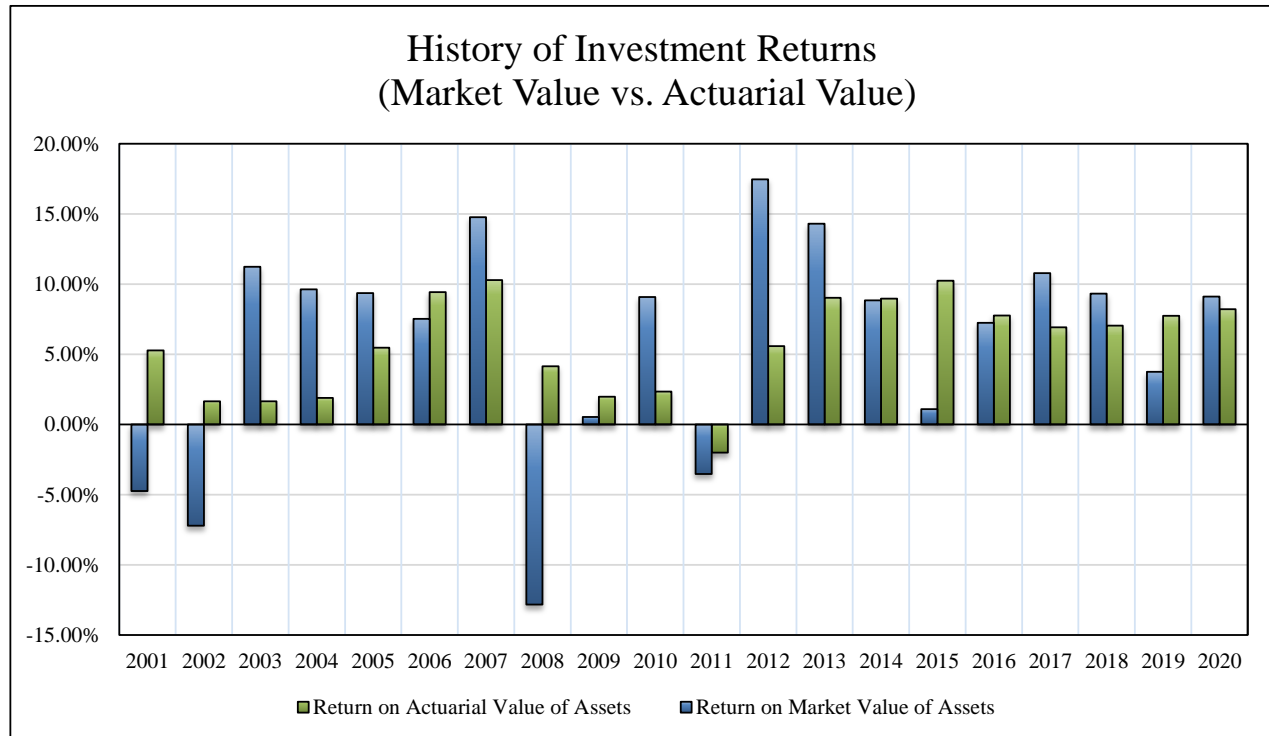
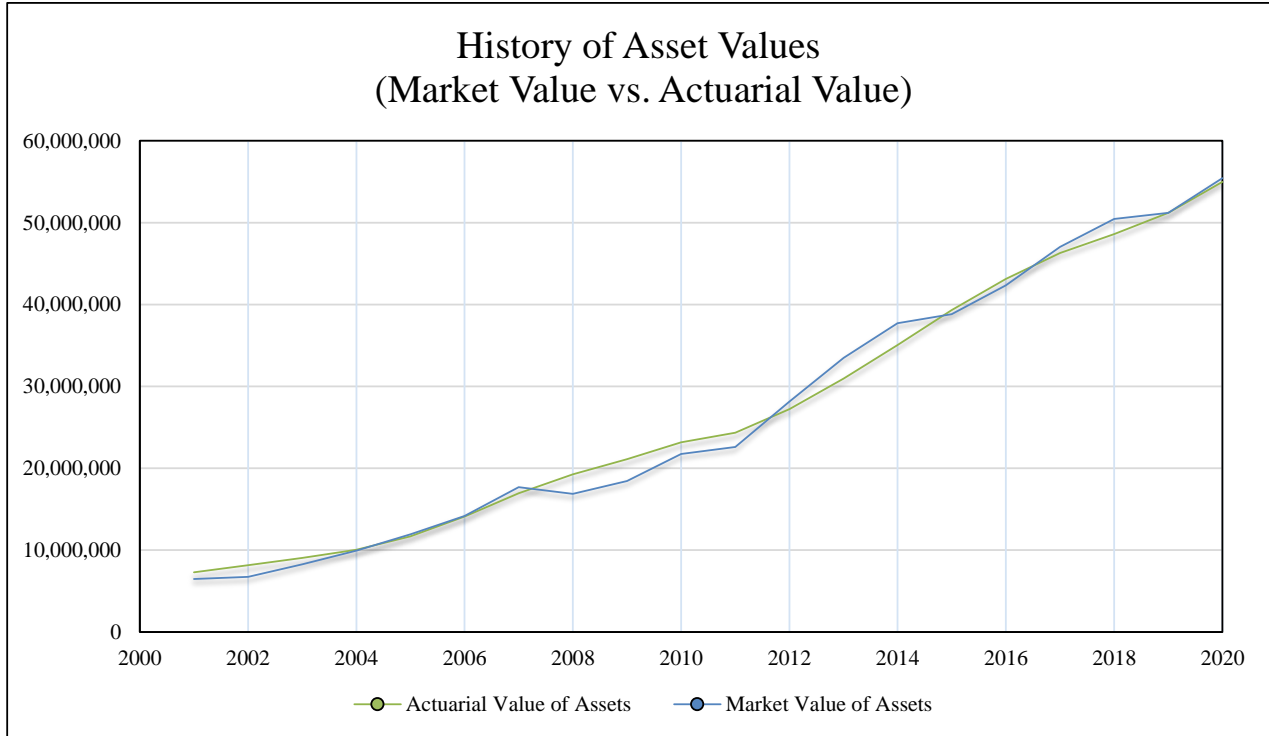
SUPPLEMENTAL CHAPTER 175 SHARE PLAN ACTIVITY
October 1, 2019 through September 30, 2020

9/30/2019 Balance	1,806,009.25
Prior Year Adjustment	(8,746.07)
Plus Additions	186,173.63
Investment Return Earned (Est.)	158,171.69
Administrative Fees	0.00
Less Distributions	<u>(61,020.75)</u>
9/30/2020 Balance (Est.)	2,080,587.75

RECONCILIATION OF CITY'S SHORTFALL/(PREPAID) CONTRIBUTION
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2020

(1)	City and State Required Contribution Rate	16.33%
(2)	Pensionable Payroll Derived from Member Contributions	\$3,617,839.25
(3)	Required City and State Contributions	\$590,793.15
(4)	Less Allowable State Contribution	<u>(250,000.00)</u>
(5)	Required City Contribution for Fiscal 2020 <i>(Prior to 18% Minimum City Contribution by Ordinance)</i>	340,793.15
(6)	18.00% Minimum City Contribution by Ordinance	651,211.07
(7)	Less 2019 Prepaid Contribution	0.00
(8)	Less Actual City Contributions	<u>(575,473.20)</u>
(9)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2020	\$75,737.87

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS



STATISTICAL DATA

	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>	<u>10/1/2020</u>
<u>Actives</u>				
Number	44	42	38	38
Average Current Age	40.5	41.2	41.3	42.3
Average Age at Employment	27.4	27.1	27.0	27.0
Average Past Service	13.1	14.1	14.3	15.3
Average Annual Salary	\$85,824	\$93,312	\$96,635	\$100,361
<u>Service Retirees</u>				
Number	18	21	25	26
Average Current Age	60.1	60.8	60.9	61.0
Average Annual Benefit	\$45,871	\$50,920	\$56,904	\$56,940
<u>DROP Retirees</u>				
Number	6	4	3	2
Average Current Age	57.3	57.0	56.8	57.7
Average Annual Benefit	\$73,744	\$63,274	\$58,388	\$76,009
<u>Beneficiaries</u>				
Number	2	2	2	3
Average Current Age	52.8	53.8	54.8	55.2
Average Annual Benefit	\$76,543	\$78,839	\$81,204	\$62,877
<u>Disability Retirees</u>				
Number	2	2	2	3
Average Current Age	56.0	57.0	58.0	53.3
Average Annual Benefit	\$40,747	\$40,747	\$40,747	\$38,839
<u>Terminated Vested</u>				
Number	37	37	38	36
Average Current Age ¹	37.4	47.0	47.6	48.4
Average Annual Benefit ²	\$34,418	\$35,199	\$35,272	\$34,418

¹ Effective 10/1/2018, the Average Current Age excludes participants awaiting a refund of contributions.

² The Average Annual Benefit excludes participants awaiting a refund of contributions.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19												0
20 - 24												0
25 - 29												0
30 - 34							3					3
35 - 39							7	4				11
40 - 44							8	1				9
45 - 49						1	4	3	2	1		11
50 - 54							1		1	1		3
55 - 59							1					1
60 - 64												0
65+												0
Total	0	0	0	0	0	1	24	8	3	2	0	38

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2019	38
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 distribution received	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. DROP	<u>0</u>
g. Continuing participants	38
h. New entrants	<u>0</u>
i. Total active life participants in valuation	38

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

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	25	3	2	2	17	21	70
Retired	2	(1)	0	0	(1)	0	0
DROP	0	0	0	0	0	0	0
Vested (Deferred Annuity)	0	0	0	0	0	0	0
Vested (Due Refund)	0	0	0	0	0	0	0
Hired/Terminated in Same Year	0	0	0	0	0	0	0
Death, With Survivor	(1)	0	1	0	0	0	0
Death, No Survivor	0	0	0	0	0	0	0
Disabled	0	0	0	1	(1)	0	0
Refund of Contributions	0	0	0	0	0	0	0
Rehires	0	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0	0
b. Number current valuation	26	2	3	3	15	21	70

SUMMARY OF CURRENT PLAN
(Through Ordinance 2018-17)

<u>Original Plan Effective Date</u>	November 5, 1974
<u>Latest Amendment</u>	April 24, 2018
<u>Eligibility</u>	Full-time employees who are classified as full-time Firefighters shall participate in the System as a condition of employment. Firefighters on or after May 10, 2016 shall participate in the Florida Retirement System. Members active on May 10, 2016 had the option of participating prospectively in the Florida Retirement System.
<u>Credited Service</u>	Total years and fractional parts of years of employment with the City as a firefighter.
<u>Salary</u>	W-2 Compensation plus tax deferred or tax sheltered items of income. Effective July 5, 2012 Salary includes up to 300 hours of overtime per fiscal year and only the dollar value of accrued sick and annual leave as of July 5, 2012 is included.
<u>Average Final Compensation</u>	Average Salary for the highest 5 years. Previously, there was a ten-year lookback period for determining this average.
<u>Member Contributions</u>	10.6% of Salary.
<u>City and State Contributions</u>	Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII of Florida Statutes, Chapter 112. In no event will the City's contribution be less than 18% of the total salary of plan Members.
<u>Normal Retirement</u>	
Date	Earlier of age 55 and 10 years of Credited Service or age 52 and 25 years of Credited Service.
Benefit	3.50% of Average Final Compensation <u>times</u> Credited Service (3.0% for those hired on and after October 12, 2012).
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Cost of Living Allowance</u>	Service retirees, vested terminated members, and their beneficiaries receive annual 3.0% benefit increases beginning at age 55 and ceasing at age 63.

Early Retirement

Eligibility	Age 50 and 10 Years of Credited Service.								
Benefit	Accrued benefit, reduced according to the following schedule:								
	<table><thead><tr><th><u>Credited Service at time of Termination or Retirement</u></th><th><u>Percent per Year Reduction</u></th></tr></thead><tbody><tr><td>Less than 15 years</td><td>3%</td></tr><tr><td>At least 15, but less than 20 years</td><td>2%</td></tr><tr><td>20 or more years</td><td>1%</td></tr></tbody></table>	<u>Credited Service at time of Termination or Retirement</u>	<u>Percent per Year Reduction</u>	Less than 15 years	3%	At least 15, but less than 20 years	2%	20 or more years	1%
<u>Credited Service at time of Termination or Retirement</u>	<u>Percent per Year Reduction</u>								
Less than 15 years	3%								
At least 15, but less than 20 years	2%								
20 or more years	1%								

Vesting

Schedule	100% after 10 years of Credited Service.
Benefit Amount	Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Disability

Eligibility	
Service Incurred	Covered from Date of Employment.
Non-Service Incurred	10 years of Credited Service.
Exclusions	Disability resulting from use of drugs, illegal participation in riots, service in military, etc.
Benefit	Benefit accrued to date of disability. For Service Incurred, not less than 42% of Average Final Compensation.
Duration	Payable as a 10 Year Certain and Life Annuity or until recovery (as determined by the Board; optional forms available).

Death Benefits

Pre-Retirement	
Vested	Monthly accrued benefit payable to designated beneficiary for 10 years.
Non-Vested	Refund of accumulated contributions, without

	interest.
Post-Retirement	Benefits payable to beneficiary in accordance with option selected at retirement.
<u>Board of Trustees</u>	<ul style="list-style-type: none"> a. Two Commission appointees, b. Two Members of the Department elected by the membership, and c. Fifth Member elected by other 4 and appointed by the City Commission.
<u>Deferred Retirement Option Plan</u>	
Eligibility	Satisfaction of Normal Retirement requirements (earlier of (1) Age 55 with 10 years of Credited Service, or (2) Age 52 with 25 years of Credited Service).
Participation	Not to exceed 60 months.
Rate of Return	At the Member's election: (1) 1.0% annual rate, or (2) actual net rate of investment return (total return net of brokerage commissions, management fees, and transaction costs), credited each fiscal quarter. One change between the above options is allowed.
Form of Distribution	Cash lump sum (options available) at termination of employment.
<u>Supplemental Retirement Benefit</u>	
Initial Crediting	The Share Account of each active firefighter and retiree who was an employee and a member of the Plan between December 1, 2005 and September 30, 2012 shall receive one share for each month of credited service from date of hire through September 30, 2012.
Annual Crediting	For plan years beginning October 1, 2012 and later, premium tax revenues received by the City each year in excess of the \$250,000 applicable frozen amount shall be allocated to each Members share account.
Investment earnings	Effective December 31, 2013, and each December 31 thereafter, each share account shall be credited or debited with earnings or losses based upon the amount in the share account at the close of the immediately preceding plan year at a rate equal to the net of fees return for the Pension Plan for the preceding plan year.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2020

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	444,337
Total Cash and Equivalents	444,337
Receivables:	
City Contributions in Transit	152,968
Additional City Contributions	75,738
Total Receivable	228,706
Investments:	
Mutual Funds:	
Fixed Income	16,664,686
Equity	32,715,566
Real Estate	5,391,335
Total Investments	54,771,587
Total Assets	55,444,630
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	7,474
Administrative Expenses	1,014
Prior Refund Payable	1,337
Total Liabilities	9,825
NET POSITION RESTRICTED FOR PENSIONS	55,434,805

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2020
Market Value Basis

ADDITIONS

Contributions:

Member	383,491
City	651,211
State	436,174

Total Contributions	1,470,876
---------------------	-----------

Investment Income:

Net Increase in Fair Value of Investments	3,026,724
Interest & Dividends	1,702,778
Less Investment Expense ¹	(110,288)

Net Investment Income	4,619,214
-----------------------	-----------

Total Additions	6,090,090
-----------------	-----------

DEDUCTIONS

Distributions to Members:

Benefit Payments	1,715,187
Lump Sum DROP Distributions	0
Lump Sum Share Distributions	61,021
Refunds of Member Contributions	0

Total Distributions	1,776,208
---------------------	-----------

Administrative Expense	80,663
------------------------	--------

Total Deductions	1,856,871
------------------	-----------

Net Increase in Net Position	4,233,219
------------------------------	-----------

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	51,201,586
-----------------------	------------

End of the Year	55,434,805
-----------------	------------

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

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2020)

Plan Administration

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

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

Full-time employees who are classified as full-time Firefighters shall participate in the System as a condition of employment. Officers hired after July 1, 2016 shall participate in the Florida Retirement System. Members active on July 1, 2016 had the option of participating prospectively in the Florida Retirement System.

Plan Membership as of October 1, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	32
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	38
Active Plan Members	38
	108

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2019 Actuarial Valuation Report for the City of North Port Firefighters' Pension - Local Option Trust Fund prepared by Foster & Foster Actuaries and Consultants.

Contributions

Member Contributions: 10.6% of Salary.

City and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII of Florida Statutes, Chapter 112. In no event will the City's contribution be less than 18% of the total salary of plan Members.

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2020:

Asset Class	Target Allocation
Domestic Equity	47.5%
International Equity	10.0%
Broad Market Fixed Income	22.5%
Global Fixed Income	5.0%
Real Estate	10.0%
GTAA	5.0%
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, 2020, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 9.11 percent.

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

GASB 67

Deferred Retirement Option Program

Eligibility: Satisfaction of Normal Retirement requirements (earlier of (1) Age 55 with 10 years of Credited Service, or (2) Age 52 with 25 years of Credited Service).

Participation: Not to exceed 60 months.

Rate of Return: At the Member's election: (1) 1.0% annual rate, or (2) actual net rate of investment return (total return net of brokerage commissions, management fees, and transaction costs), credited each fiscal quarter. One change between the above options is allowed.

The DROP balance as September 30, 2020 is \$488,686.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2020 were as follows:

Total Pension Liability	\$ 57,446,547
Plan Fiduciary Net Position	\$ (55,434,805)
Sponsor's Net Pension Liability	<u>\$ 2,011,742</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	96.50%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2019 updated to September 30, 2020 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: PubS.H-2010 for Employees, set forward one year.

Male: PubS.H-2010 for Employees, set forward one year.

Mortality Rate Healthy Retiree Lives:

Female: PubS.H-2010 for Healthy Retirees, set forward one year.

Male: PubS.H-2010 for Healthy Retirees, set forward one year.

Mortality Rate Beneficiary Lives:

Female: PubG.H-2010 for Healthy Retirees.

Male: PubG.H-2010 for Healthy Retirees, set back one year.

Mortality Rate Disabled Lives:

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

All rates are projected generationally with Mortality Improvement Scale MP-2018.

The above described mortality 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, 2019 FRS valuation report for special risk employees, with appropriate risk and collar adjustments made based on plan demographics. 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 10, 2017.

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

For 2020 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.

GASB 67

Best estimates of arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2020 are summarized in the following table:

<u>Asset Class</u>	<u>Long Term Expected Real Rate of Return¹</u>
Domestic Equity	7.50%
International Equity	8.50%
Broad Market Fixed Income	2.50%
Global Fixed Income	3.50%
Real Estate	4.50%
GTAA	3.50%

¹ Source: AndCo Consulting

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	\$ 9,752,611	\$ 2,011,742	\$ (4,339,638)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 2 Fiscal Years

	<u>09/30/2020</u>	<u>09/30/2019</u>
Total Pension Liability		
Service Cost	900,497	917,681
Interest	3,803,540	3,566,667
Share Plan Allocation	186,174	169,797
Changes of benefit terms	-	(5,208)
Differences between Expected and Actual Experience	250,384	864,392
Changes of assumptions	1,631,930	1,577,924
Benefit Payments, including Refunds of Employee Contributions	<u>(1,776,208)</u>	<u>(2,568,219)</u>
Net Change in Total Pension Liability	4,996,317	4,523,034
Total Pension Liability - Beginning	<u>52,450,230</u>	<u>47,927,196</u>
Total Pension Liability - Ending (a)	<u>\$ 57,446,547</u>	<u>\$ 52,450,230</u>
Plan Fiduciary Net Position		
Contributions - Employer	651,211	682,166
Contributions - State	436,174	419,797
Contributions - Employee	383,491	401,719
Net Investment Income	4,619,214	1,879,686
Benefit Payments, including Refunds of Employee Contributions	(1,776,208)	(2,568,219)
Administrative Expense	<u>(80,663)</u>	<u>(72,105)</u>
Net Change in Plan Fiduciary Net Position	4,233,219	743,044
Plan Fiduciary Net Position - Beginning	<u>51,201,586</u>	<u>50,458,542</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 55,434,805</u>	<u>\$ 51,201,586</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,011,742</u>	<u>\$ 1,248,644</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	96.50%	97.62%
Covered Payroll	\$ 3,617,839	\$ 3,789,804
Net Pension Liability as a percentage of Covered Payroll	55.61%	32.95%

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

Changes in benefit terms:

For measurement date 09/30/2019, amounts reported as changes of benefit terms resulted from the provisions of Chapter 112.1816, Florida Statutes. The Statutes state that, effective July 1, 2019, a death or disability (under the Plan's definition of total and permanent disability) for a Firefighter due to the diagnosis of cancer or circumstances that arise out of the treatment of cancer will be treated as duty-related.

Changes of assumptions:

For measurement date 09/30/2020, as mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the rates used in Milliman's July 1, 2019 FRS valuation report for special risk employees, with appropriate risk and collar adjustments made based on plan demographics.

Additionally, the investment return assumption was reduced from 7.25% to 7.00% per year, net of investment-related expenses.

For measurement date 09/30/2019, the investment return was lowered from 7.50% to 7.25% net of investment related expenses.

SCHEDULE OF CONTRIBUTIONS
Last 2 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
09/30/2020	\$ 901,211	\$ 901,211	\$ -	\$ 3,617,839	24.91%
09/30/2019	\$ 932,165	\$ 932,166	\$ (1)	\$ 3,789,804	24.60%

Notes to Schedule

Valuation Date: 10/01/2018 (AIS 01/28/2020)

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 can be found in the October 1, 2018 Actuarial Valuation for the City of North Port Firefighters' Pension- Local Option Trust Fund prepared by Foster & Foster Actuaries and Consultants.

SCHEDULE OF INVESTMENT RETURNS
Last 2 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2020	9.11%
09/30/2019	3.75%

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2021)

Plan Description

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

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

Full-time employees who are classified as full-time Firefighters shall participate in the System as a condition of employment.

Officers hired after July 1, 2016 shall participate in the Florida Retirement System. Members active on July 1, 2016 had the option of participating prospectively in the Florida Retirement System.

Plan Membership as of October 1, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	32
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	38
Active Plan Members	38
	108

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2019 Actuarial Valuation Report for the City of North Port Firefighters' Pension - Local Option Trust Fund prepared by Foster & Foster Actuaries and Consultants.

Contributions

Member Contributions: 10.6% of Salary.

City and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII of Florida Statutes, Chapter 112. In no event will the City's contribution be less than 18% of the total salary of plan Members.

Net Pension Liability

The measurement date is September 30, 2020.

The measurement period for the pension expense was October 1, 2019 to September 30, 2020.

The reporting period is October 1, 2020 through September 30, 2021.

The Sponsor's Net Pension Liability was measured as of September 30, 2020.

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, 2019 updated to September 30, 2020 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: PubS.H-2010 for Employees, set forward one year.

Male: PubS.H-2010 for Employees, set forward one year.

Mortality Rate Healthy Retiree Lives:

Female: PubS.H-2010 for Healthy Retirees, set forward one year.

Male: PubS.H-2010 for Healthy Retirees, set forward one year.

Mortality Rate Beneficiary Lives:

Female: PubG.H-2010 for Healthy Retirees.

Male: PubG.H-2010 for Healthy Retirees, set back one year.

Mortality Rate Disabled Lives:

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

All rates are projected generationally with Mortality Improvement Scale MP-2018.

The above described mortality 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, 2019 FRS valuation report for special risk employees, with appropriate risk and collar adjustments made based on plan demographics. 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 10, 2017.

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

For 2020 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 arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2020 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return ¹
Domestic Equity	47.5%	7.50%
International Equity	10.0%	8.50%
Broad Market Fixed Income	22.5%	2.50%
Global Fixed Income	5.0%	3.50%
Real Estate	10.0%	4.50%
GTAA	5.0%	3.50%
Total	100.0%	

¹ Source: AndCo Consulting

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)
Reporting Period Ending September 30, 2020	\$ 52,450,230	\$ 51,201,586	\$ 1,248,644
Changes for a Year:			
Service Cost	900,497	-	900,497
Interest	3,803,540	-	3,803,540
Share Plan Allocation	186,174	-	186,174
Differences between Expected and Actual Experience	250,384	-	250,384
Changes of assumptions	1,631,930	-	1,631,930
Changes of benefit terms	-	-	-
Contributions - Employer	-	651,211	(651,211)
Contributions - State	-	436,174	(436,174)
Contributions - Employee	-	383,491	(383,491)
Net Investment Income	-	4,619,214	(4,619,214)
Benefit Payments, including Refunds of Employee Contributions	(1,776,208)	(1,776,208)	-
Administrative Expense	-	(80,663)	80,663
Net Changes	4,996,317	4,233,219	763,098
Reporting Period Ending September 30, 2021	\$ 57,446,547	\$ 55,434,805	\$ 2,011,742

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	\$ 9,752,611	\$ 2,011,742	\$ (4,339,638)

Pension Plan Fiduciary Net Position.

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

**FINAL PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED
INFLOWS OF RESOURCES RELATED TO PENSIONS
FISCAL YEAR SEPTEMBER 30, 2020**

For the year ended September 30, 2020, the Sponsor has recognized a Pension Expense of \$1,273,538.

On September 30, 2020, 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	1,261,570	1,917,255
Changes of assumptions	1,818,030	207,845
Net difference between Projected and Actual Earnings on Pension Plan investments	598,802	-
Employer and State Contributions subsequent to the measurement date	1,087,385	-
Total	\$ 4,765,787	\$ 2,125,100

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State Contributions subsequent to the measurement date was recognized as a reduction of the Net Pension Liability in the year ended September 30, 2020.

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

Year ended September 30:		
2021	\$	169,380
2022	\$	974,685
2023	\$	171,434
2024	\$	335,963
2025	\$	(98,160)
Thereafter	\$	-

**PRELIMINARY PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND
DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS
FISCAL YEAR SEPTEMBER 30, 2021**

For the year ended September 30, 2021, the Sponsor will recognize a Pension Expense of \$1,501,859.

On September 30, 2021, 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	859,414	1,005,504
Changes of assumptions	2,226,793	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	178,777
Employer and State Contributions subsequent to the measurement date	TBD	-
Total	TBD	\$ 1,184,281

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State Contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended September 30, 2021.

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

Year ended September 30:		
2022	\$	1,417,905
2023	\$	614,654
2024	\$	151,745
2025	\$	(282,378)
2026	\$	-
Thereafter	\$	-

Payable to the Pension Plan

On September 30, 2020, the Sponsor reported a payable of \$75,738 for the outstanding amount of contributions of the Pension Plan required for the year ended September 30, 2020.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 2 Fiscal Years

Reporting Period Ending	09/30/2021	09/30/2020
Measurement Date	<u>09/30/2020</u>	<u>09/30/2019</u>
Total Pension Liability		
Service Cost	900,497	917,681
Interest	3,803,540	3,566,667
Share Plan Allocation	186,174	169,797
Changes of benefit terms	-	(5,208)
Differences between Expected and Actual Experience	250,384	864,392
Changes of assumptions	1,631,930	1,577,924
Benefit Payments, including Refunds of Employee Contributions	<u>(1,776,208)</u>	<u>(2,568,219)</u>
Net Change in Total Pension Liability	4,996,317	4,523,034
Total Pension Liability - Beginning	<u>52,450,230</u>	<u>47,927,196</u>
Total Pension Liability - Ending (a)	<u>\$ 57,446,547</u>	<u>\$ 52,450,230</u>
Plan Fiduciary Net Position		
Contributions - Employer	651,211	682,166
Contributions - State	436,174	419,797
Contributions - Employee	383,491	401,719
Net Investment Income	4,619,214	1,879,686
Benefit Payments, including Refunds of Employee Contributions	(1,776,208)	(2,568,219)
Administrative Expense	<u>(80,663)</u>	<u>(72,105)</u>
Net Change in Plan Fiduciary Net Position	4,233,219	743,044
Plan Fiduciary Net Position - Beginning	<u>51,201,586</u>	<u>50,458,542</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 55,434,805</u>	<u>\$ 51,201,586</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,011,742</u>	<u>\$ 1,248,644</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	96.50%	97.62%
Covered Payroll	\$ 3,617,839	\$ 3,789,804
Net Pension Liability as a percentage of Covered Payroll	55.61%	32.95%

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

Changes in benefit terms:

For measurement date 09/30/2019, amounts reported as changes of benefit terms resulted from the provisions of Chapter 112.1816, Florida Statutes. The Statutes state that, effective July 1, 2019, a death or disability (under the Plan's definition of total and permanent disability) for a Firefighter due to the diagnosis of cancer or circumstances that arise out of the treatment of cancer will be treated as duty-related.

Changes of assumptions:

For measurement date 09/30/2020, as mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the rates used in Milliman's July 1, 2019 FRS valuation report for special risk employees, with appropriate risk and collar adjustments made based on plan demographics.

Additionally, the investment return assumption was reduced from 7.25% to 7.00% per year, net of investment-related expenses.

For measurement date 09/30/2019, the investment return was lowered from 7.50% to 7.25% net of investment related expenses.

SCHEDULE OF CONTRIBUTIONS
Last 2 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
09/30/2020	\$ 901,211	\$ 901,211	\$ -	\$ 3,617,839	24.91%
09/30/2019	\$ 932,165	\$ 932,166	\$ (1)	\$ 3,789,804	24.60%

Notes to Schedule

Valuation Date: 10/01/2018 (AIS 01/28/2020)

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 can be found in the October 1, 2018 Actuarial Valuation for the City of North Port Firefighters' Pension- Local Option Trust Fund prepared by Foster & Foster Actuaries and Consultants.

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

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

FINAL COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2020

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ (2,531,346)	\$ 4,593,097	\$ 3,639,947	\$ -
Employer and State Contributions made after 09/30/2019	-	-	1,087,385	-
Total Pension Liability Factors:				
Service Cost	917,681	-	-	917,681
Interest	3,566,667	-	-	3,566,667
Share Plan Allocation	169,797	-	-	169,797
Changes in benefit terms	(5,208)	-	-	(5,208)
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	864,392	-	864,392	-
Current year amortization of experience difference	-	(911,751)	(569,077)	(342,674)
Change in assumptions about future economic or demographic factors or other inputs	1,577,924	-	1,577,924	-
Current year amortization of change in assumptions	-	(207,845)	(679,190)	471,345
Benefit Payments, including Refunds of Employee Contributions	(2,568,219)	-	-	-
Net change	<u>4,523,034</u>	<u>(1,119,596)</u>	<u>2,281,434</u>	<u>4,777,608</u>
Plan Fiduciary Net Position:				
Contributions - Employer	682,166	-	(682,166)	-
Contributions - State	419,797	-	(419,797)	-
Contributions - Employee	401,719	-	-	(401,719)
Projected Net Investment Income	3,741,767	-	-	(3,741,767)
Difference between projected and actual earnings on Pension Plan investments	(1,862,081)	-	1,862,081	-
Current year amortization	-	(394,624)	(961,935)	567,311
Benefit Payments, including Refunds of Employee Contributions	(2,568,219)	-	-	-
Administrative Expenses	(72,105)	-	-	72,105
Net change	<u>743,044</u>	<u>(394,624)</u>	<u>(201,817)</u>	<u>(3,504,070)</u>
Ending Balance	<u>\$ 1,248,644</u>	<u>\$ 3,078,877</u>	<u>\$ 5,719,564</u>	<u>\$ 1,273,538</u>

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2021

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 1,248,644	\$ 3,078,877	\$ 5,719,564	\$ -
Employer and State Contributions made after 09/30/2020	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	900,497	-	-	900,497
Interest	3,803,540	-	-	3,803,540
Share Plan Allocation	186,174	-	-	186,174
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	250,384	-	250,384	-
Current year amortization of experience difference	-	(911,751)	(652,540)	(259,211)
Change in assumptions about future economic or demographic factors or other inputs	1,631,930	-	1,631,930	-
Current year amortization of change in assumptions	-	(207,845)	(1,223,167)	1,015,322
Benefit Payments, including Refunds of Employee Contributions	(1,776,208)	-	-	-
Net change	<u>4,996,317</u>	<u>(1,119,596)</u>	<u>6,607</u>	<u>5,646,322</u>
Plan Fiduciary Net Position:				
Contributions - Employer	651,211	-	(651,211)	-
Contributions - State	436,174	-	(436,174)	-
Contributions - Employee	383,491	-	-	(383,491)
Contributions - Buy Back	-	-	-	-
Projected Net Investment Income	3,698,123	-	-	(3,698,123)
Difference between projected and actual earnings on Pension Plan investments	921,091	921,091	-	-
Current year amortization	-	(578,843)	(435,331)	(143,512)
Benefit Payments, including Refunds of Employee Contributions	(1,776,208)	-	-	-
Administrative Expenses	(80,663)	-	-	80,663
Net change	<u>4,233,219</u>	<u>342,248</u>	<u>(1,522,716)</u>	<u>(4,144,463)</u>
Ending Balance	<u>\$ 2,011,742</u>	<u>\$ 2,301,529</u>	<u>TBD</u>	<u>\$ 1,501,859</u>

* Employer and State Contributions subsequent to the measurement date made after September 30, 2020 but made on or before September 30, 2021 need to be added.

AMORTIZATION SCHEDULE - INVESTMENTS

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

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2020	\$ (921,091)	5	\$ -	\$ (184,219)	\$ (184,218)	\$ (184,218)	\$ (184,218)	\$ (184,218)	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 1,862,081	5	\$ 372,417	\$ 372,416	\$ 372,416	\$ 372,416	\$ 372,416	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (822,644)	5	\$ (164,529)	\$ (164,529)	\$ (164,529)	\$ (164,529)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (1,150,474)	5	\$ (230,095)	\$ (230,095)	\$ (230,095)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 314,575	5	\$ 62,915	\$ 62,915	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 2,633,014	5	\$ 526,603	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 567,311	\$ (143,512)	\$ (206,426)	\$ 23,669	\$ 188,198	\$ (184,218)	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions

Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2020	\$ 1,631,930	3	\$ -	\$ 543,976	\$ 543,977	\$ 543,977	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 1,577,924	3	\$ 525,974	\$ 525,975	\$ 525,975	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (831,381)	4	\$ (207,845)	\$ (207,845)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 1,378,943	9	\$ 153,216	\$ 153,216	\$ 153,216	\$ 153,216	\$ 153,216	\$ 153,216	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 471,345	\$ 1,015,322	\$ 1,223,168	\$ 697,193	\$ 153,216	\$ 153,216	\$ -	\$ -	\$ -	\$ -	\$ -

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)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2020	\$ 250,384	3	\$ -	\$ 83,462	\$ 83,461	\$ 83,461	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 864,392	3	\$ 288,130	\$ 288,131	\$ 288,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ 876,960	4	\$ 219,240	\$ 219,240	\$ 219,240	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (2,641,499)	4	\$ (660,375)	\$ (660,375)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (2,262,386)	9	\$ (251,376)	\$ (251,376)	\$ (251,376)	\$ (251,376)	\$ (251,376)	\$ (251,376)	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 555,367	9	\$ 61,707	\$ 61,707	\$ 61,707	\$ 61,707	\$ 61,707	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (342,674)	\$ (259,211)	\$ 401,163	\$ (106,208)	\$ (189,669)	\$ (251,376)	\$ -	\$ -	\$ -	\$ -	\$ -