

CITY OF EUSTIS  
MUNICIPAL FIREFIGHTERS' PENSION AND RETIREMENT SYSTEM  
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

May 10, 2021

Board of Trustees  
City of Eustis  
Firefighters' Pension Board

Re: City of Eustis Municipal Firefighters' Pension and Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Eustis Municipal Firefighters' Pension and Retirement System. Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. 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 Eustis, 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.

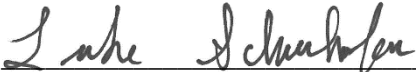
To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Eustis, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Municipal Firefighters' Pension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

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

Respectfully submitted,

Foster & Foster, Inc.

By:   
Patrick T. Donlan, EA, ASA, MAAA  
Enrolled Actuary #20-6595

By:   
Luke M. Schoenhofen, ASA, MAAA

PTD/lke  
Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Eustis Municipal Firefighters' Pension and Retirement System, 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 Applicable to Fiscal Year Ending	10/1/2020 <u>9/30/2022</u>	10/1/2019 <u>9/30/2021</u>
Minimum Required Contribution % of Projected Annual Payroll	49.2%	52.3%
Member Contributions (Est.) % of Projected Annual Payroll	4.0%	4.0%
City And State Required Contribution % of Projected Annual Payroll	45.2%	48.3%
State Contribution (Est.) <sup>1</sup> % of Projected Annual Payroll	\$94,509 6.2%	\$94,509 6.2%
City Required Contribution <sup>2</sup> % of Projected Annual Payroll	39.0%	42.1%

<sup>1</sup> The State Contribution reflects the “default” calculation under Chapter 2015-39 Laws of Florida. We applied this effective October 1, 2016. It is important to note that the estimated allowable State Contribution is based on the amount received in 2020.

<sup>2</sup> The required contribution from the combination of City and State sources for the year ending September 30, 2022, is 45.2% of the actual payroll realized in that year. As a budgeting tool, the City may contribute 39.0% of each Member’s Salary and then make a one-time adjustment to account for the actual State Monies received. Please note that a shortfall contribution of \$22,870.79 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 decrease when compared to the results determined in the October 1, 2019 actuarial valuation report. The decrease is primarily attributable to net favorable plan experience and an assumption change outlined on the following page.

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial gain included inactive mortality experience, an average salary increase of 4.70% which fell short of the 6.52% assumption, and an investment return of 8.98% (Actuarial Asset Basis) which exceeded the 7.80% assumption. There were no significant sources of actuarial loss.

## CHANGES SINCE PRIOR VALUATION

### Plan Changes

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

### Actuarial Assumption/Method Changes

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 adjustments made based on plan demographics.

There have been no method changes since the prior valuation.

## CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2019	41.3%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	0.8%
Change in Normal Cost Rate	-0.2%
Change in Administrative Expense Percentage	0.1%
Payroll Change Effect on UAAL Amortization	-0.5%
Investment Return (Actuarial Asset Basis)	-0.9%
Salary Increases	-1.3%
Active Decrements	-0.1%
Inactive Mortality	-0.1%
Increase in Share Plan Balance	0.2%
Assumption Change	-1.4%
Other	<u>1.1%</u>
Total Change in Contribution	-2.3%
(3) Contribution Determined as of October 1, 2020	39.0%



COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
<b>A. Participant Data</b>			
Actives	22	22	22
Service Retirees	16	16	17
DROP Retirees	1	1	1
Beneficiaries	2	2	1
Disability Retirees	3	3	3
Terminated Vested	<u>16</u>	<u>16</u>	<u>15</u>
<b>Total</b>	<b>60</b>	<b>60</b>	<b>59</b>
Total Annual Payroll	\$1,527,844	\$1,527,844	\$1,502,331
Payroll Under Assumed Ret. Age	1,527,844	1,527,844	1,502,331
Annual Rate of Payments to:			
Service Retirees	444,795	444,795	512,721
DROP Retirees	71,202	71,202	71,202
Beneficiaries	82,133	82,133	14,207
Disability Retirees	76,298	76,298	76,298
Terminated Vested	140,220	140,220	101,476
<b>B. Assets</b>			
Actuarial Value (AVA) <sup>1</sup>	11,544,602	11,544,602	10,510,008
Market Value (MVA) <sup>1</sup>	11,667,183	11,667,183	10,271,020
<b>C. Liabilities</b>			
Present Value of Benefits			
Actives			
Retirement Benefits	5,756,071	5,808,005	5,540,809
Disability Benefits	532,882	509,414	497,753
Death Benefits	39,389	53,087	52,379
Vested Benefits	826,978	830,782	885,628
Refund of Contributions	45,768	45,747	46,266
Service Retirees	4,435,097	4,561,889	5,473,565
DROP Retirees <sup>1</sup>	1,042,803	1,052,196	988,022
Beneficiaries	941,229	957,841	145,243
Disability Retirees	816,522	788,787	796,911
Terminated Vested	983,233	992,377	674,464
Share Plan Balances <sup>1</sup>	<u>95,739</u>	<u>95,739</u>	<u>43,989</u>
<b>Total</b>	<b>15,515,711</b>	<b>15,695,864</b>	<b>15,145,029</b>

C. Liabilities - (Continued)	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
Present Value of Future Salaries	13,356,257	13,343,212	13,268,975
Present Value of Future Member Contributions	534,250	533,728	530,759
Normal Cost (Retirement)	190,764	192,574	189,611
Normal Cost (Disability)	34,243	32,679	31,892
Normal Cost (Death)	1,399	1,860	1,869
Normal Cost (Vesting)	39,072	39,246	42,881
Normal Cost (Refunds)	<u>10,093</u>	<u>10,093</u>	<u>8,962</u>
Total Normal Cost	275,571	276,452	275,215
Present Value of Future Normal Costs	2,178,068	2,182,327	2,189,325
Accrued Liability (Retirement)	4,140,094	4,179,167	3,915,392
Accrued Liability (Disability)	258,315	248,570	238,557
Accrued Liability (Death)	27,184	36,792	35,880
Accrued Liability (Vesting)	585,266	588,026	630,114
Accrued Liability (Refunds)	12,161	12,153	13,567
Accrued Liability (Inactives) <sup>1</sup>	8,218,884	8,353,090	8,078,205
Share Plan Balances <sup>1</sup>	<u>95,739</u>	<u>95,739</u>	<u>43,989</u>
Total Actuarial Accrued Liability (EAN AL)	13,337,643	13,513,537	12,955,704
Unfunded Actuarial Accrued Liability (UAAL)	1,793,041	1,968,935	2,445,696
Funded Ratio (AVA / EAN AL)	86.6%	85.4%	81.1%

D. Actuarial Present Value of Accrued Benefits	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
Vested Accrued Benefits			
Inactives + Share Plan Balances <sup>1</sup>	8,314,623	8,448,829	8,122,194
Actives	1,794,711	1,802,824	1,750,011
Member Contributions	<u>436,567</u>	<u>436,567</u>	<u>416,709</u>
Total	10,545,901	10,688,220	10,288,914
Non-vested Accrued Benefits	<u>369,907</u>	<u>374,277</u>	<u>266,492</u>
Total Present Value			
Accrued Benefits (PVAB)	10,915,808	11,062,497	10,555,406
Funded Ratio (MVA / PVAB)	106.9%	105.5%	97.3%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	(146,689)	0	
Plan Experience	0	340,746	
Benefits Paid	0	(632,316)	
Interest	0	798,661	
Other	<u>0</u>	<u>0</u>	
Total	(146,689)	507,091	

	New Assump	Old Assump	
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 (with interest) % of Total Annual Payroll <sup>2</sup>	18.7	18.8	19.0
Administrative Expenses (with interest) % of Total Annual Payroll <sup>2</sup>	2.6	2.6	2.5
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 15 years (as of 10/1/2020, with interest) % of Total Annual Payroll <sup>2</sup>	27.9	29.2	30.8
Minimum Required Contribution % of Total Annual Payroll <sup>2</sup>	49.2	50.6	52.3
Expected Member Contributions % of Total Annual Payroll <sup>2</sup>	4.0	4.0	4.0
Expected City and State Contribution % of Total Annual Payroll <sup>2</sup>	45.2	46.6	48.3

F. Past Contributions

Plan Years Ending:	<u>9/30/2020</u>
Total Required Contribution	740,631
City and State Requirement	683,550
Actual Contributions Made:	
Members (excluding buyback)	57,081
City	589,041
State	<u>94,509</u>
Total	740,631

G. Net Actuarial (Gain)/Loss (230,147)

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

<sup>2</sup> Contributions developed as of 10/1/2020 are expressed as a percentage of total annual payroll at 10/1/2020 of \$1,527,844.

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	1,793,041
2021	1,490,592
2022	1,164,553
2025	25,767
2035	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2020	4.70%	6.52%
Year Ended 9/30/2019	7.05%	6.15%
Year Ended 9/30/2018	5.28%	6.73%
Year Ended 9/30/2017	4.62%	6.50%
Year Ended 9/30/2016	5.51%	6.50%

(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	12.74%	8.98%	7.80%
Year Ended 9/30/2019	5.37%	7.77%	7.90%
Year Ended 9/30/2018	7.47%	6.26%	7.90%
Year Ended 9/30/2017	10.48%	6.65%	8.00%
Year Ended 9/30/2016	7.83%	7.58%	8.00%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2020	\$1,527,844
	10/1/2010	1,003,447
(b) Total Increase		52.26%
(c) Number of Years		10.00
(d) Average Annual Rate		4.29%

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.



Patrick T. Donlan, EA, ASA, MAAA  
Enrolled Actuary #20-6595

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	\$2,445,696
(2) Sponsor Normal Cost developed as of October 1, 2019	215,122
(3) Expected administrative expenses for the year ended September 30, 2020	35,781
(4) Expected interest on (1), (2) and (3)	208,939
(5) Sponsor contributions to the System during the year ended September 30, 2020	683,550
(6) Expected interest on (5)	22,906
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2020 (1)+(2)+(3)+(4)-(5)-(6)	2,199,082
(8) Change to UAAL due to Assumption Change	(175,894)
(9) Change to UAAL due to Actuarial (Gain)/Loss	(230,147)
(10) Unfunded Actuarial Accrued Liability as of October 1, 2020	1,793,041

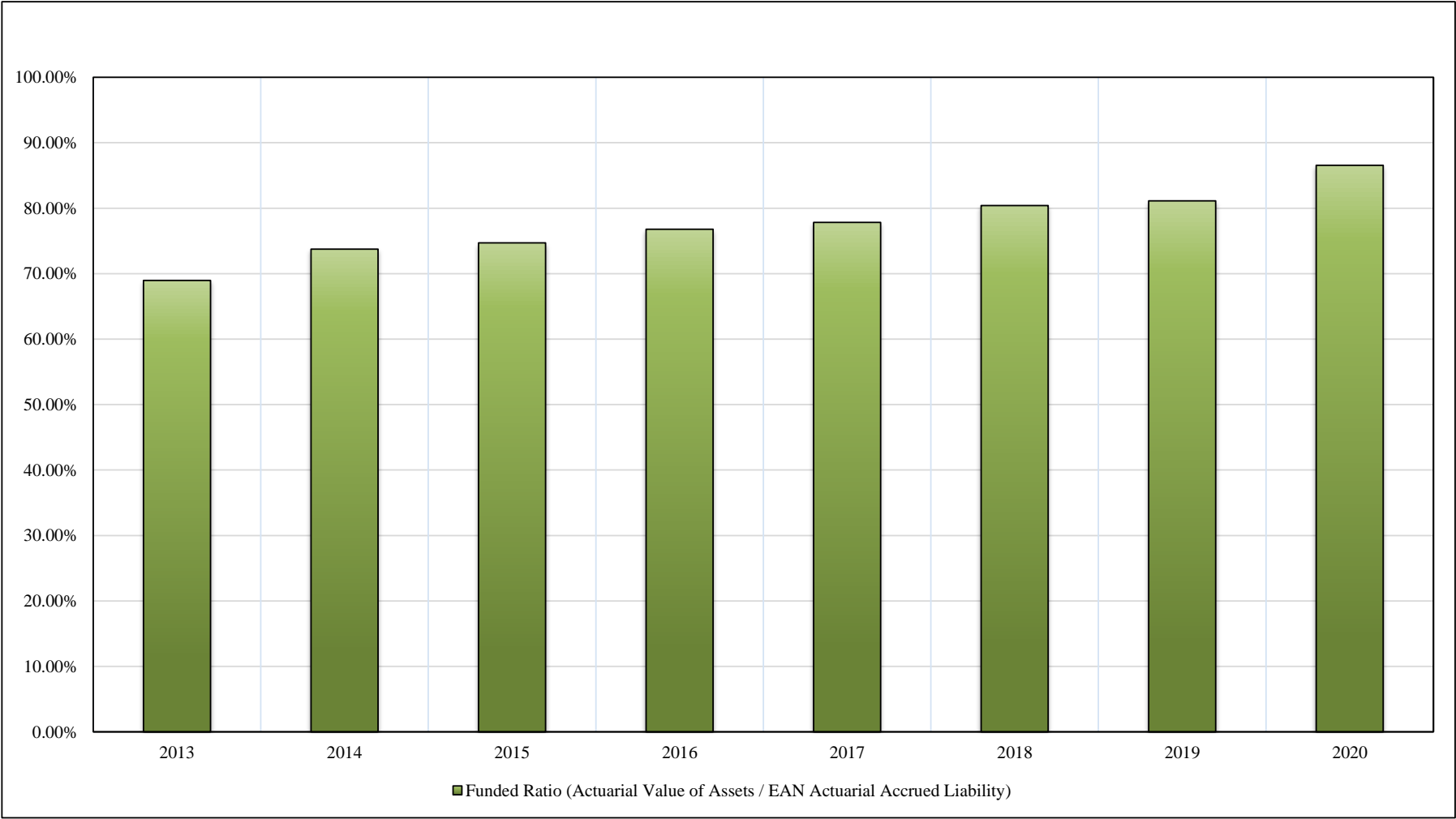
<u>Type of</u> <u>Base</u>	<u>Date</u> <u>Established</u>	<u>Years</u> <u>Remaining</u>	<u>10/1/2020</u> <u>Amount</u>	<u>Amortization</u> <u>Amount</u>
Consolidation	10/1/2018	5	1,736,663	401,362
Actuarial Loss	10/1/2018	13	226,659	26,310
Assump Change	10/1/2018	13	(19,154)	(2,223)
Benefits Change	10/1/2018	13	(5,864)	(681)
Actuarial Loss	10/1/2019	14	97,483	10,842
Assump Change	10/1/2019	14	163,295	18,161
Actuarial Gain	10/1/2020	15	(230,147)	(24,639)
Assump Change	10/1/2020	15	(175,894)	(18,831)
			<u>1,793,041</u>	<u>410,301</u>

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2019	\$2,445,696
(2) Expected UAAL as of October 1, 2020	2,199,082
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(124,513)
Salary Increases	(182,460)
Active Decrements	(11,594)
Inactive Mortality	(8,566)
Increase in Share Plan Balance	25,547
Other	<u>71,439</u>
Increase in UAAL due to (Gain)/Loss	(230,147)
Assumption Changes	<u>(175,894)</u>
(4) Actual UAAL as of October 1, 2020	\$1,793,041



# HISTORY OF FUNDING PROGRESS



## ACTUARIAL ASSUMPTIONS AND METHODS

### Mortality Rate

#### *Healthy Active Lives:*

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

**Male:** PubS.H-2010 (Below Median) 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 (Below Median) 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 (Below Median) for Healthy Retirees. Prior year assumption: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

**Male:** PubG.H-2010 (Below Median) 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. We feel this assumption sufficiently accommodates future mortality improvements.

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 adjustments made based on plan demographics.

90% of active deaths are assumed to be service-incurred.

Interest Rate

7.80% 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 on the following page. Projected average final salary at retirement is increased by 5.00% to account for final non-regular compensation. Effective with the October 1, 2018 valuation, this load is 0% for those hired on or after July 1, 2011. The current assumed salary increase rate resulted from a September 1, 2017 Experience Study.

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

\$38,948 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Funding Method

Entry Age Normal Actuarial Cost Method.

Amortization Method

New UAAL amortization bases are amortized over 15 years.

Funding 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.

Disability Rates

See table on the following page. It is assumed that 90% (prior year 66.67%) of disabilities are in the line of duty. This is based on the results of an actuarial experience study issued September 1, 2017.

Termination Rates

See table on the following page. The current rates of termination resulted from a September 1, 2017 Experience Study.

Normal Retirement Age

Earlier of:

- a) Age 55 and the completion of 10 years of service, or
- b) Age 52 and the completion of 25 years of service.

This is based on the results of an actuarial experience study issued September 1, 2017.

Early Retirement Age

Commencing at eligibility for Early Retirement, members are assumed to retire with an immediate benefit at the rate of 5.0% per year. This is based on the results of an actuarial experience study issued September 1, 2017.

Termination, Disability, and Salary Increase Rate Tables

<u>% Terminating During the Year</u>		<u>% Becoming Disabled During the Year</u>		<u>Salary Scale</u>	
<u>Service</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>
0	25.0%	20	0.14%	0	15.00%
1-4	13.0%	25	0.15%	1	10.00%
5-9	9.0%	30	0.18%	2	8.00%
10-19	5.0%	35	0.23%	3	7.00%
20+	0.0%	40	0.30%	4	6.50%
		45	0.51%	5-9	6.25%
		50	1.00%	10-14	6.00%
		55	1.55%	15+	5.00%
		60	2.23%		
		65	2.79%		

## 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 136.8% on October 1, 2010 to 84.6% 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 61.6%. 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 73.4% on October 1, 2010 to 86.6% 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, increased from -1.3% on October 1, 2010 to 0.7% on October 1, 2020. The current Net Cash Flow Ratio of 0.7% indicates that contributions are 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>10/1/2010</u>	<u>10/1/2015</u>	<u>10/1/2019</u>	<u>10/1/2020</u>
<u>Support Ratio</u>				
Total Actives	26	23	22	22
Total Inactives <sup>1</sup>	19	23	25	26
Actives / Inactives <sup>1</sup>	136.8%	100.0%	88.0%	84.6%
 <u>Asset Volatility Ratio</u>				
Market Value of Assets (MVA)	5,129,216	7,134,067	10,271,020	11,667,183
Total Annual Payroll	1,003,447	1,263,287	1,502,331	1,527,844
MVA / Total Annual Payroll	511.2%	564.7%	683.7%	763.6%
 <u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	3,778,545	6,543,059	8,078,205	8,218,884
Total Accrued Liability (EAN)	7,850,544	10,020,866	12,955,704	13,337,643
Inactive AL / Total AL	48.1%	65.3%	62.4%	61.6%
 <u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	5,758,511	7,485,934	10,510,008	11,544,602
Total Accrued Liability (EAN)	7,850,544	10,020,866	12,955,704	13,337,643
AVA / Total Accrued Liability (EAN)	73.4%	74.7%	81.1%	86.6%
 <u>Net Cash Flow Ratio</u>				
Net Cash Flow <sup>2</sup>	(64,616)	155,557	(243,738)	87,028
Market Value of Assets (MVA)	5,129,216	7,134,067	10,271,020	11,667,183
Ratio	-1.3%	2.2%	-2.4%	0.7%

<sup>1</sup> Excludes terminated participants awaiting a refund of member contributions.

<sup>2</sup> 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	46,987.00	_____%
1999	37,705.21	-19.8%
2000	43,827.38	16.2%
2001	46,377.71	5.8%
2002	43,434.00	-6.3%
2003	54,751.82	26.1%
2004	53,532.74	-2.2%
2005	60,043.32	12.2%
2006	65,916.92	9.8%
2007	76,903.55	16.7%
2008	99,201.43	29.0%
2009	102,764.07	3.6%
2010	85,818.43	-16.5%
2011	85,151.47	-0.8%
2012	85,206.79	0.1%
2013	95,824.03	12.5%
2014	90,690.37	-5.4%
2015	101,738.84	12.2%
2016	115,997.48	14.0%
2017	108,561.04	-6.4%
2018	109,423.87	0.8%
2019	115,462.84	5.5%
2020	113,353.84	-1.8%

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2020

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	129,976.52	129,976.52
Total Cash and Equivalents	129,976.52	129,976.52
Receivables:		
Additional City Contributions	22,870.79	22,870.79
Investment Income	2,058.71	2,058.71
Total Receivable	24,929.50	24,929.50
Investments:		
Stocks	1,221,646.39	1,450,853.78
Mutual Funds:		
Fixed Income	4,042,260.09	4,352,987.02
Equity	4,143,125.66	5,713,936.07
Total Investments	9,407,032.14	11,517,776.87
Total Assets	9,561,938.16	11,672,682.89
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	5,500.00	5,500.00
Total Liabilities	5,500.00	5,500.00
NET POSITION RESTRICTED FOR PENSIONS	9,556,438.16	11,667,182.89

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

ADDITIONS

Contributions:

Member	57,081.41
City	589,040.83
State	113,353.84

Total Contributions 759,476.08

Investment Income:

Net Realized Gain (Loss)	63,564.16	
Unrealized Gain (Loss)	963,264.12	
Net Increase in Fair Value of Investments		1,026,828.28
Interest & Dividends		314,119.41
Less Investment Expense <sup>1</sup>		(31,813.03)

Net Investment Income 1,309,134.66

Total Additions 2,068,610.74

DEDUCTIONS

Distributions to Members:

Benefit Payments	604,355.25
Lump Sum DROP Distributions	19,082.88
Lump Sum Share Distributions	0.00
Refunds of Member Contributions	8,877.66

Total Distributions 632,315.79

Administrative Expense 40,132.16

Total Deductions 672,447.95

Net Increase in Net Position 1,396,162.79

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 10,271,020.10

End of the Year 11,667,182.89

<sup>1</sup>Investment 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 <sup>1</sup>	
09/30/2017	10.48%	
09/30/2018	7.47%	
09/30/2019	5.37%	
09/30/2020	12.74%	
Annualized Rate of Return for prior four (4) years:		8.98%
(A) 10/01/2019 Actuarial Assets:		\$10,510,008.10
(I) Net Investment Income:		
1. Interest and Dividends	314,119.41	
2. Realized Gain (Loss)	63,564.16	
3. Unrealized Gain (Loss)	963,264.12	
4. Change in Actuarial Value	(361,569.32)	
5. Investment Related Expenses	(31,813.03)	
Total		947,565.34
(B) 10/01/2020 Actuarial Assets:		\$11,544,601.57
Actuarial Asset Rate of Return = 2I/(A+B-I):		8.98%
10/01/2020 Limited Actuarial Assets:		\$11,544,601.57
10/01/2020 Market Value of Assets:		\$11,667,182.89
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)		\$124,513.04

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

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

REVENUES

Contributions:		
Member	57,081.41	
City	589,040.83	
State	113,353.84	
Total Contributions		759,476.08
Earnings from Investments:		
Interest & Dividends	314,119.41	
Net Realized Gain (Loss)	63,564.16	
Unrealized Gain (Loss)	963,264.12	
Change in Actuarial Value	(361,569.32)	
Total Earnings and Investment Gains		979,378.37
EXPENDITURES		
Distributions to Members:		
Benefit Payments	604,355.25	
Lump Sum DROP Distributions	19,082.88	
Lump Sum Share Distributions	0.00	
Refunds of Member Contributions	8,877.66	
Total Distributions		632,315.79
Expenses:		
Investment related <sup>1</sup>	31,813.03	
Administrative	40,132.16	
Total Expenses		71,945.19
Change in Net Assets for the Year		1,034,593.47
Net Assets Beginning of the Year		10,510,008.10
Net Assets End of the Year <sup>2</sup>		11,544,601.57

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

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

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

Beginning of the Year Balance	68,909.42
Plus Additions	71,201.52
Investment Return Earned	14,331.40
Less Distributions	(19,082.88)
End of the Year Balance	135,359.46

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

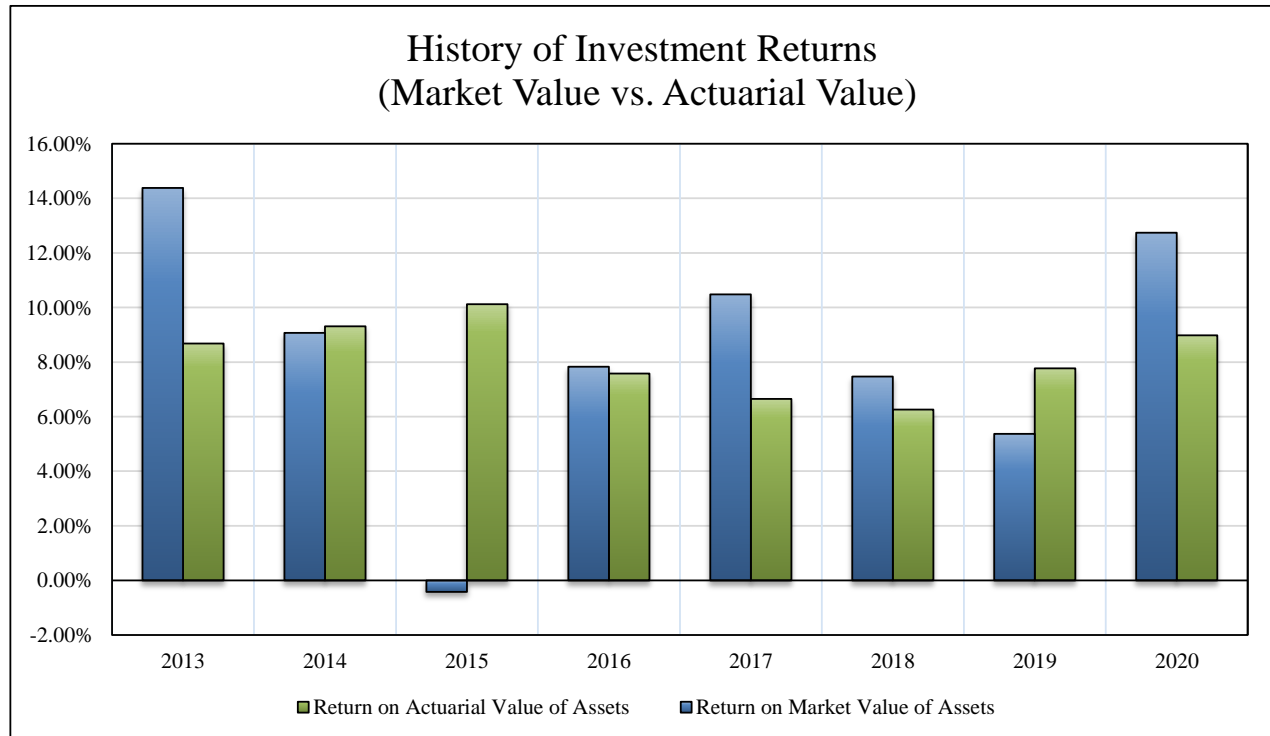
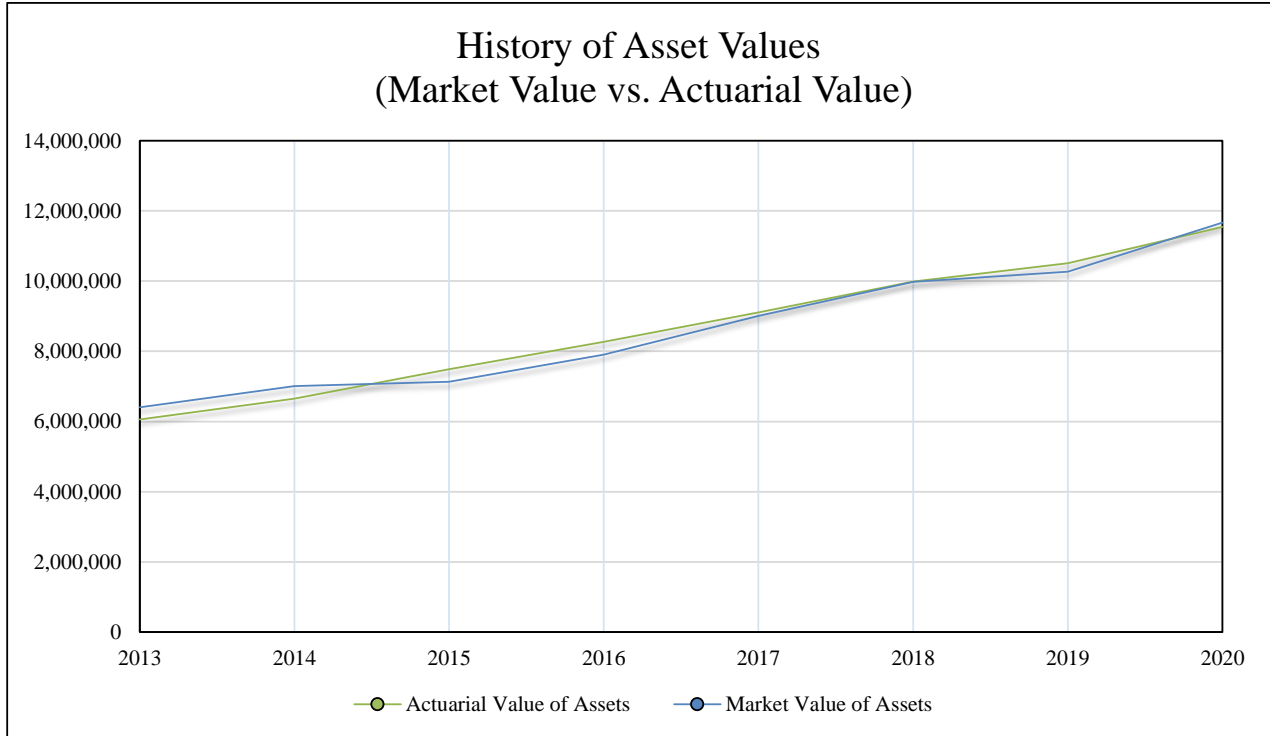
9/30/2019 Balance	43,988.99
Prior Year Adjustment	25,546.53
Plus Additions	18,844.79
Investment Return Earned (Est.)	8,858.82
Administrative Fees	(1,500.00)
Less Distributions	<u>0.00</u>
9/30/2020 Balance (Est.)	95,739.13



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

(1)	Total Required Contribution Rate	51.9%
(2)	Pensionable Payroll Derived from Member Contributions	\$1,427,035.25
(3)	Total Required Contribution (1) x (2)	740,631.29
(4)	Less Actual Member Contributions	(57,081.41)
(5)	Less Allowable State Contribution	<u>(94,509.05)</u>
(6)	Equals Required City Contribution for Fiscal 2020	589,040.83
(7)	Plus 2019 Shortfall Contribution	363.47
(8)	Less Actual City Contributions	<u>(566,533.51)</u>
(9)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2020	\$22,870.79

# 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	22	22	22	22
Average Current Age	35.9	36.9	36.3	36.4
Average Age at Employment	26.2	26.2	26.9	26.8
Average Past Service	9.7	10.7	9.4	9.6
Average Annual Salary	\$64,811	\$67,898	\$68,288	\$69,447
<u>Service Retirees</u>				
Number	15	15	17	16
Average Current Age	67.1	68.1	67.5	69.1
Average Annual Benefit	\$28,502	\$28,502	\$30,160	\$27,800
<u>DROP Retirees</u>				
Number	1	1	1	1
Average Current Age	54.9	55.9	55.7	56.7
Average Annual Benefit	\$76,332	\$76,332	\$71,202	\$71,202
<u>Beneficiaries</u>				
Number	1	1	1	2
Average Current Age	64.2	65.2	66.2	59.4
Average Annual Benefit	\$14,207	\$14,207	\$14,207	\$41,067
<u>Disability Retirees</u>				
Number	3	3	3	3
Average Current Age	47.6	48.6	49.6	50.6
Average Annual Benefit	\$25,433	\$25,433	\$25,433	\$25,433
<u>Terminated Vested</u>				
Number	15	15	15	16
Average Current Age <sup>1</sup>	40.3	50.7	48.6	49.2
Average Annual Benefit <sup>2</sup>	\$12,231	\$12,231	\$33,825	\$35,055

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

<sup>2</sup> 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	1	1				1						3
30 - 34	1					5	1					7
35 - 39						1	3	1				5
40 - 44		1					3	1				5
45 - 49									1			1
50 - 54						1						1
55 - 59												0
60 - 64												0
65+												0
<b>Total</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>22</b>

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2019	22
b. Terminations	
i. Vested (partial or full) with deferred annuity	(1)
ii. Vested in refund of member contributions only	0
iii. Refund of member contributions or full lump sum distribution received	(1)
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	20
h. New entrants	<u>2</u>
i. Total active life participants in valuation	<u>22</u>

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) <u>Refund</u>	Vested (Due Refund) <u>Refund</u>	<u>Total</u>
a. Number prior valuation	17	1	1	3	3	12	37
Retired	0	0	0	0	0	0	0
DROP	0	0	0	0	0	0	0
Vested (Deferred Annuity)	0	0	0	0	1	0	1
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	0	0	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	16	1	2	3	4	12	38

SUMMARY OF CURRENT PLAN  
(Through Ordinance 18-16)

<u>Eligibility</u>	All regular uniformed members of the Fire Department; includes active volunteers. Optional participation for the Fire Chief.
<u>Salary</u>	Total Compensation for services rendered, including payments of accumulated leave at retirement. Salary on or after July 1, 2011 will not include more than 300 hours of overtime nor payments for accumulated leave earned after that date.
<u>Average Final Compensation (AFC)</u>	One twelfth of the average of the 5 best years of the last 10 years of Salary (10 best of career for volunteers).
<u>Credited Service</u>	Years and fractional parts of years of service with the City as a Firefighter (with Member contributions when required).
<u>Normal Retirement</u>	
Date	The earlier of: a) age 55 and the completion of 10 years of Credited Service, or b) age 52 and the completion of 25 years of Credited Service.
Benefit	4.00% of AFC times Credited Service.
Form of Benefit	10 Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Date	Age 50 and 10 years of Credited Service.
Benefit	Determined as for Normal Retirement and reduced 3.00% per year.
Form of Benefit	10 Year Certain and Life Annuity (options available).
<u>Disability Benefit</u>	
Eligibility	Total and permanent as determined by the Board (medical proof required).
Benefit	Benefit accrued to date of disability. Minimum benefit for Service Incurred is 65% of AFC, for Non-Service Incurred is 25% of AFC.
Duration	Life, with 10 years guaranteed, or until recovery, as determined by the Board (options available).

Death Benefit

Pre-Retirement

Not Vested

Refund of Member Contributions.

Vested

Beneficiary receives the benefit otherwise payable to the firefighter on the date the firefighter would have reached Normal or Early Retirement.

Post-Retirement

According to optional form of benefit selected.

Termination of Employment

Less than 10 years

Refund of Member Contributions without interest.

10 or more

Refund of Contributions or Accrued benefit payable at retirement age.

Member Contributions

Amount

2.00% of Salary: November 1, 2004 – October 31, 2005  
3.00% of Salary: November 1, 2005 – October 31, 2006  
4.00% of Salary: After October 31, 2006.

Deferred Retirement Option Plan

Eligibility

Eligibility for Normal Retirement.

Participation

Not to exceed 60 months.

Rate of Return

At Member's election:

- (1) Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs) credited each fiscal quarter, or
- (2) Interest Rate credited to Members of the Florida Retirement System DROP, compounded monthly.

Members may elect to change form of return once during their DROP participation.

Form of Distribution

Cash lump sum (options available).

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2020

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	129,977
Total Cash and Equivalents	129,977
Receivables:	
Additional City Contributions	22,871
Investment Income	2,058
Total Receivable	24,929
Investments:	
Stocks	1,450,854
Mutual Funds:	
Fixed Income	4,352,987
Equity	5,713,936
Total Investments	11,517,777
Total Assets	11,672,683
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	5,500
Total Liabilities	5,500
NET POSITION RESTRICTED FOR PENSIONS	11,667,183



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

ADDITIONS

## Contributions:

Member	57,081	
City	589,041	
State	113,354	
 Total Contributions		 759,476
 Investment Income:		
Net Increase in Fair Value of Investments	1,026,828	
Interest & Dividends	314,120	
Less Investment Expense <sup>1</sup>	(31,813)	
 Net Investment Income		 1,309,135
 Total Additions		 2,068,611

DEDUCTIONS

## Distributions to Members:

Benefit Payments	604,355	
Lump Sum DROP Distributions	19,083	
Refunds of Member Contributions	8,878	
 Total Distributions		 632,316
 Administrative Expense		 40,132
 Total Deductions		 672,448
 Net Increase in Net Position		 1,396,163
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		10,271,020
 End of the Year		 11,667,183

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

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

*Plan Administration*

The City of Eustis Municipal Firefighters' Pension and Retirement System is a single-employer defined benefit pension Plan administered by a Board of Trustees. The Board consists of five Trustees, two of whom are appointed by the City Commission, two of whom are full-time Firefighters, elected by a majority of the Members of the Plan, and a fifth Member elected by the other four and appointed by Commission.

*Plan Membership as of October 1, 2019:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	22
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	15
Active Plan Members	22
	59
	59

*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 Eustis Municipal Firefighters' Pension and Retirement System prepared by Foster & Foster Actuaries and Consultants.

*Contributions*

Member Contributions:

2.00% of Salary: November 1, 2004 – October 31, 2005

3.00% of Salary: November 1, 2005 – October 31, 2006

4.00% of Salary: After October 31, 2006

City Contributions:

Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Chapter 112, Florida Statutes.

*Investment Policy:*

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

Asset Class	Target Allocation
Domestic Equity	45.0%
International Equity	15.0%
Domestic Fixed Income	25.0%
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 12.74 percent.

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

Deferred Retirement Option Program

Eligibility: Eligibility for Normal Retirement.

Participation: Not to exceed 60 months.

Rate of Return: At Member's election:

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

(2) Interest Rate credited to Members of the Florida Retirement System DROP, compounded monthly.

Members may elect to change form of return once during their DROP participation.

The DROP balance as September 30, 2020 is \$135,359.

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	\$ 13,280,912
Plan Fiduciary Net Position	\$ (11,667,183)
Sponsor's Net Pension Liability	<u>\$ 1,613,729</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	87.85%

*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	7.80%
Investment Rate of Return	7.80%

*Mortality Rate Healthy Active Lives:*

Female: PubS.H-2010 (Below Median) for Employees, set forward one year.

Male: PubS.H-2010 (Below Median) 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 (Below Median) for Healthy Retirees, set forward one year.

*Mortality Rate Beneficiary Lives:*

Female: PubG.H-2010 (Below Median) for Healthy Retirees.

Male: PubG.H-2010 (Below Median) 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. We feel this assumption sufficiently accommodates future mortality improvements.

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.

75% of active deaths are assumed to be service-incurred.

The most recent actuarial experience study used to review the other significant assumptions was dated September 1, 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.

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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 Return<sup>1</sup></u>
Domestic Equity	7.5%
International Equity	8.5%
Domestic Fixed Income	2.5%
Real Estate	4.5%
GTAA	3.5%

<sup>1</sup> Source: AndCo Consulting

### *Discount Rate:*

The Discount Rate used to measure the Total Pension Liability was 7.80 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.

	<u>1% Decrease</u>	<u>Current</u>	<u>1% Increase</u>
	<u>6.80%</u>	<u>Discount Rate</u>	<u>8.80%</u>
	<u>6.80%</u>	<u>7.80%</u>	<u>8.80%</u>
Sponsor's Net Pension Liability	\$ 3,391,417	\$ 1,613,729	\$ 145,498

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

	09/30/2020	09/30/2019
Total Pension Liability		
Service Cost	276,487	257,123
Interest	985,657	947,278
Share Plan Allocation	18,845	10,717
Changes of benefit terms	-	(6,344)
Differences between Expected and Actual Experience	109,268	72,910
Changes of assumptions	(153,334)	125,475
Benefit Payments, including Refunds of Employee Contributions	(632,316)	(941,866)
Net Change in Total Pension Liability	604,607	465,293
Total Pension Liability - Beginning	12,676,305	12,211,012
Total Pension Liability - Ending (a)	<u>\$ 13,280,912</u>	<u>\$ 12,676,305</u>
Plan Fiduciary Net Position		
Contributions - Employer	589,041	563,329
Contributions - State	113,354	115,463
Contributions - Employee	57,081	57,100
Net Investment Income	1,309,135	534,775
Benefit Payments, including Refunds of Employee Contributions	(632,316)	(941,866)
Administrative Expense	(40,132)	(37,764)
Net Change in Plan Fiduciary Net Position	1,396,163	291,037
Plan Fiduciary Net Position - Beginning	10,271,020	9,979,983
Plan Fiduciary Net Position - Ending (b)	<u>\$ 11,667,183</u>	<u>\$ 10,271,020</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 1,613,729</u>	<u>\$ 2,405,285</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	87.85%	81.03%
Covered Payroll	\$ 1,427,035	\$ 1,427,511
Net Pension Liability as a percentage of Covered Payroll	113.08%	168.50%

**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.

Additionally, Ordinance nr. 18-16 was adopted which restated the Plan.

*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 adjustments made based on plan demographics.

For measurement date 09/30/2019, amounts reported as changes of assumptions resulted from the following change:

- the final salary load was amended to be 0% for those Members hired on and after July 1, 2011 based on the salary definition in ordinance number 18-16.
- the investment return was lowered from 7.9% to 7.8% per year compounded annually, 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	\$ 683,550	\$ 683,550	\$ -	\$ 1,427,035	47.90%
09/30/2019	\$ 668,075	\$ 668,075	\$ -	\$ 1,427,511	46.80%

Notes to Schedule

Valuation Date: 10/01/2018 (AIS 11/18/2019)

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 report for the City of Eustis Municipal Firefighters' Pension and Retirement System 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	12.74%
09/30/2019	5.37%



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

*Plan Description*

The City of Eustis Municipal Firefighters' Pension and Retirement System is a single-employer defined benefit pension Plan administered by a Board of Trustees. The Board consists of five Trustees, two of whom are appointed by the City Commission, two of whom are full-time Firefighters, elected by a majority of the Members of the Plan, and a fifth Member elected by the other four and appointed by Commission.

Eligible are all regular uniformed members of the Fire Department; includes active volunteers. Optional participation for the Fire Chief.

*Plan Membership as of October 1, 2019:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	22
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	15
Active Plan Members	22
	59
	59

*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 Eustis Municipal Firefighters' Pension and Retirement System prepared by Foster & Foster Actuaries and Consultants.

Incorporated are the benefit changes for measurement date September 30, 2020 as noted under the Notes to Schedule of Changes in Net Pension Liability and Ratios.

*Contributions*

Member Contributions:

2.00% of Salary: November 1, 2004 – October 31, 2005

3.00% of Salary: November 1, 2005 – October 31, 2006

4.00% of Salary: After October 31, 2006

City Contributions:

Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Chapter 112, Florida Statutes.

*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, 2019 through September 30, 2020.

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	7.80%
Investment Rate of Return	7.80%

*Mortality Rate Healthy Active Lives:*

Female: PubS.H-2010 (Below Median) for Employees, set forward one year.

Male: PubS.H-2010 (Below Median) 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 (Below Median) for Healthy Retirees, set forward one year.

*Mortality Rate Beneficiary Lives:*

Female: PubG.H-2010 (Below Median) for Healthy Retirees.

Male: PubG.H-2010 (Below Median) 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. We feel this assumption sufficiently accommodates future mortality improvements.

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.

75% of active deaths are assumed to be service-incurred.

The most recent actuarial experience study used to review the other significant assumptions was dated September 1, 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 <sup>1</sup>
Domestic Equity	45.0%	7.50%
International Equity	15.0%	8.50%
Domestic Fixed Income	25.0%	2.50%
Real Estate	10.0%	4.50%
GTAA	5.0%	3.50%
Total	100.0%	

<sup>1</sup> Source: AndCo Consulting

*Discount Rate:*

The Discount Rate used to measure the Total Pension Liability was 7.80 percent.

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

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances at September 30, 2019	\$ 12,676,305	\$ 10,271,020	\$ 2,405,285
Changes for a Year:			
Service Cost	276,487	-	276,487
Interest	985,657	-	985,657
Share Plan Allocation	18,845	-	18,845
Differences between Expected and Actual Experience	109,268	-	109,268
Changes of assumptions	(153,334)	-	(153,334)
Changes of benefit terms	-	-	-
Contributions - Employer	-	589,041	(589,041)
Contributions - State	-	113,354	(113,354)
Contributions - Employee	-	57,081	(57,081)
Net Investment Income	-	1,309,135	(1,309,135)
Benefit Payments, including Refunds of Employee Contributions	(632,316)	(632,316)	-
Administrative Expense	-	(40,132)	40,132
Net Changes	604,607	1,396,163	(791,556)
Balances at September 30, 2020	\$ 13,280,912	\$ 11,667,183	\$ 1,613,729

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.80%	7.80%	8.80%
Sponsor's Net Pension Liability	\$ 3,391,417	\$ 1,613,729	\$ 145,498

*Pension Plan Fiduciary Net Position.*

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

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

For the year ended September 30, 2020, the Sponsor will recognize a Pension Expense of \$519,544.

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	149,873	-
Changes of assumptions	62,738	115,002
Net difference between Projected and Actual Earnings on Pension Plan investments	-	274,003
Total	\$ 212,611	\$ 389,005

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	\$	(8,899)
2022	\$	(3,441)
2023	\$	(63,134)
2024	\$	(100,920)
2025	\$	-
Thereafter	\$	-

**Payable to the Pension Plan**

On September 30, 2020, the Sponsor reported a payable of \$22,871 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

	09/30/2020	09/30/2019
Total Pension Liability		
Service Cost	276,487	257,123
Interest	985,657	947,278
Share Plan Allocation	18,845	10,717
Changes of benefit terms	-	(6,344)
Differences between Expected and Actual Experience	109,268	72,910
Changes of assumptions	(153,334)	125,475
Benefit Payments, including Refunds of Employee Contributions	(632,316)	(941,866)
Net Change in Total Pension Liability	604,607	465,293
Total Pension Liability - Beginning	12,676,305	12,211,012
Total Pension Liability - Ending (a)	<u>\$ 13,280,912</u>	<u>\$ 12,676,305</u>
Plan Fiduciary Net Position		
Contributions - Employer	589,041	563,329
Contributions - State	113,354	115,463
Contributions - Employee	57,081	57,100
Net Investment Income	1,309,135	534,775
Benefit Payments, including Refunds of Employee Contributions	(632,316)	(941,866)
Administrative Expense	(40,132)	(37,764)
Net Change in Plan Fiduciary Net Position	1,396,163	291,037
Plan Fiduciary Net Position - Beginning	10,271,020	9,979,983
Plan Fiduciary Net Position - Ending (b)	<u>\$ 11,667,183</u>	<u>\$ 10,271,020</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 1,613,729</u>	<u>\$ 2,405,285</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	87.85%	81.03%
Covered Payroll	\$ 1,427,035	\$ 1,427,511
Net Pension Liability as a percentage of Covered Payroll	113.08%	168.50%

**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.

Additionally, Ordinance nr. 18-16 was adopted which restated the Plan.

*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 adjustments made based on plan demographics.

For measurement date 09/30/2019, amounts reported as changes of assumptions resulted from the following change:

- the final salary load was amended to be 0% for those Members hired on and after July 1, 2011 based on the salary definition in ordinance number 18-16.
- the investment return was lowered from 7.9% to 7.8% per year compounded annually, 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	\$ 683,550	\$ 683,550	\$ -	\$ 1,427,035	47.90%
09/30/2019	\$ 668,075	\$ 668,075	\$ -	\$ 1,427,511	46.80%

Notes to Schedule

Valuation Date: 10/01/2018 (AIS 11/18/2019)

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 report for the City of Eustis Municipal Firefighters' Pension and Retirement System 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.**

**COMPONENTS OF PENSION EXPENSE**  
**FISCAL YEAR SEPTEMBER 30, 2020**

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 2,405,285	\$ 73,848	\$ 506,159	\$ -
<b>Total Pension Liability Factors:</b>				
Service Cost	276,487	-	-	276,487
Interest	985,657	-	-	985,657
Share Plan Allocation	18,845	-	-	18,845
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	109,268	-	109,268	-
Current year amortization of experience difference	-	-	(101,844)	101,844
Change in assumptions about future economic or demographic factors or other inputs	(153,334)	153,334	-	-
Current year amortization of change in assumptions	-	(38,332)	(71,383)	33,051
Benefit Payments, including Refunds of Employee Contributions	(632,316)	-	-	-
Net change	<u>604,607</u>	<u>115,002</u>	<u>(63,959)</u>	<u>1,415,884</u>
<b>Plan Fiduciary Net Position:</b>				
Contributions - Employer	589,041	-	-	-
Contributions - State	113,354	-	-	-
Contributions - Employee	57,081	-	-	(57,081)
Projected Net Investment Income	804,534	-	-	(804,534)
Difference between projected and actual earnings on Pension Plan investments	504,601	504,601	-	-
Current year amortization	-	(137,845)	(62,988)	(74,857)
Benefit Payments, including Refunds of Employee Contributions	(632,316)	-	-	-
Administrative Expenses	(40,132)	-	-	40,132
Net change	<u>1,396,163</u>	<u>366,756</u>	<u>(62,988)</u>	<u>(896,340)</u>
Ending Balance	<u><u>\$ 1,613,729</u></u>	<u><u>\$ 555,606</u></u>	<u><u>\$ 379,212</u></u>	<u><u>\$ 519,544</u></u>



AMORTIZATION SCHEDULE - INVESTMENTS

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

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2020	\$ (504,601)	5	\$ (100,921)	\$ (100,920)	\$ (100,920)	\$ (100,920)	\$ (100,920)	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 244,016	5	\$ 48,803	\$ 48,803	\$ 48,803	\$ 48,803	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ 50,480	5	\$ 10,096	\$ 10,096	\$ 10,096	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (184,618)	5	\$ (36,924)	\$ (36,924)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 20,444	5	\$ 4,089	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (74,857)	\$ (78,945)	\$ (42,021)	\$ (52,117)	\$ (100,920)	\$ -	\$ -	\$ -	\$ -	\$ -

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
2020	\$ (153,334)	4	\$ (38,332)	\$ (38,334)	\$ (38,334)	\$ (38,334)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 125,475	4	\$ 31,369	\$ 31,369	\$ 31,369	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 160,056	4	\$ 40,014	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 33,051	\$ (6,965)	\$ (6,965)	\$ (38,334)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATON 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
2020	\$ 109,268	4	\$ 27,317	\$ 27,317	\$ 27,317	\$ 27,317	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 72,910	4	\$ 18,228	\$ 18,228	\$ 18,228	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ 125,862	4	\$ 31,466	\$ 31,466	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 99,332	4	\$ 24,833	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 101,844	\$ 77,011	\$ 45,545	\$ 27,317	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -