

BONITA SPRINGS FIRE CONTROL AND RESCUE DISTRICT  
FIREFIGHTER'S 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

November 16, 2020

Board of Trustees  
Bonita Springs Fire Control and Rescue District  
Firefighters' Pension Board

Re: Bonita Springs Fire Control and Rescue District Firefighter's Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Bonita Springs Fire Control and Rescue District Firefighter's 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 Bonita Springs Fire Control and Rescue District, 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 Bonita Springs Fire Control and Rescue District, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Firefighter's 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:   
Kevin H. Peng, ASA, EA, MAAA  
Enrolled Actuary #20-7783

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Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Bonita Springs Fire Control and Rescue District Firefighter's 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 March 2, 2020 actuarial impact statement, 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		
% of Projected Annual Payroll	65.2%	56.2%
Member Contributions (Est.)		
% of Projected Annual Payroll	7.0%	7.0%
District And State Required Contribution		
% of Projected Annual Payroll	58.2%	49.2%
State Contribution (Est.) <sup>1</sup>	\$838,786	\$838,786
% of Projected Annual Payroll	9.2%	9.2%
District Required Contribution <sup>2</sup>		
% of Projected Annual Payroll	49.0%	40.0%

<sup>1</sup> Represents the amount received in calendar 2020. The District may use up to \$1,000,155.43, if received, in determining their bottom line funding requirement.

<sup>2</sup> The required contribution from the combination of District and State sources for the year ending September 30, 2022, is 58.2% of the actual payroll realized in that year. As a budgeting tool, the District may contribute 49.0% of each Member's Salary and then make a one-time adjustment to account for the actual State Monies received. Please note that the District has access to a prepaid contribution of \$382,768.03 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2021.

As you can see, the Minimum Required Contribution shows an increase when compared to the results determined in the March 2, 2020 actuarial impact statement. The increase is attributable to the assumption changes as described on the next page and unfavorable actuarial experience as describe in the next paragraph. The increase was offset in part by an increase in annual payroll.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial loss included an average salary increase of 8.86% which exceeded the 5.52% assumption, less turnover than expected, and an investment return of 7.25% (Actuarial Asset Basis) which fell short of the 7.60% assumption. There were no significant sources of actuarial gain.

## CHANGES SINCE PRIOR VALUATION

### Plan Changes

Resolution No. 2020-05-02 was adopted on May 5, 2020. This resolution provided the same automatic Cost of Living Adjustments to Disability and Pre-Retirement Death Beneficiaries that is currently provided to Normal and Early Retirees. The impact of this change on the funding requirements is outlined in our Actuarial Impact Statement dated March 2, 2020.

### 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 the July 1, 2019 actuarial valuation for special risk lives, with appropriate risk and collar adjustments made based on plan demographics.

Additionally, as approved by the Board at their August 19, 2020 meeting, the following changes were made to the assumptions as a result of the Experience Study dated August 17, 2020:

- 1.) Investment Return reduced from 7.60% to 7.50%, net of investment related expenses.
- 2.) Change assumed individual Salary increases to 10.0% per year for the first 4 years of service, with 4.0% per year after 4 years of service.
- 3.) Eliminate the assumption that Members eligible for Normal Retirement on the valuation date would work one more year.
- 4.) Change the assumed rates of withdrawal to 8.0% for first year, 2.5% for each of the next 4 years, 1.5% for each of the next 5 years and 1.0% per year beginning at 10 years of service.

## CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2019	41.1%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	-1.1%
Change in Normal Cost Rate	-1.3%
Change in Administrative Expense Percentage	0.1%
Payroll Change Effect on UAAL Amortization	-1.7%
Investment Return (Actuarial Asset Basis)	0.3%
Salary Increases	1.2%
Active Decrements	0.5%
Inactive Mortality	0.2%
Assumption Change	9.4%
Other	<u>0.3%</u>
Total Change in Contribution	7.9%
(3) Contribution Determined as of October 1, 2020	49.0%

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>
A. Participant Data			
Actives	96	96	97
Service Retirees	45	45	44
DROP Retirees	4	4	4
Beneficiaries	5	5	2
Disability Retirees	3	3	3
Terminated Vested	<u>5</u>	<u>5</u>	<u>7</u>
 Total	 158	 158	 157
 Total Annual Payroll	 \$9,601,737	 \$9,620,994	 \$9,060,926
Payroll Under Assumed Ret. Age	9,137,234	9,620,994	9,060,926
 Annual Rate of Payments to:			
Service Retirees	4,001,773	4,001,773	3,729,401
DROP Retirees	294,573	294,573	342,862
Beneficiaries	133,809	133,809	49,997
Disability Retirees	142,244	142,244	137,988
Terminated Vested	105,699	105,699	105,699
 B. Assets			
Actuarial Value (AVA) <sup>1</sup>	81,886,425	81,886,425	75,528,254
Market Value (MVA) <sup>1</sup>	79,378,043	79,378,043	73,803,033
 C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	66,189,242	59,119,823	55,246,641
Disability Benefits	773,586	698,885	662,242
Death Benefits	226,576	369,474	340,332
Vested Benefits	2,124,112	3,769,203	3,584,567
Refund of Contributions	128,841	165,203	147,028
Service Retirees	51,094,522	49,576,843	46,901,409
DROP Retirees <sup>1</sup>	6,904,085	6,787,562	7,049,128
Beneficiaries	1,242,610	1,231,336	321,809
Disability Retirees	2,045,972	1,977,295	1,970,570
Terminated Vested	782,453	740,631	691,449
Share Plan Balances <sup>1</sup>	<u>0</u>	<u>0</u>	<u>0</u>
 Total	 131,511,999	 124,436,255	 116,915,175

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	86,989,476	84,471,623	80,032,226
Present Value of Future Member Contributions	6,089,263	5,913,014	5,602,256
Normal Cost (Retirement)	2,298,916	2,103,110	2,072,612
Normal Cost (Disability)	48,195	45,831	47,725
Normal Cost (Death)	10,544	17,673	17,444
Normal Cost (Vesting)	105,138	187,393	190,973
Normal Cost (Refunds)	17,315	21,491	19,149
Total Normal Cost	<u>2,480,108</u>	<u>2,375,498</u>	<u>2,347,903</u>
Present Value of Future Normal Costs	22,709,228	20,126,008	20,041,288
Accrued Liability (Retirement)	45,056,505	41,270,457	37,478,754
Accrued Liability (Disability)	351,695	329,453	284,295
Accrued Liability (Death)	131,130	223,542	197,373
Accrued Liability (Vesting)	1,165,380	2,132,890	1,954,987
Accrued Liability (Refunds)	28,419	40,238	24,113
Accrued Liability (Inactives) <sup>1</sup>	62,069,642	60,313,667	56,934,365
Share Plan Balances <sup>1</sup>	0	0	0
Total Actuarial Accrued Liability (EAN AL)	<u>108,802,771</u>	<u>104,310,247</u>	<u>96,873,887</u>
Unfunded Actuarial Accrued Liability (UAAL)	26,916,346	22,423,822	21,345,633
Funded Ratio (AVA / EAN AL)	75.3%	78.5%	78.0%

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>	62,069,642	60,313,667	56,934,365
Actives	19,666,569	18,332,878	17,239,476
Member Contributions	<u>5,276,492</u>	<u>5,276,492</u>	<u>4,907,525</u>
Total	87,012,703	83,923,037	79,081,366
Non-vested Accrued Benefits	<u>6,071,975</u>	<u>5,400,100</u>	<u>5,345,730</u>
Total Present Value			
Accrued Benefits (PVAB)	93,084,678	89,323,137	84,427,096
Funded Ratio (MVA / PVAB)	85.3%	88.9%	87.4%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	3,761,541	0	
Plan Experience	0	2,976,295	
Benefits Paid	0	(4,332,094)	
Interest	0	6,251,840	
Other	<u>0</u>	<u>0</u>	
Total	3,761,541	4,896,041	

	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>	28.2	25.6	26.9
Administrative Expenses (with interest) % of Total Annual Payroll <sup>2</sup>	0.8	0.8	0.7
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>	36.2	29.4	28.6
Minimum Required Contribution % of Total Annual Payroll <sup>2</sup>	65.2	55.8	56.2
Expected Member Contributions % of Total Annual Payroll <sup>2</sup>	7.0	7.0	7.0
Expected District and State Contribution % of Total Annual Payroll <sup>2</sup>	58.2	48.8	49.2

F. Past Contributions

Plan Years Ending:	<u>9/30/2020</u>
Total Required Contribution	5,210,386
District and State Requirement	4,565,992
Actual Contributions Made:	
Members (excluding buyback)	644,394
District	3,727,206
State	<u>838,786</u>
Total	5,210,386

G. Net Actuarial (Gain)/Loss 2,262,132

<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 \$9,137,234 after assumption changes and of \$9,620,994 before assumption changes.

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	26,916,346
2021	25,508,264
2022	23,994,577
2025	18,737,657
2029	9,695,720
2032	2,218,644
2035	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2020	8.86%	5.52%
Year Ended 9/30/2019	7.01%	5.28%
Year Ended 9/30/2018	5.99%	5.33%
Year Ended 9/30/2017	5.20%	4.89%
Year Ended 9/30/2016	6.05%	4.71%

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

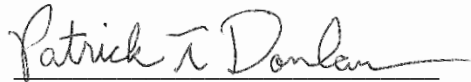
	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended 9/30/2020	6.38%	7.25%	7.60%
Year Ended 9/30/2019	1.34%	7.65%	7.60%
Year Ended 9/30/2018	8.79%	7.12%	7.60%
Year Ended 9/30/2017	12.82%	7.61%	7.60%
Year Ended 9/30/2016	7.98%	8.64%	7.60%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2020	\$9,137,234
	10/1/2010	6,351,738
(b) Total Increase		43.85%
(c) Number of Years		10.00
(d) Average Annual Rate		3.70%

## 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

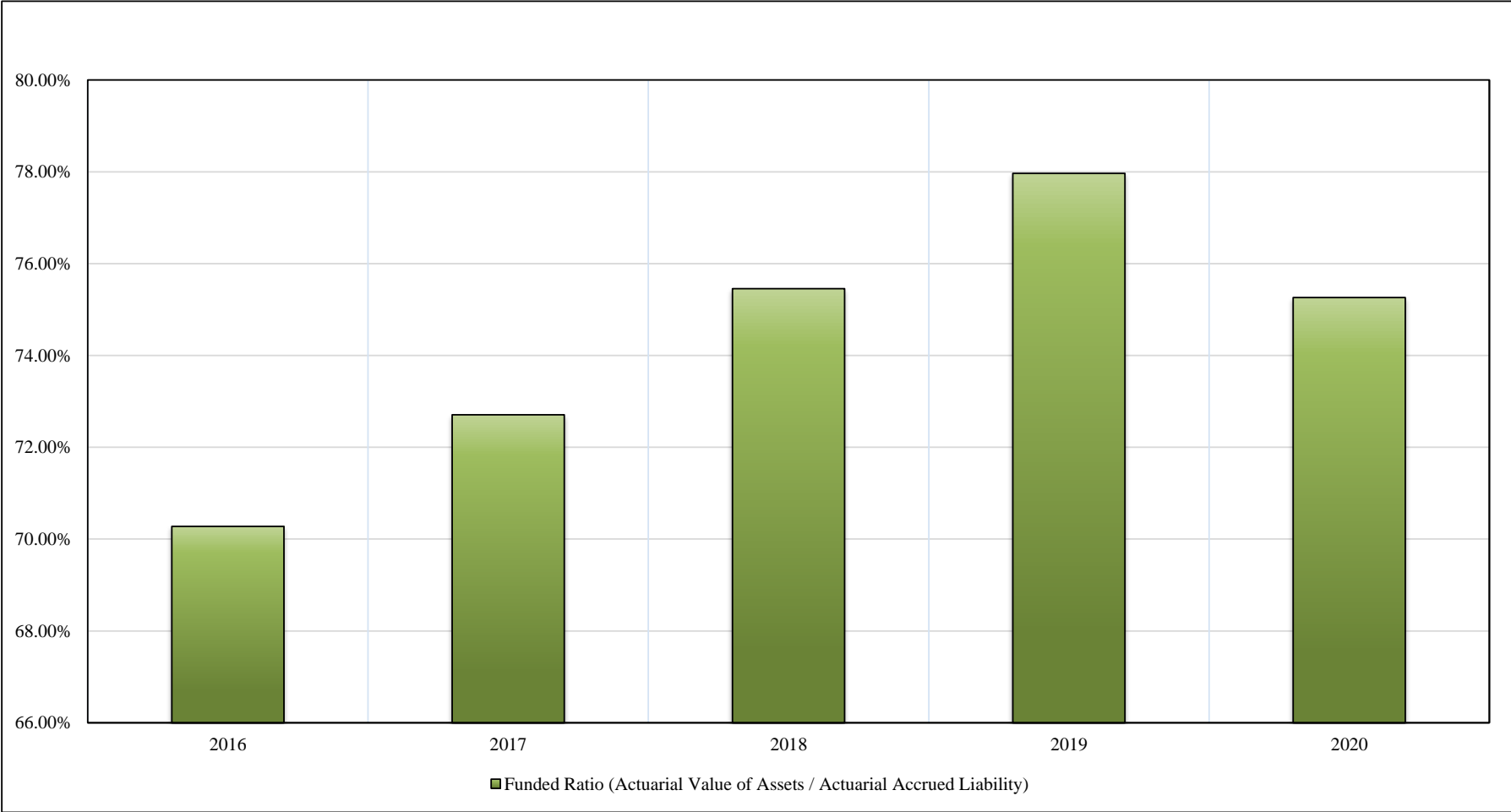
(1) Unfunded Actuarial Accrued Liability as of October 1, 2019	\$21,345,633
(2) Sponsor Normal Cost developed as of October 1, 2019	1,713,638
(3) Expected administrative expenses for the year ended September 30, 2020	65,339
(4) Expected interest on (1), (2) and (3)	1,754,987
(5) Sponsor contributions to the System during the year ended September 30, 2020	4,565,992
(6) Expected interest on (5)	151,915
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2020 (1)+(2)+(3)+(4)-(5)-(6)	20,161,690
(8) Change to UAAL due to Assumption Change	4,492,524
(9) Change to UAAL due to Actuarial (Gain)/Loss	2,262,132
(10) Unfunded Actuarial Accrued Liability as of October 1, 2020	26,916,346

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2020 <u>Amount</u>	Amortization <u>Amount</u>
Consolidation	10/1/2018	11.5	19,083,652	2,357,802
Benefit	10/1/2018	13	(6,649)	(761)
Actuarial Loss	10/1/2019	14	459,426	50,343
Benefits Change	10/1/2019	14	625,261	68,515
Actuarial Loss	10/1/2020	15	2,262,132	238,391
Assump Change	10/1/2020	15	4,492,524	473,438
			26,916,346	3,187,728

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2019	\$21,345,633
(2) Expected UAAL as of October 1, 2020	20,161,690
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	265,897
Salary Increases	1,057,818
Active Decrements	477,448
Inactive Mortality	210,587
Other	<u>250,382</u>
Increase in UAAL due to (Gain)/Loss	2,262,132
Assumption Changes	4,492,524
(4) Actual UAAL as of October 1, 2020	\$26,916,346

# 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 (Above Median) for Healthy Retirees, set forward one year. Prior year assumption: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

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

**Male:** PubG.H-2010 (Above 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.

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.

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

Interest Rate

7.50% (previously 7.60%) per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

Salary Increases

<u>Credited Service</u>	<u>Assumed Rate</u>
Years 1-4	10.0%
Greater than 4 years	4.0%

(Previously Years 1-5 and Greater than 5 years)

These rates are based on the results of an experience study issued August 17, 2020.

Payroll Growth

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

Administrative Expenses

\$69,524 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Amortization Method

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

- Experience: 15 Years.
- Assumption/Method Changes: 15 Years.
- Benefit Changes: 15 Years.

Termination Rates

**Current**

<u>Credited Service</u>	<u>Assumed Rate</u>
First Year	8.0%
Next 4 Years	2.5%
Next 5 Years	1.5%
Greater than 10 Years	2.0%

**Previous**

<u>Credited Service</u>	<u>Assumed Rate</u>
First Year	6.0%
Next 4 Years	3.0%
Greater than 5 Years	2.0%

These rates are based on the results of an experience study issued August 17, 2020.

Disability Rates

It is assumed that 90% of disablements and active Member deaths are service related.

<u>Age</u>	<u>% Becoming Disabled During the Year</u>
20	0.03%
30	0.04
40	0.07
50	0.18

These rates are consistent with rates used in other fire plans.

Retirement Age

Earlier of Age 55 and 10 years of service or Age 50 and 25 years of service. Previously any member who has reached Normal Retirement was assumed to continue employment for one additional year. This assumption is deemed reasonable based on plan provisions and is supported by the August 17, 2020 experience study.

Early Retirement

Commencing upon a member's eligibility for Early Retirement (Age 50 with 10 years of credited service), members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. This assumption is deemed reasonable based on plan provisions and is supported by the August 17, 2020 experience study.

Funding Method

Entry Age Normal Actuarial Cost Method.

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.

## 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 168.6% on October 1, 2017 to 160.0% 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 57.0%. 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 72.7% on October 1, 2017 to 75.3% 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, stayed approximately the same from October 1, 2017 to October 1, 2020. The current Net Cash Flow Ratio of 1.1% 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>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>	<u>10/1/2020</u>
<u>Support Ratio</u>				
Total Actives	86	100	97	96
Total Inactives <sup>1</sup>	51	51	56	60
Actives / Inactives <sup>1</sup>	168.6%	196.1%	173.2%	160.0%
 <u>Asset Volatility Ratio</u>				
Market Value of Assets (MVA)	64,902,949	70,794,857	73,803,033	79,378,043
Total Annual Payroll	7,791,232	8,918,131	9,060,926	9,601,737
MVA / Total Annual Payroll	833.0%	793.8%	814.5%	826.7%
 <u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	50,979,955	49,950,869	56,934,365	62,069,642
Total Accrued Liability (EAN)	87,199,617	90,365,008	96,873,887	108,802,771
Inactive AL / Total AL	58.5%	55.3%	58.8%	57.0%
 <u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	63,400,968	68,184,358	75,528,254	81,886,425
Total Accrued Liability (EAN)	87,199,617	90,365,008	96,873,887	108,802,771
AVA / Total Accrued Liability (EAN)	72.7%	75.5%	78.0%	75.3%
 <u>Net Cash Flow Ratio</u>				
Net Cash Flow <sup>2</sup>	724,597	259,835	2,047,621	850,295
Market Value of Assets (MVA)	64,902,949	70,794,857	73,803,033	79,378,043
Ratio	1.1%	0.4%	2.8%	1.1%

<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	71,670.43	_____ %
1999	83,576.24	16.6%
2000	113,991.40	36.4%
2001	142,687.43	25.2%
2002	204,053.35	43.0%
2003	266,383.07	30.5%
2004	308,557.20	15.8%
2005	357,891.78	16.0%
2006	440,565.24	23.1%
2007	518,217.57	17.6%
2008	638,819.90	23.3%
2009	603,170.07	-5.6%
2010	525,706.56	-12.8%
2011	548,627.86	4.4%
2012	569,492.15	3.8%
2013	552,532.41	-3.0%
2014	583,891.66	5.7%
2015	585,583.85	0.3%
2016	567,161.77	-3.1%
2017	550,061.99	-3.0%
2018	554,750.22	0.9%
2019	736,951.41	32.8%
2020	838,785.67	13.8%

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2020

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	4,252,720.48	4,252,720.48
Total Cash and Equivalents	4,252,720.48	4,252,720.48
Receivables:		
Investment Income	11,061.20	11,061.20
Total Receivable	11,061.20	11,061.20
Investments:		
Stocks	10,426,744.11	14,263,499.78
Mutual Funds:		
Fixed Income	6,774,338.70	19,397,640.55
Equity	25,964,251.22	34,193,956.24
Pooled/Common/Commingled Funds:		
Real Estate	6,035,092.54	7,649,167.64
Total Investments	49,200,426.57	75,504,264.21
Total Assets	53,464,208.25	79,768,045.89
 <u>LIABILITIES</u>		
Payables:		
Investment Expenses	7,235.16	7,235.16
Prepaid District Contribution	382,768.03	382,768.03
Total Liabilities	390,003.19	390,003.19
 NET POSITION RESTRICTED FOR PENSIONS	 53,074,205.06	 79,378,042.70

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

ADDITIONS

Contributions:

Member	644,394.01
Buy-Back	33,880.67
District	3,727,206.17
State	838,785.67

Total Contributions 5,244,266.52

Investment Income:

Net Realized Gain (Loss)	204,966.48
Unrealized Gain (Loss)	2,511,090.54
Net Increase in Fair Value of Investments	2,716,057.02
Interest & Dividends	2,294,789.93
Less Investment Expense <sup>1</sup>	(286,131.80)

Net Investment Income 4,724,715.15

Total Additions 9,968,981.67

DEDUCTIONS

Distributions to Members:

Benefit Payments	4,033,426.65
Lump Sum DROP Distributions	293,851.25
Lump Sum PLOP Distributions	0.00
Refunds of Member Contributions	4,815.67

Total Distributions 4,332,093.57

Administrative Expense 61,878.24

Total Deductions 4,393,971.81

Net Increase in Net Position 5,575,009.86

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 73,803,032.84

End of the Year 79,378,042.70

<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	12.82%
09/30/2018	8.79%
09/30/2019	1.34%
09/30/2020	6.38%

Annualized Rate of Return for prior four (4) years: 7.25%

(A) 10/01/2019 Actuarial Assets: \$75,528,254.26

(I) Net Investment Income:

1. Interest and Dividends	2,294,789.93	
2. Realized Gain (Loss)	204,966.48	
3. Unrealized Gain (Loss)	2,511,090.54	
4. Change in Actuarial Value	783,161.06	
5. Investment Related Expenses	(286,131.80)	
Total		5,507,876.21

(B) 10/01/2020 Actuarial Assets: \$81,886,425.18

Actuarial Asset Rate of Return =  $2I/(A+B-I)$ : 7.25%

10/01/2020 Limited Actuarial Assets: \$81,886,425.18

10/01/2020 Market Value of Assets: \$79,378,042.70

Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis) (\$265,897.47)

<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	644,394.01	
Buy-Back	33,880.67	
District	3,727,206.17	
State	838,785.67	
 Total Contributions		 5,244,266.52
Earnings from Investments:		
Interest & Dividends	2,294,789.93	
Net Realized Gain (Loss)	204,966.48	
Unrealized Gain (Loss)	2,511,090.54	
Change in Actuarial Value	783,161.06	
 Total Earnings and Investment Gains		 5,794,008.01

EXPENDITURES

Distributions to Members:		
Benefit Payments	4,033,426.65	
Lump Sum DROP Distributions	293,851.25	
Lump Sum PLOP Distributions	0.00	
Refunds of Member Contributions	4,815.67	
 Total Distributions		 4,332,093.57
Expenses:		
Investment related <sup>1</sup>	286,131.80	
Administrative	61,878.24	
 Total Expenses		 348,010.04
 Change in Net Assets for the Year		 6,358,170.92
 Net Assets Beginning of the Year		 75,528,254.26
 Net Assets End of the Year <sup>2</sup>		 81,886,425.18

<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.

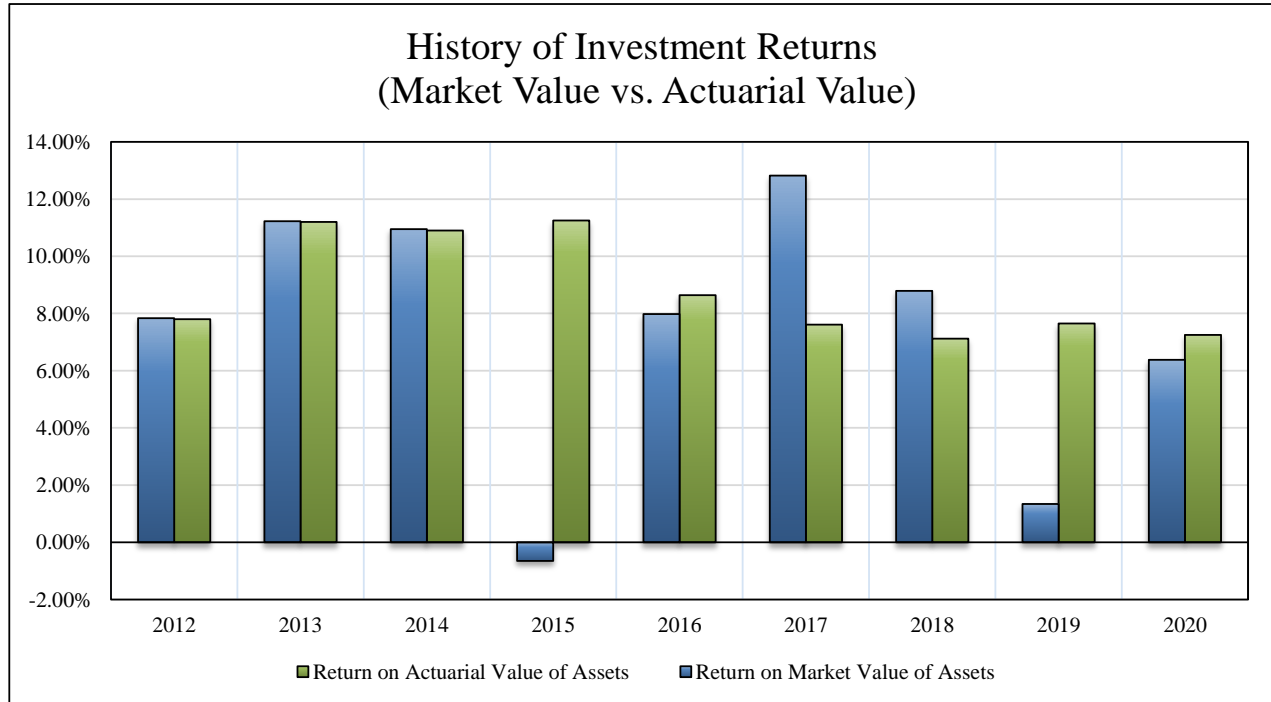
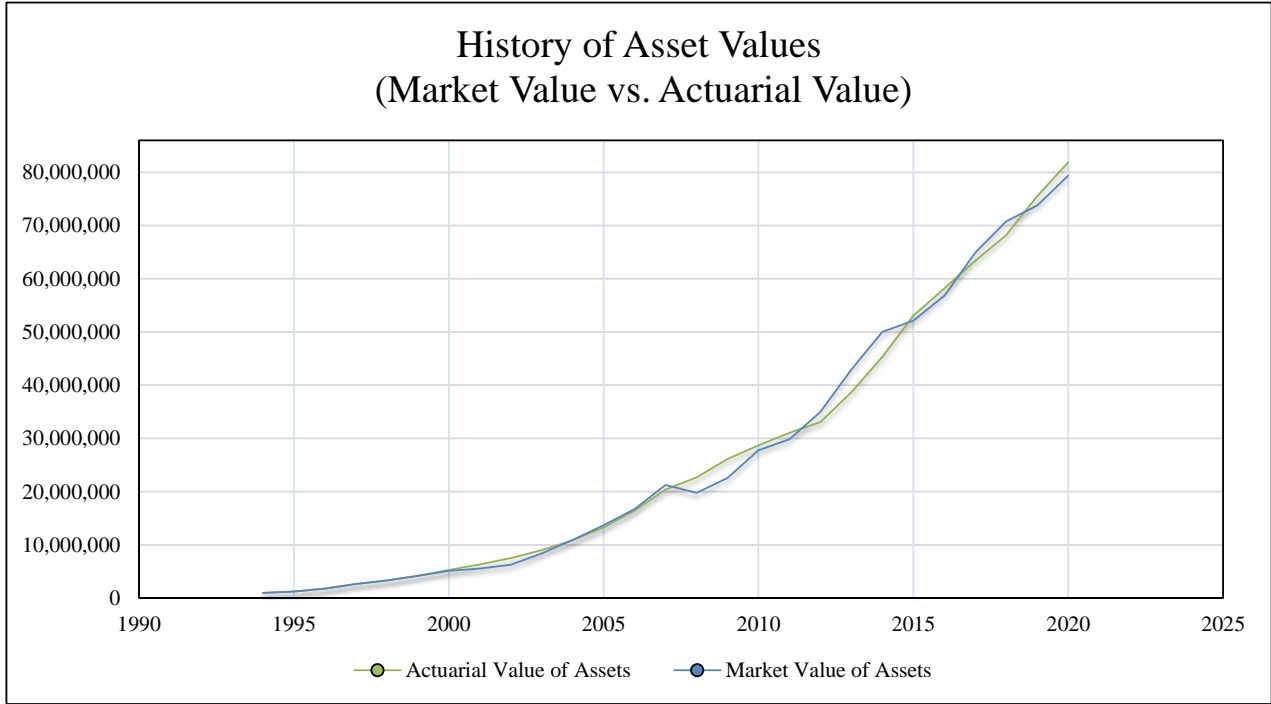
DEFERRED RETIREMENT OPTION PLAN ACTIVITY  
October 1, 2019 to September 30, 2020

Beginning of the Year Balance	1,587,288.35
Plus Additions	962,192.41
Investment Return Earned	109,340.17
Less Distributions	(293,851.25)
End of the Year Balance	2,364,969.68

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

(1)	Total Required Contribution Rate	56.6%
(2)	Pensionable Payroll Derived from Member Contributions	\$9,205,628.71
(3)	Total Required Contribution (1) x (2)	5,210,385.85
(4)	Less Actual Member Contributions	(644,394.01)
(5)	Less Allowable State Contribution	<u>(838,785.67)</u>
(6)	Equals Required District Contribution for Fiscal 2020	3,727,206.17
(7)	Less 2019 Prepaid Contribution	(114,711.99)
(8)	Less Actual District Contributions	<u>(3,995,262.21)</u>
(9)	Equals District's Shortfall/(Prepaid) Contribution as of September 30, 2020	(\$382,768.03)

# 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	86	100	97	96
Average Current Age	39.1	38.9	39.5	39.8
Average Age at Employment	28.2	28.8	29.2	29.0
Average Past Service	10.9	10.1	10.3	10.8
Average Annual Salary	\$90,596	\$89,181	\$93,412	\$100,018
<u>Service Retirees</u>				
Number	40	43	44	45
Average Current Age	58.6	59.6	60.6	61.0
Average Annual Benefit	\$78,035	\$83,411	\$84,759	\$88,928
<u>DROP Retirees</u>				
Number	5	2	4	4
Average Current Age	57.0	55.3	53.7	56.9
Average Annual Benefit	\$94,633	\$76,051	\$85,716	\$73,643
<u>Beneficiaries</u>				
Number	2	2	2	5
Average Current Age	68.7	69.7	70.7	47.9
Average Annual Benefit	\$22,961	\$22,961	\$24,999	\$26,762
<u>Disability Retirees</u>				
Number	2	2	3	3
Average Current Age	48.4	49.4	49.2	50.2
Average Annual Benefit	\$41,134	\$41,134	\$45,996	\$47,415
<u>Terminated Vested</u>				
Number	3	4	7	5
Average Current Age <sup>1</sup>	41.1	44.9	44.7	45.7
Average Annual Benefit <sup>2</sup>	\$28,575	\$28,575	\$35,233	\$35,233

<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	1	1										2
25 - 29	1		2	6								9
30 - 34			2	4	1	7	1					15
35 - 39		1		5	1	3	11	2				23
40 - 44		1		4		3	6	2				16
45 - 49							5	12	1	1		19
50 - 54			1			2		4	1	1	1	10
55 - 59								1				1
60 - 64		1										1
65+												0
Total	2	4	5	19	2	15	23	21	2	2	1	96

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2019	97
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	(1)
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(1)
f. DROP	<u>(1)</u>
g. Continuing participants	94
h. New entrants	<u>2</u>
i. Total active life participants in valuation	96

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

	Service Retirees, Vested Receiving	DROP Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested (Deferred Annuity)	Vested (Due Refund)	Total
	<u>Benefits</u>	<u>Benefits</u>	<u>Benefits</u>	<u>Benefits</u>	<u>Annuitiy)</u>	<u>Refund)</u>	<u>Total</u>
a. Number prior valuation	44	4	2	3	3	4	60
Retired	2	(1)	0	0	0	0	1
DROP	0	1	0	0	0	0	1
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	3	0	0	0	2
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	(2)	(2)
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	45	4	5	3	3	2	62

SUMMARY OF CURRENT PLAN  
(Through Resolution No. 2020-05-02)

<u>Latest Amendment Date</u>	May 11, 2020
<u>Eligibility</u>	Full-time employees who are classified as full-time Firefighters shall participate in the System as a condition of employment.
<u>Credited Service</u>	Total years and fractional parts of years of service as a Firefighter with the District.
<u>Salary</u>	Basic compensation, including incentive pay and longevity pay, plus tax deferred and tax-exempt items of income.
<u>Average Final Compensation</u>	Average Salary for the highest 5 years during the 10 years immediately preceding retirement or termination.
<u>Member Contributions</u>	7.00% of Salary.
<u>District and State Contributions</u>	Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Chapter 112, <u>Florida Statutes</u> . In no event will the District's contribution be less than 15% of the Members' Salary.
<u>Normal Retirement</u>	
Date	Earlier of age 55 and 10 years of Credited Service, or age 50 and 25 years of Credited Service.
Benefit	3.58% (3.00% for Firefighters hired after June 1, 2010) of Average Final Compensation <u>times</u> Credited Service
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Eligibility	Age 50 and 10 Years of Credited Service.
Benefit	Accrued benefit, reduced 3% per year.

Cost of Living Adjustment

Normal and Early Service Retirees after January 1, 2000, and current and future Disability Retirees and Pre-Retirement Death Beneficiaries as of May 11, 2020, receive 3% annual benefit increases for 17 years (12 years for Firefighters hired after June 1, 2010), commencing 1 year after retirement.

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 but not less than 42% of Average Final Compensation (Service Incurred).

Duration Payable for life (with 120 payments guaranteed), or until recovery (as determined by the Board). Optional forms of payment 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.

Board of Trustees

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

Deferred Retirement Option Plan

Eligibility	Satisfaction of Normal Retirement requirements (earlier of (1) Age 55 with 10 years of Credited Service, or (2) Age 50 with 25 years of Credited Service).
Participation	Not to exceed 60 months.
Rate of Return	At the Member's election: (1) 6.5% 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 is allowed.
Form of Distribution	Cash lump sum (options available) at termination of employment.

Chapter 175 Share Accounts

Effective March 1, 2010, a share plan was established pursuant to Chapter 175, Florida Statutes.

For plan years on or after October 1, 2009, all premium tax revenues received by the District in excess of \$1,000,155 shall be allocated to the participants' share accounts as follows:

- Members employed on preceding September 30 receive one share for each month of credited service.
- Interest equal to the System's actual net rate of investment return for the preceding plan year is credited each January 1.

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2020

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	4,252,720
Total Cash and Equivalents	4,252,720
Receivables:	
Investment Income	11,061
Total Receivable	11,061
Investments:	
Stocks	14,263,500
Mutual Funds:	
Fixed Income	19,397,641
Equity	34,193,956
Pooled/Common/Commingled Funds:	
Real Estate	7,649,168
Total Investments	75,504,265
Total Assets	79,768,046
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	7,235
Total Liabilities	7,235
NET POSITION RESTRICTED FOR PENSIONS	79,760,811

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

ADDITIONS

## Contributions:

Member	644,373	
Buy-Back	33,881	
District	3,995,262	
State	838,786	
 Total Contributions		 5,512,302
 Investment Income:		
Net Increase in Fair Value of Investments	2,716,057	
Interest & Dividends	2,294,790	
Less Investment Expense <sup>1</sup>	(286,132)	
 Net Investment Income		 4,724,715
 Total Additions		 10,237,017

DEDUCTIONS

## Distributions to Members:

Benefit Payments	4,033,427	
Lump Sum DROP Distributions	293,851	
Lump Sum Share Distributions	0	
Refunds of Member Contributions	4,816	
 Total Distributions		 4,332,094
 Administrative Expense		 61,878
 Total Deductions		 4,393,972
 Net Increase in Net Position		 5,843,045
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		73,917,766
 End of the Year		 79,760,811

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

- a. Two District appointees,
- b. Two Members of the Department elected by the Membership, and a
- c. Fifth Member elected by other four and appointed by the District.

*Plan Membership as of October 1, 2019:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	53
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	7
Active Plan Members	97
	157

*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 Bonita Springs Fire Control and Rescue District Firefighter's 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 Related Ratios.

*Contributions*

Member Contributions: 7.0% of Salary.

District and State 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. In no event will the District's contribution be less than 15% of the Member's Salary.

*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	20.0%
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 6.38 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 50 with 25 years of Credited Service).

Participation: Not to exceed 60 months.

Rate of Return: At the Member's election: (1) 6.5% 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 is allowed.

The DROP balance as September 30, 2020 is \$2,364,970.

## 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	\$ 106,617,546
Plan Fiduciary Net Position	\$ (79,760,811)
Sponsor's Net Pension Liability	<u>\$ 26,856,735</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	74.81%

*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	7.50%	
Investment Rate of Return	7.50%	

*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 (Above Median) for Healthy Retirees, set forward one year.

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

*Mortality Rate Beneficiary Lives:*

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

Male: PubG.H-2010 (Above 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.

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.

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

The most recent actuarial experience study used to review the other significant assumptions was dated August 17, 2020.

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	Long Term Expected Real Rate of Return <sup>1</sup>
Domestic Equity	7.50%
International Equity	8.50%
Domestic Fixed Income	2.50%
Global Fixed Income	3.50%
Real Estate	4.50%
GTAA	3.50%

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

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.50 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
	6.50%	7.50%	8.50%
Sponsor's Net Pension Liability	\$ 40,778,528	\$ 26,856,735	\$ 15,341,266

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	2,374,553	2,349,475
Interest	7,318,463	6,872,486
Changes of benefit terms	636,608	(7,100)
Differences between Expected and Actual Experience	506,294	44,227
Changes of assumptions	4,629,394	-
Contributions - Buy Back	33,881	59,882
Benefit Payments, including Refunds of Employee Contributions	(4,332,094)	(3,907,194)
Net Change in Total Pension Liability	11,167,099	5,411,777
Total Pension Liability - Beginning	95,450,447	90,038,670
Total Pension Liability - Ending (a)	<u>\$106,617,546</u>	<u>\$ 95,450,447</u>
Plan Fiduciary Net Position		
Contributions - Employer	3,995,262	4,730,535
Contributions - State	838,786	736,952
Contributions - Employee	644,373	619,281
Contributions - Buy Back	33,881	59,882
Net Investment Income	4,724,715	960,555
Benefit Payments, including Refunds of Employee Contributions	(4,332,094)	(3,907,194)
Administrative Expense	(61,878)	(77,171)
Net Change in Plan Fiduciary Net Position	5,843,045	3,122,840
Plan Fiduciary Net Position - Beginning	73,917,766	70,794,926
Plan Fiduciary Net Position - Ending (b)	<u>\$ 79,760,811</u>	<u>\$ 73,917,766</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 26,856,735</u>	<u>\$ 21,532,681</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	74.81%	77.44%
Covered Payroll	\$ 9,205,629	\$ 8,847,560
Net Pension Liability as a percentage of Covered Payroll	291.74%	243.37%

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

For measurement date 09/30/2020, amounts reported as changes of benefit terms resulted from Resolution No. 2020-05-02 was adopted on May 5, 2020. This resolution provided the same automatic Cost of Living Adjustments to Disability and Pre-Retirement Death Beneficiaries that is currently provided to Normal and Early Retirees.

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 the July 1, 2019 actuarial valuation for special risk lives, with appropriate risk and collar adjustments made based on plan demographics.

Additionally, as approved by the Board at their August 19, 2020 meeting, the following changes were made to the assumptions as a result of the Experience Study dated August 17, 2020:

- 1.) Investment Return reduced from 7.60% to 7.50%, net of investment related expenses.
- 2.) Change assumed individual Salary increases to 10.0% per year for the first 4 years of service, with 4.0% per year after 4 years of service.
- 3.) Eliminate the assumption that Members eligible for Normal Retirement on the valuation date would work one more year.
- 4.) Change the assumed rates of withdrawal to 8.0% for first year, 2.5% for each of the next 4 years, 1.5% for each of the next 5 years and 1.0% per year beginning at 10 years of service.

**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 <sup>1</sup>	Contributions as a percentage of Covered Payroll
09/30/2020	\$ 4,565,992	\$ 4,834,048	\$ (268,056)	\$ 9,205,629	52.51%
09/30/2019	\$ 5,352,774	\$ 5,467,486	\$ (114,712)	\$ 8,847,560	61.80%

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 for the Bonita Springs Fire Control and Rescue District Firefighters' 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	6.38%
09/30/2019	1.34%

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 District appointees,
- b. Two Members of the Department elected by the Membership, and a
- c. Fifth Member elected by other four and appointed by the District.

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

*Plan Membership as of October 1, 2019:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	53
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	7
Active Plan Members	97
	157

*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 Bonita Springs Fire Control and Rescue District Firefighter's 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 Related Ratios.

*Contributions*

Member Contributions: 7.0% of Salary.

District and State 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. In no event will the District's contribution be less than 15% of the Member's Salary.

*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	7.50%
Investment Rate of Return	7.50%

*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 (Above Median) for Healthy Retirees, set forward one year.

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

*Mortality Rate Beneficiary Lives:*

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

Male: PubG.H-2010 (Above 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.

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 August 17, 2020.

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	20.0%	2.50%
Global Fixed Income	5.0%	3.50%
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 7.50 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	\$ 95,450,447	\$ 73,917,766	\$ 21,532,681
Changes for a Year:			
Service Cost	2,374,553	-	2,374,553
Interest	7,318,463	-	7,318,463
Differences between Expected and Actual Experience	506,294	-	506,294
Changes of assumptions	4,629,394	-	4,629,394
Changes of benefit terms	636,608	-	636,608
Contributions - Employer	-	3,995,262	(3,995,262)
Contributions - State	-	838,786	(838,786)
Contributions - Employee	-	644,373	(644,373)
Contributions - Buy Back	33,881	33,881	-
Net Investment Income	-	4,724,715	(4,724,715)
Benefit Payments, including Refunds of Employee Contributions	(4,332,094)	(4,332,094)	-
Administrative Expense	-	(61,878)	61,878
Net Changes	11,167,099	5,843,045	5,324,054
Reporting Period Ending September 30, 2021	\$ 106,617,546	\$ 79,760,811	\$ 26,856,735

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.50%	7.50%	8.50%
Sponsor's Net Pension Liability	\$ 40,778,528	\$ 26,856,735	\$ 15,341,266

*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 \$4,681,177.

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	1,049,811	200,748
Changes of assumptions	837,474	-
Net difference between Projected and Actual Earnings on Pension Plan investments	1,969,103	-
Employer and State contributions subsequent to the measurement date	4,834,048	-
<b>Total</b>	<b>8,690,436</b>	<b>\$ 200,748</b>

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State contributions subsequent to the measurement date has been 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		\$		626,142	
2022		\$		656,839	
2023		\$		1,250,878	
2024		\$		1,056,833	
2025		\$		53,892	
Thereafter		\$		11,056	

**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 \$5,542,093.

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	1,216,675	133,832
Changes of assumptions	4,609,034	-
Net difference between Projected and Actual Earnings on Pension Plan investments	2,579,772	-
Employer and State contributions subsequent to the measurement date	TBD	-
<b>Total</b>	<b>TBD</b>	<b>\$ 133,832</b>

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		\$	1,485,906	
2023		\$	2,079,945	
2024		\$	1,885,900	
2025		\$	882,959	
2026		\$	647,489	
Thereafter		\$	1,289,450	

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	2,374,553	2,349,475
Interest	7,318,463	6,872,486
Changes of benefit terms	636,608	(7,100)
Differences between Expected and Actual Experience	506,294	44,227
Changes of assumptions	4,629,394	-
Contributions - Buy Back	33,881	59,882
Benefit Payments, including Refunds of Employee Contributions	<u>(4,332,094)</u>	<u>(3,907,194)</u>
Net Change in Total Pension Liability	11,167,099	5,411,777
Total Pension Liability - Beginning	<u>95,450,447</u>	<u>90,038,670</u>
Total Pension Liability - Ending (a)	<u>\$106,617,546</u>	<u>\$ 95,450,447</u>
Plan Fiduciary Net Position		
Contributions - Employer	3,995,262	4,730,535
Contributions - State	838,786	736,952
Contributions - Employee	644,373	619,281
Contributions - Buy Back	33,881	59,882
Net Investment Income	4,724,715	960,555
Benefit Payments, including Refunds of Employee Contributions	<u>(4,332,094)</u>	<u>(3,907,194)</u>
Administrative Expense	<u>(61,878)</u>	<u>(77,171)</u>
Net Change in Plan Fiduciary Net Position	5,843,045	3,122,840
Plan Fiduciary Net Position - Beginning	<u>73,917,766</u>	<u>70,794,926</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 79,760,811</u>	<u>\$ 73,917,766</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 26,856,735</u>	<u>\$ 21,532,681</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	74.81%	77.44%
Covered Payroll	\$ 9,205,629	\$ 8,847,560
Net Pension Liability as a percentage of Covered Payroll	291.74%	243.37%

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

For measurement date 09/30/2020, amounts reported as changes of benefit terms resulted from Resolution No. 2020-05-02 was adopted on May 5, 2020. This resolution provided the same automatic Cost of Living Adjustments to Disability and Pre-Retirement Death Beneficiaries that is currently provided to Normal and Early Retirees.

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 the July 1, 2019 actuarial valuation for special risk lives, with appropriate risk and collar adjustments made based on plan demographics.

Additionally, as approved by the Board at their August 19, 2020 meeting, the following changes were made to the assumptions as a result of the Experience Study dated August 17, 2020:

- 1.) Investment Return reduced from 7.60% to 7.50%, net of investment related expenses.
- 2.) Change assumed individual Salary increases to 10.0% per year for the first 4 years of service, with 4.0% per year after 4 years of service.
- 3.) Eliminate the assumption that Members eligible for Normal Retirement on the valuation date would work one more year.
- 4.) Change the assumed rates of withdrawal to 8.0% for first year, 2.5% for each of the next 4 years, 1.5% for each of the next 5 years and 1.0% per year beginning at 10 years of service.

**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 <sup>1</sup>	Contributions as a percentage of Covered Payroll
09/30/2020	\$ 4,565,992	\$ 4,834,048	\$ (268,056)	\$ 9,205,629	52.51%
09/30/2019	\$ 5,352,774	\$ 5,467,486	\$ (114,712)	\$ 8,847,560	61.80%

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 for the Bonita Springs Fire Control and Rescue District Firefighters' 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.**

FINAL COMPONENTS OF PENSION EXPENSE  
FISCAL YEAR SEPTEMBER 30, 2020

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 19,243,744	\$ 2,662,831	\$ 8,710,712	\$ -
Employer and State Contributions made after 09/30/2019	-	-	4,834,048	-
Total Pension Liability Factors:				
Service Cost	2,349,475	-	-	2,349,475
Interest	6,872,486	-	-	6,872,486
Changes in benefit terms	(7,100)	-	-	(7,100)
Contributions - Buy Back	59,882	-	-	59,882
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	44,227	-	44,227	-
Current year amortization of experience difference	-	(66,916)	(276,148)	209,232
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(279,158)	279,158
Benefit Payments, including Refunds of Employee Contributions	(3,907,194)	-	-	-
Net change	<u>5,411,777</u>	<u>(66,916)</u>	<u>4,322,969</u>	<u>9,763,133</u>
Plan Fiduciary Net Position:				
Contributions - Employer	4,730,535	-	(4,730,535)	-
Contributions - State	736,952	-	(736,952)	-
Contributions - Employee	619,281	-	-	(619,281)
Contributions - Buy Back	59,882	-	-	(59,882)
Projected Net Investment Income	5,462,581	-	-	(5,462,581)
Difference between projected and actual earnings on Pension Plan investments	(4,502,026)	-	4,502,026	-
Current year amortization	-	(762,650)	(1,745,267)	982,617
Benefit Payments, including Refunds of Employee Contributions	(3,907,194)	-	-	-
Administrative Expenses	(77,171)	-	-	77,171
Net change	<u>3,122,840</u>	<u>(762,650)</u>	<u>(2,710,728)</u>	<u>(5,081,956)</u>
Ending Balance	<u>\$ 21,532,681</u>	<u>\$ 1,833,265</u>	<u>\$ 10,322,953</u>	<u>\$ 4,681,177</u>

**PRELIMINARY COMPONENTS OF PENSION EXPENSE**  
**FISCAL YEAR SEPTEMBER 30, 2021**

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 21,532,681	\$ 1,833,265	\$ 10,322,953	\$ -
Employer and State Contributions made after 09/30/2020	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	2,374,553	-	-	2,374,553
Interest	7,318,463	-	-	7,318,463
Changes in benefit terms	636,608	-	-	636,608
Contributions - Buy Back	33,881	-	-	33,881
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	506,294	-	506,294	-
Current year amortization of experience difference	-	(66,916)	(339,430)	272,514
Change in assumptions about future economic or demographic factors or other inputs	4,629,394	-	4,629,394	-
Current year amortization of change in assumptions	-	-	(857,834)	857,834
Benefit Payments, including Refunds of Employee Contributions	(4,332,094)	-	-	-
Net change	<u>11,167,099</u>	<u>(66,916)</u>	<u>3,938,424</u>	<u>11,493,853</u>
Plan Fiduciary Net Position:				
Contributions - Employer	3,995,262	-	(3,995,262)	-
Contributions - State	838,786	-	(838,786)	-
Contributions - Employee	644,373	-	-	(644,373)
Contributions - Buy Back	33,881	-	-	(33,881)
Projected Net Investment Income	5,660,247	-	-	(5,660,247)
Difference between projected and actual earnings on Pension Plan investments	(935,532)	-	935,532	-
Current year amortization	-	(762,650)	(1,087,513)	324,863
Benefit Payments, including Refunds of Employee Contributions	(4,332,094)	-	-	-
Administrative Expenses	(61,878)	-	-	61,878
Net change	<u>5,843,045</u>	<u>(762,650)</u>	<u>(4,986,029)</u>	<u>(5,951,760)</u>
Ending Balance	<u>\$ 26,856,735</u>	<u>\$ 1,003,699</u>	<u>TBD</u>	<u>\$ 5,542,093</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	\$ 935,532	5	\$ -	\$ 187,108	\$ 187,106	\$ 187,106	\$ 187,106	\$ 187,106	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 4,502,026	5	\$ 900,406	\$ 900,405	\$ 900,405	\$ 900,405	\$ 900,405	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (689,570)	5	\$ (137,914)	\$ (137,914)	\$ (137,914)	\$ (137,914)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (2,970,193)	5	\$ (594,039)	\$ (594,039)	\$ (594,039)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (153,487)	5	\$ (30,697)	\$ (30,697)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 4,224,305	5	\$ 844,861	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 982,617	\$ 324,863	\$ 355,558	\$ 949,597	\$ 1,087,511	\$ 187,106	\$ -	\$ -	\$ -	\$ -	\$ -

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	\$ 4,629,394	8	\$ -	\$ 578,676	\$ 578,674	\$ 578,674	\$ 578,674	\$ 578,674	\$ 578,674	\$ 578,674	\$ 578,674	\$ -	\$ -
2016	\$ 1,954,103	7	\$ 279,158	\$ 279,158	\$ 279,158	\$ 279,158	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 279,158	\$ 857,834	\$ 857,832	\$ 857,832	\$ 578,674	\$ 578,674	\$ 578,674	\$ 578,674	\$ 578,674	\$ -	\$ -

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	\$ 506,294	8	\$ -	\$ 63,285	\$ 63,287	\$ 63,287	\$ 63,287	\$ 63,287	\$ 63,287	\$ 63,287	\$ 63,287	\$ -	\$ -
2019	\$ 44,227	8	\$ 5,531	\$ 5,528	\$ 5,528	\$ 5,528	\$ 5,528	\$ 5,528	\$ 5,528	\$ 5,528	\$ -	\$ -	\$ -
2018	\$ 338,549	7	\$ 48,364	\$ 48,364	\$ 48,364	\$ 48,364	\$ 48,364	\$ 48,364	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 717,752	7	\$ 102,536	\$ 102,536	\$ 102,536	\$ 102,536	\$ 102,536	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 838,022	7	\$ 119,717	\$ 119,717	\$ 119,717	\$ 119,717	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ (535,327)	8	\$ (66,916)	\$ (66,916)	\$ (66,916)	\$ (66,916)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 209,232	\$ 272,514	\$ 272,516	\$ 272,516	\$ 219,715	\$ 117,179	\$ 68,815	\$ 68,815	\$ 63,287	\$ -	\$ -