TOWN OF LONGBOAT KEY CONSOLIDATED 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





February 12, 2021 Board of Trustees Town of Longboat Key Consolidated Retirement System

Re: Town of Longboat Key Consolidated Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Town of Longboat Key Consolidated 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 Chapter 112, 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 Town of Longboat Key, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2018. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 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 Town of Longboat Key, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Consolidated 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.

Bv:

Respectfully submitted,

Foster & Foster, Inc.

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

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Peter McCloud FSA, EA, MAAA Enrolled Actuary #20-6101

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By:

Enclosures

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#### SUMMARY OF REPORT

The regular annual actuarial valuation of the Town of Longboat Key Consolidated 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>
Police Officers	\$568,816	\$553,969
Firefighters	1,907,757	2,006,151
General Employees	<u>409,499</u>	420,842
Town Required Contribution	\$2,886,072	\$2,980,962

Aggregate experience since the prior valuation was overall unfavorable on the basis of the plan's actuarial assumptions. The primary sources of actuarial loss included inactive mortality experience for Police and Fire.

In spite of the net actuarial loss described above, the minimum required contribution amounts for the Fire and General components of the Consolidated Fund have decreased primarily due to adoption of the statutory mortality assumption. The contribution requirement for Police increased modestly due to expiration of an actuarial gain component of the UAAL; the Police required contribution would have otherwise decreased due to the mortality assumption change.

#### 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 (Firefighters and Police Officers) and for non-special-risk employees (General Employees) with appropriate adjustments made based on plan demographics.

There have been no method changes since the prior valuation.

# COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS POLICE OFFICERS

	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
A. Participant Data			
Actives	4	4	5
Service Retirees	15	15	14
Beneficiaries	3	3	3
Disability Retirees	2	2	2
Terminated Vested	<u>2</u>	<u>2</u>	<u>2</u>
Total	26	26	26
Total Annual Payroll	N/A	N/A	N/A
Payroll Under Assumed Ret. Age	N/A	N/A	N/A
Annual Rate of Payments to:			
Service Retirees	706,720	706,720	667,312
Beneficiaries	96,146	96,146	94,502
Disability Retirees	59,528	59,528	59,528
Terminated Vested	27,191	27,191	27,191
B. Assets			
Actuarial Value (AVA)	8,012,971	8,012,971	7,686,659
Market Value (MVA)	7,763,990	7,763,990	7,508,727
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	418,514	420,740	757,709
Disability Benefits	22,737	22,081	27,246
Death Benefits	1,054	1,553	2,734
Vested Benefits	3,326	3,327	7,217
Refund of Contributions	0	0	0
Service Retirees	9,779,353	10,019,686	9,525,697
Beneficiaries	781,174	806,218	821,615
Disability Retirees	681,087	671,633	678,596
Terminated Vested	299,155	300,973	274,991
Total	11,986,400	12,246,211	12,095,805

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	N/A	N/A	N/A
Present Value of Future			
Member Contributions	N/A	N/A	N/A
Normal Cost (Retirement)	0	0	0
Normal Cost (Disability)	12,264	11,957	8,584
Normal Cost (Death)	218	308	653
Normal Cost (Vesting)	0	0	0
Normal Cost (Refunds)	0	0	0
Total Normal Cost	12,482	12,265	9,237
Present Value of Future			
Normal Costs	14,095	13,878	14,746
Accrued Liability (Retirement)	418,514	420,740	757,709
Accrued Liability (Disability)	8,990	8,691	13,563
Accrued Liability (Death)	706	1,065	1,671
Accrued Liability (Vesting)	3,326	3,327	7,217
Accrued Liability (Refunds)	0	0	0
Accrued Liability (Inactives)	11,540,769	11,798,510	11,300,899
Total Actuarial Accrued Liability (EAN AL)	11,972,305	12,232,333	12,081,059
Unfunded Actuarial Accrued			
Liability (UAAL)	3,959,334	4,219,362	4,394,400
Funded Ratio (AVA / EAN AL)	66.9%	65.5%	63.6%

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	11,540,769	11,798,510	11,300,899
Actives	251,705	253,780	536,186
Member Contributions	193,761	193,761	258,024
Total	11,986,235	12,246,051	12,095,109
Non-vested Accrued Benefits	0	0	0
Total Present Value			
Accrued Benefits (PVAB)	11,986,235	12,246,051	12,095,109
Funded Ratio (MVA / PVAB)	64.8%	63.4%	62.1%
Increase (Decrease) in Present Value of			
Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	(259,816)	0	
Plan Experience	0	156,798	
Benefits Paid	0	(823,685)	
Interest	0	817,829	
Other	0	0	
Total	(259,816)	150,942	

	New Assump	Old Assump	
Valuation Date	10/1/2020	10/1/2020	10/1/2019
Applicable to Fiscal Year Ending	9/30/2022	<u>9/30/2022</u>	<u>9/30/2021</u>
E. Pension Cost			
Normal Cost <sup>1</sup>	\$13,793	\$13,553	\$10,207
Administrative Expenses <sup>1</sup>	20,984	20,984	22,492
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 22 years			
(as of 10/1/2020) <sup>1</sup>	534,039	559,386	521,270
Minimum Required Contribution	568,816	593,923	553,969
Expected Town Contribution	568,816	593,923	553,969
F. Past Contributions			
Plan Years Ending:	9/30/2020		
Town Requirement	634,000		
Actual Contributions Made:			
Town	634,000		
Total	634,000		
G. Net Actuarial (Gain)/Loss	142,593		

<sup>1</sup> Contributions developed as of 10/1/2020 displayed above have been adjusted to account for a 1.5 year interest load.

H. Schedule Illustrating the A	Amortization of the Tota	l Unfunded Actuarial	Accrued Liability as of:

	Projected Unfunded	
Year	Actuarial Accrued Liability	
2020	3,959,334	
2021	3,719,363	
2022	3,495,409	
2023	3,245,602	
2024	2,962,394	
2025	2,636,303	
2042	0	

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

		Actual	Assumed
Year Ended	9/30/2020	N/A	N/A
Year Ended	9/30/2019	N/A	N/A
Year Ended	9/30/2018	N/A	N/A
Year Ended	9/30/2017	N/A	N/A
Year Ended	9/30/2016	N/A	N/A

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

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2020	6.36%	7.06%	7.00%
Year Ended	9/30/2019	2.86%	7.53%	7.00%
Year Ended	9/30/2018	8.04%	5.78%	7.00%
Year Ended	9/30/2017	11.15%	6.25%	7.00%
Year Ended	9/30/2016	8.25%	6.73%	7.00%
<ul><li>(iii) Average Annual Payroll Growth</li><li>(a) Payroll as of:</li></ul>		10/1/2020 10/1/2020	N/A N/A	
(b) Total Increase			N/A	
(c) Number of Years			N/A	
(d) Average Annual Rate			N/A	

# COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS FIREFIGHTERS

	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
A. Participant Data			
Actives	5	5	5
Service Retirees	31	31	31
Beneficiaries	1	1	1
Disability Retirees	4	4	4
Terminated Vested	<u>4</u>	<u>4</u>	<u>4</u>
Total	45	45	45
Total Annual Payroll	N/A	N/A	N/A
Payroll Under Assumed Ret. Age	N/A	N/A	N/A
Annual Rate of Payments to:			
Service Retirees	2,035,565	2,035,565	1,991,693
Beneficiaries	19,344	19,344	19,344
Disability Retirees	110,093	110,093	110,093
Terminated Vested	43,809	43,809	43,809
B. Assets			
Actuarial Value (AVA)	20,709,283	20,709,283	19,370,420
Market Value (MVA)	20,088,427	20,088,427	18,935,406
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	2,201,850	2,265,032	2,049,539
Disability Benefits	45,900	44,571	56,454
Death Benefits	3,590	5,055	6,294
Vested Benefits	42,229	42,733	66,279
Refund of Contributions	0	0	0
Service Retirees	28,473,803	29,206,971	28,999,401
Beneficiaries	234,458	235,097	237,564
Disability Retirees	1,185,792	1,151,540	1,169,344
Terminated Vested	281,183	278,159	260,682
Total	32,468,805	33,229,158	32,845,557

	New Assump	Old Assump	
C. Liabilities - (Continued)	<u>10/1/2020</u>	<u>10/1/2020</u>	<u>10/1/2019</u>
Present Value of Future Salaries	N/A	N/A	N/A
Present Value of Future			
Member Contributions	N/A	N/A	N/A
Normal Cost (Retirement)	0	0	0
Normal Cost (Disability)	6,314	6,211	6,211
Normal Cost (Death)	294	371	373
Normal Cost (Vesting)	0	0	0
Normal Cost (Refunds)	0	0	0
Total Normal Cost	6,608	6,582	6,584
Present Value of Future			
Normal Costs	16,686	16,408	21,232
Accrued Liability (Retirement)	2,201,850	2,265,032	2,049,539
Accrued Liability (Disability)	30,035	29,251	36,588
Accrued Liability (Death)	2,769	3,967	4,928
Accrued Liability (Vesting)	42,229	42,733	66,279
Accrued Liability (Refunds)	0	0	0
Accrued Liability (Inactives)	30,175,236	30,871,767	30,666,991
Total Actuarial Accrued Liability	32,452,119	33,212,750	32,824,325
Unfunded Actuarial Accrued			
Liability (UAAL)	11,742,836	12,503,467	13,453,905
Funded Ratio (AVA / EAN AL)	63.8%	62.4%	59.0%

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	30,175,236	30,871,767	30,666,991
Actives	1,928,212	1,992,191	1,812,081
Member Contributions	359,931	359,931	359,931
Total	32,463,379	33,223,889	32,839,003
Non-vested Accrued Benefits	0	0	0
Total Present Value			
Accrued Benefits (PVAB)	32,463,379	33,223,889	32,839,003
Funded Ratio (MVA / PVAB)	61.9%	60.5%	57.7%
Increase (Decrease) in Present Value of			
Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	(760,510)	0	
Plan Experience	0	283,845	
Benefits Paid	0	(2,123,371)	
Interest	0	2,224,412	
Other	0	0	
Total	(760,510)	384,886	

	New Assump	Old Assump	
Valuation Date	10/1/2020	10/1/2020	10/1/2019
Applicable to Fiscal Year Ending	9/30/2022	<u>9/30/2022</u>	<u>9/30/2021</u>
E. Pension Cost			
Normal Cost <sup>1</sup>	\$7,302	\$7,273	\$7,275
Administrative Expenses <sup>1</sup>	52,495	52,495	55,208
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 22 years			
(as of 10/1/2020) <sup>1</sup>	1,847,960	1,922,107	1,943,668
Minimum Required Contribution	1,907,757	1,981,875	2,006,151
Expected Member Contributions <sup>1</sup>	0	0	0
Expected Town Contribution	1,907,757	1,981,875	2,006,151
F. Past Contributions			
Plan Years Ending:	9/30/2020		
Town Requirement	2,144,404		
Actual Contributions Made:			
Town	2,144,404		
G. Net Actuarial (Gain)/Loss	267,434		

<sup>1</sup> Contributions developed as of 10/1/2020 displayed above have been adjusted to account for a 1.5 year interest load.

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

	Projected Unfunded
Year	Actuarial Accrued Liability
2020	11,742,836
2021	10,775,408
2022	9,837,035
2023	8,766,393
2024	7,648,929
2025	6,466,361
2042	0

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

(d) Average Annual Rate

		Actual	Assumed
Year Ended	9/30/2020	N/A	N/A
Year Ended	9/30/2019	N/A	N/A
Year Ended	9/30/2018	N/A	N/A
Year Ended	9/30/2017	N/A	N/A
Year Ended	9/30/2016	N/A	N/A

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

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2020	6.36%	7.06%	7.00%
Year Ended	9/30/2019	2.86%	7.53%	7.00%
Year Ended	9/30/2018	8.04%	5.89%	7.00%
Year Ended	9/30/2017	11.15%	6.27%	7.00%
Year Ended	9/30/2016	8.25%	6.14%	7.00%
(iii) Average Annual Payroll Growth (a) Payroll as of:		10/1/2020 10/1/2010	N/A N/A	
(b) Total Increase			N/A	
(c) Number of Years			N/A	

N/A

# COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS GENERAL EMPLOYEES

	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
A. Participant Data			
Actives	15	15	17
Service Retirees	42	42	41
Beneficiaries	3	3	2
Disability Retirees	0	0	0
Terminated Vested	<u>10</u>	<u>10</u>	<u>11</u>
Total	70	70	71
Total Annual Payroll	N/A	N/A	N/A
Payroll Under Assumed Ret. Age	N/A	N/A	N/A
Annual Rate of Payments to:			
Service Retirees	989,001	989,001	992,168
Beneficiaries	29,071	29,071	20,806
Disability Retirees	0	0	0
Terminated Vested	113,043	113,043	120,944
B. Assets			
Actuarial Value (AVA)	11,735,425	11,735,425	11,331,708
Market Value (MVA)	11,400,465	11,400,465	11,096,808
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	2,787,936	2,785,788	2,818,272
Disability Benefits	0	0	0
Death Benefits	20,660	26,870	29,693
Vested Benefits	42,769	42,921	52,506
Refund of Contributions	0	0	0
Service Retirees	10,549,280	10,572,067	10,657,544
Beneficiaries	242,158	243,839	193,140
Disability Retirees	0	0	0
Terminated Vested	654,771	660,361	684,906
Total	14,297,574	14,331,846	14,436,061

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	N/A	N/A	N/A
Present Value of Future			
Member Contributions	N/A	N/A	N/A
Normal Cost (Retirement)	0	0	0
Normal Cost (Disability)	0	0	0
Normal Cost (Death)	1,435	1,692	2,024
Normal Cost (Vesting)	0	0	0
Normal Cost (Refunds)	0	0	0
Total Normal Cost	1,435	1,692	2,024
Present Value of Future			
Normal Costs	4,027	4,658	5,950
Accrued Liability (Retirement)	2,787,936	2,785,788	2,818,272
Accrued Liability (Disability)	0	0	0
Accrued Liability (Death)	16,633	22,212	23,743
Accrued Liability (Vesting)	42,769	42,921	52,506
Accrued Liability (Refunds)	0	0	0
Accrued Liability (Inactives)	11,446,209	11,476,267	11,535,590
Total Actuarial Accrued Liability (EAN AL)	14,293,547	14,327,188	14,430,111
Unfunded Actuarial Accrued			
Liability (UAAL)	2,558,122	2,591,763	3,098,403
Funded Ratio (AVA / EAN AL)	82.1%	81.9%	78.5%

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	11,446,209	11,476,267	11,535,590
Actives	2,213,166	2,217,745	2,369,935
Member Contributions	498,883	498,883	530,536
Total	14,158,258	14,192,895	14,436,061
Non-vested Accrued Benefits	0	0	0
Total Present Value			
Accrued Benefits (PVAB)	14,158,258	14,192,895	14,436,061
Funded Ratio (MVA / PVAB)	80.5%	80.3%	76.9%
Increase (Decrease) in Present Value of			
Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	(34,637)	0	
Plan Experience	0	(193,304)	
Benefits Paid	0	(1,024,528)	
Interest	0	974,666	
Other	0	0	
Total	(34,637)	(243,166)	

Valuation Date Applicable to Fiscal Year Ending	New Assump 10/1/2020 <u>9/30/2022</u>	Old Assump 10/1/2020 <u>9/30/2022</u>	10/1/2019 <u>9/30/2021</u>
E. Pension Cost			
Normal Cost <sup>1</sup>	\$1,586	\$1,870	\$2,237
Administrative Expenses <sup>1</sup>	31,012	31,012	33,998
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 22 years (as of 10/1/2020) <sup>1</sup>	376,901	380,181	384,607
	,		
Minimum Required Contribution	409,499	413,063	420,842
Expected Town Contribution	409,499	413,063	420,842
F. Past Contributions			
Plan Years Ending:	<u>9/30/2020</u>		
Town Requirement	670,264		
Actual Contributions Made:			
Town	670,264		
G. Net Actuarial (Gain)/Loss	(63,815)		

<sup>1</sup> Contributions developed as of 10/1/2020 displayed above have been adjusted to account for a 1.5 year interest load.

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

Year	Projected Unfunded Actuarial Accrued Liability
2020	2,558,122
2021	2,372,228
2022	2,227,332
2023	1,982,384
2024	1,754,467
2025	1,507,946
2042	0

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

		<u>Actual</u>	Assumed
Year Ended	9/30/2020	N/A	N/A
Year Ended	9/30/2019	N/A	N/A
Year Ended	9/30/2018	N/A	N/A
Year Ended	9/30/2017	N/A	N/A
Year Ended	9/30/2016	N/A	N/A

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

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2020	6.36%	7.06%	7.00%
Year Ended	9/30/2019	2.86%	7.53%	7.00%
Year Ended	9/30/2018	8.04%	6.51%	7.00%
Year Ended	9/30/2017	11.15%	6.87%	7.00%
Year Ended	9/30/2016	8.25%	6.67%	7.00%
(iii) Average Annual Payroll Growth (a) Payroll as of:		10/1/2020 10/1/2010	N/A N/A	
(b) Total Increase			N/A	
(c) Number of Years			N/A	
(d) Average Annual Rate			N/A	

#### STATEMENT BY ENROLLED ACTUARY

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

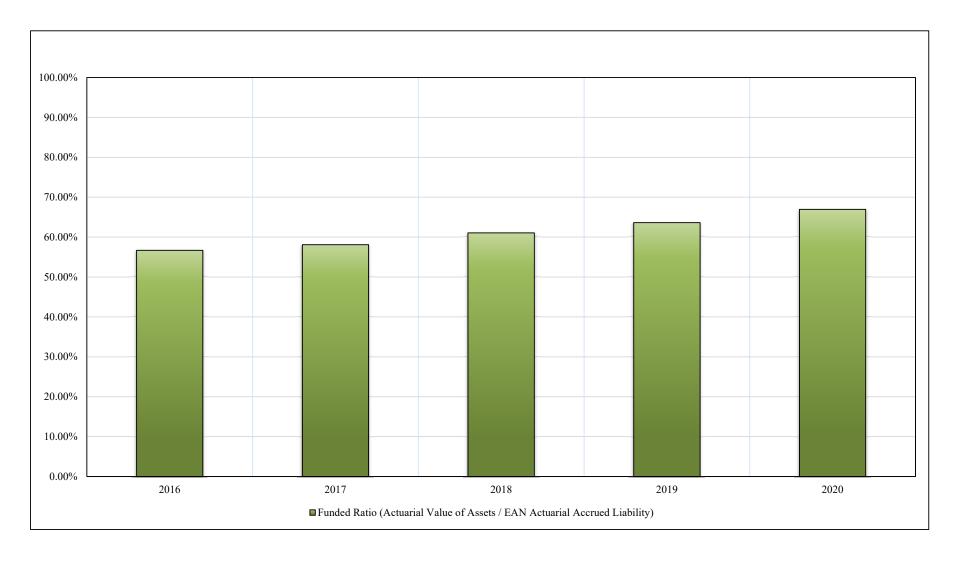
Douglas H. Lozen, EA, MAAA Enrolled Actuary #20-7778

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

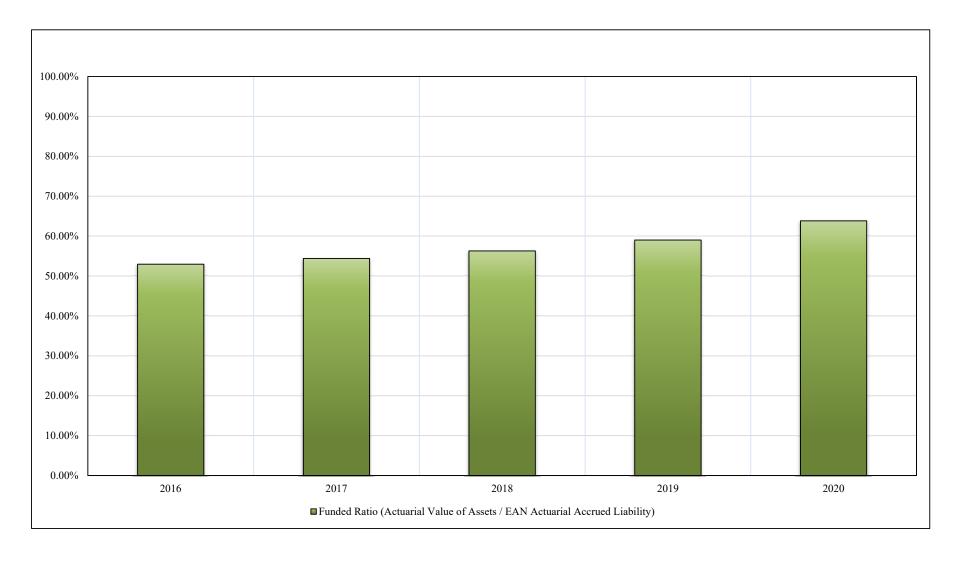
Mr. Keith Brinkman Bureau of Local Retirement Systems Post Office Box 9000 Tallahassee, FL 32315-9000

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

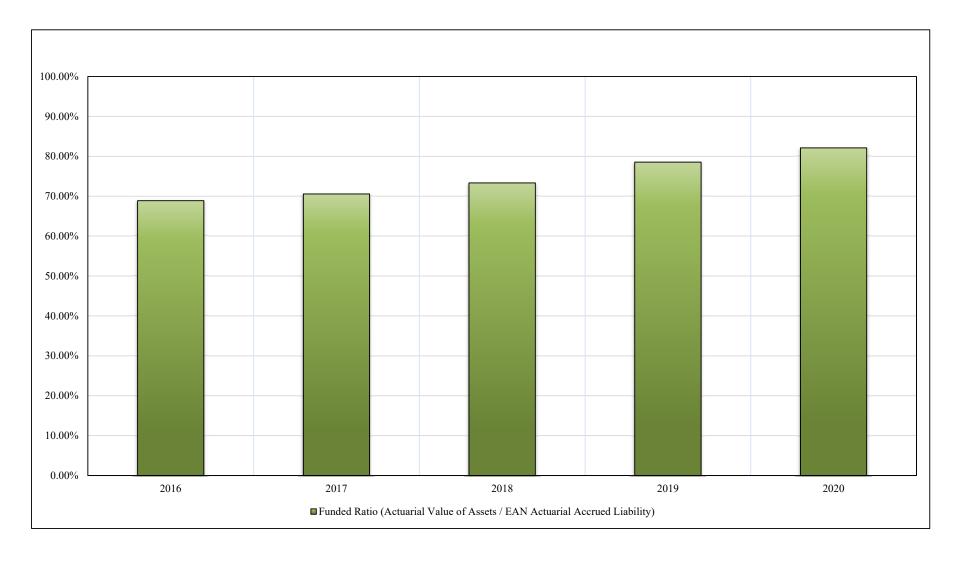
# HISTORY OF FUNDING PROGRESS (POLICE OFFICERS)



# HISTORY OF FUNDING PROGRESS (FIREFIGHTERS)



# HISTORY OF FUNDING PROGRESS (GENERAL EMPLOYEES)



# RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES POLICE OFFICERS

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2019	\$4,394,400
(2)	Sponsor Normal Cost developed as of October 1, 2019	9,237
(3)	Expected administrative expenses for the year ended September 30, 2020	20,355
(4)	Expected interest on (1), (2) and (3)	308,967
(5)	Sponsor contributions to the System during the year ended September 30, 2020	634,000
(6)	Expected interest on (5)	22,190
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2020 (1)+(2)+(3)+(4)-(5)-(6)	4,076,769
(8)	Change to UAAL due to Assumption Change	(260,028)
(9)	Change to UAAL due to Actuarial (Gain)/Loss	142,593
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2020	3,959,334

Type of	Date	Years	10/1/2020	Amortization
Base	<b>Established</b>	Remaining	Amount	Amount
	10/1/1991	1	38,245	38,245
	10/1/1996	6	(49,256)	(9,658)
	10/1/1999	9	(104,065)	(14,928)
Method Change	10/1/2002	12	859,272	101,107
Prior Losses	10/1/2002	8	699,585	109,493
Actuarial Gain	10/1/2003	8	(358,989)	(56,186)
Actuarial Loss	10/1/2004	8	174,650	27,335
Actuarial Loss	10/1/2005	8	219,383	34,336
Actuarial Gain	10/1/2006	8	(13,952)	(2,184)
Benefit Change	10/1/2006	16	702,081	69,459
Actuarial Loss	10/1/2007	8	413,300	64,686
Assump Change	10/1/2007	17	64,690	6,192
Benefit Change	10/1/2007	17	324,144	31,029
Method Change	10/1/2008	8	136,210	21,318
Actuarial Gain	10/1/2011	1	(7,577)	(7,577)
Actuarial Gain	10/1/2012	2	(18,398)	(9,510)
Assump Change	10/1/2012	12	353,254	41,566
Benefit Change	10/1/2012	22	(279,705)	(23,633)
Actuarial Gain	10/1/2013	3	(41,774)	(14,877)

Type of	Date	Years	10/1/2020	Amortization
Base	<b>Established</b>	Remaining	Amount	Amount
Actuarial Gain	10/1/2014	4	(78,083)	(21,544)
Assump Change	10/1/2015	15	421,809	43,283
Actuarial Gain	10/1/2015	5	(186,359)	(42,478)
Benefit Change	10/1/2015	15	(9,745)	(1,000)
Assump Change	10/1/2016	16	558,489	55,253
Actuarial Loss	10/1/2016	6	76,120	14,925
Actuarial Loss	10/1/2017	7	855	148
Actuarial Loss	10/1/2017	7	268,062	46,486
Actuarial Gain	10/1/2018	8	(135,204)	(21,161)
Actuarial Loss	10/1/2019	9	49,727	7,133
Actuarial Loss	10/1/2020	10	142,593	18,974
Assump Change	10/1/2020	20	(260,028)	(22,939)
			3,959,334	483,293

# RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES FIREFIGHTERS

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2019	\$13,453,905
(2)	Sponsor Normal Cost developed as of October 1, 2019	6,584
(3)	Expected administrative expenses for the year ended September 30, 2020	49,962
(4)	Expected interest on (1), (2) and (3)	943,983
(5)	Sponsor contributions to the System during the year ended September 30, 2020	2,144,404
(6)	Expected interest on (5)	73,997
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2020 (1)+(2)+(3)+(4)-(5)-(6)	12,236,033
(8)	Change to UAAL due to Assumption Change	(760,631)
(9)	Change to UAAL due to Actuarial (Gain)/Loss	267,434
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2020	11,742,836

Type of	Date	Years	10/1/2020	Amortization
Base	Established	Remaining	Amount	Amount
	10/1/1997	7	515,736	89,436
	10/1/1998	8	(148,019)	(23,167)
	10/1/1999	9	(300,559)	(43,114)
	10/1/2001	11	1,041,747	129,836
Method Change	10/1/2002	12	1,688,306	198,655
Prior Losses	10/1/2002	8	1,370,276	214,465
Actuarial Loss	10/1/2003	8	122,628	19,193
Actuarial Loss	10/1/2004	8	890,404	139,359
Benefit Change	10/1/2005	15	1,185,317	121,628
Actuarial Loss	10/1/2005	8	467,662	73,195
Actuarial Loss	10/1/2006	8	(149,451)	(23,391)
Actuarial Loss	10/1/2007	8	1,224,494	191,648
Assump Change	10/1/2007	17	668,711	64,012
Benefit Change	10/1/2007	17	(142,545)	(13,645)
Method Change	10/1/2008	8	149,876	23,457
Actuarial Loss	10/1/2011	1	90,447	90,447
Actuarial Gain	10/1/2012	2	(120,392)	(62,232)
Benefit Change	10/1/2012	22	(1,383,907)	(116,928)
Actuarial Loss	10/1/2013	3	73,808	26,285

Type of	Date	Years	10/1/2020	Amortization
Base	Established	<u>Remaining</u>	<u>Amount</u>	<u>Amount</u>
Actuarial Loss	10/1/2014	4	44,447	12,264
Assump Change	10/1/2014	14	1,082,846	115,718
Actuarial Loss	10/1/2015	5	72,246	16,467
Assump Change	10/1/2015	15	1,363,073	139,867
Benefit Change	10/1/2015	17	(307,895)	(29,473)
Assump Change	10/1/2016	16	1,680,001	166,206
Actuarial Loss	10/1/2016	6	331,240	64,947
Actuarial Loss	10/1/2017	7	307,887	53,392
Actuarial Loss	10/1/2018	8	417,268	65,307
Benefits Change	10/1/2018	13	381	43
Actuarial Loss	10/1/2020	10	267,434	35,586
Assump Change	10/1/2020	20	(760,631)	(67,101)
			11,742,836	1,672,362

# RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES GENERAL EMPLOYEES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2019	\$3,098,403
(2)	Sponsor Normal Cost developed as of October 1, 2019	2,024
(3)	Expected administrative expenses for the year ended September 30, 2020	30,767
(4)	Expected interest on (1), (2) and (3)	218,107
(5)	Sponsor contributions to the System during the year ended September 30, 2020	670,264
(6)	Expected interest on (5)	23,459
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2020 (1)+(2)+(3)+(4)-(5)-(6)	2,655,578
(8)	Change to UAAL due to Assumption Change	(33,641)
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(63,815)
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2020	2,558,122

Type of	Date	Years	10/1/2020	Amortization
Base	<b>Established</b>	Remaining	Amount	Amount
	10/1/1991	1	29,612	29,612
	10/1/1996	6	(76,037)	(14,909)
	10/1/1997	7	53,717	9,315
	10/1/2001	11	154,611	19,270
Method Change	10/1/2002	12	1,088,241	128,048
Prior Losses	10/1/2002	8	883,913	138,343
Actuarial Gain	10/1/2003	8	(268,847)	(42,078)
Actuarial Loss	10/1/2004	8	181,574	28,418
Actuarial Loss	10/1/2005	8	101,919	15,952
Actuarial Gain	10/1/2006	8	(16,505)	(2,583)
Benefit Change	10/1/2006	16	(143,767)	(14,223)
Actuarial Loss	10/1/2007	8	172,163	26,946
Assump Change	10/1/2007	17	189,692	18,158
Benefit Change	10/1/2007	17	206,121	19,731
Method Change	10/1/2008	8	70,292	11,002
Actuarial Loss	10/1/2011	1	20,865	20,865
Actuarial Gain	10/1/2012	2	(162,555)	(84,026)
Assump Change	10/1/2012	12	8,488	999
Benefit Change	10/1/2012	22	(546,769)	(46,197)

Type of	Date	Years	10/1/2020	Amortization
Base	<b>Established</b>	Remaining	Amount	Amount
Actuarial Loss	10/1/2013	3	89,696	31,943
Assump Change	10/1/2013	13	702,081	78,509
Actuarial Gain	10/1/2014	4	(8,977)	(2,477)
Actuarial Gain	10/1/2015	5	(28,651)	(6,531)
Benefit Change	10/1/2015	15	(234,367)	(24,049)
Assump Change	10/1/2016	16	441,185	43,647
Actuarial Loss	10/1/2016	6	104,866	20,561
Actuarial Loss	10/1/2017	7	45,105	7,822
Actuarial Gain	10/1/2018	8	(141,171)	(22,095)
Actuarial Gain	10/1/2019	9	(260,917)	(37,427)
Actuarial Gain	10/1/2020	10	(63,815)	(8,491)
Assump Change	10/1/2020	20	(33,641)	(2,968)
			2,558,122	341,087

#### ACTUARIAL ASSUMPTIONS AND METHODS POLICE OFFICERS

#### 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 (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 for Healthy Retirees, set forward one year. Prior year assumption: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

#### Beneficiary Lives:

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

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

#### Disabled Lives:

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

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

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

All rates are projected generationally with Mortality Improvement Scale MP-2018. 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.
Interest Rate	7.00% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.
Salary Increases	None.
Payroll Growth	None.
Administrative Expenses	\$18,990 annually, based on the average of actual expenses incurred in the prior two fiscal years.
Amortization Method	New UAAL amortization bases are amortized over the following amortization periods:
	Experience: 10 Years. Assumption/Method Changes: 20 Years. Benefit Changes: 30 Years.
Termination Rates	Below are sample rates of termination. This assumption is consistent with historical Plan experience.
	Age         Rate of Termination           20         9.2%           30         7.3%           40         3.5%           50         0.8%
Disability Rates	Below are sample rates of disability. Additionally, 75% of disability retirements are assumed to be service-related. These rates are similar to those utilized by other Florida special risk retirement programs.
	Age         Rate of Disability           20         0.14%           30         0.18%           40         0.30%           50         1.00%

Early Retirement	None.
<u>Normal Retirement</u>	The earlier of age 60, age 55 with 10 years of credited service, or 25 years of credited service, regardless of age. Also, any Member who has reached Normal Retirement is assumed to continue employment for one additional year. This assumption is reasonable based on the plan provisions.
Cost of Living Adjustment	3.0% per year, beginning 5 years after retirement.
Funding Method	Entry Age Normal Actuarial Cost Method. An interest load equal to 1.5 years has been applied for determination of the Total Required Contribution.
Asset Valuation Method	The Actuarial Value of Assets is brought forward using the historical four-year geometric average of Market Value Returns (net-of-fees). Over time, this may result in a de minimis bias that is above or below the Market Value of Assets.

#### ACTUARIAL ASSUMPTIONS AND METHODS FIREFIGHTERS

#### 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 (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 for Healthy Retirees, set forward one year. Prior year assumption: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

#### Beneficiary Lives:

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

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

#### Disabled Lives:

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

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

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

All rates are projected generationally with Mortality Improvement Scale MP-2018. 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.
Interest Rate	7.00% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.
Salary Increases	None.
Payroll Growth	None.
Administrative Expenses	\$47,507 annually, based on the average of actual expenses incurred in the prior two fiscal years.
Amortization Method	New UAAL amortization bases are amortized over the following amortization periods:
	Experience: 10 Years. Assumption/Method Changes: 20 Years. Benefit Changes: 30 Years.
Termination Rates	Below are sample rates of termination. This assumption is based on the results of an experience study for the period 2002 to 2007.
	Age 20Rate of Termination2012.4%3010.5%405.7%501.5%
<u>Disability Rates</u>	Below are sample rates of disability. Additionally, 90% (previously 75%) of disability retirements are assumed to be service-related. This assumption was developed from those used by other plans containing Florida municipale firefighters.
	Age         Rate of Disability           20         0.14%           30         0.18%           40         0.30%           50         1.00%

<u>Normal Retirement</u>	The earlier of age 60, age 55 with 10 years of credited service, or 25 years of credited service, regardless of age. Also, any Member who has reached Normal Retirement is assumed to continue employment for one additional year. This assumption is reasonable based on the plan provisions.
Early Retirement	None.
Cost of Living Adjustment	3.0% per year, beginning 5 years after retirement.
Funding Method	Entry Age Normal Actuarial Cost Method. An interest load equal to 1.5 years has been applied for determination of the Total Required Contribution.
Asset Valuation Method	The Actuarial Value of Assets is brought forward using the historical four-year geometric average of Market Value Returns (net-of-fees). Over time, this may result in a de minimis bias that is above or below the Market Value of Assets.

#### ACTUARIAL ASSUMPTIONS AND METHODS GENERAL EMPLOYEES

#### Mortality Rate

#### Healthy Active Lives:

**Female:** PubG.H-2010 (Below Median) for Employees. Prior year assumption: RP2000 Generational, 100% White Collar, Scale BB. **Male:** PubG.H-2010 (Below Median) for Employees, set back one year. Prior year assumption: RP2000 Generational, 50% White Collar / 50% Blue Collar, Scale BB.

#### Healthy Retiree Lives:

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

**Male:** PubG.H-2010 for Healthy Retirees, set back one year. Prior year assumption: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB.

#### Beneficiary Lives:

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

**Male:** PubG.H-2010 for Healthy Retirees, set back one year. Prior year assumption: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB.

#### Disabled Lives:

PubG.H-2010 for Disabled Retirees, set forward three years.

Prior year assumption (Female): 100% RP2000 Disabled Female set forward two years.

Prior year assumption (Male): 100% RP2000 Disabled Male set back four years.

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 non-special-risk employees, with appropriate adjustments made based on plan demographics.
Interest Rate	7.00% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.
Salary Increases	None.
Payroll Growth	None.
Administrative Expenses	\$28,065 annually, based on the average of actual expenses incurred in the prior two fiscal years.
Amortization Method	New UAAL amortization bases are amortized over the following amortization periods:
	Experience: 10 Years. Assumption/Method Changes: 20 Years. Benefit Changes: 30 Years.
Termination Rates	Below are sample rates of termination. This assumption is consistent with historical Plan experience.
	Age 20Rate of Termination2017.2%3015.0%408.2%501.7%
Normal Retirement	The earlier of age 62 or age 55 and completion of 30 years of credited service. Also, any Member who has reached Normal Retirement is assumed to continue employment for one additional year. This assumption is reasonable based on the plan provisions.
Early Retirement	5.0% per year, for each year of eligibility, beginning at age 50 with 15 years of credited service. This assumption is reasonable based on the plan provisions.
Funding Method	Entry Age Normal Actuarial Cost Method. An interest load equal to 1.5 years has been applied for determination of the Total Required Contribution.

Asset Valuation Method

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

#### GLOSSARY

<u>Actuarial Value of Assets</u> 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.

(a) The normal cost accrual rate equals the present value of future benefits for the participant, determined as of the participant's entry age and amortized over the anticipated number of years of participation, determined as of the entry age.

(b) 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.

(c) 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.

<u>Market Value of Assets</u> 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.

<u>Normal (Current Year's) Cost</u> 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.

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

<u>Total Required Contribution</u> 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.

<u>Unfunded Actuarial Accrued Liability (UAAL)</u> 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.

- <u>Investment Return</u>: 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.
- <u>Demographic Assumptions</u>: 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 like the Town of Longboat Key Consolidated Retirement System, 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 for Police Officers, Firefighters, and General Employees during the period October 1, 2010 to October 1, 2020. We expect this ratio will continue to decrease as more active members terminate and retire.
- 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 approximately 96%, 93%, and 80% as of October 1, 2010 for the Police Officers', Firefighters', and General Employees' Plans, respectively. 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 for all three legacy plans during the period October 1, 2010 to 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, is currently negative for the three legacy plans, indicating that contributions are not currently covering the 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 POLICE OFFICERS

	10/1/2010	<u>10/1/2015</u>	<u>10/1/2019</u>	<u>10/1/2020</u>
Support Ratio				
Total Actives Total Inactives <sup>1</sup> Actives / Inactives <sup>1</sup>	14 18 77.8%	4 20 20.0%	5 21 23.8%	4 22 18.2%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability <sup>3</sup> Total Accrued Liability (EAN) <sup>3</sup> Inactive AL / Total AL	7,959,951 10,840,105 73.4%	10,380,600 10,669,319 97.3%	11,300,899 12,081,059 93.5%	11,540,769 11,972,305 96.4%
Funded Ratio				
Actuarial Value of Assets (AVA) <sup>3</sup> Total Accrued Liability (EAN) <sup>3</sup> AVA / Total Accrued Liability (EAN)	4,837,127 10,840,105 44.6%	5,962,870 10,669,319 55.9%	7,686,659 12,081,059 63.6%	8,012,971 11,972,305 66.9%
Net Cash Flow Ratio				
Net Cash Flow <sup>2 3</sup> Market Value of Assets (MVA) <sup>3</sup> Ratio	(60,499) 4,407,186 -1.4%	(138,422) 5,607,388 -2.5%	(159,921) 7,508,727 -2.1%	(209,034) 7,763,990 -2.7%

<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.

<sup>3</sup> Items as of October 1, 2010 do not include accumulated DROP balances.

# PLAN MATURITY MEASURES AND OTHER RISK METRICS FIREFIGHTERS

	10/1/2010	<u>10/1/2015</u>	<u>10/1/2019</u>	10/1/2020
Support Ratio				
Total Actives Total Inactives <sup>1</sup>	33 27	6	5	5
Actives / Inactives <sup>1</sup>	122.2%	37 16.2%	39 12.8%	40 12.5%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability <sup>3</sup>	16,177,655 26,130,298	27,293,170 28,098,531	30,666,991 32,824,325	30,175,236 32,452,119
Total Accrued Liability (EAN) <sup>3</sup> Inactive AL / Total AL	20,130,298 61.9%	28,098,551 97.1%	93.4%	93.0%
Funded Ratio				
Actuarial Value of Assets (AVA) <sup>3</sup>	11,770,977	14,939,696	19,370,420	20,709,283
Total Accrued Liability (EAN) <sup>3</sup> AVA / Total Accrued Liability (EAN)	26,130,298 45.0%	28,098,531 53.2%	32,824,325 59.0%	32,452,119 63.8%
Net Cash Flow Ratio				
Net Cash Flow <sup>2 3</sup> Market Value of Assets (MVA) <sup>3</sup> Ratio	503,621 10,843,487 4.6%	1,242,454 13,999,869 8.9%	(68,054) 18,935,406 -0.4%	(27,824) 20,088,427 -0.1%

<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.

<sup>3</sup> Items as of October 1, 2010 do not include accumulated DROP balances.

### PLAN MATURITY MEASURES AND OTHER RISK METRICS GENERAL EMPLOYEES

	10/1/2010	<u>10/1/2015</u>	<u>10/1/2019</u>	10/1/2020
Support Ratio				
Total Actives Total Inactives <sup>1</sup> Actives / Inactives <sup>1</sup>	48 35 137.1%	11 51 21.6%	17 54 31.5%	15 55 27.3%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability <sup>3</sup> Total Accrued Liability (EAN) <sup>3</sup> Inactive AL / Total AL	3,846,570 13,266,355 29.0%	11,347,840 11,924,476 95.2%	11,535,590 14,430,111 79.9%	11,446,209 14,293,547 80.1%
Funded Ratio				
Actuarial Value of Assets (AVA) <sup>3</sup> Total Accrued Liability (EAN) <sup>3</sup> AVA / Total Accrued Liability (EAN)	7,067,928 13,266,355 53.3%	7,501,583 11,924,476 62.9%	11,331,708 14,430,111 78.5%	11,735,425 14,293,547 82.1%
Net Cash Flow Ratio				
Net Cash Flow <sup>2 3</sup> Market Value of Assets (MVA) <sup>3</sup> Ratio	(320,775) 6,280,460 -5.1%	(267,788) 7,051,065 -3.8%	(234,032) 11,096,808 -2.1%	(382,854) 11,400,465 -3.4%

<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.

<sup>3</sup> Items as of October 1, 2010 do not include accumulated DROP balances.

# PARTIAL HISTORY OF PREMIUM TAX REFUNDS POLICE OFFICERS

Received During <u>Fiscal Year</u>	Amount	Increase from Previous Year
1998	30,943.80	%
1999	34,500.65	11.5%
2000	35,338.03	2.4%
2001	38,821.79	9.9%
2002	47,239.79	21.7%
2003	51,163.55	8.3%
2004	55,090.41	7.7%
2005	59,461.95	7.9%
2006	62,317.27	4.8%
2007	71,050.22	14.0%
2008	-	-100.0%
2009	137,801.41	N/A
2010	70,446.46	-48.9%
2011	70,893.30	0.6%
2012	77,700.11	9.6%
2013	77,298.10	-0.5%
2014	81,017.31	4.8%

(Historical information only - No State Monies received after fiscal 2014)

# PARTIAL HISTORY OF PREMIUM TAX REFUNDS FIREFIGHTERS

Received During <u>Fiscal Year</u>	Amount	Increase from Previous Year
1997	70,510.54	%
1998	84,957.68	20.5%
1999	83,629.64	-1.6%
2000	109,664.52	31.1%
2001	92,878.93	-15.3%
2002	106,726.80	14.9%
2003	138,730.84	30.0%
2004	140,408.22	1.2%
2005	177,792.61	26.6%
2006	225,258.22	26.7%
2007	295,948.69	31.4%
2008	-	-100.0%
2009	513,555.97	N/A
2010	241,221.17	-53.0%
2011	239,800.33	-0.6%
2012	274,615.73	14.5%
2013	269,818.47	-1.7%

(Historical information only - No State Monies received after fiscal 2013)

## STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2020

ASSETS Contract Contractor	COST VALUE	MARKET VALUE
Cash and Cash Equivalents: Prepaid Benefits Money Market Cash	71,720.88 206,702.85 8,339.10	71,720.88 206,702.85 8,339.10
Total Cash and Equivalents	286,762.83	286,762.83
Receivables:		-
From Broker for Investments Sold Investment Income	50,951.12 18,560.41	50,951.12 18,560.41
Total Receivable	69,511.53	69,511.53
Investments:		
U. S. Bonds and Bills	799,921.13	856,528.46
Federal Agency Guaranteed Securities	167,623.52	173,513.68
Corporate Bonds	755,527.42	790,998.46
Stocks Mutual Funds:	2,409,083.67	2,683,850.27
Equity	1,026,809.73	2,181,446.08
Pooled/Common/Commingled Funds:		
Real Estate	731,934.00	730,424.14
Total Investments	5,890,899.47	7,416,761.09
Total Assets	6,247,173.83	7,773,035.45
LIABILITIES Payables:		
Administrative Expenses	1,058.53	1,058.53
To Broker for Investments Purchased	7,986.80	7,986.80
Total Liabilities	9,045.33	9,045.33
NET POSITION RESTRICTED FOR PENSIONS	6,238,128.50	7,763,990.12

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

ADDITIONS Contributions: Town		634,000.00	
Total Contributions			634,000.00
Investment Income: Net Realized Gain (Loss) Unrealized Gain (Loss) Net Increase in Fair Value of Investments Interest & Dividends Less Investment Expense <sup>1</sup>	206,737.99 127,339.03	334,077.02 170,855.49 (40,635.87)	
Net Investment Income			464,296.64
Total Additions			1,098,296.64
<u>DEDUCTIONS</u> Distributions to Members: Benefit Payments Lump Sum DROP Distributions		823,685.25 0.00	
Total Distributions			823,685.25
Administrative Expense			19,348.62
Total Deductions			843,033.87
Net Increase in Net Position			255,262.77
NET POSITION RESTRICTED FOR PENSIONS Beginning of the Year	5		7,508,727.35
End of the Year			7,763,990.12

<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:

Rate of Return <sup>1</sup>		
11.15%		
8.04%		
2.86%		
6.36%		
rs:	7.06%	
:		\$7,686,658.98
es Total	170,855.49 206,737.99 127,339.03 71,049.01 (40,635.87)	535,345.65
:		\$8,012,970.76
		7.06%
Assets:		\$8,012,970.76
Assets:		\$7,763,990.12
(Actuarial Asset Basis)		\$4,549.68
	11.15% 8.04% 2.86% 6.36% rs: : es Total : Assets: Assets:	11.15% 8.04% 2.86% 6.36% rs: 7.06% rs: 7.06% rs: 170,855.49 206,737.99 127,339.03 71,049.01 es (40,635.87) Total r Assets: Assets:

<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

	KE VENUES	
Contributions:		
Town	634,000.00	
Total Contributions		634,000.00
Earnings from Investments: Interest & Dividends Net Realized Gain (Loss) Unrealized Gain (Loss) Change in Actuarial Value	170,855.49 206,737.99 127,339.03 71,049.01	
Total Earnings and Investment Gains		575,981.52
	EXPENDITURES	
Distributions to Members:		
Benefit Payments	823,685.25	
Lump Sum DROP Distributions	0.00	
Total Distributions		823,685.25
Expenses:		
Investment related <sup>1</sup>	40,635.87	
Administrative	19,348.62	
Total Expenses		59,984.49
Change in Net Assets for the Year		326,311.78
Net Assets Beginning of the Year		7,686,658.98
Net Assets End of the Year <sup>2</sup>		8,012,970.76

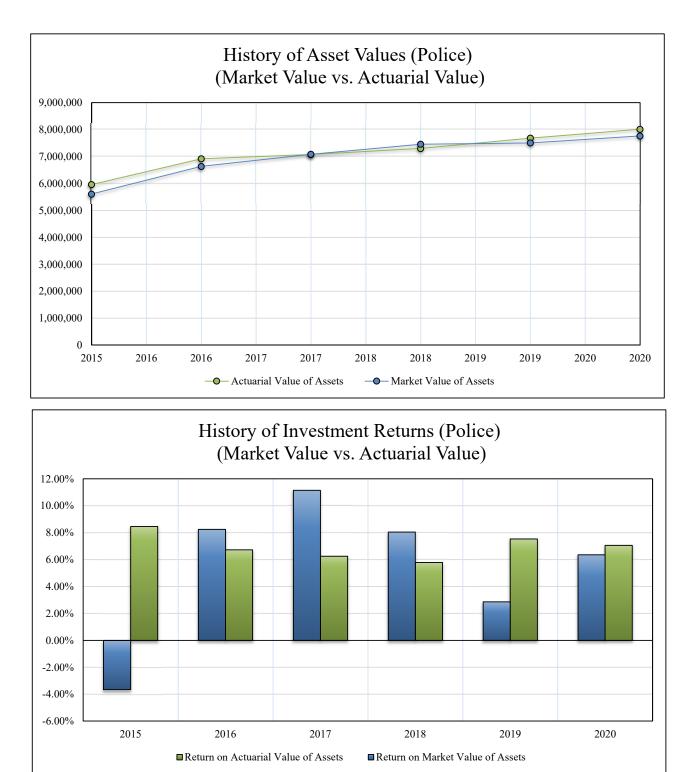
<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees. <sup>2</sup>Net Assets may be limited for actuarial consideration.

# TOWN CONTRIBUTIONS IN EXCESS OF MINIMUM REQUIREMENT FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2020

## POLICE OFFICERS

(1)	Required Town Contributions	\$634,000.00
(2)	Less 2019 Prepaid Contribution	0.00
(3)	Less Actual Town Contributions	(634,000.00)
(4)	Town Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2020	\$0.00

# HISTORY OF ASSET VALUES AND INVESTMENT RETURNS



## STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2020

ASSETS	COST VALUE	MARKET VALUE
Cash and Cash Equivalents: Prepaid Benefits	181,181.48	181,181.48
Money Market	534,112.98	534,112.98
Cash	21,547.95	21,547.95
Tatal Cash and Espiralants	,	
Total Cash and Equivalents	736,842.41	736,842.41
Receivables:		
Additional Town Contributions	30,194.00	30,194.00
From Broker for Investments Sold	131,655.93	131,655.93
Investment Income	47,959.45	47,959.45
Total Receivable	209,809.38	209,809.38
Investments:		
U. S. Bonds and Bills	2,066,968.37	2,213,239.76
Federal Agency Guaranteed Securities	433,133.35	448,353.32
Corporate Bonds	1,952,256.58	2,043,912.52
Stocks	6,224,988.41	6,934,975.77
Mutual Funds:		
Equity	2,653,240.64	5,636,780.80
Pooled/Common/Commingled Funds:		
Real Estate	1,891,292.00	1,887,390.57
Total Investments	15,221,879.35	19,164,652.74
Total Assets	16,168,531.14	20,111,304.53
<u>LIABILITIES</u>		
Payables:		
Administrative Expenses	2,735.20	2,735.20
To Broker for Investments Purchased	20,142.70	20,142.70
Total Liabilities	22,877.90	22,877.90
NET POSITION RESTRICTED FOR PENSIONS	16,145,653.24	20,088,426.63

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

ADDITIONS Contributions: Town		2,144,404.00	
Total Contributions			2,144,404.00
Investment Income: Net Realized Gain (Loss) Unrealized Gain (Loss) Net Increase in Fair Value of Investments Interest & Dividends Less Investment Expense <sup>1</sup>	521,393.23 329,867.38	851,260.61 432,067.70 (102,483.66)	
Net Investment Income			1,180,844.65
Total Additions			3,325,248.65
<u>DEDUCTIONS</u> Distributions to Members: Benefit Payments Lump Sum DROP Distributions		2,123,370.72 0.00	
Total Distributions			2,123,370.72
Administrative Expense			48,857.47
Total Deductions			2,172,228.19
Net Increase in Net Position			1,153,020.46
NET POSITION RESTRICTED FOR PENSIONS Beginning of the Year	5		18,935,406.17
End of the Year			20,088,426.63

<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	11.15%		
09/30/2018	8.04%		
09/30/2019	2.86%		
09/30/2020	6.36%		
Annualized Rate of Return for prior four (4) y	rears:	7.06%	
(A) 10/01/2019 Actuarial Asso	ets:		\$19,370,419.61
(I) Net Investment Income:			
<ol> <li>Interest and Dividends</li> <li>Realized Gain (Loss)</li> <li>Unrealized Gain (Loss)</li> <li>Change in Actuarial Valu</li> <li>Investment Related Expension</li> </ol>		432,067.70 521,393.23 329,867.38 185,843.30 (102,483.66)	1,366,687.95
(B) 10/01/2020 Actuarial Asso	ets:		\$20,709,283.37
Actuarial Asset Rate of Return = $2I/(A+B-I)$ :			7.06%
10/01/2020 Limited Actuar	ial Assets:		\$20,709,283.37
10/01/2020 Market Value o	f Assets:		\$20,088,426.63
Actuarial Gain/(Loss) due to Investment Return	rn (Actuarial Asset Basis)		\$11,614.91

<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

	ICE VERICES	
Contributions: Town	2,144,404.00	
Total Contributions		2,144,404.00
Earnings from Investments: Interest & Dividends Net Realized Gain (Loss) Unrealized Gain (Loss) Change in Actuarial Value	432,067.70 521,393.23 329,867.38 185,843.30	
Total Earnings and Investment Gains		1,469,171.61
	EXPENDITURES	
Distributions to Members: Benefit Payments Lump Sum DROP Distributions	2,123,370.72 0.00	
Total Distributions		2,123,370.72
Expenses:		
Investment related <sup>1</sup> Administrative	102,483.66 48,857.47	
Total Expenses		151,341.13
Change in Net Assets for the Year		1,338,863.76
Net Assets Beginning of the Year		19,370,419.61
Net Assets End of the Year <sup>2</sup>		20,709,283.37

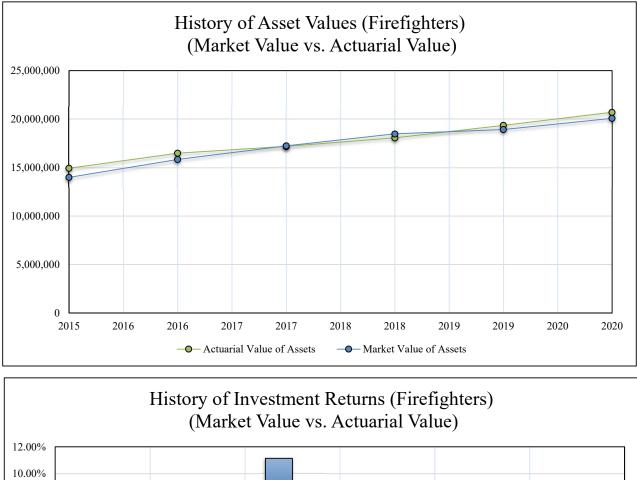
<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees. <sup>2</sup>Net Assets may be limited for actuarial consideration.

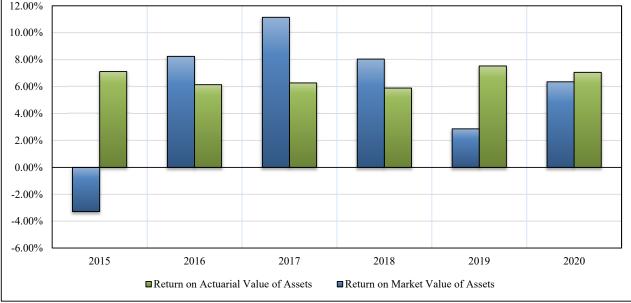
# TOWN CONTRIBUTIONS IN EXCESS OF MINIMUM REQUIREMENT FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2020

## FIREFIGHTERS

(1) Requi	red Town Contributions	\$2,144,404.00
(2) Less 2	019 Prepaid Contribution	0.00
(3) Less A	Actual Town Contributions	(2,114,210.00)
(4) Town	Shortfall Contribution as of September 30, 2020	\$30,194.00

# HISTORY OF ASSET VALUES AND INVESTMENT RETURNS





## STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2020

ASSETS Contract Contraction Instant	COST VALUE	MARKET VALUE
Cash and Cash Equivalents: Prepaid Benefits Money Market Cash	84,150.56 304,087.88 12,267.96	84,150.56 304,087.88 12,267.96
Total Cash and Equivalents	400,506.40	400,506.40
Receivables:		
From Broker for Investments Sold Investment Income	74,956.01 27,304.87	74,956.01 27,304.87
Total Receivable	102,260.88	102,260.88
Investments:		
U. S. Bonds and Bills	1,176,792.26	1,260,069.33
Federal Agency Guaranteed Securities	246,596.89	255,262.11
Corporate Bonds	1,111,483.11	1,163,665.82
Stocks	3,544,088.21	3,948,307.08
Mutual Funds:	1 510 556 10	
Equity	1,510,576.13	3,209,202.50
Pooled/Common/Commingled Funds:	1 056 554 00	1 054 550 50
Real Estate	1,076,774.00	1,074,552.79
Total Investments	8,666,310.60	10,911,059.63
Total Assets	9,169,077.88	11,413,826.91
LIABILITIES Payables:		
Administrative Expenses	1,557.24	1,557.24
To Broker for Investments Purchased	11,804.48	11,804.48
To Broker for investments Furchased	11,001.10	11,001.10
Total Liabilities	13,361.72	13,361.72
NET POSITION RESTRICTED FOR PENSIONS	9,155,716.16	11,400,465.19

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

<u>ADDITIONS</u> Contributions: Town		670,264.00	
Total Contributions			670,264.00
Investment Income: Net Realized Gain (Loss) Unrealized Gain (Loss) Net Increase in Fair Value of Investments Interest & Dividends Less Investment Expense <sup>1</sup>	305,558.76 188,665.89	494,224.65 252,346.20 (60,059.81)	
Net Investment Income			686,511.04
Total Additions			1,356,775.04
<u>DEDUCTIONS</u> Distributions to Members: Benefit Payments Lump Sum DROP Distributions		1,024,528.35 0.00	
Total Distributions			1,024,528.35
Administrative Expense			28,589.98
Total Deductions			1,053,118.33
Net Increase in Net Position			303,656.71
NET POSITION RESTRICTED FOR PENSIONS Beginning of the Year	5		11,096,808.48
End of the Year			11,400,465.19

<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	11.15%		
09/30/2018	8.04%		
09/30/2019	2.86%		
09/30/2020	6.36%		
Annualized Rate of Return for prior four (4) year	rs:	7.06%	
(A) 10/01/2019 Actuarial Assets:	:		\$11,331,707.78
(I) Net Investment Income:			
<ol> <li>Interest and Dividends</li> <li>Realized Gain (Loss)</li> <li>Unrealized Gain (Loss)</li> <li>Change in Actuarial Value</li> <li>Investment Related Expense</li> </ol>	es Fotal	252,346.20 305,558.76 188,665.89 100,060.98 (60,059.81)	786,572.02
(B) 10/01/2020 Actuarial Assets:			\$11,735,425.47
Actuarial Asset Rate of Return = $2I/(A+B-I)$ :			7.06%
10/01/2020 Limited Actuarial	Assets:		\$11,735,425.47
10/01/2020 Market Value of A	Assets:		\$11,400,465.19
Actuarial Gain/(Loss) due to Investment Return (	(Actuarial Asset Basis)		\$6,684.75

<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

	KE VENUE5	
Contributions: Town	670,264.00	
Total Contributions		670,264.00
Earnings from Investments: Interest & Dividends Net Realized Gain (Loss) Unrealized Gain (Loss) Change in Actuarial Value	252,346.20 305,558.76 188,665.89 100,060.98	
Total Earnings and Investment Gains		846,631.83
	EXPENDITURES	
Distributions to Members: Benefit Payments Lump Sum DROP Distributions	1,024,528.35 0.00	
Total Distributions		1,024,528.35
Expenses: Investment related <sup>1</sup> Administrative	60,059.81 28,589.98	
Total Expenses		88,649.79
Change in Net Assets for the Year		403,717.69
Net Assets Beginning of the Year		11,331,707.78
Net Assets End of the Year <sup>2</sup>		11,735,425.47

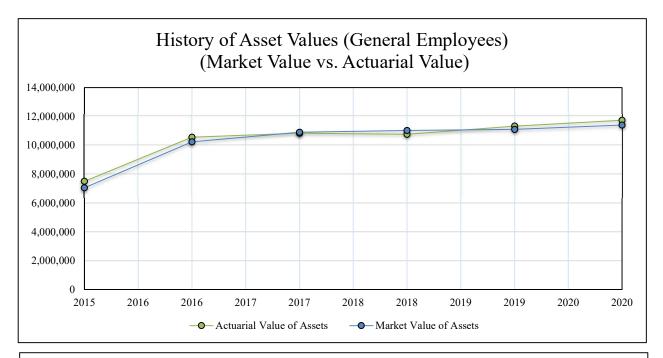
<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees. <sup>2</sup>Net Assets may be limited for actuarial consideration.

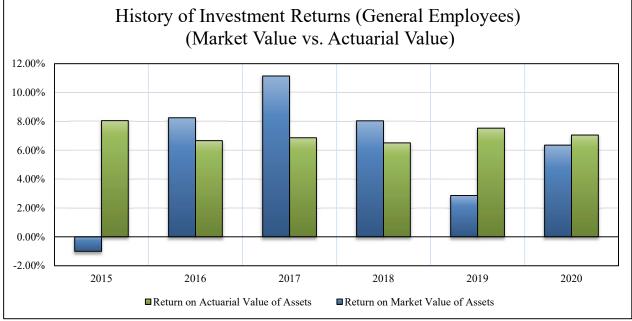
# TOWN CONTRIBUTIONS IN EXCESS OF MINIMUM REQUIREMENT FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2020

#### GENERAL EMPLOYEES

(1)	Required Town Contributions	\$670,264.00
(2)	Less 2019 Prepaid Contribution	0.00
(3)	Less Actual Town Contributions	(670,264.00)
(4)	Town Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2020	\$0.00

# HISTORY OF ASSET VALUES AND INVESTMENT RETURNS





# VALUATION PARTICIPANT RECONCILIATION POLICE OFFICERS

# 1. Active lives

a. Number in prior valuation 10/1/2019	5
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	0
iii. Refund of member contributions or full lump sum distributio	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(1)
f. Continuing participants	4
g. New entrants	0
h. Total active life participants in valuation	4

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

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred <u>Annuity)</u>	Vested (Due <u>Refund)</u>	<u>Total</u>
a. Number prior valuation	14	3	2	2	0	21
Retired	1	0	0	0	0	1
Vested (Deferred Annuity)	0	0	0	0	0	0
Vested (Due Refund)	0	0	0	0	0	0
Hired/Terminated in Same Year	0	0	0	0	0	0
Death, With Survivor	0	0	0	0	0	0
Death, No Survivor	0	0	0	0	0	0
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	15	3	2	2	0	22

# VALUATION PARTICIPANT RECONCILIATION FIREFIGHTERS

# 1. Active lives

a. Number in prior valuation 10/1/2019	5
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	0
iii. Refund of member contributions or full lump sum distributio	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. Continuing participants	5
g. New entrants	0
h. Total active life participants in valuation	5

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

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred <u>Annuity)</u>	Vested (Due <u>Refund)</u>	<u>Total</u>
a. Number prior valuation	31	1	4	3	1	40
Retired	0	0	0	0	0	0
Vested (Deferred Annuity)	0	0	0	0	0	0
Vested (Due Refund)	0	0	0	0	0	0
Hired/Terminated in Same Year	0	0	0	0	0	0
Death, With Survivor	0	0	0	0	0	0
Death, No Survivor	0	0	0	0	0	0
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	31	1	4	3	1	40

# VALUATION PARTICIPANT RECONCILIATION GENERAL EMPLOYEES

# 1. Active lives

a. Number in prior valuation 10/1/2019	17
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 distributio	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(1)
f. Continuing participants	15
g. New entrants	0
h. Total active life participants in valuation	15

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

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred <u>Annuity)</u>	Vested (Due <u>Refund)</u>	<u>Total</u>
a. Number prior valuation	41	2	0	11	0	54
Retired	2	0	0	(1)	0	1
Vested (Deferred Annuity)	0	0	0	1	0	1
Vested (Due Refund)	0	0	0	0	0	0
Hired/Terminated in Same Year	0	0	0	0	0	0
Death, With Survivor	0	1	0	(1)	0	0
Death, No Survivor	(1)	0	0	0	0	(1)
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	42	3	0	10	0	55

#### SUMMARY OF PLAN PROVISIONS POLICE OFFICERS (Through Ordinance 2016-22)

# The below information is for historical reference only. Benefits are frozen as of February 1, 2014

<u>Eligibility</u>	Full-time Police Officers participate as a condition of employment. Members hired after January 31, 2014 do not participate in this System.
Credited Service	Total years and fractional parts of years of service as a Police Officer with the Town. Credited Service is frozen as of January 31, 2014.
Salary	Total W-2 compensation, plus tax deferred, tax-sheltered, and tax-exempt income. Salary earned after January 31, 2014 is not counted for determination of the accrued benefit.
Average Final Compensation	Average Salary for the best 5 years during the 10 years immediately preceding retirement or termination. Average Final Compensation is not applicable for the determination of the accrued benefit after January 31, 2014.
Member Contributions	None (previously 10%).
Town Contributions	Amount necessary to maintain actuarial soundness and meet State requirements.
Normal Retirement	
Eligibility	Attainment of 1) age 60, 2) age 55 and the completion of 10 years of Credited Service or 3) the completion of 25 years of Credited Service, regardless of age.
Benefit	3.5% of Average Final Compensation times Years of Credited Service. The accrued benefit is frozen as of January 31, 2014.
Form of Benefit	10 Year Certain and Life Annuity (options are available).

Early Re	etirement (r	removed	with	Ordinance	2013-13)

Eligibility	Age 45 and the completion of 15 Service or Age 50 and the compl Credited Service.	•
Benefit	Accrued benefit, reduced 3% per	year.
Supplemental Benefit	\$10.00 per month for each year of payable to age 65. Credited Serv January 31, 2014 for determinati Benefit.	vice is frozen as of
Cost of Living Adjustment	Service Retirees receive a 3% an commencing on the October 1 fo years of benefit payments.	
<u>Vesting (Termination)</u>	Upon an employee's termination reason other than death, disability be entitled to the payment of the his or her accrued pension at the (reduced) of Normal Retirement Vested Percentage is determined	y or retirement, he shall Vested Percentage of otherwise Early Date. The applicable
	Years of Service	Percentage <sup>1</sup>
	Less than 5 5 6 7 8 9 10 <sup>1</sup> Members are 100% vested in th benefit as of January 31, 2014.	0% 50% 60% 70% 80% 90% 100%
Death Benefit		
Vested or Eligible for Retirement	Monthly accrued benefit payable beneficiary. The accrued benefit 31, 2014.	
Non-Vested	Refund of Member Contributions	S.

# <u>Disability</u>

Eligibility	
Service Incurred	Covered from Date of Employment.
Non-Service Incurred	10 years of Credited Service.
Benefit	<ul><li>3.5% of Average Final Compensation times</li><li>Credited Service (but not less than 42% of</li><li>Average Final Compensation for Service Incurred).</li><li>Average Final Compensation and Credited Service for</li><li>purposes of determining the applicable minimum</li><li>Disability Benefit are frozen as of January 31, 2014.</li></ul>
Form of Benefit	Ten year Certain and Life Annuity (options are available).
Board of Trustees	<ul><li>a. Five Commission appointees, and</li><li>b. Two Town Manager appointees</li></ul>
Deferred Retirement Option Plan (DROP)	e. Two Town manager appointees
Eligibility	Members who were within two years of Normal Retirement eligibility as of January 25, 2014 had the option of DROP participation prior to February 1, 2014.
Participation	Not to exceed 36 months.
Rate of Return	At the Member's election:
	a. Actual net rate of investment return credited each fiscal quarter, or
	b. A fixed rate money market account.
Form of Distribution	Cash lump sum (options available) at termination of employment.

## SUMMARY OF PLAN PROVISIONS FIREFIGHTERS (Through Ordinance 2016-22)

# The below information is for historical reference only. Benefits are frozen as of September 30, 2013.

Eligibility	Full-time certified Firefighters participate as a condition of employment. Members hired after September 30, 2013 do not participate in this System
Credited Service	Total years and fractional parts of years of service as a Firefighter with the Town. Credited Service is frozen as of September 30, 2013.
<u>Salary</u>	Total W-2 compensation, plus tax deferred, tax- sheltered, and tax-exempt income. Salary earned after September 30, 2013 is not counted for determination of the accrued benefit.
Average Final Compensation	Average Salary for the best 5 years during the 10 years immediately preceding retirement or termination. Average Final Compensation is not applicable for the determination of the accrued benefit after September 30, 2013.
Member Contributions	None.
Town Contributions	Amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability over 30 years (per Chapter 112, Florida Statutes).
Normal Retirement	
Eligibility	Attainment of 1) age 60, 2) age 55 and the completion of 10 years of Credited Service or 3) the completion of 25 years of Credited Service, regardless of age.
Benefit	3.5% of Average Final Compensation times Years of Credited Service. The accrued benefit is frozen as of September 30, 2013.
Form of Benefit	10 Year Certain and Life Annuity (options are available).

## Early Retirement (removed with Ordinance 2013-13)

Eligibil	lity	Age 45 and the completion of 15 years of Credited Service or Age 50 and the completion of 10 years of Credited Service.	
Benefit		Accrued benefit, reduced 3% per year.	
<u>Supplemental E</u>	<u>Benefit</u>	\$10.00 per month for each year of Credited Service, payable to age 65. Credited Service is frozen as of September 30, 2013 for determination of the Supplemental Benefit.	
<u>Vesting (Termi</u>	nation)	Upon an employee's termination of employment for reason other than death, disability or retirement, he shal be entitled to the payment of the Vested Percentage of his or her accrued pension at the otherwise Early (reduced) of Normal Retirement Date. The applicable Vested Percentage is determined by the following table:	
		Years of Service	Percentage <sup>1</sup>
		Less than 5 5 6 7 8 9 10 <sup>1</sup> Members are 100% vested in the benefit as of September 30, 2013.	0% 50% 60% 70% 80% 90% 100% ir frozen accrued
<u>Disability</u>			
Eligibil	lity		
	Service Incurred	Covered from Date of Employment.	
	Non-Service Incurred	10 years of Credited Service.	
	Benefit	<ul><li>3.5% of Average Final Compensation times</li><li>Credited Service (but not less than 42% of</li><li>Average Final Compensation for Service Incurred).</li><li>Average Final Compensation and Credited Service for</li><li>purposes of determining the applicable minimum</li><li>Disability Benefit are frozen as of September 30, 2013.</li></ul>	
	Form of Benefit	Ten year Certain and Life Annuity available)	v (options are

Cost of Living Adjustment	Service Retirees receive a 3% annual increase in benefits commencing on the October 1 following the receipt of 5 years of benefit payments.
Death Benefit	
Vested or Eligible for Retirement	Monthly accrued benefit payable to designated beneficiary. The accrued benefit is frozen as of September 30, 2013.
Non-Vested	Refund of Member Contributions.
Board of Trustees	a. Five Commission appointees, and
	b. Two Town Manager appointees
Deferred Retirement Option Plan (DROP)	
Eligibility	Satisfaction of Normal Retirement requirements. New DROP participants are not permitted after September 30, 2013.
Participation	Not to exceed 36 months.
Rate of Return	At the Member's election:
	a. Actual net rate of investment return credited each fiscal quarter, or
	b. A fixed rate money market account.
Form of Distribution	Cash lump sum (options available) at termination of employment.

## SUMMARY OF PLAN PROVISIONS GENERAL EMPLOYEES (Through Ordinance No. 2016-22)

# The information below is for historical reference only. Benefits are frozen as of September 30, 2013.

Effective Date	April 1, 1992
Latest Amendment	August 14, 2013
Eligibility	Full-time employees hired before September 30, 2013 become Members as a condition of employment.
<u>Compensation</u>	W-2 earnings, plus tax-deferred, tax-sheltered, and tax-exempt income. Salary earned after September 30, 2013 is not counted for determination of the accrued benefit.
Average Final Compensation	Average Compensation paid an employee during the best 5 years within the last 10 years preceding September 30, 2013.
Credited Service	Years and fractional parts of years of service with the Town as a General Employee through September 30, 2013.
Normal Retirement	
Eligibility	Earlier of 1) Age 62 or 2) Age 55 and the completion of 30 years of Credited Service.
Benefit	2.75% of Average Final Compensation times Years of Credited Service. The benefit is frozen as of September 30, 2013.
Form of Benefit	Life Annuity with 120 months certain (options available).
Early Retirement	
Date	Attainment of age 50 and the completion of 15 years of Credited Service.
Benefit	Accrued benefit reduced 3.0% for each year preceding the Normal Retirement Date.

Death Benefit		
Not Vested	Refund of Member Contributions.	
Vested	Accrued benefit paid to Beneficiary for 120 months at Member's otherwise Early (reduced) or Normal Retirement Date.	
Post-Retirement	According to optional form of benefit selected.	
<u>Termination of Employment</u>	Upon an employee's termination of employment for reason other than death, disability or retirement, he shall be entitled to the payment of the Vested Percentage of his or her accrued pension at the otherwise Early (reduced) or Normal Retirement Date. The applicable Vested Percentage is determined by the following table:	
	Years of Service	Percentage
	Less than 5 5 6 7 8 9 10	0% 50% 60% 70% 80% 90% 100%
	Members are 100% vested on September 30, 2013.	
Deferred Retirement Option Plan		
Eligibility	Within 12 months following satisfaction of Normal Retirement requirements (age 62 or age 55 and 30 years of Credited Service.) New DROP Participants are not allowed after September 30, 2013.	
Participation	Not to exceed 60 months.	
Rate of Return	At election of Member (may change once during the DROP period) either: 1) actual net rate of investment return (total return net of brokerage commissions, management fees, and transaction costs), or 2) 6.5%. Earnings are credited each fiscal quarter.	
Form of Distribution	Cash lump sum (options available) at t employment.	ermination of

## **Contributions**

EmployeeNone.TownAmount necessary for payment of Normal (current<br/>year's) Cost and amortization of the accrued past service<br/>liability over 30 years (per Chapter 112, F.S.).

## GASB 67

Town of Longboat Key Police Officers' Retirement System

## STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2020

ASSETS	MARKET VALUE
Cash and Cash Equivalents:	
Prepaid Benefits	71,721
Prepaid Expenses	0
Money Market	206,703
Cash	8,339
Total Cash and Equivalents	286,763
Receivables:	
From Broker for Investments Sold	50,951
Investment Income	18,560
Total Receivable	69,511
Investments:	
U. S. Bonds and Bills	856,528
Federal Agency Guaranteed Securities	173,514
Corporate Bonds	790,999
Stocks	2,683,850
Equity	2,181,446
Real Estate	730,424
Total Investments	7,416,761
Total Assets	7,773,035
LIABILITIES	
Payables:	
Administrative Expenses	1,058
To Broker for Investments Purchased	7,987
Total Liabilities	9,045
NET POSITION RESTRICTED FOR PENSIONS	7,763,990

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

ADDITIONS Contributions: Town	634,000
Total Contributions	634,000
Investment Income: Net Increase in Fair Value of Investments Interest & Dividends	334,077 170,856
Less Investment Expense <sup>1</sup>	(40,636)
Net Investment Income	464,297
Total Additions	1,098,297
DEDUCTIONS Distributions to Members: Benefit Payments	823,685
Total Distributions	823,685
Administrative Expense	19,349
Total Deductions	843,034
Net Increase in Net Position	255,263
NET POSITION RESTRICTED FOR PENSIONS Beginning of the Year	7,508,727
End of the Year	7,763,990

<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. Five Commission appointees, and

b. Two Town Manager appointees.

Full-time Police Officers participate as a condition of employment. Members hired after January 31, 2014 do not participate in this System.

#### Plan Membership as of October 1, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	19
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	2
Active Plan Members	5
	26

## Benefits Provided

The Plan provides retirement, termination, disability and death benefits. Benefits are frozen as of February 1, 2014. A summary of the benefit provisions can be found in the October 1, 2019 Actuarial Valuation Report for the Town of Longboat Key Consolidated Retirement System prepared by Foster & Foster Actuaries and Consultants.

## Contributions

#### Member Contributions: None.

Town Contributions: Amount necessary to maintain actuarial soundness and meet State requirements.

## Investment Policy:

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

Asset Class	Target Allocation
Domestic Equity	45.00%
International Equity	15.00%
Fixed Income	25.00%
Real Estate	10.00%
MLP/Energy Infrastructure	5.00%
Total	100.00%

#### 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 6.36 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: Members who were within two years of Normal Retirement eligibility as of January 25, 2014 had the option of DROP participation prior to February 1, 2014.

Participation: Not to exceed 36 months.

At Member's election:

a. Actual net rate of investment return credited each fiscal quarter, or

b. A fixed rate money market account.

The DROP balance as September 30, 2020 is \$0.

## 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	\$ 11,841,093
Plan Fiduciary Net Position	\$ (7,763,990)
Sponsor's Net Pension Liability	\$ 4,077,103
Plan Fiduciary Net Position as a percentage of Total Pension Liability	 65.57%

#### 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	2.30%
Salary Increases	None
Discount Rate	7.00%
Investment Rate of Return	7.00%

#### Mortality Rate Healthy Active Lives:

Female: PubS.H-2010 for Employees, set forward one year.
Male: PubS.H-2010 (Below Median) for Employees, set forward one year. *Mortality Rate Retiree Lives:*Female: PubS.H-2010 for Healthy Retirees, set forward one year.
Male: PubS.H-2010 for Healthy Retirees, set forward one year. *Mortality Rate Beneficiary Lives:*Female: PubG.H-2010 for Healthy Retirees.
Male: PubG.H-2010 for Healthy Retirees, set back one year. *Mortality Rate Disabled Lives:*80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.
All rates are projected generationally with Mortality Improvement Scale MP-2018. We feel this assumption sufficiently

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.

The most recent actuarial experience study used to review the other significant assumptions was dated February 25, 2008.

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 1.80%.

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

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

	Long Term Expected Real Rate of
Asset Class	Return <sup>1</sup>
Domestic Equity	5.71%
International Equity	4.60%
Fixed Income	1.45%
Real Estate	4.80%
MLP/Energy Infrastructure	4.82%

<sup>1</sup> Source: Morgan Stanley. Based on secular annualized return and volatility estimates are based on a 20-year-plus time horizon.

Please note that long term expected return of the total portfolio is greater than simply multiplying each of the above "Long Term Expected Real Rate of Returns" by their target allocation % and adding them together. Not only is the time horizon longer for an actuarial valuation relative to the time horizon over which the above projected returns were generated, but also there is an additional correlation resulting from a diversified portfolio that will provide additional returns.

#### Discount Rate:

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

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

	Current					
	19	% Decrease	Di	scount Rate	19	% Increase
	6.00%		7.00%		8.00%	
Sponsor's Net Pension Liability	\$	5,357,984	\$	4,077,103	\$	3,001,421

## 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	14,470	15,180
Interest	810,997	827,065
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	98,696	(257,101)
Changes of assumptions	(246,036)	-
Benefit Payments, including Refunds of Employee Contributions	(823,685)	(804,263)
Net Change in Total Pension Liability	(145,558)	(219,119)
Total Pension Liability - Beginning	11,986,651	12,205,770
Total Pension Liability - Ending (a)	\$ 11,841,093	\$ 11,986,651
Plan Fiduciary Net Position		
Contributions - Employer	634,000	654,726
Net Investment Income	464,297	207,777
Benefit Payments, including Refunds of Employee Contributions	(823,685)	(804,263)
Administrative Expense	(19,349)	(18,631)
Net Change in Plan Fiduciary Net Position	255,263	39,609
Plan Fiduciary Net Position - Beginning	7,508,727	7,469,118
Plan Fiduciary Net Position - Ending (b)	\$ 7,763,990	\$ 7,508,727
Net Pension Liability - Ending (a) - (b)	\$ 4,077,103	\$ 4,477,924
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	65.57%	62.64%
Covered Payroll	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A

## **Notes to Schedule:**

## 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.

## SCHEDULE OF CONTRIBUTIONS

Last 2 Fiscal Years

				ntributions relation to				Contributions
	Ac	ctuarially	the A	Actuarially	Co	ntribution		as a percentage
	De	etermined	De	etermined	D	eficiency	Covered	of Covered
Fiscal Year Ended	Co	ntribution	Cor	ntributions	(	Excess)	Payroll	Payroll
09/30/2020	\$	634,000	\$	634,000	\$	-	N/A	N/A
09/30/2019	\$	654,726	\$	654,726	\$	-	N/A	N/A

Notes to Schedule Valuation Date:

10/01/2018

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

Methods and assumptions used to determine contribution rates can be found in the October 1, 2018 Actuarial Valuation for the City of Longboat Key Consolidated Retirement System prepared by Foster & Foster Actuaries and Consultants.

SCHEDULE OF INVESTMENT RETURNS

Last 2 Fiscal Years

	Annual Money-Weighted Rate of Return
Fiscal Year Ended	Net of Investment Expense
09/30/2020	6.36%
09/30/2019	2.86%

## 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. Five Commission appointees, and

b. Two Town Manager appointees.

Full-time Police Officers participate as a condition of employment. Members hired after January 31, 2014 do not participate in this System.

#### Plan Membership as of October 1, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	19
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	2
Active Plan Members	5
	26

## Benefits Provided

The Plan provides retirement, termination, disability and death benefits. Benefits are frozen as of February 1, 2014. A summary of the benefit provisions can be found in the October 1, 2019 Actuarial Valuation Report for the Town of Longboat Key Consolidated Retirement System prepared by Foster & Foster Actuaries and Consultants.

#### Contributions

Member Contributions: None.

Town Contributions: Amount necessary to maintain actuarial soundness and meet State requirements.

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	2.30%
Salary Increases	None
Discount Rate	7.00%
Investment Rate of Return	7.00%

Mortality Rate Healthy Active Lives:
Female: PubS.H-2010 for Employees, set forward one year.
Male: PubS.H-2010 (Below Median) for Employees, set forward one year.
Mortality Rate Retiree Lives:
Female: PubS.H-2010 for Healthy Retirees, set forward one year.
Male: PubS.H-2010 for Healthy Retirees, set forward one year.
Mortality Rate Beneficiary Lives:
Female: PubG.H-2010 for Healthy Retirees.
Male: PubG.H-2010 for Healthy Retirees, set back one year.
Mortality Rate Disabled Lives:
80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

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

The most recent actuarial experience study used to review the other significant assumptions was dated February 25, 2008.

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 1.80%.

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

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

	Long Term Expected
Target Allocation	Real Rate of Return <sup>1</sup>
45.00%	5.71%
15.00%	4.60%
25.00%	1.45%
10.00%	4.80%
5.00%	4.82%
100.00%	
	45.00% 15.00% 25.00% 10.00% 5.00%

<sup>1</sup> Source: Morgan Stanley. Based on secular annualized return and volatility estimates are based on a 20-year-plus time horizon.

Please note that long term expected return of the total portfolio is greater than simply multiplying each of the above "Long Term Expected Real Rate of Returns" by their target allocation % and adding them together. Not only is the time horizon longer for an actuarial valuation relative to the time horizon over which the above projected returns were generated, but also there is an additional correlation resulting from a diversified portfolio that will provide additional returns.

#### Discount Rate:

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

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

## Town of Longboat Key Police Officers' Retirement System CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)					
	Т	otal Pension	Pla	n Fiduciary	l	Net Pension
		Liability	N	et Position		Liability
		(a)		(b)		(a)-(b)
Reporting Period Ending September 30, 2020	\$	11,986,651	\$	7,508,727	\$	4,477,924
Changes for a Year:						
Service Cost		14,470		-		14,470
Interest		810,997		-		810,997
Differences between Expected and Actual Experience		98,696		-		98,696
Changes of assumptions		(246,036)		-		(246,036)
Changes of benefit terms		-		-		-
Contributions - Employer		-		634,000		(634,000)
Net Investment Income		-		464,297		(464,297)
Benefit Payments, including Refunds of Employee Contributions		(823,685)		(823,685)		-
Administrative Expense		-		(19,349)		19,349
Net Changes		(145,558)		255,263		(400,821)
Reporting Period Ending September 30, 2021	\$	11,841,093	\$	7,763,990	\$	4,077,103

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

	Current Discount						
	19	% Decrease	se Rate		1	1% Increase	
		6.00%		7.00%		8.00%	
Sponsor's Net Pension Liability	\$	5,357,984	\$	4,077,103	\$	3,001,421	

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 \$219,163. On September 30, 2020, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Ou	eferred tflows of esources	Inf	eferred lows of sources
Differences between Expected and Actual Experience		-		-
Changes of assumptions		-		-
Net difference between Projected and Actual Earnings on Pension Plan investments		89,074		-
Employer contributions subsequent to the measurement date		634,000		-
Total	\$	723,074	\$	-

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer 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	\$ (18,823)
2022	\$ (2,978)
2023	\$ 49,040
2024	\$ 61,835
2025	\$ -
Thereafter	\$ -

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

For the year ended September 30, 2021, the Sponsor will recognize a Pension Expense of \$171,156. 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	-	-
Changes of assumptions	-	-
Net difference between Projected and Actual Earnings on Pension Plan investments	151,097	-
Employer contributions subsequent to the measurement date	TBD	-
Total	TBD	\$ -

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer 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	\$ 7,822
2023	\$ 59,840
2024	\$ 72,635
2025	\$ 10,800
2026	\$ -
Thereafter	\$ -

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

Reporting Period Ending Measurement Date	09/30/2021 09/30/2020	09/30/2020 09/30/2019
Total Pension Liability	· ·	
Service Cost	14,470	15,180
Interest	810,997	827,065
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	98,696	(257,101)
Changes of assumptions	(246,036)	-
Benefit Payments, including Refunds of Employee Contributions	(823,685)	(804,263)
Net Change in Total Pension Liability	(145,558)	(219,119)
Total Pension Liability - Beginning	11,986,651	12,205,770
Total Pension Liability - Ending (a)	\$ 11,841,093	\$ 11,986,651
Plan Fiduciary Net Position		
Contributions - Employer	634,000	654,726
Net Investment Income	464,297	207,777
Benefit Payments, including Refunds of Employee Contributions	(823,685)	(804,263)
Administrative Expense	(19,349)	(18,631)
Net Change in Plan Fiduciary Net Position	255,263	39,609
Plan Fiduciary Net Position - Beginning	7,508,727	7,469,118
Plan Fiduciary Net Position - Ending (b)	\$ 7,763,990	\$ 7,508,727
Net Pension Liability - Ending (a) - (b)	\$ 4,077,103	\$ 4,477,924
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	65.57%	62.64%
Covered Payroll	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A

## **Notes to Schedule:**

#### 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.

## SCHEDULE OF CONTRIBUTIONS

Last 2 Fiscal Years

			Cor	ntributions				
			in 1	elation to				Contributions
	A	ctuarially	the .	Actuarially	Co	ntribution		as a percentage
	Determined		De	etermined	D	eficiency	Covered	of Covered
Fiscal Year Ended	Contribution		Cor	ntributions	(	Excess)	Payroll	Payroll
09/30/2020	\$	634,000	\$	634,000	\$	-	N/A	N/A
09/30/2019	\$	654,726	\$	654,726	\$	-	N/A	N/A

Notes to Schedule

Valuation Date:

10/01/2018

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

Methods and assumptions used to determine contribution rates can be found in the October 1, 2018 Actuarial Valuation for the City of Longboat Key Consolidated 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

	let Pension Liability	Deferred Inflows	Deferred Outflows		Pension Expense
Beginning balance	\$ 4,736,652	\$ 238,924	\$ 805,889	\$	-
Employer Contributions made after 09/30/2019	-	-	634,000		-
Total Pension Liability Factors:					
Service Cost	15,180	-	-		15,180
Interest	827,065	-	-		827,065
Changes in benefit terms	-	-	-		-
Differences between Expected and Actual Experience					
with regard to economic or demographic assumptions	(257,101)	257,101	-		-
Current year amortization of experience difference	-	(257,101)	-		(257,101)
Change in assumptions about future economic or					
demographic factors or other inputs	-	-	-		-
Current year amortization of change in assumptions	-	-	-		-
Benefit Payments, including Refunds of Employee					
Contributions	 (804,263)	 	-		-
Net change	 (219,119)	 	634,000		585,144
Plan Fiduciary Net Position:					
Contributions - Employer	654,726	-	(654,726)		-
Projected Net Investment Income	516,952	-	-		(516,952)
Difference between projected and actual earnings on					
Pension Plan investments	(309,175)	-	309,175		-
Current year amortization	-	(80,658)	(212,998)		132,340
Benefit Payments, including Refunds of Employee					
Contributions	(804,263)	-	-		-
Administrative Expenses	 (18,631)	 -	-		18,631
Net change	 39,609	 (80,658)	(558,549)	_	(365,981)
Ending Balance	\$ 4,477,924	\$ 158,266	\$ 881,340	\$	219,163

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

	]	et Pension Liability	 Deferred Inflows	Deferred Outflows	 Pension Expense
Beginning balance	\$	4,477,924	\$ 158,266	\$ 881,340	\$ -
Employer Contributions made after 09/30/2020		-	-	TBD*	-
Total Pension Liability Factors:					
Service Cost		14,470	-	-	14,470
Interest		810,997	-	-	810,997
Changes in benefit terms		-	-	-	-
Differences between Expected and Actual Experience					
with regard to economic or demographic assumptions		98,696	-	98,696	-
Current year amortization of experience difference		-	-	(98,696)	98,696
Change in assumptions about future economic or					
demographic factors or other inputs		(246,036)	246,036	-	-
Current year amortization of change in assumptions		-	(246,036)	-	(246,036)
Benefit Payments, including Refunds of Employee					
Contributions		(823,685)	 -	-	 -
Net change		(145,558)	 -	-	 678,127
Plan Fiduciary Net Position:					
Contributions - Employer		634,000	-	(634,000)	-
Projected Net Investment Income		518,295	-	-	(518,295)
Difference between projected and actual earnings on					
Pension Plan investments		(53,998)	-	53,998	-
Current year amortization		-	(80,658)	(72,633)	(8,025)
Benefit Payments, including Refunds of Employee					
Contributions		(823,685)	-	-	-
Administrative Expenses		(19,349)	 -	-	 19,349
Net change		255,263	 (80,658)	(652,635)	 (506,971)
Ending Balance	\$	4,077,103	\$ 77,608	TBD	\$ 171,156

\* Employer 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

lan Year	5	and Actual	Recognition														_
Ending	Ear	nings	Period (Years)	 2020	 2021	2022	2023		2024	 2025	20	26	 2027	2028		202	)
2020	\$	53,998	5	\$ -	\$ 10,798 \$	10,800	\$ 10,800 \$	5	10,800	\$ 10,800 \$	5	-	\$ - \$		- 5	5	
2019	\$	309,175	5	\$ 61,835	\$ 61,835 \$	61,835	\$ 61,835 \$	5	61,835	\$ - \$	5	-	\$ - \$		- 3	5	
2018	\$	(63,977)	5	\$ (12,795)	\$ (12,795) \$	(12,795)	\$ (12,795) \$	5	-	\$ - \$	5	-	\$ - \$		- 3	5	
2017	\$	(260,090)	5	\$ (52,018)	\$ (52,018) \$	(52,018)	\$ - \$	5	-	\$ - \$	5	-	\$ - \$		- 3	5	
2016	\$	(79,225)	5	\$ (15,845)	\$ (15,845) \$	-	\$ - \$	5	-	\$ - \$	5	-	\$ - \$		- 3	5	-
2015	\$	755,814	5	\$ 151,163	\$ - \$	-	\$ - \$	5	-	\$ - \$	5	-	\$ - \$		- 3	5	-

## AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

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

Plan Year Ending		ferences Between bected and Actual Experience	Recognition Period (Years)	2020		2021	2022		2023		2024	1	2025		2026		2027		2028		2029	
2020	\$	(246,036)	1	\$	- \$	(246,036)	\$ -	• \$		- :	\$	- \$		- \$		- \$		- \$		- \$		-
Net Increas	se (De	crease) in Pension	Expense	\$	- \$	(246,036)	\$ -	• \$		- 3	\$	- \$		- \$		- \$		- \$		- \$		-

## AMORTIZATION SCHEDULE - EXPERIENCE

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

	Dif	ferences Between																				
Plan Year	Exp	pected and Actual	Recognition																			
Ending		Experience	Period (Years)	2020		2021	2022		202	3	2024		2025		2026		2027		2028		2029	
2020	\$	98,696	1	\$	- \$	98,696	\$	-	\$	-	\$	- \$		-	\$	-	\$	- \$		- \$		-
2019	\$	(257,101)	1	\$ (257,10	1) \$	-	\$	-	\$	-	\$	- \$		-	\$	-	\$	- \$		- \$		-
Net Increas	e (De	ecrease) in Pension	Expense	\$ (257,10	1) \$	98,696	\$	-	\$	-	\$	- \$		-	\$	-	\$	- \$		- \$		-

## STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2020

ASSETS	MARKET VALUE
Cash and Cash Equivalents:	101 101
Prepaid Benefits Money Market	181,181 534,113
Cash	21,548
Cuon	21,510
Total Cash and Equivalents	736,842
Receivables:	
Additional Town Contributions	30,194
From Broker for Investments Sold	131,656
Investment Income	47,959
Total Receivable	209,809
Investments:	
U. S. Bonds and Bills	2,213,240
Federal Agency Guaranteed Securities	448,353
Corporate Bonds	2,043,913
Stocks	6,934,976
Mutual Funds:	
Equity	5,636,781
Pooled/Common/Commingled Funds:	
Real Estate	1,887,391
Total Investments	19,164,654
Total Assets	20,111,305
LIABILITIES	
Payables:	
Administrative Expenses	2,735
To Broker for Investments Purchased	20,143
Total Liabilities	22,878
NET POSITION RESTRICTED FOR PENSIONS	20,088,427

## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2020

Market Value Basis

ADDITIONS Contributions:		
Town	2,144,404	
Total Contributions		2,144,404
Investment Income:		
Net Increase in Fair Value of Investments	851,261	
Interest & Dividends	432,068	
Less Investment Expense <sup>1</sup>	(102,484)	
Net Investment Income		1,180,845
Total Additions		3,325,249
<u>DEDUCTIONS</u> Distributions to Members: Benefit Payments Lump Sum DROP Distributions	2,123,371 0	
Total Distributions		2,123,371
Administrative Expense		48,857
Total Deductions		2,172,228
Net Increase in Net Position		1,153,021
NET POSITION RESTRICTED FOR PENSIONS Beginning of the Year		18,935,406
End of the Year		20,088,427

<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. Five Commission appointees, and

b. Two Town Manager appointees.

Full-time certified Firefighters participate as a condition of employment. Members hired after September 30, 2013 do not participate in this System

#### Plan Membership as of October 1, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	36
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	4
Active Plan Members	5
	45

#### Benefits Provided

The Plan provides retirement, termination, disability and death benefits. Benefits are frozen as of September 30, 2013. A summary of the benefit provisions can be found in the October 1, 2019 Actuarial Valuation Report for the Town of Longboat Key Consolidated Retirement System prepared by Foster & Foster Actuaries and Consultants.

#### Contributions

#### Member Contributions: None.

Town Contributions: Amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability over 30 years (per Chapter 112, Florida Statutes).

#### Investment Policy:

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

Target Allocation
45.00%
15.00%
25.00%
10.00%
5.00%
100.00%

#### 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 6.36 percent.

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

## Deferred Retirement Option Program

Eligibility: Satisfaction of Normal Retirement requirements. New DROP participants are not permitted after September 30, 2013.

Participation: Not to exceed 36 months.

Rate of Return: At the Member's election:

a. Actual net rate of investment return credited each fiscal quarter, or

b. A fixed rate money market account.

The DROP balance as September 30, 2020 is \$0.

## 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	\$ 32,208,388
Plan Fiduciary Net Position	\$ (20,088,427)
Sponsor's Net Pension Liability	\$ 12,119,961
Plan Fiduciary Net Position as a percentage of Total Pension Liability	62.37%

#### 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	2.30%
Salary Increases	None.
Discount Rate	7.00%
Investment Rate of Return	7.00%

#### Mortality Rate Healthy Active Lives:

Female: PubS.H-2010 for Employees, set forward one year.
Male: PubS.H-2010 (Below Median) for Employees, set forward one year. *Mortality Rate Retiree Lives:*Female: PubS.H-2010 for Healthy Retirees, set forward one year.
Male: PubS.H-2010 for Healthy Retirees, set forward one year. *Mortality Rate Beneficiary Lives:*Female: PubG.H-2010 for Healthy Retirees.
Male: PubG.H-2010 for Healthy Retirees, set back one year.

Mortality Rate Disabled Lives:

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

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

The most recent actuarial experience study used to review the other significant assumptions was dated March 10, 2008.

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 1.80%.

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

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

	Long Term Expected Real Rate of	
Asset Class	Return <sup>1</sup>	
Domestic Equity	5.71%	
International Equity	4.60%	
Fixed Income	1.45%	
Real Estate	4.80%	
MLP/Energy Infrastructure	4.82%	

<sup>1</sup> Source: Morgan Stanley. Based on secular annualized return and volatility estimates are based on a 20-year-plus time horizon.

Please note that long term expected return of the total portfolio is greater than simply multiplying each of the above "Long Term Expected Real Rate of Returns" by their target allocation % and adding them together. Not only is the time horizon longer for an actuarial valuation relative to the time horizon over which the above projected returns were generated, but also there is an additional correlation resulting from a diversified portfolio that will provide additional returns.

#### Discount Rate:

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

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

	Current		
	1% Decrease	Discount Rate	1% Increase
	6.00%	7.00%	8.00%
Sponsor's Net Pension Liability	\$ 15,800,560	\$ 12,119,961	\$ 9,049,033

## 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	6,585	11,489
Interest	2,184,370	2,155,999
Changes of benefit terms	-	410
Differences between Expected and Actual Experience	603,406	328,243
Changes of assumptions	(722,995)	-
Benefit Payments, including Refunds of Employee Contributions	(2,123,371)	(2,047,660)
Net Change in Total Pension Liability	(52,005)	448,481
Total Pension Liability - Beginning	32,260,393	31,811,912
Total Pension Liability - Ending (a)	\$ 32,208,388	\$ 32,260,393
Plan Fiduciary Net Position		
Contributions - Employer	2,144,404	1,980,448
Net Investment Income	1,180,845	518,225
Benefit Payments, including Refunds of Employee Contributions	(2,123,371)	(2,047,660)
Administrative Expense	(48,857)	(46,157)
Net Change in Plan Fiduciary Net Position	1,153,021	404,856
Plan Fiduciary Net Position - Beginning	18,935,406	18,530,550
Plan Fiduciary Net Position - Ending (b)	\$ 20,088,427	\$ 18,935,406
Net Pension Liability - Ending (a) - (b)	\$ 12,119,961	\$ 13,324,987
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	62.37%	58.70%
Covered Payroll	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A

#### **Notes to Schedule:**

#### Changes of benefit terms:

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

#### Changes of assumptions:

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

## SCHEDULE OF CONTRIBUTIONS

Last 2 Fiscal Years

		Contributions in relation to			Contributions
	Actuarially	the Actuarially	Contribution		as a percentage
	Determined	Determined	Deficiency	Covered	of Covered
Fiscal Year Ended	Contribution	Contributions	(Excess)	Payroll <sup>1</sup>	Payroll
09/30/2020	\$ 2,144,404	\$ 2,144,404	\$ -	N/A	N/A
09/30/2019	\$ 1,980,448	\$ 1,980,448	\$ -	N/A	N/A

Notes to Schedule Valuation Date:

10/01/2018

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

Methods and assumptions used to determine contribution rates can be found in the October 1, 2018 Actuarial Valuation for the City of Longboat Key Consolidated Retirement System prepared by Foster & Foster Actuaries and Consultants.

## SCHEDULE OF INVESTMENT RETURNS

Last 2 Fiscal Years

	Annual Money-Weighted Rate of Return
Fiscal Year Ended	Net of Investment Expense
09/30/2020	6.36%
09/30/2019	2.86%

## 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. Five Commission appointees, and

b. Two Town Manager appointees.

Full-time certified Firefighters participate as a condition of employment. Members hired after September 30, 2013 do not participate in this System.

#### Plan Membership as of October 1, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	36
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	4
Active Plan Members	5
	45

## Benefits Provided

The Plan provides retirement, termination, disability and death benefits. Benefits are frozen as of September 30, 2013. A summary of the benefit provisions can be found in the October 1, 2019 Actuarial Valuation Report for the Town of Longboat Key Consolidated 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: None.

Town Contributions: Amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability over 30 years (per 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, 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	2.30%
Salary Increases	None.
Discount Rate	7.00%
Investment Rate of Return	7.00%

Mortality Rate Healthy Active Lives:
Female: PubS.H-2010 for Employees, set forward one year.
Male: PubS.H-2010 (Below Median) for Employees, set forward one year.
Mortality Rate Retiree Lives:
Female: PubS.H-2010 for Healthy Retirees, set forward one year.
Male: PubS.H-2010 for Healthy Retirees, set forward one year.
Mortality Rate Beneficiary Lives:
Female: PubG.H-2010 for Healthy Retirees.
Male: PubG.H-2010 for Healthy Retirees, set back one year.
Mortality Rate Disabled Lives:
80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

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

The most recent actuarial experience study used to review the other significant assumptions was dated March 10, 2008.

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 1.80%.

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

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

		Long Term Expected
Asset Class	Target Allocation	Real Rate of Return <sup>1</sup>
Domestic Equity	45.00%	5.71%
International Equity	15.00%	4.60%
Fixed Income	25.00%	1.45%
Real Estate	10.00%	4.80%
MLP/Energy Infrastructure	5.00%	4.82%
Total	100.00%	

<sup>1</sup> Source: Morgan Stanley. Based on secular annualized return and volatility estimates are based on a 20-year-plus time horizon.

Please note that long term expected return of the total portfolio is greater than simply multiplying each of the above "Long Term Expected Real Rate of Returns" by their target allocation % and adding them together. Not only is the time horizon longer for an actuarial valuation relative to the time horizon over which the above projected returns were generated, but also there is an additional correlation resulting from a diversified portfolio that will provide additional returns.

#### Discount Rate:

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

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

# Town of Longboat Key Firefighters' Retirement System CHANGES IN NET PENSION LIABILITY

			Inc	rease (Decrease	e)	
	Т	otal Pension	Р	lan Fiduciary	]	Net Pension
		Liability	]	Net Position		Liability
		(a)		(b)		(a)-(b)
Reporting Period Ending September 30, 2020	\$	32,260,393	\$	18,935,406	\$	13,324,987
Changes for a Year:						
Service Cost		6,585		-		6,585
Interest		2,184,370		-		2,184,370
Differences between Expected and Actual Experience		603,406		-		603,406
Changes of assumptions		(722,995)		-		(722,995)
Changes of benefit terms		-		-		-
Contributions - Employer		-		2,144,404		(2,144,404)
Net Investment Income		-		1,180,845		(1,180,845)
Benefit Payments, including Refunds of Employee Contributions		(2,123,371)		(2,123,371)		-
Administrative Expense	_	-		(48,857)		48,857
Net Changes		(52,005)		1,153,021		(1,205,026)
Reporting Period Ending September 30, 2021	\$	32,208,388	\$	20,088,427	\$	12,119,961

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

			Cur	rent Discount		
	1	% Decrease		Rate	1	1% Increase
		6.00%		7.00%		8.00%
Sponsor's Net Pension Liability	\$	15,800,560	\$	12,119,961	\$	9,049,033

Pension Plan Fiduciary Net Position.

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

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

For the year ended September 30, 2020, the Sponsor has recognized a Pension Expense of \$1,550,876. 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	-	-
Changes of assumptions	-	-
Net difference between Projected and Actual Earnings on Pension Plan investments	234,559	-
Employer contributions subsequent to the measurement date	2,144,404	-
Total	\$ 2,378,963	\$ -

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer 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	\$ (44,654)
2022	\$ 84
2023	\$ 124,140
2024	\$ 154,989
2025	\$ -
Thereafter	\$ -

Payable to the Pension Plan

On September 30, 2020, the Sponsor reported a payable of \$30,194 for the outstanding amount of contributions of the Pension Plan required for the year ended September 30, 2020.

## 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 \$779,796. 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	-	-
Changes of assumptions	-	-
Net difference between Projected and Actual Earnings on Pension Plan investments	394,141	-
Employer contributions subsequent to the measurement date	TBD	-
Total	TBD	\$ -

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer 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	\$ 28,816
2023	\$ 152,872
2024	\$ 183,721
2025	\$ 28,732
2026	\$ -
Thereafter	\$ -

Payable to the Pension Plan

On September 30, 2020, the Sponsor reported a payable of \$30,194 for the outstanding amount of contributions of the Pension Plan required for the year ended September 30, 2020.

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

Reporting Period Ending	09/30/2021	09/30/2020
Measurement Date	09/30/2020	09/30/2019
Total Pension Liability	07/30/2020	07/30/2017
Service Cost	6,585	11,489
Interest	2,184,370	2,155,999
Changes of benefit terms	_,_ 0 ,, 0 , 0 , 0	410
Differences between Expected and Actual Experience	603,406	328,243
Changes of assumptions	(722,995)	
Benefit Payments, including Refunds of Employee Contributions	(2,123,371)	(2,047,660)
Net Change in Total Pension Liability	(52,005)	448,481
Total Pension Liability - Beginning	32,260,393	31,811,912
· · · · -	\$ 32,208,388	\$ 32,260,393
=	- , - ,	
Plan Fiduciary Net Position		
Contributions - Employer	2,144,404	1,980,448
Net Investment Income	1,180,845	518,225
Benefit Payments, including Refunds of Employee Contributions	(2,123,371)	(2,047,660)
Administrative Expense	(48,857)	(46,157)
— Net Change in Plan Fiduciary Net Position	1,153,021	404,856
Plan Fiduciary Net Position - Beginning	18,935,406	18,530,550
Plan Fiduciary Net Position - Ending (b)	\$ 20,088,427	\$ 18,935,406
=		
Net Pension Liability - Ending (a) - (b)	\$ 12,119,961	\$ 13,324,987
=		
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	62.37%	58.70%
Covered Payroll	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A

#### **Notes to Schedule:**

#### Changes of benefit terms:

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

#### Changes of assumptions:

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

## SCHEDULE OF CONTRIBUTIONS

Last 2 Fiscal Years

		Contributions			
		in relation to			Contributions
	Actuarially	the Actuarially	Contribution		as a percentage
	Determined	Determined	Deficiency	Covered	of Covered
Fiscal Year Ended	Contribution	Contributions	(Excess)	Payroll	Payroll
09/30/2020	\$ 2,144,404	\$ 2,144,404	\$ -	N/A	N/A
09/30/2019	\$ 1,980,448	\$ 1,980,448	\$ -	N/A	N/A

Notes to Schedule

Valuation Date:

10/01/2018

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

Methods and assumptions used to determine contribution rates can be found in the October 1, 2018 Actuarial Valuation for the City of Longboat Key Consolidated 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	\$ 13,281,362	\$ 585,040	\$ 2,326,850	\$ -
Employer Contributions made after 09/30/2019	-	-	2,144,404	-
Total Pension Liability Factors:				
Service Cost	11,489	-	-	11,489
Interest	2,155,999	-	-	2,155,999
Changes in benefit terms	410	-	-	410
Differences between Expected and Actual Experience				
with regard to economic or demographic assumptions	328,243	-	328,243	-
Current year amortization of experience difference	-	-	(328,243)	328,243
Change in assumptions about future economic or				
demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	-	-
Benefit Payments, including Refunds of Employee				
Contributions	(2,047,660)		-	
Net change	448,481		2,144,404	2,496,141
Plan Fiduciary Net Position:				
Contributions - Employer	1,980,448	-	(1,980,448)	-
Projected Net Investment Income	1,293,171	_	-	(1,293,171)
Difference between projected and actual earnings on	, , -			
Pension Plan investments	(774,946)	-	774,946	-
Current year amortization	-	(199,643)	(501,392)	301,749
Benefit Payments, including Refunds of Employee				,
Contributions	(2,047,660)	-	-	-
Administrative Expenses	(46,157)	-	-	46,157
Net change	404,856	(199,643)	(1,706,894)	(945,265)
Ending Balance	\$ 13,324,987	\$ 385,397	\$ 2,764,360	\$ 1,550,876

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

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 13,324,987	\$ 385,397	\$ 2,764,360	\$ -
Employer Contributions made after 09/30/2020	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	6,585	-	-	6,585
Interest	2,184,370	-	-	2,184,370
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience				
with regard to economic or demographic assumptions	603,406	-	603,406	-
Current year amortization of experience difference	-	-	(603,406)	603,406
Change in assumptions about future economic or				
demographic factors or other inputs	(722,995)	722,995	-	-
Current year amortization of change in assumptions	-	(722,995)	-	(722,995)
Benefit Payments, including Refunds of Employee				
Contributions	(2,123,371)			
Net change	(52,005)	-		2,071,366
Plan Fiduciary Net Position:				
Contributions - Employer	2,144,404	-	(2,144,404)	-
Projected Net Investment Income	1,324,505	-	-	(1,324,505)
Difference between projected and actual earnings on				
Pension Plan investments	(143,660)	-	143,660	-
Current year amortization	-	(199,643)	(183,721)	(15,922)
Benefit Payments, including Refunds of Employee				
Contributions	(2,123,371)	-	-	-
Administrative Expenses	(48,857)	-	-	48,857
Net change	1,153,021	(199,643)	(2,184,465)	(1,291,570)
Ending Balance	\$ 12,119,961	\$ 185,754	TBD	\$ 779,796

\* Employer 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

	Diff	erences Between																
Plan Year	Proj	ected and Actual	Recognition															
Ending		Earnings	Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027		2028		2029		20	030
2020	\$	143,660	5	\$ -	\$ 28,732	\$ 28,732	\$ 28,732	\$ 28,732	\$ 28,732	\$ - \$		-	\$	-	\$	-	\$	-
2019	\$	774,946	5	\$ 154,990	\$ 154,989	\$ 154,989	\$ 154,989	\$ 154,989	\$ -	\$ - \$		-	\$	-	\$	-	\$	-
2018	\$	(154,245)	5	\$ (30,849)	\$ (30,849)	\$ (30,849)	\$ (30,849)	\$ -	\$ -	\$ - \$		-	\$	-	\$	-	\$	-
2017	\$	(620,281)	5	\$ (124,056)	\$ (124,056)	\$ (124,056)	\$ -	\$ -	\$ -	\$ - \$		-	\$	-	\$	-	\$	-
2016	\$	(223,688)	5	\$ (44,738)	\$ (44,738)	\$ -	\$ -	\$ -	\$ -	\$ - \$		-	\$	-	\$	-	\$	-
2015	\$	1,732,012	5	\$ 346,402	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - \$		-	\$	-	\$	-	\$	-
Net Increase	e (De	crease) in Pension	Expense	\$ 301,749	\$ (15,922)	\$ 28,816	\$ 152,872	\$ 183,721	\$ 28,732	\$ - \$		-	\$	-	\$	-	\$	

## 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	2(	029
2020	\$ (722,995)	) 1	\$	- \$	(722,995) \$		- \$		- \$		- \$		- \$		- \$		- \$		- \$	-
Net Increase	(Decrease) in Pension	n Expense	\$	- \$	(722,995) \$		- \$		- \$		- \$		- \$		- \$		- \$		- \$	-

## AMORTIZATION SCHEDULE - EXPERIENCE

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

	Dif	ferences Between																					
Plan Year	Exp	pected and Actual	Recognition																				
Ending		Experience	Period (Years)	2020	2021	2022		2023		2024	-	2025		2026		2027		2028		2029		 2030	
2020	\$	603,406	1	\$ -	\$ 603,406	\$	- 5	\$	-	\$	-	\$	- 3	5	- 5	5	-	\$	-	\$	-	\$	-
2019	\$	328,243	1	\$ 328,243	\$ -	\$	- 3	\$	-	\$	-	\$	- 3	5	- 3	5	-	\$	-	\$	-	\$	-
Net Increase	e (De	crease) in Pension	Expense	\$ 328,243	\$ 603,406	\$	- 3	\$	-	\$	-	\$	- 3	5	- 5	5	-	\$	-	\$	-	\$	-

# STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2020

ASSETS	MARKET VALUE
Cash and Cash Equivalents:	
Prepaid Benefits	84,151
Money Market	304,088
Cash	12,268
Total Cash and Equivalents	400,507
Receivables:	
From Broker for Investments Sold	74,956
Investment Income	27,305
Total Receivable	102,261
Investments:	
U. S. Bonds and Bills	1,260,069
Federal Agency Guaranteed Securities	255,262
Corporate Bonds	1,163,666
Stocks	3,948,307
Mutual Funds:	
Equity	3,209,202
Real Estate	1,074,553
Total Investments	10,911,059
Total Assets	11,413,827
LIABILITIES	
Payables:	
Administrative Expenses	1,557
To Broker for Investments Purchased	11,805
Total Liabilities	13,362
NET POSITION RESTRICTED FOR PENSIONS	11,400,465

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

<u>ADDITIONS</u> Contributions:	
Town	670,264
Total Contributions	670,264
Investment Income:	
Net Increase in Fair Value of Investments	494,225
Interest & Dividends	252,346
Less Investment Expense <sup>1</sup>	(60,060)
Net Investment Income	686,511
Total Additions	1,356,775
DEDUCTIONS Distributions to Members:	
Benefit Payments	1,024,528
Total Distributions	1,024,528
Administrative Expense	28,590
Total Deductions	1,053,118
Net Increase in Net Position	303,657
NET POSITION RESTRICTED FOR PENSIONS	
Beginning of the Year	11,096,808
End of the Year	11,400,465

<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. The Board shall consist of seven Trustees, five of whom, unless otherwise prohibited by law, must be registered voters and residents of the town, who shall be appointed by the Longboat Key Town Commission, and two of whom shall be appointed by the Town Manager.

Plan Membership as of October 1, 2019:	
Inactive Plan Members or Beneficiaries Currently Receiving Benefits	43
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	11
Active Plan Members	17
	71

#### Benefits Provided

The Plan provides retirement, termination, and death benefits. Benefits are frozen as of September 30, 2013. A summary of the benefit provisions can be found in the October 1, 2019 Actuarial Valuation Report for the Town of Longboat Key Consolidated Retirement System prepared by Foster & Foster Actuaries and Consultants.

#### Contributions

#### Employee: None.

Town: Amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability over 30 years, as per 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	45.00%
International Equity	15.00%
Fixed Income	25.00%
Real Estate	10.00%
MLP/Energy Infrastructure	5.00%
Total	100.00%

#### 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 6.36 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: Within 12 months following satisfaction of Normal Retirement requirements (age 62 or age 55 and 30 years of Credited Service.) New DROP Participants are not allowed after September 30, 2013.

Participation: Not to exceed 60 months.

Rate of Return: At election of Member (may change once during the DROP period) either: 1) actual net rate of investment return (total return net of brokerage commissions, management fees, and transaction costs), or 2) 6.5%. Earnings are credited each fiscal quarter.

The DROP balance as September 30, 2020 is \$0.

## 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	\$ 14,351,378
Plan Fiduciary Net Position	\$ (11,400,465)
Sponsor's Net Pension Liability	\$ 2,950,913
Plan Fiduciary Net Position as a percentage of Total Pension Liability	79.44%

#### 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	2.30%
Salary Increases	None
Discount Rate	7.00%
Investment Rate of Return	7.00%

Mortality Rate Healthy Active Lives:

Female: PubG.H-2010 (Below Median) for Employees.
Male: PubG.H-2010 (Below Median) for Employees, set back one year. *Mortality Rate Healthy Retiree Lives:*Female: PubG.H-2010 for Healthy Retirees, set back one year. *Mortality Rate Beneficiary Lives:*Female: PubG.H-2010 for Healthy Retirees.
Male: PubG.H-2010 for Healthy Retirees, set back one year. *Mortality Rate Disabled Lives:*PubG.H-2010 for Disabled Retirees, set forward three years.

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 non-special-risk employees, with appropriate adjustments made based on plan demographics.

The most recent actuarial experience study used to review the other significant assumptions was dated March, 7, 2008.

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 1.80%.

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

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

	Long Term Expected Real Rate of
Asset Class	Return <sup>1</sup>
Domestic Equity	5.71%
International Equity	4.60%
Fixed Income	1.45%
Real Estate	4.80%
MLP/Energy Infrastructure	4.82%

<sup>1</sup> Source: Morgan Stanley. Based on secular annualized return and volatility estimates are based on a 20-year-plus time horizon.

Please note that long term expected return of the total portfolio is greater than simply multiplying each of the above "Long Term Expected Real Rate of Returns" by their target allocation % and adding them together. Not only is the time horizon longer for an actuarial valuation relative to the time horizon over which the above projected returns were generated, but also there is an additional correlation resulting from a diversified portfolio that will provide additional returns.

#### Discount Rate:

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

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

	Current							
	19	% Decrease	Di	scount Rate	19	% Increase		
		6.00%		7.00%		8.00%		
Sponsor's Net Pension Liability	\$	4,410,287	\$	2,950,913	\$	1,715,860		

# 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	2,024	2,231
Interest	991,851	1,009,583
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(266,891)	(253,661)
Changes of assumptions	(30,620)	-
Benefit Payments, including Refunds of Employee Contributions	(1,024,528)	(997,983)
Net Change in Total Pension Liability	(328,164)	(239,830)
Total Pension Liability - Beginning	14,679,542	14,919,372
Total Pension Liability - Ending (a)	\$ 14,351,378	\$ 14,679,542
Plan Fiduciary Net Position		
Contributions - Employer	670,264	758,168
Net Investment Income	686,511	308,291
Benefit Payments, including Refunds of Employee Contributions	(1,024,528)	(997,983)
Administrative Expense	(28,590)	(27,539)
Net Change in Plan Fiduciary Net Position	303,657	40,937
Plan Fiduciary Net Position - Beginning	11,096,808	11,055,871
Plan Fiduciary Net Position - Ending (b)	\$ 11,400,465	\$ 11,096,808
Net Pension Liability - Ending (a) - (b)	\$ 2,950,913	\$ 3,582,734
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	79.44%	75.59%
Covered Payroll	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A

#### **Notes to Schedule:**

#### 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 non-special-risk employees with appropriate adjustments made based on plan demographics.

## SCHEDULE OF CONTRIBUTIONS

Last 2 Fiscal Years

		Contributions in relation to			Contributions
	Actuarially	the Actuarially	Contribution		as a percentage
	Determined	Determined	Deficiency	Covered	of Covered
Fiscal Year Ended	Contribution	Contributions	(Excess)	Payroll	Payroll
09/30/2020	\$ 670,264	\$ 670,264	\$ -	N/A	N/A
09/30/2019	\$ 758,168	\$ 758,168	\$ -	N/A	N/A

Notes to Schedule

Valuation Date:

10/01/2018

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

Methods and assumptions used to determine contribution rates can be found in the October 1, 2018 Actuarial Valuation for the City of Longboat Key Consolidated Retirement System prepared by Foster & Foster Actuaries and Consultants.

## SCHEDULE OF INVESTMENT RETURNS

Last 2 Fiscal Years

Annual Money-Weighted Rate of ReturnFiscal Year EndedNet of Investment Expense09/30/20206.36%09/30/20192.86%

## 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. The Board shall consist of seven Trustees, five of whom, unless otherwise prohibited by law, must be registered voters and residents of the town, who shall be appointed by the Longboat Key Town Commission, and two of whom shall be appointed by the Town Manager. Full-time employees hired before September 30, 2013 become Members as a condition of employment.

#### Plan Membership as of October 1, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	43
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	11
Active Plan Members	17
	71

#### **Benefits** Provided

The Plan provides retirement, termination, and death benefits. Benefits are frozen as of September 30, 2013. A summary of the benefit provisions can be found in the October 1, 2019 Actuarial Valuation Report for the Town of Longboat Key Consolidated Retirement System prepared by Foster & Foster Actuaries and Consultants.

#### Contributions

#### Employee: None.

Town: Amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability over 30 years, as per 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, 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	2.30%
Salary Increases	None
Discount Rate	7.00%
Investment Rate of Return	7.00%

Mortality Rate Healthy Active Lives:
Female: PubG.H-2010 (Below Median) for Employees.
Male: PubG.H-2010 (Below Median) for Employees, set back one year.
Mortality Rate Healthy Retiree Lives:
Female: PubG.H-2010 for Healthy Retirees.
Male: PubG.H-2010 for Healthy Retirees, set back one year.
Mortality Rate Beneficiary Lives:
Female: PubG.H-2010 for Healthy Retirees.
Male: PubG.H-2010 for Healthy Retirees.
Male: PubG.H-2010 for Healthy Retirees.
Male: PubG.H-2010 for Healthy Retirees.
PubG.H-2010 for Healthy Retirees, set back one year.
Mortality Rate Disabled Lives:
PubG.H-2010 for Disabled Retirees, set forward three years.

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 non-special-risk employees, with appropriate adjustments made based on plan demographics.

The most recent actuarial experience study used to review the other significant assumptions was dated March, 7, 2008.

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 1.80%.

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

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

		Long Term Expected
Asset Class	Target Allocation	Real Rate of Return <sup>1</sup>
Domestic Equity	45.00%	5.71%
International Equity	15.00%	4.60%
Fixed Income	25.00%	1.45%
Real Estate	10.00%	4.80%
MLP/Energy Infrastructure	5.00%	4.82%
Total	100.00%	

<sup>1</sup> Source: Morgan Stanley. Based on secular annualized return and volatility estimates are based on a 20-year-plus time horizon. Please note that long term expected return of the total portfolio is greater than simply multiplying each of the above "Long Term Expected Real Rate of Returns" by their target allocation % and adding them together. Not only is the time horizon longer for an actuarial valuation relative to the time horizon over which the above projected returns were generated, but also there is an additional correlation resulting from a diversified portfolio that will provide additional returns.

#### Discount Rate:

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

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

# CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)					
	Total Pension Plan Fiduciary N				Net Pension	
		Liability	Net Position			Liability
		(a)		(b)		(a)-(b)
Reporting Period Ending September 30, 2020	\$	14,679,542	\$	11,096,808	\$	3,582,734
Changes for a Year:						
Service Cost		2,024		-		2,024
Interest		991,851		-		991,851
Differences between Expected and Actual Experience		(266,891)		-		(266,891)
Changes of assumptions		(30,620)		-		(30,620)
Changes of benefit terms		-		-		-
Contributions - Employer		-		670,264		(670,264)
Net Investment Income		-		686,511		(686,511)
Benefit Payments, including Refunds of Employee Contributions		(1,024,528)		(1,024,528)		-
Administrative Expense		-		(28,590)		28,590
Net Changes		(328,164)		303,657		(631,821)
Reporting Period Ending September 30, 2021	\$	14,351,378	\$	11,400,465	\$	2,950,913

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

	Current Discount					
						% Increase
						8.00%
Sponsor's Net Pension Liability	\$	4,410,287	\$	2,950,913	\$	1,715,860

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 \$296,524. 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	In	Deferred Iflows of esources
Differences between Expected and Actual Experience	-		126,831
Changes of assumptions	-		-
Net difference between Projected and Actual Earnings on Pension Plan investments	102,827		-
Employer Contributions subsequent to the measurement date	670,264		-
Total	\$ 773,091	\$	126,831

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer 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	\$ (166,837)
2022	\$ (15,435)
2023	\$ 67,015
2024	\$ 91,253
2025	\$ -
Thereafter	\$ -

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

For the year ended September 30, 2021, the Sponsor will recognize a Pension Expense of -\$41,130. 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	In	Deferred flows of esources
Differences between Expected and Actual Experience	-		133,446
Changes of assumptions	-		15,310
Net difference between Projected and Actual Earnings on Pension Plan investments	204,325		-
Employer Contributions subsequent to the measurement date	TBD		-
Total	TBD	\$	148,756

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer 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	\$ (148,818)
2023	\$ 82,388
2024	\$ 106,626
2025	\$ 15,373
2026	\$ -
Thereafter	\$ -

## 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	09/30/2020	09/30/2019
Total Pension Liability		
Service Cost	2,024	2,231
Interest	991,851	1,009,583
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(266,891)	(253,661)
Changes of assumptions	(30,620)	-
Benefit Payments, including Refunds of Employee Contributions	(1,024,528)	(997,983)
Net Change in Total Pension Liability	(328,164)	(239,830)
Total Pension Liability - Beginning	14,679,542	14,919,372
Total Pension Liability - Ending (a)	\$ 14,351,378	\$ 14,679,542
Plan Fiduciary Net Position		
Contributions - Employer	670,264	758,168
Net Investment Income	686,511	308,291
Benefit Payments, including Refunds of Employee Contributions	(1,024,528)	(997,983)
Administrative Expense	(28,590)	(27,539)
Net Change in Plan Fiduciary Net Position	303,657	40,937
Plan Fiduciary Net Position - Beginning	11,096,808	11,055,871
Plan Fiduciary Net Position - Ending (b)	\$ 11,400,465	\$ 11,096,808
Net Pension Liability - Ending (a) - (b)	\$ 2,950,913	\$ 3,582,734
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	79.44%	75.59%
Covered Payroll	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A

## Notes to Schedule:

#### 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 non-special-risk employees with appropriate adjustments made based on plan demographics.

## SCHEDULE OF CONTRIBUTIONS

Last 2 Fiscal Years

				ntributions relation to				Contributions
	A	ctuarially		Actuarially	Co	ntribution		as a percentage
		etermined		etermined		eficiency	Covered	of Covered
Fiscal Year Ended	Co	ntribution	Co	Contributions		Excess)	Payroll	Payroll
09/30/2020	\$	670,264	\$	670,264	\$	-	N/A	N/A
09/30/2019	\$	758,168	\$	758,168	\$	-	N/A	N/A

Notes to Schedule

Valuation Date:

10/01/2018

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

Methods and assumptions used to determine contribution rates can be found in the October 1, 2018 Actuarial Valuation for the City of Longboat Key Consolidated 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.

Difference between projected and actual earnings on

Benefit Payments, including Refunds of Employee

Pension Plan investments

Current year amortization

Administrative Expenses

Contributions

Net change

**Ending Balance** 

## Town of Longboat Key General Employees' Retirement System

## FINAL COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2020

	N	Vet Pension Liability	Deferred Inflows	Deferred Dutflows	 Pension Expense
Beginning balance		3,863,501	\$ 393,444	\$ 946,731	\$ -
Employer Contributions made after 09/30/2019		-	-	670,264	-
Total Pension Liability Factors:					
Service Cost		2,231	-	-	2,231
Interest		1,009,583	-	-	1,009,583
Changes in benefit terms		-	-	-	-
Differences between Expected and Actual Experience					
with regard to economic or demographic assumptions		(253,661)	253,661	-	-
Current year amortization of experience difference		-	(126,830)	(27,219)	(99,611)
Change in assumptions about future economic or					
demographic factors or other inputs		-	-	-	-
Current year amortization of change in assumptions		-	-	-	-
Benefit Payments, including Refunds of Employee					
Contributions		(997,983)	 -	-	 -
Net change		(239,830)	 126,831	 643,045	 912,203
Plan Fiduciary Net Position:					
Contributions - Employer		758,168	-	(758,168)	-
Projected Net Investment Income		764,554	-	-	(764,554)
Net change Plan Fiduciary Net Position: Contributions - Employer		(239,830) 758,168	 - - -	 <u> </u>	 912,203

(456,263)

(997,983)

(27, 539)40,937

3,582,734

\$

\$

-

121,336

27,539

(615,679)

296,524

456,263

(252,595)

-

(554,500)

1,035,276

\$

-

-

(131,259)

389,016

\$

(131, 259)

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

	et Pension Liability	Deferred Inflows	Deferred Dutflows	Pension Expense
Beginning balance	\$ 3,582,734	\$ 389,016	\$ 1,035,276	\$ -
Employer Contributions made after 09/30/2020	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	2,024	-	-	2,024
Interest	991,851	-	-	991,851
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience				
with regard to economic or demographic assumptions	(266,891)	266,891	-	-
Current year amortization of experience difference	-	(260,276)	-	(260,276)
Change in assumptions about future economic or				
demographic factors or other inputs	(30,620)	30,620	-	-
Current year amortization of change in assumptions	-	(15,310)	-	(15,310)
Benefit Payments, including Refunds of Employee				
Contributions	 (1,024,528)	 -	 -	 -
Net change	 (328,164)	 21,925	 -	 718,289
Plan Fiduciary Net Position:				
Contributions - Employer	670,264	-	(670,264)	-
Projected Net Investment Income	763,377	-	-	(763,377)
Difference between projected and actual earnings on				
Pension Plan investments	(76,866)	-	76,866	-
Current year amortization	-	(131,259)	(106,627)	(24,632)
Benefit Payments, including Refunds of Employee				
Contributions	(1,024,528)	-	-	-
Administrative Expenses	(28,590)	 -	 -	 28,590
Net change	 303,657	 (131,259)	 (700,025)	 (759,419)
Ending Balance	\$ 2,950,913	\$ 279,682	 TBD	\$ (41,130)

\* Employer 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	Proje	cted and Actual	Recognition													
Ending		Earnings	Period (Years)	2020	2021	2022	2023	2024		2025	2026	2027	2028		2029	)
2020	\$	76,866	5	\$ -	\$ 15,374	\$ 15,373	\$ 15,373 \$	15,3	73	\$ 15,373	\$ -	\$ - \$		-	\$	-
2019	\$	456,263	5	\$ 91,251	\$ 91,253	,	\$ 91,253 \$			\$ -	\$ -	\$ - \$		-	\$	-
2018	\$	(121,191)	5	\$ (24,238)	\$ (24,238)	\$ (24,238)	\$ (24,238) \$		-	\$ -	\$ -	\$ - \$		-	\$	-
2017	\$	(412,250)	5	\$ (82,450)	\$ (82,450)	\$ (82,450)	\$ - \$		-	\$ -	\$ -	\$ - \$		-	\$	-
2016	\$	(122,855)	5	\$ (24,571)	\$ (24,571)	\$ -	\$ - \$		-	\$ -	\$ -	\$ - \$		-	\$	-
2015	\$	806,720	5	\$ 161,344	\$ -	\$ -	\$ - \$		-	\$ -	\$ -	\$ - \$		-	\$	-
Net Increas	e (Dec	rease) in Pension	Expense	\$ 121,336	\$ (24,632)	\$ (62)	\$ 82,388 \$	106,6	26	\$ 15,373	\$ -	\$ - \$		-	\$	

## 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		2021	2022	2023		2024		2025		2026		2027	2028	2	2029
2020	\$ (30,	620) 2	\$ - \$	(15,310) \$	(15,310) \$		- \$		- \$		- \$		- \$	-	\$	- \$	-
Net Increase	e (Decrease) in Per	nsion Expense	\$ - \$	(15,310) \$	(15,310) \$		- \$		- \$		- \$		- \$	-	\$	- \$	-

## AMORTIZATION SCHEDULE - EXPERIENCE

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

	Diff	ferences Between																			
Plan Year	Exp	ected and Actual	Recognition																		
Ending		Experience	Period (Years)	2020	2021	2022		202	23	2024		2025		2026		2027		2028		202	.9
2020	\$	(266,891)	2	\$ -	\$ (133,445) \$	(133,44	6)	\$	-	\$	-	\$	- \$	5	-	\$	- \$		-	\$	-
2019	\$	(253,661)	2	\$ (126,830)	\$ (126,831) \$		-	\$	-	\$	-	\$	- \$	5	-	\$	- \$		-	\$	-
2018	\$	54,437	2	\$ 27,219	\$ - \$		-	\$	-	\$	-	\$	- \$	5	-	\$	- \$		-	\$	-
Net Increas	e (De	crease) in Pension	Expense	\$ (99,611)	\$ (260,276) \$	(133,44	6)	\$	-	\$	-	\$	- 9	5	-	\$	- \$		-	\$	-