#### TOWN OF LONGBOAT KEY CONSOLIDATED RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF OCTOBER 1, 2019

CONTRIBUTIONS APPLICABLE TO THE PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2021

GASB 67/68 DISCLOSURE INFORMATION AS OF SEPTEMBER 30, 2019



April 3, 2020

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. 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, 2019 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.

The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the 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.

Respectfully submitted,

Foster & Foster, Inc.

By:

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

Amanda M. Brown, ASA, MAAA

By:

Enclosures

DHL/lke

TABLE OF CONTENTS
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Section	Title	Page
Ι	Introduction	
	a. Summary of Report	5
	b. Changes Since Prior Valuation	6
	c. Comparative Summary of Principal Valuation Results	7
II	Valuation Information	
	a. Reconciliation of Unfunded Actuarial Accrued Liabilities	23
	b. Actuarial Assumptions and Methods	26
	c. Glossary	32
	d. Discussion of Risk	33
	e. Partial History of Premium Tax Refunds	38
III	Trust Fund	40
IV	Valuation Participant Reconciliation	55
V	Summary of Current Plan	58
VI	Governmental Accounting Standards Board Statements No. 67 and No. 68 Disclosure Information	67

#### SUMMARY OF REPORT

The regular annual actuarial valuation of the Town of Longboat Key Consolidated Retirement System, performed as of October 1, 2019, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2021.

The contribution requirements, compared with those set forth in the October 1, 2018 actuarial valuation report and the Actuarial Impact Statement for Firefighters' dated January 15, 2020, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2019 <u>9/30/2021</u>	10/1/2018 <u>9/30/2020</u>
Police Officers	\$553,969	\$634,000
Firefighters	2,006,151	2,144,404
General Employees	420,842	<u>670,264</u>
Town Required Contribution	\$2,980,962	\$3,448,668

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, and one Firefighter Disability Retirement. These losses were partially offset by a 7.53% investment return (net of fees, Actuarial Asset Basis), exceeding the 7.00% assumption, and greater than expected retiree mortality for the General Employees' portion of the Fund.

In spite of the net actuarial loss described above, the minimum required contribution amounts for the Police, Fire, and General components of the Consolidated Fund have decreased due to full recognition of actuarial losses incurred in fiscal 2009.

#### CHANGES SINCE PRIOR VALUATION

#### Plan Changes

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

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

#### Actuarial Assumption/Method Changes

There have been no changes of actuarial assumptions or methods since the prior valuation other than an increase in the expected percentage of Firefighter disabilities that are in line-of-duty, as a result of the plan change described above.

# COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS POLICE OFFICERS

	<u>10/1/2019</u>	<u>10/1/2018</u>
A. Participant Data		
Actives	5	5
Service Retirees	14	14
Beneficiaries	3	3
Disability Retirees	2	2
Terminated Vested	<u>2</u>	<u>2</u>
Total	26	26
Total Annual Payroll	N/A	N/A
Payroll Under Assumed Ret. Age	N/A	N/A
Annual Rate of Payments to:		
Service Retirees	667,312	651,836
Beneficiaries	94,502	92,905
Disability Retirees	59,528	59,528
Terminated Vested	27,191	27,191
B. Assets		
Actuarial Value (AVA)	7,686,659	7,302,500
Market Value (MVA)	7,508,727	7,460,871
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	757,709	693,815
Disability Benefits	27,246	46,732
Death Benefits	2,734	3,850
Vested Benefits	7,217	11,322
Refund of Contributions	0	0
Service Retirees	9,525,697	9,462,189
Beneficiaries	821,615	836,153
Disability Retirees	678,596	678,134
Terminated Vested	274,991	259,400
Total	12,095,805	11,991,595

C. Liabilities - (Continued)	<u>10/1/2019</u>	<u>10/1/2018</u>
Present Value of Future Salaries	N/A	N/A
Present Value of Future		
Member Contributions	N/A	N/A
Normal Cost (Retirement)	0	0
Normal Cost (Disability)	8,584	13,989
Normal Cost (Death)	653	704
Normal Cost (Vesting)	0	0
Normal Cost (Refunds)	<u>0</u>	<u>0</u>
Total Normal Cost	9,237	14,693
Present Value of Future		
Normal Costs	14,746	28,252
Accrued Liability (Retirement)	757,709	693,815
Accrued Liability (Disability)	13,563	20,143
Accrued Liability (Death)	1,671	2,187
Accrued Liability (Vesting)	7,217	11,322
Accrued Liability (Refunds)	0	0
Accrued Liability (Inactives)	<u>11,300,899</u>	<u>11,235,876</u>
Total Actuarial Accrued Liability (EAN AL)	12,081,059	11,963,343
Unfunded Actuarial Accrued		
Liability (UAAL)	4,394,400	4,660,843
Funded Ratio (AVA / EAN AL)	63.6%	61.0%

D. Actuarial Present Value of		
Accrued Benefits	10/1/2019	10/1/2018
Vested Accrued Benefits		
Inactives	11,300,899	11 225 976
		11,235,876
Actives	536,186	495,710
Member Contributions	<u>258,024</u>	<u>258,024</u>
Total	12,095,109	11,989,610
Non-vested Accrued Benefits	<u>0</u>	<u>0</u>
Total Present Value		
Accrued Benefits (PVAB)	12,095,109	11,989,610
Funded Ratio (MVA / PVAB)	62.1%	62.2%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	98,639	
Benefits Paid	(804,263)	
Interest	811,123	
Other		
	<u>0</u>	
Total	105,499	

Valuation Date Applicable to Fiscal Year Ending	10/1/2019 9/30/2021	10/1/2018 <u>9/30/2020</u>
E. Pension Cost		
Normal Cost <sup>1</sup>	\$10,207	\$16,236
Administrative Expenses <sup>1</sup>	22,492	24,396
Payment Required to Amortize Unfunded Actuarial Accrued		
Liability over 23 years (as of 10/1/2019) <sup>1</sup>	521,270	593,368
Minimum Required Contribution	553,969	634,000
F. Past Contributions		
Plan Years Ending:	<u>9/30/2019</u>	
Town Requirement	654,726	
Actual Contributions Made: Total	662,973	
G. Net Actuarial (Gain)/Loss	55,192	

<sup>1</sup> Contributions developed as of 10/1/2019 and 10/1/2018 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:	H. Schedule Illustrating the	Amortization of the	e Total Unfu	nded Actuarial	Accrued Liability as of:
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	Projected Unfunded	
Year	Actuarial Accrued Liability	
2019	4,394,400	
2020	4,197,246	
2021	3,954,274	
2026	2,458,378	
2032	572,816	
2042	0	

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

Row Header		<u>Actual</u>	Assumed
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
Year Ended	9/30/2015	N/A	N/A

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

Row Header		Market Value	Actuarial Value	Assumed
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%
Year Ended	9/30/2015	-3.67%	8.46%	7.50%

# (iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2019 10/1/2019	N/A N/A
(b) Total Increase		N/A
(c) Number of Years		0.00
(d) Average Annual Rate		N/A

# COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS FIREFIGHTERS

	10/1/2019	<u>10/1/2018</u>
A. Participant Data		
Actives	5	7
Service Retirees	31	31
Beneficiaries	1	0
Disability Retirees	4	3
Terminated Vested	<u>4</u>	<u>4</u>
Total	45	45
Total Annual Payroll	N/A	N/A
Payroll Under Assumed Ret. Age	N/A	N/A
Annual Rate of Payments to:		
Service Retirees	1,991,693	1,900,155
Beneficiaries	19,344	0
Disability Retirees	110,093	67,055
Terminated Vested	43,809	43,809
B. Assets		
Actuarial Value (AVA)	19,370,420	18,079,121
Market Value (MVA)	18,935,406	18,485,235
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	2,049,539	3,179,725
Disability Benefits	56,454	94,156
Death Benefits	6,294	12,097
Vested Benefits	66,279	105,322
Refund of Contributions	0	0
Service Retirees	28,999,401	27,957,474
Beneficiaries	237,564	0
Disability Retirees	1,169,344	561,370
Terminated Vested	<u>260,682</u>	243,527
Total	32,845,557	32,153,671

C. Liabilities - (Continued)	<u>10/1/2019</u>	<u>10/1/2018</u>
Present Value of Future Salaries	N/A	N/A
Present Value of Future		
Member Contributions	N/A	N/A
Normal Cost (Retirement)	0	0
Normal Cost (Disability)	6,211	10,545
Normal Cost (Death)	373	944
Normal Cost (Vesting)	0	0
Normal Cost (Refunds)	<u>0</u>	<u>0</u>
Total Normal Cost	6,584	11,489
Present Value of Future		
Normal Costs	21,232	34,580
Accrued Liability (Retirement)	2,049,539	3,179,725
Accrued Liability (Disability)	36,588	62,261
Accrued Liability (Death)	4,928	9,412
Accrued Liability (Vesting)	66,279	105,322
Accrued Liability (Refunds)	0	0
Accrued Liability (Inactives)	<u>30,666,991</u>	28,762,371
Total Actuarial Accrued Liability (EAN AL)	32,824,325	32,119,091
Unfunded Actuarial Accrued		
Liability (UAAL)	13,453,905	14,039,970
Funded Ratio (AVA / EAN AL)	59.0%	56.3%

D. Actuarial Present Value of		
Accrued Benefits	10/1/2019	10/1/2018
Vested Accrued Benefits		
Inactives	20,666,001	20 762 271
	30,666,991	28,762,371
Actives	1,812,081	2,825,241
Member Contributions	<u>359,931</u>	<u>557,306</u>
Total	32,839,003	32,144,918
Non-vested Accrued Benefits	<u>0</u>	<u>0</u>
Total Present Value		
Accrued Benefits (PVAB)	32,839,003	32,144,918
Funded Ratio (MVA / PVAB)	57.7%	57.5%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	563,269	
Benefits Paid	(2,047,660)	
Interest	2,178,476	
Other	<u>0</u>	
Total	694,085	
	•	

Valuation Date Applicable to Fiscal Year Ending	10/1/2019 <u>9/30/2021</u>	10/1/2018 <u>9/30/2020</u>
E. Pension Cost		
Normal Cost <sup>1</sup>	\$7,275	\$12,695
Administrative Expenses <sup>1</sup>	55,208	59,411
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 23 years (as of 10/1/2019) <sup>1</sup>	1,943,668	2,072,298
Minimum Required Contribution	2,006,151	2,144,404
F. Past Contributions		
Plan Years Ending:	<u>9/30/2019</u>	
Town Requirement	1,980,448	
Actual Contributions Made: Town	2,025,763	
G. Net Actuarial (Gain)/Loss	461,447	

<sup>1</sup> Contributions developed as of 10/1/2019 displayed above have been adjusted to account for a 1.5 year interest load component.

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

Year	Projected Unfunded Actuarial Accrued Liability
2019	13,453,905
2020	12,513,572
2021	11,523,094
2026	5,819,649
2032	763,924
2037	0

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

Row Header		<u>Actual</u>	Assumed
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
Year Ended	9/30/2015	N/A	N/A

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

Row Header	r	Market Value	Actuarial Value	Assumed
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%
Year Ended	9/30/2015	-3.28%	7.12%	7.50%

# COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS GENERAL EMPLOYEES

	<u>10/1/2019</u>	10/1/2018
A. Participant Data		
Actives	17	18
Service Retirees	41	43
DROP Retirees	0	0
Beneficiaries	2	1
Disability Retirees	0	0
Terminated Vested	<u>11</u>	<u>11</u>
Total	71	73
Total Annual Payroll	N/A	N/A
Payroll Under Assumed Ret. Age	N/A	N/A
Annual Rate of Payments to:		
Service Retirees	992,168	998,636
DROP Retirees	0	0
Beneficiaries	20,806	3,473
Disability Retirees	0	0
Terminated Vested	120,944	135,614
B. Assets		
Actuarial Value (AVA) <sup>1</sup>	11,331,708	10,763,714
Market Value (MVA) <sup>1</sup>	11,096,808	11,022,549
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	2,818,272	2,774,279
Disability Benefits	0	0
Death Benefits	29,693	32,273
Vested Benefits	52,506	62,859
Refund of Contributions	0	0
Service Retirees	10,657,544	10,965,388
DROP Retirees <sup>1</sup>	0	0
Beneficiaries	193,140	28,522
Disability Retirees	0	0
Terminated Vested	<u>684,906</u>	826,530
Total	14,436,061	14,689,851

C. Liabilities - (Continued)	10/1/2019	<u>10/1/2018</u>
Present Value of Future Salaries	N/A	N/A
Present Value of Future		
Member Contributions	N/A	N/A
Normal Cost (Retirement)	0	0
Normal Cost (Disability)	0	0
Normal Cost (Death)	2,024	2,231
Normal Cost (Vesting)	0	0
Normal Cost (Refunds)	<u>0</u>	<u>0</u>
Total Normal Cost	2,024	2,231
Present Value of Future		
Normal Costs	5,950	7,545
Accrued Liability (Retirement)	2,818,272	2,774,279
Accrued Liability (Disability)	0	0
Accrued Liability (Death)	23,743	24,728
Accrued Liability (Vesting)	52,506	62,859
Accrued Liability (Refunds)	0	0
Accrued Liability (Inactives) <sup>1</sup>	<u>11,535,590</u>	<u>11,820,440</u>
Total Actuarial Accrued Liability (EAN AL)	14,430,111	14,682,306
Unfunded Actuarial Accrued		
Liability (UAAL)	3,098,403	3,918,592
Funded Ratio (AVA / EAN AL)	78.5%	73.3%

D. Actuarial Present Value of		
Accrued Benefits	10/1/2019	<u>10/1/2018</u>
Vested Accrued Benefits		
Inactives <sup>1</sup>	11,535,590	11,820,440
Actives	2,369,935	2,320,934
Member Contributions	<u>530,536</u>	<u>548,477</u>
Total	14,436,061	14,689,851
Non-vested Accrued Benefits	<u>0</u>	<u>0</u>
Total Present Value		
Accrued Benefits (PVAB)	14,436,061	14,689,851
Funded Ratio (MVA / PVAB)	76.9%	75.0%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	(249,167)	
Benefits Paid	(997,983)	
Interest	993,360	
Other	<u>0</u>	
Total	(253,790)	

Valuation Date Applicable to Fiscal Year Ending	10/1/2019 <u>9/30/2021</u>	10/1/2018 <u>9/30/2020</u>
E. Pension Cost		
Normal Cost <sup>2</sup>	\$2,237	\$2,465
Administrative Expenses <sup>2</sup>	33,998	37,564
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 23 years (as of 10/1/2019) <sup>2</sup>	384,607	630,235
Minimum Required Contribution	420,842	670,264
F. Past Contributions		
Plan Years Ending:	9/30/2019	
Town Requirement	758,168	
Actual Contributions Made: Total	791,490	
G. Net Actuarial (Gain)/Loss	(311,704)	

<sup>1</sup> The asset values and liabilities include accumulated DROP Plan Balances as of 9/30/2019 and 9/30/2018.

<sup>2</sup> Contributions developed as of 10/1/2019 and 10/1/2018 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 Liabilit	y as of:
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	Projected Unfunded
Year	Actuarial Accrued Liability
2019	3,098,403
2020	2,942,863
2021	2,730,827
2022	2,563,808
2027	1,112,507
2030	398,736
2042	0

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

Row Header	•	Actual	Assumed
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
Year Ended	9/30/2015	N/A	N/A

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

Row Header	ſ	Market Value	Actuarial Value	Assumed
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%
Year Ended	9/30/2015	-1.01%	8.05%	7.00%
(iii) Average Annual Payroll Growth (a) Payroll as of:		10/1/2019	N/A	
(b) Total Increase		10/1/2009	N/A N/A	

(c) Number of Years	10.00

(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 a copy of the report to the following office to comply with Chapter 112 Florida Statutes:

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

# RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES POLICE OFFICERS

(1)	Unfunded Actuaria	Accrued Liabilit	v as of October 1, 2018		\$4,660,843
(1)					14,693
(3)		1	r the year ended Septemb	ber 50, 2019	22,078
(4)	Expected interest of	on (1), (2) and (3)			328,060
(5)	Sponsor contribution	ons to the System	during the year ended Se	ptember 30, 2019	662,973
(6)	Expected interest of	on (5)			23,493
(7)	Expected Unfunde	d Actuarial Accru	ed Liability as of		
. ,	September 30, 201	9 (1)+(2)+(3)+(4)	)-(5)-(6)		4,339,208
(8)	Change to UAAL of	due to Actuarial (C	Gain)/Loss		55,192
(9)	Unfunded Actuaria	al Accrued Liabilit	y as of October 1, 2019		4,394,400
	Type of	Date	Years	10/1/2019	Amortization
	Base	Established	Remaining	Amount	Amount
		10/1/1991	2	76,179	39,378
		10/1/1996	7	(57,337)	(9,943)
		10/1/1999	10	(115,500)	(15,369)
	Method Change	10/1/2002	13	930,884	104,094
	Prior Losses	10/1/2002	9	785,868	112,729
	Actuarial Gain	10/1/2003	9	(403,266)	(57,847)
	Actuarial Loss	10/1/2004	9	196,191	28,143
	Actuarial Loss	10/1/2005	9	246,441	35,351
	Actuarial Gain	10/1/2006	9	(15,672)	(2,248)
	Benefit Change	10/1/2006	17	747,052	71,511
	Actuarial Loss	10/1/2007	9	464,275	66,598
	Assump Change	10/1/2007	18	68,621	6,376
	Benefit Change	10/1/2007	18	343,837	31,946
	Method Change	10/1/2008	9	153,010	21,949
	Actuarial Gain	10/1/2010	1	(29,925)	(29,925)
	Actuarial Gain	10/1/2011	2	(15,092)	(7,801)
	Actuarial Gain	10/1/2012	3	(27,495)	(9,792)
	Assump Change	10/1/2012	13	382,694	42,794
	Benefit Change	10/1/2012	23	(293,463)	(24,331)
	Actuarial Gain	10/1/2013	4	(55,510)	(15,316)
	Actuarial Gain	10/1/2014	5	(97,313)	(22,181)
	Assump Change	10/1/2015	16	450,426	44,562
	Actuarial Gain	10/1/2015	6	(223,047)	(43,733)
	Benefit Change	10/1/2015	16	(10,406)	(1,029)
	Assump Change	10/1/2016	17	594,263	56,886
	Actuarial Loss	10/1/2016	7	88,609	15,366
	Actuarial Loss	10/1/2017	8	974	152
	Actuarial Loss	10/1/2017	8	305,789	47,860
	Actuarial Gain	10/1/2018	9	(151,879)	(21,786)
	Actuarial Loss	10/1/2019	10	55,192	7,344
				4,394,400	471,738

# RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES FIREFIGHTERS

(1)	Unfunded Actuaria	A correct Liebilit	use of Ostober 1, 2019		\$14,020,070
(1) (2)				\$14,039,970 11,489	
(2)					
(3)	-	-	the year ended Septem	iber 30, 2019	53,766
(4)	Expected interest of				985,484
(5)	-	-	during the year ended S	September 30, 2019	2,025,763
(6)	Expected interest of	on (5)			72,488
(7)	Expected Unfunde September 30, 201		•		12,992,458
(8)	Change to UAAL of	due to Actuarial (C	Gain)/Loss		461,447
(9)	Unfunded Actuaria	al Accrued Liabilit	y as of October 1, 2019	)	13,453,905
	Type of	Date	Years	10/1/2019	Amortization
	Base	<b>Established</b>	Remaining	Amount	Amount
		10/1/1997	8	564,404	88,336
		10/1/1998	9	(159,516)	(22,882)
		10/1/1999	10	(320,024)	(42,583)
		10/1/2001	12	1,089,859	128,239
	Method Change	10/1/2002	13	1,754,660	196,212
	Prior Losses	10/1/2002	9	1,476,706	211,827
	Actuarial Loss	10/1/2003	9	132,153	18,957
	Actuarial Loss	10/1/2004	9	959,563	137,645
	Benefit Change	10/1/2005	16	1,214,279	120,132
	Actuarial Loss	10/1/2005	9	503,986	72,294
	Actuarial Loss	10/1/2006	9	(161,059)	(23,103)
	Actuarial Loss	10/1/2007	9	1,319,601	189,291
	Assump Change	10/1/2007	18	680,502	63,225
	Benefit Change	10/1/2007	18	(145,058)	(13,477)
	Method Change	10/1/2008	9	161,517	23,169
	Actuarial Loss	10/1/2010	1	14,653	14,653
	Actuarial Loss	10/1/2011	2	172,825	89,335
	Actuarial Gain	10/1/2012	3	(172,598)	(61,466)
	Benefit Change	10/1/2012	23	(1,392,952)	(115,490)
	Actuarial Loss	10/1/2013	4	94,092	25,961
	Actuarial Loss	10/1/2014	5	53,141	12,113
	Assump Change	10/1/2014	15	1,113,851	114,294
	Actuarial Loss	10/1/2015	6	82,954	16,265
	Assump Change	10/1/2015	16	1,396,378	138,147
	Benefit Change	10/1/2015	18	(313,324)	(29,111)
	Assump Change	10/1/2016	17	1,714,943	164,162
	Actuarial Loss	10/1/2016	7	369,911	64,148
	Actuarial Loss	10/1/2017	8	336,941	52,735
	Actuarial Loss	10/1/2018	9	449,677	64,504
	Benefits Change	10/1/2018	14	393	42
	Actuarial Loss	10/1/2019	10	<u>461,447</u> 13,453,905	<u>61,402</u> 1,758,976

### RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES GENERAL EMPLOYEES

(1)	Unfunded Actuaria	al Accrued Liabili	ty as of October 1, 2018	2	\$3,918,592
(2)				2,231	
(3)	Expected administ	rative expenses for	or the year ended Septen	nber 30, 2019	33,995
(4)	Expected interest of	on (1), (2) and (3)			275,647
(5)	Sponsor contributi	ons to the System	during the year ended S	September 30, 2019	791,490
(6)	Expected interest of	on (5)			28,868
(7)	Expected Unfunde	d Actuarial Accru	ed Liability as of		
(')	September 30, 201		•		3,410,107
(8)	Change to UAAL	due to Assumption	n Change		0
(9)	Change to UAAL	due to Actuarial (	Gain)/Loss		(311,704)
(10)	Unfunded Actuaria	al Accrued Liabili	ty as of October 1, 2019	)	3,098,403
	Type of	Date	Years	10/1/2019	Amortization
	Base	<b>Established</b>	<u>Remaining</u>	Amount	Amount
		10/1/1991	2	63,491	32,819
		10/1/1996	7	(95,272)	(16,522)
		10/1/1997	8	65,957	10,323
		10/1/2001	12	181,482	21,354
	Method Change	10/1/2002	13	1,268,975	141,901
	Prior Losses	10/1/2002	9	1,068,763	153,309
	Actuarial Gain	10/1/2003	9	(325,070)	(46,630)
	Actuarial Loss	10/1/2004	9	219,546	31,493
	Actuarial Loss	10/1/2005	9	123,233	17,677
	Actuarial Gain	10/1/2006	9	(19,957)	(2,863)
	Benefit Change	10/1/2006	17	(164,659)	(15,762)
	Actuarial Loss	10/1/2007	9	208,168	29,861
	Assump Change	10/1/2007	18	216,584	20,123
	Benefit Change	10/1/2007	18	235,341	21,865
	Method Change	10/1/2008	9	84,992	12,192
	Actuarial Gain	10/1/2010	1	(42,627)	(42,627)
	Actuarial Loss	10/1/2011	2	44,731	23,122
	Actuarial Gain	10/1/2012	3	(261,472)	(93,116)
	Assump Change	10/1/2012	13	9,898	1,107
	Benefit Change	10/1/2012	23	(617,474)	(51,195)
	Actuarial Loss	10/1/2013	4	128,294	35,398
	Assump Change	10/1/2013	14	814,136	87,002
	Actuarial Gain	10/1/2014	5	(12,042)	(2,745)
	Actuarial Gain	10/1/2015	6	(36,911)	(7,237)
	Benefit Change	10/1/2015	16	(269,380)	(26,650)
	Assump Change	10/1/2016	17	505,297	48,369
	Actuarial Loss	10/1/2016	7	131,394	22,786
	Actuarial Loss	10/1/2017	8	55,382	8,668
	Actuarial Gain	10/1/2018	9	(170,693)	(24,485)
	Actuarial Gain	10/1/2019	10	<u>(311,704)</u>	<u>(41,476)</u>
				3,098,403	348,061

## ACTUARIAL ASSUMPTIONS AND METHODS POLICE OFFICERS

Mortality Rate	Healthy Active Lives: Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB
	Healthy Inactive Lives: Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB
	Disabled Lives: <b>Female:</b> 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale <b>Male:</b> 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale
	The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2018 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.
Interest Rate	7.00% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.
Administrative Expenses	\$22,354 annually, based on the average of actual expenses incurred in the prior two fiscal years. Previously, the actual expense in the prior fiscal year was used. Using a two-year average results in a less volatile estimate than the prior method. Administrative expenses are pro-rated for the Police Officer portion of total assets.
Salary Increases	None.
Payroll Growth	None.

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.	
	AgeRate of Disability200.14%300.18%400.30%501.00%	
Normal Retirement	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 FIREFIGHTERS

Mortality Rate	Healthy Active Lives: Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB
	Healthy Inactive Lives: Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB
	Disabled Lives: <b>Female:</b> 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale <b>Male:</b> 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale
	The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2018 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.
Interest Rate	7.00% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.
Salary Increases	None.
Payroll Growth	None.
<u>Administrative Expenses</u>	\$49,962 annually, based on the average of actual expenses incurred in the prior two fiscal years. Previously, the actual expense in the prior fiscal year was used. Using a two-year average results in a less volatile estimate than the prior method. Administrative expenses are pro-rated for the Firefighter portion of total assets.

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.
	AgeRate of Termination2012.4%3010.5%405.7%501.5%
Disability Rates	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.
	AgeRate of Disability200.14%300.18%400.30%501.00%
Normal Retirement	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: RP2000 Generational, 100% White Collar, Scale BB Male: RP2000 Generational, 50% White Collar / 50% Blue Collar, Scale BB
	Healthy Inactive Lives: Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB Male: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB
	Disabled Lives: Female: 100% RP2000 Disabled Female set forward two years Male: 100% RP2000 Disabled Male setback four years
	The assumed rates of mortality are mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2018 FRS actuarial valuation report for non-special risk lives. We feel this assumption sufficiently accommodates future mortality improvements.
Interest Rate	7.00% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.
<u>Administrative Expenses</u>	\$30,767 annually, based on the average of actual expenses incurred in the prior two fiscal years. Previously, the actual expense in the prior fiscal year was used. Using a two-year average results in a less volatile estimate than the prior method. Administrative expenses are pro-rated for the General Employees portion of total assets.
Salary Increases	None.
Payroll Growth	None.

Termination Rates	Below are sample rates of termination. This assumption is consistent with historical Plan experience.			
	AgeRate 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

#### Total Annual Payroll not applicable.

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

<u>Normal (Current Year's) Cost</u> is determined for each participant as the present value of future benefits, determined as of the Member's entry age, amortized over the anticipated number of years of participation, determined as of the entry age.

<u>Individual Entry Age Normal Actuarial Cost Method</u> (Level Dollar) is the method used to determine required contributions under the Plan. The use of this method involves the systematic funding of the Normal Cost (described above) and the Unfunded Accrued (Past Service) Liability. The actuarial accrued liability for active participants is the difference between the present value of future benefits and the present value of future Normal Costs. The actuarial accrued liability for inactive participants is the present value of future benefits.

<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.

<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.

#### 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, 2016 to October 1, 2019. 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 over 90% for Police Officers and Firefighters, and around 80% for General Employees. 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 Police Officers, Firefighters, and General Employees during the period October 1, 2016 to October 1, 2019.
- 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, has increased for Police Officers, Firefighters, and General Employees during the period October 1, 2016 to October 1, 2019. The current negative Net Cash Flow Ratio of indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

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

# PLAN MATURITY MEASURES AND OTHER RISK METRICS POLICE OFFICERS

	10/1/2016	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>
Support Ratio				
Total Actives	6	6	5	5
Total Inactives	22	21	21	21
Actives / Inactives	27.3%	28.6%	23.8%	23.8%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability	11,416,979	11,329,915	11,235,876	11,300,899
Total Accrued Liability (EAN)	12,205,941	12,187,546	11,963,343	12,081,059
Inactive AL / Total AL	93.5%	93.0%	93.9%	93.5%
Funded Ratio				
Actuarial Value of Assets (AVA)	6,919,849	7,076,693	7,302,500	7,686,659
Total Accrued Liability (EAN)	12,205,941	12,187,546	11,963,343	12,081,059
AVA / Total Accrued Liability (EAN)	56.7%	58.1%	61.0%	63.6%
Net Cash Flow Ratio				
Net Cash Flow <sup>1</sup>	(356,384)	(267,047)	(178,367)	(159,921)
Market Value of Assets (MVA)	6,636,441	7,084,977	7,460,871	7,508,727
Ratio	-5.4%	-3.8%	-2.4%	-2.1%

<sup>1</sup> Determined as total contributions minus benefit payments and administrative expenses.

# PLAN MATURITY MEASURES AND OTHER RISK METRICS FIREFIGHTERS

	10/1/2016	<u>10/1/2017</u>	10/1/2018	10/1/2019
Support Ratio				
Total Actives	7	7	7	5
Total Inactives	39	39	37	39
Actives / Inactives	17.9%	17.9%	18.9%	12.8%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability	28,299,261	28,507,144	28,762,371	30,666,991
Total Accrued Liability (EAN)	31,146,932	31,605,533	32,119,091	32,824,325
Inactive AL / Total AL	90.9%	90.2%	89.5%	93.4%
Funded Ratio				
Actuarial Value of Assets (AVA)	16,493,651	17,196,756	18,079,121	19,370,420
Total Accrued Liability (EAN)	31,146,932	31,605,533	32,119,091	32,824,325
AVA / Total Accrued Liability (EAN)	53.0%	54.4%	56.3%	59.0%
Net Cash Flow Ratio				
Net Cash Flow <sup>1</sup>	(1,898,362)	(321,192)	(126,978)	(68,054)
Market Value of Assets (MVA)	15,852,517	17,251,626	18,485,235	18,935,406
Ratio	-12.0%	-1.9%	-0.7%	-0.4%

<sup>1</sup> Determined as total contributions minus benefit payments and administrative expenses.

## PLAN MATURITY MEASURES AND OTHER RISK METRICS GENERAL EMPLOYEES

	10/1/2016	10/1/2017	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Support Ratio</u>				
Total Actives	19	19	18	17
Total Inactives	57	57	55	54
Actives / Inactives	33.3%	33.3%	32.7%	31.5%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability	12,383,563	12,183,683	11,820,440	11,535,590
Total Accrued Liability (EAN)	15,341,560	15,349,766	14,682,306	14,430,111
Inactive AL / Total AL	80.7%	79.4%	80.5%	79.9%
Funded Ratio				
Actuarial Value of Assets (AVA)	10,566,941	10,831,104	10,763,714	11,331,708
Total Accrued Liability (EAN)	15,341,560	15,349,766	14,682,306	14,430,111
AVA / Total Accrued Liability (EAN)	68.9%	70.6%	73.3%	78.5%
Net Cash Flow Ratio				
Net Cash Flow <sup>1</sup>	(390,294)	(446,688)	(747,843)	(234,032)
Market Value of Assets (MVA)	10,241,394	10,909,386	11,022,549	11,096,808
Ratio	-3.8%	-4.1%	-6.8%	-2.1%

<sup>1</sup> Determined as total contributions minus benefit payments and administrative expenses.

## 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
1998	84,957.68	%
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, 2019

ASSETS	COST VALUE	MARKET VALUE
Cash and Cash Equivalents: Prepaid Benefits	68,452.33	68,452.33
Prepaid Expenses	121.08	121.08
Money Market	223,841.60	223,841.60
Cash	951.98	951.98
Total Cash and Equivalents	293,366.99	293,366.99
Receivables:		
From Broker for Investments Sold	5,614.94	5,614.94
Investment Income	24,153.03	24,153.03
Total Receivable	29,767.97	29,767.97
Investments:		
U. S. Bonds and Bills	822,113.13	850,755.69
Federal Agency Guaranteed Securities	229,408.61	233,308.39
Corporate Bonds	741,689.56	748,773.82
Stocks	2,028,696.10	2,341,486.16
Mutual Funds:	1 202 227 62	0.056.056.40
Equity	1,393,337.63	2,356,056.48
Pooled/Common/Commingled Funds: Real Estate	639,836.80	659 245 22
Real Estate	039,830.80	658,245.22
Total Investments	5,855,081.83	7,188,625.76
Total Assets	6,178,216.79	7,511,760.72
LIABILITIES		
Payables:	0.012.11	2 012 11
Administrative Expenses To Broker for Investments Purchased	2,913.11	2,913.11
TO DIOKET for investments Purchased	120.26	120.26
Total Liabilities	3,033.37	3,033.37
NET POSITION RESTRICTED FOR PENSIONS	6,175,183.42	7,508,727.35

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

ADDITIONS Contributions: Town		662,973.00	
Total Contributions			662,973.00
Investment Income: Net Realized Gain (Loss) Unrealized Gain (Loss) Net Increase in Fair Value of Investments Interest & Dividends Less Investment Expense <sup>1</sup>	11,195.96 52,996.81	64,192.77 183,323.53 (39,738.81)	
Net Investment Income			207,777.49
Total Additions			870,750.49
<u>DEDUCTIONS</u> Distributions to Members: Benefit Payments Lump Sum DROP Distributions		804,262.80 0.00	
Total Distributions			804,262.80
Administrative Expense			18,631.07
Total Deductions			822,893.87
Net Increase in Net Position			47,856.62
NET POSITION RESTRICTED FOR PENSIONS Beginning of the Year			7,460,870.73
End of the Year			7,508,727.35

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

#### ACTUARIAL ASSET VALUATION SEPTEMBER 30, 2019

Actuarial Assets for funding purposes are developed by increasing the Actuarial Assets used in the most recent actuarial valuation of the Fund by the average annual market value rate of return (net of investment related expenses) for the past four years. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Details of the derivation are set forth as follows:

Plan Year End	Rate of Return <sup>1</sup>		
09/30/2016	8.25%		
09/30/2017	11.15%		
09/30/2018	8.04%		
09/30/2019	2.86%		
Annualized Rate of Return for prior four (4) years	3:	7.53%	
(A) 10/01/2018 Actuarial Assets:			\$7,302,499.63
(I) Net Investment Income:			
<ol> <li>Interest and Dividends</li> <li>Realized Gains (Losses)</li> <li>Unrealized Gains (Losses)</li> <li>Change in Actuarial Value</li> <li>Investment Related Expenses</li> </ol>	s 'otal	183,323.53 11,195.96 52,996.81 336,302.73 (39,738.81)	544,080.22
(B) 10/01/2019 Actuarial Assets:			\$7,686,658.98
Actuarial Asset Rate of Return = 2I/(A+B-I):			7.53%
10/01/2019 Limited Actuarial Assets:		\$7,686,658.98	
10/01/2019 Market Value of As	ssets:		\$7,508,727.35
Actuarial Gain/(Loss) due to Investment Return (A	Actuarial Asset Basis)		\$38,295.15

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

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

#### REVENUES

	KL VLIVULD	
Contributions: Town	662,973.00	
Town	002,775.00	
Total Contributions		662,973.00
Earnings from Investments:		
Interest & Dividends	183,323.53	
Net Realized Gain (Loss)	11,195.96	
Unrealized Gain (Loss)	52,996.81	
Change in Actuarial Value	336,302.73	
Total Earnings and Investment Gains		583,819.03
	EXPENDITURES	
Distributions to Members:		
Benefit Payments	804,262.80	
Lump Sum DROP Distributions	0.00	
Total Distributions		804,262.80
Expenses:		
Investment related <sup>1</sup>	39,738.81	
Administrative	18,631.07	
		50 260 00
Total Expenses		58,369.88
Change in Net Assets for the Year		384,159.35
Net Assets Beginning of the Year		7,302,499.63
Net Assets End of the Year <sup>2</sup>		7,686,658.98

<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, 2019

(1)	Required Town Contributions	\$654,726.00
(2)	Less 2018 Prepaid Contribution	(8,247.00)
(3)	Less Actual Town Contributions	(654,726.00)
(4)	Town Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2019	(\$8,247.00)

## STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2019

ASSETS	COST VALUE	MARKET VALUE
Cash and Cash Equivalents: Prepaid Benefits	177,077.72	177,077.72
Prepaid Expenses	300.00	300.00
Money Market	564,342.83	564,342.83
Cash	2,400.10	2,400.10
Total Cash and Equivalents	744,120.65	744,120.65
Receivables:		
From Broker for Investments Sold	14,156.23	14,156.23
Investment Income	60,893.90	60,893.90
Total Receivable	75,050.13	75,050.13
T i i i		
Investments: U. S. Bonds and Bills	2,072,687.37	2,144,900.15
Federal Agency Guaranteed Securities	578,378.21	588,210.22
Corporate Bonds	1,869,925.84	1,887,786.47
Stocks	5,114,688.74	5,903,285.82
Mutual Funds:	0,11,00007	0,700,200102
Equity	3,512,841.73	5,940,020.07
Pooled/Common/Commingled Funds:		
Real Estate	1,613,137.66	1,659,548.43
Total Investments	14,761,659.55	18,123,751.16
Total Assets	15,580,830.33	18,942,921.94
LIABILITIES_		
Payables:		
Administrative Expenses	7,217.79	7,217.79
To Broker for Investments Purchased	297.98	297.98
Total Liabilities	7,515.77	7,515.77
NET POSITION RESTRICTED FOR PENSIONS	15,573,314.56	18,935,406.17

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

ADDITIONS Contributions: Town		2,025,763.00	
Total Contributions			2,025,763.00
Investment Income: Net Realized Gain (Loss) Unrealized Gain (Loss) Net Increase in Fair Value of Investments Interest & Dividends Less Investment Expense <sup>1</sup>	27,740.24 133,792.62	161,532.86 455,152.69 (98,460.89)	
Net Investment Income			518,224.66
Total Additions			2,543,987.66
<u>DEDUCTIONS</u> Distributions to Members: Benefit Payments Lump Sum DROP Distributions		2,047,659.59 0.00	
Total Distributions			2,047,659.59
Administrative Expense			46,157.11
Total Deductions			2,093,816.70
Net Increase in Net Position			450,170.96
NET POSITION RESTRICTED FOR PENSIONS Beginning of the Year	1		18,485,235.21
End of the Year			18,935,406.17

## ACTUARIAL ASSET VALUATION SEPTEMBER 30, 2019

Actuarial Assets for funding purposes are developed by increasing the Actuarial Assets used in the most recent actuarial valuation of the Fund by the average annual market value rate of return (net of investment related expenses) for the past four years. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Details of the derivation are set forth as follows:

Plan Year End	Rate of Return <sup>1</sup>		
09/30/2016	8.25%		
09/30/2017	11.15%		
09/30/2018	8.04%		
09/30/2019	2.86%		
Annualized Rate of Return for prior four (4) years	S:	7.53%	
(A) 10/01/2018 Actuarial Assets:			\$18,079,120.55
(I) Net Investment Income:			
<ol> <li>Interest and Dividends</li> <li>Realized Gains (Losses)</li> <li>Unrealized Gains (Losses)</li> <li>Change in Actuarial Value</li> <li>Investment Related Expenses</li> </ol>	s 'otal	455,152.69 27,740.24 133,792.62 841,128.10 (98,460.89)	1,359,352.76
(B) 10/01/2019 Actuarial Assets:			\$19,370,419.61
Actuarial Asset Rate of Return = 2I/(A+B-I):			7.53%
10/01/2019 Limited Actuarial Assets:		\$19,370,419.61	
10/01/2019 Market Value of Assets:		\$18,935,406.17	
Actuarial Gain/(Loss) due to Investment Return (	Actuarial Asset Basis)		\$95,678.22

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

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

#### REVENUES

Contributions: Town	2,025,763.00	
Total Contributions		2,025,763.00
Earnings from Investments: Interest & Dividends Net Realized Gain (Loss) Unrealized Gain (Loss) Change in Actuarial Value	455,152.69 27,740.24 133,792.62 841,128.10	
Total Earnings and Investment Gains		1,457,813.65
Distributions to Members: Benefit Payments Lump Sum DROP Distributions	EXPENDITURES 2,047,659.59 0.00	
Total Distributions		2,047,659.59
Expenses: Investment related <sup>1</sup> Administrative	98,460.89 46,157.11	
Total Expenses		144,618.00
Change in Net Assets for the Year		1,291,299.06
Net Assets Beginning of the Year		18,079,120.55
Net Assets End of the Year <sup>2</sup>		19,370,419.61

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

(1)	Required Town Contributions	\$1,980,448.00
(2)	Less 2018 Prepaid Contribution	(45,315.00)
(3)	Less Actual Town Contributions	(1,980,448.00)
(4)	Town Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2019	(\$45,315.00)

## STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2019

ASSETS	COST VALUE	MARKET VALUE
Cash and Cash Equivalents: Prepaid Benefits Prepaid Expenses Money Market Cash	84,414.47 178.92 331,309.03 1,409.02	84,414.47 178.92 331,309.03 1,409.02
Total Cash and Equivalents	417,311.44	417,311.44
Receivables:		
From Broker for Investments Sold Investment Income	8,310.71 35,749.01	8,310.71 35,749.01
Total Receivable	44,059.72	44,059.72
Investments:		1 250 205 (2
U. S. Bonds and Bills	1,216,813.63	1,259,207.62
Federal Agency Guaranteed Securities	339,548.78	345,320.86
Corporate Bonds	1,097,778.30	1,108,263.76
Stocks	3,002,682.90	3,465,644.98
Mutual Funds: Equity Pooled/Common/Commingled Funds:	2,062,285.76	3,487,210.57
Real Estate	947,025.54	974,271.94
Total Investments	8,666,134.91	10,639,919.73
Total Assets	9,127,506.07	11,101,290.89
LIABILITIES Payables:		
Administrative Expenses	4,304.69	4,304.69
To Broker for Investments Purchased	177.72	177.72
Total Liabilities	4,482.41	4,482.41
NET POSITION RESTRICTED FOR PENSIONS	9,123,023.66	11,096,808.48

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

ADDITIONS Contributions: Town		791,490.00	
Total Contributions			791,490.00
Investment Income: Net Realized Gain (Loss) Unrealized Gain (Loss) Net Increase in Fair Value of Investments Interest & Dividends Less Investment Expense <sup>1</sup>	16,544.28 79,702.10	96,246.38 270,767.32 (58,722.06)	
Net Investment Income			308,291.64
Total Additions			1,099,781.64
<u>DEDUCTIONS</u> Distributions to Members: Benefit Payments Lump Sum DROP Distributions		997,983.04 0.00	
Total Distributions			997,983.04
Administrative Expense			27,538.64
Total Deductions			1,025,521.68
Net Increase in Net Position			74,259.96
NET POSITION RESTRICTED FOR PENSIONS Beginning of the Year			11,022,548.52
End of the Year			11,096,808.48

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

### ACTUARIAL ASSET VALUATION SEPTEMBER 30, 2019

Actuarial Assets for funding purposes are developed by increasing the Actuarial Assets used in the most recent actuarial valuation of the Fund by the average annual market value rate of return (net of investment related expenses) for the past four years. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Details of the derivation are set forth as follows:

Plan Year End	Rate of Return <sup>1</sup>		
09/30/2016	8.25%		
09/30/2017	11.15%		
09/30/2018	8.04%		
09/30/2019	2.86%		
Annualized Rate of Return for prior four (4) years	s:	7.53%	
(A) 10/01/2018 Actuarial Assets:			\$10,763,714.31
(I) Net Investment Income:			
<ol> <li>Interest and Dividends</li> <li>Realized Gains (Losses)</li> <li>Unrealized Gains (Losses)</li> <li>Change in Actuarial Value</li> <li>Investment Related Expenses</li> </ol>	s 'otal	270,767.32 16,544.28 79,702.10 493,733.51 (58,722.06)	802,025.15
(B) 10/01/2019 Actuarial Assets:			\$11,331,707.78
Actuarial Asset Rate of Return = 2I/(A+B-I):			7.53%
10/01/2019 Limited Actuarial A	Assets:		\$11,331,707.78
10/01/2019 Market Value of As	ssets:		\$11,096,808.48
Actuarial Gain/(Loss) due to Investment Return (A	Actuarial Asset Basis)		\$56,450.64

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

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

#### REVENUES

	KL V LIVOLD	
Contributions: Town	791,490.00	
Total Contributions		791,490.00
Earnings from Investments: Interest & Dividends Net Realized Gain (Loss) Unrealized Gain (Loss) Change in Actuarial Value	270,767.32 16,544.28 79,702.10 493,733.51	
Total Earnings and Investment Gains		860,747.21
Distributions to Marsham	EXPENDITURES	
Distributions to Members: Benefit Payments Lump Sum DROP Distributions	997,983.04 0.00	
Total Distributions		997,983.04
Expenses: Investment related <sup>1</sup> Administrative	58,722.06 27,538.64	
Total Expenses		86,260.70
Change in Net Assets for the Year		567,993.47
Net Assets Beginning of the Year		10,763,714.31
Net Assets End of the Year <sup>2</sup>		11,331,707.78

<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, 2019

(1)	Required Town Contributions	\$758,168.00
(2)	Less 2018 Prepaid Contribution	(33,322.00)
(3)	Less Actual Town Contributions	(758,168.00)
(4)	Town Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2019	(\$33,322.00)

## VALUATION PARTICIPANT RECONCILIATION POLICE OFFICERS

## 1. Active lives

a. Number in prior valuation 10/1/2018	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 distribution r	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	<u>0</u>
h. Total active life participants in valuation	5

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

ROW HEADER	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	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	14	3	2	2	0	21

## VALUATION PARTICIPANT RECONCILIATION FIREFIGHTERS

## 1. Active lives

a. Number in prior valuation 10/1/2018	7
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	(1)
e. Retired	(1)
f. Continuing participants	5
g. New entrants	<u>0</u>
h. Total active life participants in valuation	5

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

ROW HEADER	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	0	3	3	1	38
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	(1)	1	0	0	0	0
Death, No Survivor	0	0	0	0	0	0
Disabled	0	0	1	0	0	1
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 10/1/2018	18
b. Terminations	
i. Vested (partial or full) with deferred annuity	(1)
ii. Vested in refund of member contributions only	0
iii. Refund of member contributions or full lump sum distribution received	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. DROP	<u>0</u>
g. Continuing participants	17
h. New entrants	<u>0</u>
i. Total active life participants in valuation	17

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

ROW HEADER	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <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	43	0	1	0	11	0	55
Retired	1	0	0	0	(1)	0	0
DROP	0	0	0	0	0	0	0
Vested (Deferred Annuity)	0	0	0	0	1	0	1
Vested (Due Refund)	0	0	0	0	0	0	0
Hired/Terminated in Same Year	0	0	0	0	0	0	0
Death, With Survivor	(1)	0	1	0	0	0	0
Death, No Survivor	(2)	0	0	0	0	0	(2)
Disabled	0	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0	0
Rehires	0	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0	0
b. Number current valuation	41	0	2	0	11	0	54

## 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.
<u>Salary</u>	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 Retirement (removed with Ordinance 2013-13)

Eligibility	Age 45 and the completion of 1 Service or Age 50 and the comp Credited Service.	
Benefit	Accrued benefit, reduced 3% pe	er year.
Supplemental Benefit	\$10.00 per month for each year payable to age 65. Credited Ser January 31, 2014 for determinat Benefit.	vice is frozen as of
Cost of Living Adjustment	Service Retirees receive a 3% a benefits commencing on the Oc receipt of 5 years of benefit pay	tober 1 following the
<u>Vesting (Termination)</u>	Upon an employee's termination reason other than death, disabilit be entitled to the payment of the his or her accrued pension at the (reduced) of Normal Retirement Vested Percentage is determined	ty or retirement, he shall e Vested Percentage of e otherwise Early t 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 t benefit as of January 31, 2014.	0% 50% 60% 70% 80% 90% 100% heir frozen accrued
Dooth Popofit		
Death Benefit		
Vested or Eligible for Retirement	Monthly accrued benefit payabl beneficiary. The accrued benef 31, 2014.	

## <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	a. Five Commission appointees, and
	b. Two Town Manager appointees
Deferred Retirement Option Plan (DROP)	
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.
Salary	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)

Eligib	ility	Age 45 and the completion of 15 Credited Service or Age 50 and the years of Credited Service.	-
Benef	it	Accrued benefit, reduced 3% per	year.
Supplemental	Benefit	\$10.00 per month for each year o payable to age 65. Credited Serv September 30, 2013 for determin Supplemental Benefit.	ice is frozen as of
Vesting (Term	ination)	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 I Vested Percentage is determined	v 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 the benefit as of September 30, 2013	
Disability			
Eligib	ility		
	Service Incurred	Covered from Date of Employme	ent.
	Non-Service Incurred	10 years of Credited Service.	
	Benefit	3.5% of Average Final Compensa Credited Service (but not less tha Average Final Compensation for Average Final Compensation and purposes of determining the appli Disability Benefit are frozen as o	n 42% of Service Incurred). I Credited Service for icable minimum
	Form of Benefit	Ten year Certain and Life Annuit available)	y (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.
Compensation	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 Member's otherwise Early (reduced) o Retirement Date.	
Post-Retirement	According to optional form of benefit	selected.
Termination of Employment	Upon an employee's termination of em reason other than death, disability or re- be entitled to the payment of the Veste his or her accrued pension at the otherw (reduced) or Normal Retirement Date. Vested Percentage is determined by the	tirement, he shall d Percentage of vise Early The applicable
	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 Septemb	per 30, 2013.
Deferred Retirement Option Plan		
Eligibility	Within 12 months following satisfaction Retirement requirements (age 62 or age of Credited Service.) New DROP Part allowed after September 30, 2013.	e 55 and 30 years
Participation	Not to exceed 60 months.	
Rate of Return	At election of Member (may change or DROP period) either: 1) actual net rate return (total return net of brokerage con management fees, and transaction cost Earnings are credited each fiscal quarte	of investment mmissions, s), or 2) 6.5%.
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, 2019

ASSETS	MARKET VALUE
Cash and Cash Equivalents:	
Prepaid Benefits	68,452
Prepaid Expenses	121
Money Market	223,842
Cash	952
Total Cash and Equivalents	293,367
Receivables:	
From Broker for Investments Sold	5,615
Investment Income	24,153
Total Receivable	29,768
Investments:	
U. S. Bonds and Bills	850,756
Federal Agency Guaranteed Securities	233,308
Corporate Bonds	748,774
Stocks	2,341,486
Equity	2,356,056
Real Estate	658,245
Total Investments	7,188,625
Total Assets	7,511,760
LIABILITIES	
Payables:	
Administrative Expenses	2,913
To Broker for Investments Purchased	120
Total Liabilities	3,033
NET POSITION RESTRICTED FOR PENSIONS	7,508,727

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

ADDITIONS Contributions:		
Town	654,726	
Total Contributions	654,720	5
Investment Income:		
Net Increase in Fair Value of Investments	64,193	
Interest & Dividends	183,323	
Less Investment Expense <sup>1</sup>	(39,739)	
Net Investment Income	207,777	7
Total Additions	862,503	3
DEDUCTIONS Distributions to Members:		
Benefit Payments	804,263	
Lump Sum DROP Distributions	0	
Total Distributions	804,263	3
Administrative Expense	18,63	1
Total Deductions	822,894	4
Net Increase in Net Position	39,609	)
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year	7,469,118	3
End of the Year	7,508,727	7

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

## Town of Longboat Key Police Officers' Retirement System

## NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2019)

#### 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, 2018:

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, 2018 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.

#### Investments

Investment Policy:

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

Asset Class	Target Allocation	
Large Cap US Equity	35.00%	
Small/Mid Cap US Equity	10.00%	
Non-US Equity Developed	15.00%	
US Corps Bonds-Core	25.00%	
Real Estate	10.00%	
MLPs/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, 2019, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 2.86 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 allowed after January 31, 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, 2019 is \$0.

## NET PENSION LIABILITY OF THE SPONSOR

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

Total Pension Liability	\$ 11,986,651
Plan Fiduciary Net Position	\$ (7,508,727)
Sponsor's Net Pension Liability	\$ 4,477,924
Plan Fiduciary Net Position as a percentage of Total Pension Liability	62.64%

#### Actuarial Assumptions:

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

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

#### Mortality Rate Healthy Active Lives:

Female: RP 2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP 2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB

Mortality Rate Healthy Active Lives:

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

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale. Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale. The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption

used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2018 FRS valuation report for special risk participants. We feel this assumption sufficiently accommodates future mortality improvements.

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 2019 the inflation rate assumption of the investment advisor was 1.90%.

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

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2019 are summarized in the following table:

	Long Term Expected Real Rate of		
Asset Class	Return <sup>1</sup>		
Large Cap US Equity	5.70%		
Small/Mid Cap US Equity	5.93%		
Non-US Equity Developed	5.20%		
US Corps Bonds-Core	1.80%		
Real Estate	6.00%		
MLPs/Infrastructure	5.10%		

<sup>1</sup> 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	\$	5,852,560	\$	4,477,924	\$	3,333,598

## SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	15,180	18,025	19,241
Interest	827,065	827,736	814,693
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(257,101)	(40,037)	176,585
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(804,263)	(820,665)	(825,266)
Net Change in Total Pension Liability	(219,119)	(14,941)	185,253
Total Pension Liability - Beginning	12,205,770	12,220,711	12,035,458
Total Pension Liability - Ending (a)	\$ 11,986,651	\$ 12,205,770	\$ 12,220,711
Plan Fiduciary Net Position			
Contributions - Employer	654,726	664,376	594,116
Contributions - State	-	-	-
Contributions - Employee	-	-	-
Net Investment Income	207,777	554,260	715,583
Benefit Payments, including Refunds of Employee Contributions	(804,263)	(820,665)	(825,266)
Administrative Expense	(18,631)	(22,077)	(27,650)
Net Change in Plan Fiduciary Net Position	39,609	375,894	456,783
Plan Fiduciary Net Position - Beginning	7,469,118	7,093,224	6,636,441
Plan Fiduciary Net Position - Ending (b)	\$ 7,508,727	\$ 7,469,118	\$ 7,093,224
Net Pension Liability - Ending (a) - (b)	\$ 4,477,924	\$ 4,736,652	\$ 5,127,487
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	62.64%	61.19%	58.04%
Than Therefore, The Toshion as a percentage of the Total Tension Elability	02.0470	01.1970	56.0470
Covered Payroll	N/A	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A	N/A

	C	9/30/2016	0	9/30/2015
Total Pension Liability				
Service Cost		14,674		28,625
Interest		797,181		812,505
Changes of benefit terms		(9,211)		-
Differences between Expected and Actual Experience		(337,539)		(4,365)
Changes of assumptions		653,987		570,366
Benefit Payments, including Refunds of Employee Contributions		(940,156)		(717,957)
Net Change in Total Pension Liability		178,936		689,174
Total Pension Liability - Beginning		11,856,522		11,167,348
Total Pension Liability - Ending (a)	\$	12,035,458	\$	11,856,522
Plan Fiduciary Net Position				
Contributions - Employer		623,019		621,921
Contributions - State		-		-
Contributions - Employee		-		-
Net Investment Income		519,859		(246,652)
Benefit Payments, including Refunds of Employee Contributions		(940,156)		(717,957)
Administrative Expense		(39,247)		(42,386)
Net Change in Plan Fiduciary Net Position		163,475		(385,074)
Plan Fiduciary Net Position - Beginning		6,472,966		6,858,040
Plan Fiduciary Net Position - Ending (b)	\$	6,636,441	\$	6,472,966
	<b>_</b>	5 000 01 <b>5</b>	<b>.</b>	
Net Pension Liability - Ending (a) - (b)	\$	5,399,017	\$	5,383,556
Plan Fiduciary Net Position as a percentage of the Total Pension Liability		55.14%		54.59%
Covered Payroll <sup>1</sup>	\$	429,341	\$	603,217
Net Pension Liability as a percentage of Covered Payroll		1257.51%		892.47%

## Notes to Schedule:

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

### Changes of benefit terms:

For measurement date 09/30/2016, amounts reported as changes of benefit terms resulted from Ordinance 2016-22, adopted and effective July 5, 2016, provided a lump sum cash out option to active Members and prior Vested participants who were due a deferred monthly benefit.

## Changes of Assumptions:

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System for special risk employees.

The inflation assumption rate was lowered from 3.00% to 2.30%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

For measurement date 09/30/2015, amounts reported as changes of assumptions were resulted from lowering the investment rate of return from 7.50% to 7.00%.

	09/30/2014	09/30/2013
Total Pension Liability		
Service Cost	6,496	6,043
Interest	823,074	835,385
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(1,267,283)	(744,769)
Net Change in Total Pension Liability	(437,713)	96,659
Total Pension Liability - Beginning	11,605,061	11,508,403
Total Pension Liability - Ending (a)	\$ 11,167,348	\$ 11,605,061
Plan Fiduciary Net Position		0.0.1.000
Contributions - Employer	552,573	824,909
Contributions - State	81,017	77,298
Contributions - Employee	35,601	100,547
Net Investment Income	662,893	785,731
Benefit Payments, including Refunds of Employee Contributions	(1,267,283)	(744,769)
Administrative Expense	(39,110)	(28,794)
Net Change in Plan Fiduciary Net Position	25,691	1,014,922
Plan Fiduciary Net Position - Beginning	6,832,349	5,817,427
Plan Fiduciary Net Position - Ending (b)	\$ 6,858,040	\$ 6,832,349
Net Pension Liability - Ending (a) - (b)	\$ 4,309,308	\$ 4,772,713
Tot Polision Encontry Encong (a) (b)	\$ 4,307,300	φ 4,772,715
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	61.41%	58.87%
Covered Payroll	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A

# SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

Fiscal Year Ended	De	ctuarially etermined ntribution	in the De	ntributions relation to Actuarially etermined ntributions	De	ntribution eficiency Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
09/30/2019	\$	654,726	\$	654,726	\$	-	N/A	N/A
09/30/2018	\$	664,376	\$	664,376	\$	-	N/A	N/A
09/30/2017	\$	585,869	\$	594,116	\$	(8,247)	N/A	N/A
09/30/2016	\$	623,019	\$	623,019	\$	-	\$ 429,341	145.11%
09/30/2015	\$	621,921	\$	621,921	\$	-	\$ 603,217	103.10%
09/30/2014	\$	633,590	\$	633,590	\$	-	N/A	N/A
09/30/2013	\$	902,207	\$	902,207	\$	-	N/A	N/A

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

## Notes to Schedule

Valuation Date:

### 10/01/2017

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

Methods and assumptions used to determine contribution rates:

Mortality:	Healthy Inactive Lives:
	Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.
	Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue
	Collar, Scale BB.
	Healthy Active Lives:
	Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.
	Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined
	Healthy Blue Collar, Scale BB.
	Disabled Lives:
	Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White
	Collar with no setback, no projection scale.
	Male: 60% RP2000 Disabled Male setback four years /40% Annuitant White Collar
	with no setback, no projection scale.
	The assumed rates of mortality were mandated by Chapter 2015-157, Laws of
	Florida. This law mandates the use of the assumption used in either of the two most
	recent valuations of the Florida Retirement System (FRS). The above rates are those
	outlined in the July 1, 2016 FRS actuarial valuation report for special risk
	participants. We feel this assumption sufficiently accommodates future mortality improvements.
Termination Rates:	See Table below (1304A). This assumption is consistent with historical Plan
Termination Rates.	experience.
Disability Rates:	See Table below (1205). 75% of Disability Retirements are assumed to service-
	related. These rates are similar to those utilized by other Florida special risk
	retirement programs.
Retirement Age:	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 for the associated Plan provisions

# GASB 67

# Town of Longboat Key Police Officers' Retirement System

Interest Rate:	7.0% per year, compounded annually, net of investment-related expenses. This assumption is supported by the Plan's investment policy and long-term expected returns by asset class.
Salary Increases:	None.
Early Retirement:	None.
Cost of Living Adjustment:	3.0% per year, beginning 5 years after retirement.
Payroll Growth:	None.
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 deminis bias that is above or below the Market Value of Assets.

Termination and Disability Rate Table:

	% Terminating	% Becoming
	During the	Disabled During
Age	Year	the Year
20	9.2%	0.14%
30	7.3%	0.18%
40	3.5%	0.30%
50	0.8%	1.00%

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. Level Dollar.

Amortization Method: **Remaining Amortization Period:** 

25 Years (as of 10/01/2017).

# SCHEDULE OF INVESTMENT RETURNS

Last 10 Fiscal Years

	Annual Money-Weighted Rate of Return
Fiscal Year Ended	Net of Investment Expense
09/30/2019	2.86%
09/30/2018	8.04%
09/30/2017	11.15%
09/30/2016	8.25%
09/30/2015	-3.67%
09/30/2014	9.94%
09/30/2013	13.20%

## NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2020)

## General Information about the Pension Plan

### 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, 2018:

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, 2018 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 09/30/2019 as noted under the Notes to Schedule of Changes in Net Pension Liability and Related Ratios.

### **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, 2019.

The measurement period for the pension expense was October 1, 2018 to September 30, 2019. The reporting period is October 1, 2019 through September 30, 2020.

The Sponsor's Net Pension Liability was measured as of September 30, 2019. The Total Pension Liability used to calculate the Net Pension Liability was determined as of that date.

### Actuarial Assumptions:

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

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

Mortality Rate Healthy Active Lives:
Female: RP 2000 Generational, 100% Annuitant White Collar, Scale BB.
Male: RP 2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB
Mortality Rate Healthy Active Lives:
Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.
Male: RP2000 Generational, 10% Combined Healthy White Collar, Scale BB.
Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.
Mortality Rate Disabled Lives:
Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.
Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.
The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2018 FRS valuation report for special risk participants. We feel this assumption sufficiently accommodates future mortality improvements.

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 2019 the inflation rate assumption of the investment advisor was 1.90%.

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

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2019 are summarized in the following table:

	Long Term Expected
Target Allocation	Real Rate of Return <sup>1</sup>
35.00%	5.70%
10.00%	5.93%
15.00%	5.20%
25.00%	1.80%
10.00%	6.00%
5.00%	5.10%
100.00%	
	35.00% 10.00% 15.00% 25.00% 10.00% 5.00%

<sup>1</sup> 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				Net Pension	
		Liability	Ne	et Position		Liability
		(a)		(b)		(a)-(b)
Reporting Period Ending September 30, 2019	\$	12,205,770	\$	7,469,118	\$	4,736,652
Changes for a Year:						
Service Cost		15,180		-		15,180
Interest		827,065		-		827,065
Differences between Expected and Actual Experience		(257,101)		-		(257,101)
Changes of assumptions		-		-		-
Changes of benefit terms		-		-		-
Contributions - Employer		-		654,726		(654,726)
Net Investment Income		-		207,777		(207,777)
Benefit Payments, including Refunds of Employee Contributions		(804,263)		(804,263)		-
Administrative Expense		-		(18,631)		18,631
Net Changes		(219,119)		39,609		(258,728)
Reporting Period Ending September 30, 2020	\$	11,986,651	\$	7,508,727	\$	4,477,924

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

	Current Discount						
	19		Rate	1	1% Increase		
	6.00%			7.00%		8.00%	
Sponsor's Net Pension Liability	\$	5,852,560	\$	4,477,924	\$	3,333,598	

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, 2019

For the year ended September 30, 2019, the Sponsor has recognized a Pension Expense of \$373,149. On September 30, 2019, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Infl	ferred lows of sources
Differences between Expected and Actual Experience	-		-
Changes of assumptions	-		-
Net difference between Projected and Actual Earnings on Pension Plan investments	-		87,761
Employer contributions subsequent to the measurement date	654,726		-
Total	\$ 654,726	\$	87,761

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, 2019. 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:	
2020	\$ 70,505
2021	\$ (80,658)
2022	\$ (64,813)
2023	\$ (12,795)
2024	\$ -
Thereafter	\$ -

# PRELIMINARY 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 will recognize 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:

	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	89,074	-
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, 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	\$ -

Reporting Period Ending	09/30/2020	09/30/2019	09/30/2018
Measurement Date	09/30/2020	09/30/2019	09/30/2017
Total Pension Liability	07/30/2017	07/30/2010	07/30/2017
Service Cost	15,180	18,025	19,241
Interest	827,065	827,736	814,693
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(257,101)	(40,037)	176,585
Changes of assumptions		-	
Benefit Payments, including Refunds of Employee Contributions	(804,263)	(820,665)	(825,266)
Net Change in Total Pension Liability	(219,119)	(14,941)	185,253
Total Pension Liability - Beginning	12,205,770	12,220,711	12,035,458
Total Pension Liability - Ending (a)	\$ 11,986,651	\$ 12,205,770	\$ 12,220,711
Plan Fiduciary Net Position			
Contributions - Employer	654,726	664,376	594,116
Contributions - State	-	-	-
Contributions - Employee	-	-	-
Net Investment Income	207,777	554,260	715,583
Benefit Payments, including Refunds of Employee Contributions	(804,263)	(820,665)	(825,266)
Administrative Expense	(18,631)	(22,077)	(27,650)
Net Change in Plan Fiduciary Net Position	39,609	375,894	456,783
Plan Fiduciary Net Position - Beginning	7,469,118	7,093,224	6,636,441
Plan Fiduciary Net Position - Ending (b)	\$ 7,508,727	\$ 7,469,118	\$ 7,093,224
Net Pension Liability - Ending (a) - (b)	\$ 4,477,924	\$ 4,736,652	\$ 5,127,487
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	62.64%	61.19%	58.04%
Covered Payroll	N/A	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A	N/A

Reporting Period Ending	09/30/2017	09/30/2016
Measurement Date	09/30/2016	09/30/2015
Total Pension Liability		
Service Cost	14,674	28,625
Interest	797,181	812,505
Changes of benefit terms	(9,211)	-
Differences between Expected and Actual Experience	(337,539)	(4,365)
Changes of assumptions	653,987	570,366
Benefit Payments, including Refunds of Employee Contributions	(940,156)	(717,957)
Net Change in Total Pension Liability	178,936	689,174
Total Pension Liability - Beginning	11,856,522	11,167,348
Total Pension Liability - Ending (a)	\$ 12,035,458	\$ 11,856,522
Plan Fiduciary Net Position		
Contributions - Employer	623,019	621,921
Contributions - State	-	-
Contributions - Employee	-	-
Net Investment Income	519,859	(246,652)
Benefit Payments, including Refunds of Employee Contributions	(940,156)	(717,957)
Administrative Expense	(39,247)	(42,386)
Net Change in Plan Fiduciary Net Position	163,475	(385,074)
Plan Fiduciary Net Position - Beginning	6,472,966	6,858,040
Plan Fiduciary Net Position - Ending (b)	\$ 6,636,441	\$ 6,472,966
Net Pension Liability - Ending (a) - (b)	\$ 5,399,017	\$ 5,383,556
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	55.14%	54.59%
Covered Payroll <sup>1</sup>	\$ 429,341	\$ 603,217
Net Pension Liability as a percentage of Covered Payroll	1257.51%	¢ 892.47%
	1_0 / 10 1 /0	0/2017/0

## **Notes to Schedule:**

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

### Changes of benefit terms:

For measurement date 09/30/2016, amounts reported as changes of benefit terms resulted from Ordinance 2016-22, adopted and effective July 5, 2016, provided a lump sum cash out option to active Members and prior Vested participants who were due a deferred monthly benefit.

## Changes of Assumptions:

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System for special risk employees.

The inflation assumption rate was lowered from 3.00% to 2.30%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

For measurement date 09/30/2015, amounts reported as changes of assumptions were resulted from lowering the investment rate of return from 7.50% to 7.00%.

Reporting Period Ending	09/30/2015	09/30/2014
Measurement Date	09/30/2014	09/30/2013
Total Pension Liability		
Service Cost	6,496	6,043
Interest	823,074	835,385
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(1,267,283)	(744,769)
Net Change in Total Pension Liability	(437,713)	96,659
Total Pension Liability - Beginning	11,605,061	11,508,403
Total Pension Liability - Ending (a)	\$ 11,167,348	\$ 11,605,061
Plan Fiduciary Net Position		
Contributions - Employer	552,573	824,909
Contributions - State	81,017	77,298
Contributions - Employee	35,601	100,547
Net Investment Income	662,893	785,731
Benefit Payments, including Refunds of Employee Contributions	(1,267,283)	(744,769)
Administrative Expense	(39,110)	(28,794)
Net Change in Plan Fiduciary Net Position	25,691	1,014,922
Plan Fiduciary Net Position - Beginning	6,832,349	5,817,427
Plan Fiduciary Net Position - Ending (b)	\$ 6,858,040	\$ 6,832,349
Net Pension Liability - Ending (a) - (b)	\$ 4,309,308	\$ 4,772,713
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	61.41%	58.87%
Covered Payroll	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A

# SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	A	ctuarially	in	ntributions relation to Actuarially	Co	ontribution		Contributions as a percentage
	De	etermined	De	etermined	D	eficiency	Covered	of Covered
Fiscal Year Ended	Co	ntribution	Co	ntributions	(	(Excess)	Payroll	Payroll
09/30/2019	\$	654,726	\$	654,726	\$	-	N/A	N/A
09/30/2018	\$	664,376	\$	664,376	\$	-	N/A	N/A
09/30/2017	\$	585,869	\$	594,116	\$	(8,247)	N/A	N/A
09/30/2016	\$	623,019	\$	623,019	\$	-	\$ 429,341	145.11%
09/30/2015	\$	621,921	\$	621,921	\$	-	\$ 603,217	103.10%
09/30/2014	\$	633,590	\$	633,590	\$	-	N/A	N/A
09/30/2013	\$	902,207	\$	902,207	\$	-	N/A	N/A

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

## Notes to Schedule

Valuation Date:

10/01/2017

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

Methods and assumptions used to determine contribution rates:

Mortality:	Healthy Inactive Lives:
	Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.
	Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue
	Collar, Scale BB.
	Healthy Active Lives:
	Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.
	Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined
	Healthy Blue Collar, Scale BB.
	Disabled Lives:
	Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White
	Collar with no setback, no projection scale.
	Male: 60% RP2000 Disabled Male setback four years /40% Annuitant White Collar
	with no setback, no projection scale.
	The assumed rates of mortality were mandated by Chapter 2015-157, Laws of
	Florida. This law mandates the use of the assumption used in either of the two most
	recent valuations of the Florida Retirement System (FRS). The above rates are those
	outlined in the July 1, 2016 FRS actuarial valuation report for special risk
	participants. We feel this assumption sufficiently accommodates future mortality
	improvements.
Termination Rates:	See Table below (1304A). This assumption is consistent with historical Plan experience.
Disability Rates:	See Table below (1205). 75% of Disability Retirements are assumed to service-
5	related. These rates are similar to those utilized by other Florida special risk
	retirement programs.
Retirement Age:	The earlier of age 60, age 55 with 10 years of credited service, or 25 years of credited
C	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 for the associated Plan provisions
	-

# GASB 68

# Town of Longboat Key Police Officers' Retirement System

Interest Rate:	7.0% per year, compounded annually, net of investment-related expenses. This assumption is supported by the Plan's investment policy and long-term expected returns by asset class.
Salary Increases:	None.
Early Retirement:	None.
Cost of Living Adjustment:	3.0% per year, beginning 5 years after retirement.
Payroll Growth:	None.
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 deminis bias that is above or below the Market Value of Assets.

Termination and Disability Rate Table:

	% Terminating During the	% Becoming Disabled During
Age	Year	the Year
20	9.20%	0.14%
30	7.30%	0.18%
40	3.50%	0.30%
50	0.80%	1.00%

Funding Method:

Amortization Method: Remaining Amortization Period: been applied for determination of the Total Required Contribution. Level Dollar. 25 Years (as of 10/01/2017).

Entry Age Normal Actuarial Cost Method. An interest load equal to 1.5 years has

# 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, 2019

	N	Vet Pension Liability		Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$	5,127,487	\$	290,479	\$ 966,702	\$ -
Employer Contributions made after 09/30/2018		-		-	654,726	-
Total Pension Liability Factors:						
Service Cost		18,025		-	-	18,025
Interest		827,736		-	-	827,736
Changes in benefit terms		-		-	-	-
Differences between Expected and Actual Experience						
with regard to economic or demographic assumptions		(40,037)		40,037	-	-
Current year amortization of experience difference		-		(40,037)	-	(40,037)
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		(820,665)		-	-	 -
Net change		(14,941)			654,726	 805,724
Plan Fiduciary Net Position:						
Contributions - Employer		664,376		-	(664,376)	-
Projected Net Investment Income		490,283		-	-	(490,283)
Difference between projected and actual earnings on						
Pension Plan investments		63,977		63,977	-	-
Current year amortization		-		(115,532)	(151,163)	35,631
Benefit Payments, including Refunds of Employee						
Contributions		(820,665)		-	-	-
Administrative Expenses		(22,077)		-	-	 22,077
Net change		375,894		(51,555)	(815,539)	 (432,575)
	_		_			
Ending Balance	\$	4,736,652	\$	238,924	\$ 805,889	\$ 373,149

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

	et Pension Liability	Deferred Inflows	Deferred Dutflows	Pension Expense
Beginning balance	\$ 4,736,652	\$ 238,924	\$ 805,889	\$ -
Employer Contributions made after 09/30/2019	-	-	TBD*	-
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)	 -	-	 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	TBD	\$ 219,163

\* Employer Contributions subsequent to the measurement date made after September 30, 2019 but made on or before September 30, 2020 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	ferences Between																	
Plan Year	Proj	jected and Actual	Recognition																
Ending		Earnings	Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026		20	)27	2028		2	2029	
2019	\$	309,175	5	\$ -	\$ 61,835	\$ 61,835	\$ 61,835	\$ 61,835	\$ 61,835	\$ - \$		-	\$	-	\$	-	\$		-
2018	\$	(63,977)	5	\$ (12,797)	\$ (12,795)	\$ (12,795)	\$ (12,795)	\$ (12,795)	\$ -	\$ - \$		-	\$	-	\$	-	\$		-
2017	\$	(260,090)	5	\$ (52,018)	\$ (52,018)	\$ (52,018)	\$ (52,018)	\$ -	\$ -	\$ - \$		-	\$	-	\$	-	\$		-
2016	\$	(79,225)	5	\$ (15,845)	\$ (15,845)	\$ (15,845)	\$ -	\$ -	\$ -	\$ - \$		-	\$	-	\$	-	\$		-
2015	\$	755,814	5	\$ 151,163	\$ 151,163	\$ -	\$ -	\$ -	\$ -	\$ - \$		-	\$	-	\$	-	\$		-
2014	\$	(174,362)	5	\$ (34,872)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - \$		-	\$	-	\$	-	\$		-
Net Increase	e (De	crease) in Pension	Expense	\$ 35,631	\$ 132,340	\$ (18,823)	\$ (2,978)	\$ 49,040	\$ 61,835	\$ - \$		-	\$	-	\$	-	\$		-

# AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

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

	Differences Betw	ween																											
Plan Year	Expected and A	ctual	Recognition																										
Ending	Experience		Period (Years)	20	019		2020		2021		2022			2023		2024			2025		2026		2027			2028		202	9
2019	\$	-	1	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-
2018	\$	-	1	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-
2017	\$	-	1	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-
2016	\$ 653	,987	1	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-
2015	\$ 570	,366	2	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-
2014	\$	-	2	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-
2013	\$	-	1	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-
2012	\$	-	1	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-
2011	\$	-	1	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-
2010	\$	-	1	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-	\$	-	\$		-	\$	-	\$		-	\$	-
Not Increas	e (Decrease) in Pe	ncion	Expansa	¢		¢		¢			\$		¢			¢		¢		¢			\$		¢			¢	
inci increas	e (Decrease) III Pe	IISIOII	Expense	¢	-	\$	-	\$		-	\$	-	\$		-	\$	-	\$	-	\$		-	φ	-	\$		-	φ	

## 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	Ex	pected and Actual	Recognition																					
Ending		Experience	Period (Years)	2019	2020	2021		2022		2023		2024		2025		2026		2027		2028		2	2029	
2019	\$	(257,101)	1	\$ -	\$ (257,101)	\$	- \$		-	\$	-	\$	- 3	\$	- \$		-	\$	-	\$	-	\$		-
2018	\$	(40,037)	1	\$ (40,037)	\$ - 3	\$	- \$		-	\$	-	\$	- 3	\$	- \$		-	\$	-	\$	-	\$		-
Net Increas	e (De	ecrease) in Pension	Expense	\$ (40,037)	\$ (257,101)	\$	- \$		-	\$	-	\$	- 3	\$	- \$		-	\$	-	\$	-	\$		-

# STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2019

ASSETS	MARKET VALUE
Cash and Cash Equivalents:	
Prepaid Benefits	177,078
Prepaid Expenses	300 564 242
Money Market Cash	564,343
Cash	2,400
Total Cash and Equivalents	744,121
Receivables:	
From Broker for Investments Sold	14,156
Investment Income	60,894
Total Receivable	75,050
Investments:	
U. S. Bonds and Bills	2,144,900
Federal Agency Guaranteed Securities	588,211
Corporate Bonds	1,887,786
Stocks	5,903,286
Mutual Funds:	
Equity	5,940,020
Pooled/Common/Commingled Funds:	
Real Estate	1,659,548
Total Investments	18,123,751
Total Assets	18,942,922
LIABILITIES	
Payables:	
Administrative Expenses	7,218
To Broker for Investments Purchased	298
Total Liabilities	7,516
NET POSITION RESTRICTED FOR PENSIONS	18,935,406

# STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2019

Market Value Basis

ADDITIONS Contributions:		
Town	1,980,448	
	· · · · · · · ·	
Total Contributions		1,980,448
Investment Income:		
Net Increase in Fair Value of Investments	161,533	
Interest & Dividends	455,153	
Less Investment Expense <sup>1</sup>	(98,461)	
Net Investment Income		518,225
Total Additions		2,498,673
		_, ., ., ., .
DEDUCTIONS		
Distributions to Members:		
Benefit Payments	2,047,660	
Lump Sum DROP Distributions	0	
Total Distributions		2,047,660
Total Distributions		2,047,000
Administrative Expense		46,157
-		
Total Deductions		2,093,817
Net Increase in Net Position		404,856
		101,000
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		18,530,550
End of the Year		18,935,406

<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, 2019)

## 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, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	34
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	4
Active Plan Members	7
	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, 2018 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 09/30/2019 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).

### Investment Policy:

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

Asset Class	Target Allocation
Large Cap US Equity	35.00%
Small/Mid Cap US Equity	10.00%
Non-US Equity Developed	15.00%
US Corps Bonds-Core	25.00%
Real Estate	10.00%
MLPs/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, 2019, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 2.86 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, 2019 is \$0.

# NET PENSION LIABILITY OF THE SPONSOR

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

Total Pension Liability	\$ 32,260,393
Plan Fiduciary Net Position	\$ (18,935,406)
Sponsor's Net Pension Liability	\$ 13,324,987
Plan Fiduciary Net Position as a percentage of Total Pension Liability	58.70%

#### Actuarial Assumptions:

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

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

### Mortality Rate Healthy Inactive Lives:

Female: RP 2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP 2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Mortality Rate Active Lives:

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

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB. *Mortality Rate Disabled Lives:* 

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale. Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale. The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2018 FRS valuation report for special risk participants. We feel this assumption sufficiently accommodates future mortality improvements.

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 2019 the inflation rate assumption of the investment advisor was 1.90%.

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

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2019 are summarized in the following table:

	Long Term Expected Real Rate of
Asset Class	Return <sup>1</sup>
Large Cap US Equity	5.70%
Small/Mid Cap US Equity	5.93%
Non-US Equity Developed	5.20%
US Corps Bonds-Core	1.80%
Real Estate	6.00%
MLPs/Infrastructure	5.10%

<sup>1</sup> 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	\$ 17,244,092	\$ 13,324,987	\$ 10,080,794

# SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	11,489	11,382	12,384
Interest	2,155,999	2,127,614	2,077,039
Changes of benefit terms	410	-	-
Differences between Expected and Actual Experience	328,243	264,783	566,726
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(2,047,660)	(1,949,938)	(1,915,362)
Net Change in Total Pension Liability	448,481	453,841	740,787
Total Pension Liability - Beginning	31,811,912	31,358,071	30,617,284
Total Pension Liability - Ending (a)	\$ 32,260,393	\$ 31,811,912	\$ 31,358,071
Plan Fiduciary Net Position			
Contributions - Employer	1,980,448	1,876,726	1,705,515
Contributions - State	-	-	-
Contributions - Employee	-	-	-
Net Investment Income	518,225	1,360,587	1,720,301
Benefit Payments, including Refunds of Employee Contributions	(2,047,660)	(1,949,938)	(1,915,362)
Administrative Expense	(46,157)	(53,766)	(66,030)
Net Change in Plan Fiduciary Net Position	404,856	1,233,609	1,444,424
Plan Fiduciary Net Position - Beginning	18,530,550	17,296,941	15,852,517
Plan Fiduciary Net Position - Ending (b)	\$ 18,935,406	\$ 18,530,550	\$ 17,296,941
	<b>* 10 00 1</b> 00 <b>5</b>	<b>. . . . . . . . . .</b>	<b>.</b>
Net Pension Liability - Ending (a) - (b)	\$ 13,324,987	\$ 13,281,362	\$ 14,061,130
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	58.70%	58.25%	55.16%
Covered Payroll	N/A	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	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.

	09/30/2016	09/30/2015
Total Pension Liability		
Service Cost	7,140	16,994
Interest	2,005,250	2,089,626
Changes of benefit terms	(349,443)	-
Differences between Expected and Actual Experience	79,615	82,293
Changes of assumptions	1,696,399	1,573,612
Benefit Payments, including Refunds of Employee Contributions	(3,620,803)	(1,616,182)
Net Change in Total Pension Liability	(181,842)	2,146,343
Total Pension Liability - Beginning	30,799,126	28,652,783
Total Pension Liability - Ending (a)	\$ 30,617,284	\$ 30,799,126
Plan Fiduciary Net Position		
Contributions - Employer	1,758,137	2,906,549
Contributions - State	-	-
Contributions - Employee	-	-
Net Investment Income	1,308,231	(507,354)
Benefit Payments, including Refunds of Employee Contributions	(3,620,803)	(1,616,182)
Administrative Expense	(35,696)	(47,913)
Net Change in Plan Fiduciary Net Position	(590,131)	735,100
Plan Fiduciary Net Position - Beginning	16,442,648	15,707,548
Plan Fiduciary Net Position - Ending (b)	\$ 15,852,517	\$ 16,442,648
Net Pension Liability - Ending (a) - (b)	\$ 14,764,767	\$ 14,356,478
Net relision Elability - Ending (a) - (b)	\$ 14,704,707	\$ 14,330,478
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	51.78%	53.39%
Covered Payroll <sup>1</sup>	\$ 893,374	\$ 1,491,476
Net Pension Liability as a percentage of Covered Payroll	1652.70%	962.57%

## **Notes to Schedule:**

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

### Changes of benefit terms:

For measurement date 09/30/2016, amounts reported as changes of benefit terms resulted from Ordinance 2016-22, adopted and effective July 5, 2016, provided a lump sum cash out option to active Members and prior Vested participants who were due a deferred monthly benefit.

## Changes of assumptions:

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System for special risk employees. The inflation assumption rate was lowered from 3.00% to 2.30%, matching the long-term inflation assumption utilized by the

For measurement date 09/30/2015, amounts reported as changes of assumptions were resulted from lowering the investment rate of return from 7.50% to 7.00%.

	09/30/2014	09/30/2013
Total Pension Liability		
Service Cost	17,183	15,910
Interest	2,082,208	2,046,450
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	1,446,265	-
Benefit Payments, including Refunds of Employee Contributions	(1,806,573)	(1,426,754)
Net Change in Total Pension Liability	1,739,083	635,606
Total Pension Liability - Beginning	26,913,700	26,278,094
Total Pension Liability - Ending (a)	\$ 28,652,783	\$ 26,913,700
Plan Fiduciary Net Position		
Contributions - Employer	1,526,725	1,542,566
Contributions - State	-	269,818
Contributions - Employee	-	259,097
Net Investment Income	1,384,179	1,401,812
Benefit Payments, including Refunds of Employee Contributions	(1,806,573)	(1,426,754)
Administrative Expense	(60,183)	(54,125)
Net Change in Plan Fiduciary Net Position	1,044,148	1,992,415
Plan Fiduciary Net Position - Beginning	14,663,400	12,670,985
Plan Fiduciary Net Position - Ending (b)	\$ 15,707,548	\$ 14,663,400
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Net Pension Liability - Ending (a) - (b)	\$ 12,945,234	\$ 12,250,300
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	54.82%	54.48%
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 09/30/2014, amounts reported as changes of assumptions were resulted from lowering the investment rate of return from 8.00% to 7.50%.

-

# SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

Fiscal Year Ended	Ľ	Actuarially Determined ontribution	in the D	ontributions relation to Actuarially Determined ontributions	-	Contribution Deficiency (Excess)	Covered Payroll <sup>1</sup>	Contributions as a percentage of Covered Payroll
09/30/2019	\$	1,980,448	\$	1,980,448	\$	-	N/A	N/A
09/30/2018	\$	1,876,726	\$	1,876,726	\$	-	N/A	N/A
09/30/2017	\$	1,660,200	\$	1,705,515	\$	(45,315)	N/A	N/A
09/30/2016	\$	1,758,137	\$	1,758,137	\$	-	\$ 893,374	196.80%
09/30/2015	\$	1,638,549	\$	2,906,549	\$	(1,268,000)	\$ 1,491,476	194.88%
09/30/2014	\$	1,526,725	\$	1,526,725	\$	-	N/A	N/A
09/30/2013	\$	1,812,384	\$	1,812,384	\$	-	N/A	N/A

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

### Notes to Schedule

Valuation Date:

10/01/2017

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

Methods and assumptions used to determine contribution rates:

Mortality:	Healthy Inactive Lives:
5	Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.
	Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue
	Collar, Scale BB.
	Healthy Active Lives:
	Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.
	Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined
	Healthy Blue Collar, Scale BB
	Disabled Lives:
	Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White
	Collar with no setback, no projection scale.
	Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar
	with no setback, no projection scale.
	The above assumption rates were mandated by Chapter 2015-157, Laws of Florida.
	This law mandates the use of the assumption used in either of the two most recent
	valuations of the Florida Retirement System (FRS). The above rates are those
	outlined in Milliman's July 1, 2016 FRS valuation report for special risk participants.
	We feel this assumption sufficiently accommodates future mortality improvements.
Termination Rates:	See table on following page (1304). This is based on the results of an experience
	study for the period 2002 to 2007.
Disability Rates:	See Table on the following page (1205). 75% of Disability Retirements are assumed
	to service-related. This assumption was developed from those used by other plans
	containing Florida municipal Firefighters.
Retirement Age:	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. We feel this assumption is
	reasonable based on the plan provisions.

# GASB 67

# Town of Longboat Key Firefighters' Retirement System

Interest Rate:	7.0% per year, compounded annually, net of investment-related expenses. This is supported by the target asset class allocation of the trust and the expected long-term return by asset class.
Salary Increases:	None.
Early Retirement:	None.
Cost of Living Adjustment:	3.0% per year, beginning 5 years after retirement.
Payroll Growth:	None.
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 deminis bias that is above or below the Market Value of Assets.

Termination and Disability Rate Table:

	% Terminating During the	% Becoming Disabled During
Age	Year	the Year
20	12.4%	0.14%
30	10.5%	0.18%
40	5.7%	0.30%
50	1.5%	1.00%

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. Level Percentage of Pay, Closed. 25 Years (as of 10/01/2017).

Amortization Method: Remaining Amortization Period:

# SCHEDULE OF INVESTMENT RETURNS

Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2019	2.86%
09/30/2018	8.04%
09/30/2017	11.15%
09/30/2016	8.25%
09/30/2015	-3.28%
09/30/2014	9.60%
09/30/2013	10.62%

## NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2020)

## General Information about the Pension Plan

## 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, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	34
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	4
Active Plan Members	7
Total	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, 2018 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 09/30/2019 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, 2019. The measurement period for the pension expense was October 1, 2018 to September 30, 2019. The reporting period is October 1, 2019 through September 30, 2020.

The Sponsor's Net Pension Liability was measured as of September 30, 2019. The Total Pension Liability used to calculate the Net Pension Liability was determined as of that date.

### Actuarial Assumptions:

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

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

Mortality Rate Healthy Inactive Lives:
Female: RP 2000 Generational, 100% Annuitant White Collar, Scale BB.
Male: RP 2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.
Mortality Rate Active Lives:
Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.
Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.
Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.
Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.
Mate: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.
Mate: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.
Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.
Mate: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.
Mortality Rate Disabled Lives:
Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.
Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.
The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2018 FRS valuation report for special risk participants. We feel this assumption sufficiently accommodates future mortality

improvements.

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 2019 the inflation rate assumption of the investment advisor was 1.90%.

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

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2019 are summarized in the following table:

		Long Term Expected
Asset Class	Target Allocation	Real Rate of Return <sup>1</sup>
Large Cap US Equity	35.00%	5.70%
Small/Mid Cap US Equity	10.00%	5.93%
Non-US Equity Developed	15.00%	5.20%
US Corps Bonds-Core	25.00%	1.80%
Real Estate	10.00%	6.00%
MLPs/Infrastructure	5.00%	5.10%
Total	100.00%	

<sup>1</sup> 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 Net Pension					Net Pension
		Liability		Net Position		Liability
		(a)		(b)		(a)-(b)
Reporting Period Ending September 30, 2019	\$	31,811,912	\$	18,530,550	\$	13,281,362
Changes for a Year:						
Service Cost		11,489		-		11,489
Interest		2,155,999		-		2,155,999
Differences between Expected and Actual Experience		328,243		-		328,243
Changes of assumptions		-		-		-
Changes of benefit terms		410		-		410
Contributions - Employer		-		1,980,448		(1,980,448)
Net Investment Income		-		518,225		(518,225)
Benefit Payments, including Refunds of Employee Contributions		(2,047,660)		(2,047,660)		-
Administrative Expense		-		(46,157)		46,157
Net Changes		448,481		404,856		43,625
Reporting Period Ending September 30, 2020	\$	32,260,393	\$	18,935,406	\$	13,324,987

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

			Cur	rent Discount		
	1% Decrease		Rate		1% Increase	
		6.00%		7.00%		8.00%
Sponsor's Net Pension Liability	\$	17,244,092	\$	13,324,987	\$	10,080,794

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, 2019

For the year ended September 30, 2019, the Sponsor has recognized a Pension Expense of \$1,353,020. On September 30, 2019, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Ou	Deferred utflows of desources	Ir	Deferred nflows of esources
Differences between Expected and Actual Experience		-		-
Changes of assumptions		-		-
Net difference between Projected and Actual Earnings on Pension Plan investments		-		238,638
Employer contributions subsequent to the measurement date		1,980,448		-
Total	\$	1,980,448	\$	238,638

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, 2019. 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:	
2020	\$ 146,759
2021	\$ (199,643)
2022	\$ (154,905)
2023	\$ (30,849)
2024	\$ -
Thereafter	\$ -

## PRELIMINARY 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 will recognize a Pension Expense of \$1,550,876. On September 29, 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	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, 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	\$ -

	00/20/2020	00/20/2010	00/20/2010
Reporting Period Ending	09/30/2020	09/30/2019	09/30/2018
Measurement Date	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability	11 490	11 202	10 294
Service Cost	11,489	11,382	12,384
Interest Changes of benefit terms	2,155,999	2,127,614	2,077,039
Differences between Expected and Actual Experience	410	-	-
Changes of assumptions	328,243	264,783	566,726
Benefit Payments, including Refunds of Employee Contributions	(2.047.660)	-	(1.015.262)
	(2,047,660)	(1,949,938)	(1,915,362)
Net Change in Total Pension Liability	448,481	453,841	740,787
Total Pension Liability - Beginning	31,811,912	31,358,071	30,617,284
Total Pension Liability - Ending (a)	\$ 32,260,393	\$ 31,811,912	\$ 31,358,071
Plan Fiduciary Net Position			
Contributions - Employer	1,980,448	1,876,726	1,705,515
Contributions - State	-	-	-
Contributions - Employee	-	-	-
Net Investment Income	518,225	1,360,587	1,720,301
Benefit Payments, including Refunds of Employee Contributions	(2,047,660)	(1,949,938)	(1,915,362)
Administrative Expense	(46,157)	(53,766)	(66,030)
Net Change in Plan Fiduciary Net Position	404,856	1,233,609	1,444,424
Plan Fiduciary Net Position - Beginning	18,530,550	17,296,941	15,852,517
Plan Fiduciary Net Position - Ending (b)	\$ 18,935,406	\$ 18,530,550	\$ 17,296,941
Net Pension Liability - Ending (a) - (b)	\$ 13,324,987	\$ 13,281,362	\$ 14,061,130
	i		
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	58.70%	58.25%	55.16%
Covered Payroll	N/A	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	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.

Reporting Period Ending	09/30/2017	09/30/2016
Measurement Date	09/30/2016	09/30/2015
Total Pension Liability		
Service Cost	7,140	16,994
Interest	2,005,250	2,089,626
Changes of benefit terms	(349,443)	-
Differences between Expected and Actual Experience	79,615	82,293
Changes of assumptions	1,696,399	1,573,612
Benefit Payments, including Refunds of Employee Contributions	(3,620,803)	(1,616,182)
Net Change in Total Pension Liability	(181,842)	2,146,343
Total Pension Liability - Beginning	30,799,126	28,652,783
Total Pension Liability - Ending (a)	\$ 30,617,284	\$ 30,799,126
Plan Fiduciary Net Position		
Contributions - Employer	1,758,137	2,906,549
Contributions - State	-	-
Contributions - Employee	-	-
Net Investment Income	1,308,231	(507,354)
Benefit Payments, including Refunds of Employee Contributions	(3,620,803)	(1,616,182)
Administrative Expense	(35,696)	(47,913)
Net Change in Plan Fiduciary Net Position	(590,131)	735,100
Plan Fiduciary Net Position - Beginning	16,442,648	15,707,548
Plan Fiduciary Net Position - Ending (b)	\$ 15,852,517	\$ 16,442,648
Net Pension Liability - Ending (a) - (b)	\$ 14,764,767	\$ 14,356,478
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	51.78%	53.39%
Covered Payroll <sup>1</sup>	\$ 893,374	\$ 1,491,476
Net Pension Liability as a percentage of Covered Payroll	1652.70%	962.57%

#### Notes to Schedule:

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

#### Changes of benefit terms:

For measurement date 09/30/2016, amounts reported as changes of benefit terms resulted from Ordinance 2016-22, adopted and effective July 5, 2016, provided a lump sum cash out option to active Members and prior Vested participants who were due a deferred monthly benefit.

#### Changes of assumptions:

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System for special risk employees. The inflation assumption rate was lowered from 3.00% to 2.30%, matching the long-term inflation assumption utilized by the

For measurement date 09/30/2015, amounts reported as changes of assumptions were resulted from lowering the investment rate of return from 7.50% to 7.00%.

Reporting Period Ending	09/30/2015	09/30/2014
Measurement Date	09/30/2014	09/30/2013
Total Pension Liability		
Service Cost	17,183	15,910
Interest	2,082,208	2,046,450
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	1,446,265	-
Benefit Payments, including Refunds of Employee Contributions	(1,806,573)	(1,426,754)
Net Change in Total Pension Liability	1,739,083	635,606
Total Pension Liability - Beginning	26,913,700	26,278,094
Total Pension Liability - Ending (a)	\$ 28,652,783	\$ 26,913,700
Plan Fiduciary Net Position		
Contributions - Employer	1,526,725	1,542,566
Contributions - State	-	269,818
Contributions - Employee	-	259,097
Net Investment Income	1,384,179	1,401,812
Benefit Payments, including Refunds of Employee Contributions	(1,806,573)	(1,426,754)
Administrative Expense	(60,183)	(54,125)
Net Change in Plan Fiduciary Net Position	1,044,148	1,992,415
Plan Fiduciary Net Position - Beginning	14,663,400	12,670,985
Plan Fiduciary Net Position - Ending (b)	\$ 15,707,548	\$ 14,663,400
Net Pension Liability - Ending (a) - (b)	\$ 12,945,234	\$ 12,250,300
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	54.82%	54.48%
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 09/30/2014, amounts reported as changes of assumptions were resulted from lowering the investment rate of return from 8.00% to 7.50%.

## SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll <sup>1</sup>	Contributions as a percentage of Covered Payroll
09/30/2019	\$ 1,980,448	\$ 1,980,448	\$ -	N/A	N/A
09/30/2018	\$ 1,876,726	\$ 1,876,726	\$ -	N/A	N/A
09/30/2017	\$ 1,660,200	\$ 1,705,515	\$ (45,315)	N/A	N/A
09/30/2016	\$ 1,758,137	\$ 1,758,137	\$ -	\$ 893,374	196.80%
09/30/2015	\$ 1,638,549	\$ 2,906,549	\$ (1,268,000)	\$ 1,491,476	194.88%
09/30/2014	\$ 1,526,725	\$ 1,526,725	\$ -	N/A	N/A
09/30/2013	\$ 1,812,384	\$ 1,812,384	\$ -	N/A	N/A

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

#### Notes to Schedule

Valuation Date:

10/01/2017

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

Methods and assumptions used to determine contribution rates:

Mortality:	Healthy Inactive Lives:
5	Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.
	Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue
	Collar, Scale BB.
	Healthy Active Lives:
	Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.
	Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined
	Healthy Blue Collar, Scale BB
	Disabled Lives:
	Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White
	Collar with no setback, no projection scale.
	Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar
	with no setback, no projection scale.
	The above assumption rates were mandated by Chapter 2015-157, Laws of Florida.
	This law mandates the use of the assumption used in either of the two most recent
	valuations of the Florida Retirement System (FRS). The above rates are those
	outlined in Milliman's July 1, 2016 FRS valuation report for special risk participants.
	We feel this assumption sufficiently accommodates future mortality improvements.
Termination Rates:	See table on following page (1304). This is based on the results of an experience
	study for the period 2002 to 2007.
Disability Rates:	See Table on the following page (1205). 75% of Disability Retirements are assumed
	to service-related. This assumption was developed from those used by other plans
	containing Florida municipal Firefighters.
Retirement Age:	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. We feel this assumption is
	reasonable based on the plan provisions.

## GASB 68

## Town of Longboat Key Firefighters' Retirement System

Interest Rate:	7.0% per year, compounded annually, net of investment-related expenses. This is supported by the target asset class allocation of the trust and the expected long-term						
	return by asset class.						
Salary Increases:	None.						
Early Retirement:	None.						
Cost of Living Adjustment:	3.0% per year, beginning 5 years after retirement.						
Payroll Growth:	None.						
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 deminis bias that is above or below the Market Value of Assets.						

Termination and Disability Rate Table:

	% Terminating	% Becoming
	During the	Disabled During
Age	Year	the Year
20	12.40%	0.14%
30	10.50%	0.18%
40	5.70%	0.30%
50	1.50%	1.00%

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. Level Percentage of Pay, Closed. 25 Years (as of 10/01/2017).

Amortization Method: Remaining Amortization Period:

Town of Longboat Key Consolidated Retirement System

# 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, 2019

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 14,061,130	\$ 675,380	\$ 2,569,530	\$ -
Employer Contributions made after 09/30/2018	-	-	1,980,448	-
Total Pension Liability Factors:				
Service Cost	11,382	-	-	11,382
Interest	2,127,614	-	-	2,127,614
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience				
with regard to economic or demographic assumptions	264,783	-	264,783	-
Current year amortization of experience difference	-	-	(264,783)	264,783
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	(1,949,938)			
Net change	453,841		1,980,448	2,403,779
Plan Fiduciary Net Position:				
Contributions - Employer	1,876,726	-	(1,876,726)	-
Projected Net Investment Income	1,206,342	-	-	(1,206,342)
Difference between projected and actual earnings on	, ,			
Pension Plan investments	154,245	154,245	-	-
Current year amortization	-	(244,585)	(346,402)	101,817
Benefit Payments, including Refunds of Employee			,	
Contributions	(1,949,938)	-	-	-
Administrative Expenses	(53,766)	-	-	53,766
Net change	1,233,609	(90,340)	(2,223,128)	(1,050,759)
Ending Balance	\$ 13,281,362	\$ 585,040	\$ 2,326,850	\$ 1,353,020

## PRELIMINARY 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	-	-	TBD*	-
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			2,496,141
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	TBD	\$ 1,550,876

\* Employer Contributions subsequent to the measurement date made after September 30, 2019 but made on or before September 30, 2020 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

	Dif	ferences Between																								
Plan Year	Pro	jected and Actual	Recognition																							
Ending		Earnings	Period (Years)		2019		2020		2021		2022		2023		2024		2025	2026		2027		2028	3		2029	
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)	\$	(30,849)	\$	-	\$	- \$		-	\$	-	\$	-	\$		-
2017	\$	(620,281)	5	\$	(124,056)	\$	(124,056)	\$	(124,056)	\$	(124,056)	\$	-	\$	-	\$	- \$		-	\$	-	\$	-	\$		-
2016	\$	(223,688)	5	\$	(44,738)	\$	(44,738)	\$	(44,738)	\$	-	\$	-	\$	-	\$	- \$		-	\$	-	\$	-	\$		-
2015	\$	1,732,012	5	\$	346,402	\$	346,402	\$	-	\$	-	\$	-	\$	-	\$	- \$		-	\$	-	\$	-	\$		-
2014	\$	(224,708)	5	\$	(44,942)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	- \$		-	\$	-	\$	-	\$		-
NY . Y	æ		5	<b>_</b>	101.017	<u>ф</u>	201 740	Φ.	(11 65 1)	¢	0.4	¢	124 1 40	Φ.	154.000	¢	¢			Φ.		<u>ф</u>		¢		
Net Increas	e (De	ecrease) in Pension	Expense	\$	101,817	\$	301,749	\$	(44,654)	\$	84	\$	124,140	\$	154,989	\$	- \$		-	\$	-	\$	-	\$		

## 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	Ex	pected and Actual	Recognition																					
Ending		Experience	Period (Years)	2019	2020	2021		2022		2023		2	2024		2025		2026		2027		2028		2029	
2019	\$	328,243	1	\$ -	\$ 328,243	\$	-	\$	-	\$	-	\$		- \$		- \$		-	\$	-	\$	-	\$	-
2018	\$	264,783	1	\$ 264,783	\$ -	\$	-	\$	-	\$	-	\$		- \$		- \$		-	\$	-	\$	-	\$	-
Net Increase	e (De	ecrease) in Pension	Expense	\$ 264,783	\$ 328,243	\$	-	\$	-	\$	-	\$		- \$		- \$		-	\$	-	\$	-	\$	-

# STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2019

ASSETS	MARKET VALUE
Cash and Cash Equivalents:	
Prepaid Benefits	84,414
Prepaid Expenses	179
Money Market	331,309
Cash	1,409
Total Cash and Equivalents	417,311
Receivables:	
From Broker for Investments Sold	8,311
Investment Income	35,749
Total Receivable	44,060
Investments:	
U. S. Bonds and Bills	1,259,208
Federal Agency Guaranteed Securities	345,321
Corporate Bonds	1,108,264
Stocks	3,465,644
Mutual Funds:	
Equity	3,487,211
Real Estate	974,272
Total Investments	10,639,920
Total Assets	11,101,291
LIABILITIES	
Payables:	
Administrative Expenses	4,305
To Broker for Investments Purchased	178
Total Liabilities	4,483
NET POSITION RESTRICTED FOR PENSIONS	11,096,808

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

ADDITIONS Contributions: Town	758,168	
Total Contributions	750,100	758,168
Investment Income: Net Increase in Fair Value of Investments Interest & Dividends Less Investment Expense <sup>1</sup>	96,246 270,767 (58,722)	
Net Investment Income		308,291
Total Additions		1,066,459
DEDUCTIONS Distributions to Members: Benefit Payments	997,983	
Total Distributions		997,983
Administrative Expense		27,539
Total Deductions		1,025,522
Net Increase in Net Position		40,937
NET POSITION RESTRICTED FOR PENSIONS Beginning of the Year		11,055,871
End of the Year		11,096,808

<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, 2019)

#### 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, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	44
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	11
Active Plan Members	18
Total	73

#### 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, 2018 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.

#### Investments

#### Investment Policy:

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

Asset Class	Target Allocation
Large Cap US Equity	35.00%
Small/Mid Cap US Equity	10.00%
Non-US Equity Developed	15.00%
US Corps Bonds-Core	25.00%
Real Estate	10.00%
MLPs/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, 2019, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 2.86 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, 2019 is \$0.

## NET PENSION LIABILITY OF THE SPONSOR

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

Total Pension Liability	\$	14,679,542
Plan Fiduciary Net Position	\$ (	(11,096,808)
Sponsor's Net Pension Liability	\$	3,582,734
Plan Fiduciary Net Position as a percentage of Total Pension Liability		75.59%

#### Actuarial Assumptions:

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

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

#### Mortality Rate Healthy Active Lives:

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

Male: RP2000 Generational, 50% White Collar Combined Healthy / 50% Blue Collar, Scale BB.

#### Mortality Rate Healthy Inactive Lives:

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

Male: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB

#### Mortality Rate Disabled Lives:

Female: 100% RP2000 Disabled Female set forward two years.

Male: 100% RP2000 Disabled Male setback four years.

The assumed rates of mortality are mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2018 FRS actuarial valuation report for non-special risk lives. We feel this assumption sufficiently accommodates future mortality improvements.

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 2019 the inflation rate assumption of the investment advisor was 1.90%.

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

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2019 are summarized in the following table:

	Long Term Expected Real Rate of
Asset Class	Return <sup>1</sup>
Large Cap US Equity	5.70%
Small/Mid Cap US Equity	5.93%
Non-US Equity Developed	5.20%
US Corps Bonds-Core	1.80%
Real Estate	6.00%
MLPs/Infrastructure	5.10%

<sup>1</sup> 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	1	% Increase
		6.00%		7.00%		8.00%
Sponsor's Net Pension Liability	\$	5,110,136	\$	3,582,734	\$	2,295,157

# SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	2,231	2,272	4,174
Interest	1,009,583	1,020,110	1,020,584
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(253,661)	54,437	240,109
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(997,983)	(1,456,337)	(1,083,136)
Net Change in Total Pension Liability	(239,830)	(379,518)	181,731
Total Pension Liability - Beginning	14,919,372	15,298,890	15,117,159
Total Pension Liability - Ending (a)	\$ 14,679,542	\$ 14,919,372	\$ 15,298,890
Plan Fiduciary Net Position		<b>-</b> ( <b>2</b> , (22)	510 101
Contributions - Employer	758,168	742,489	712,431
Contributions - Employee	-	-	-
Net Investment Income	308,291	861,006	1,114,680
Benefit Payments, including Refunds of Employee Contributions	(997,983)	(1,456,337)	(1,083,136)
Administrative Expense	(27,539)	(33,995)	(42,661)
Net Change in Plan Fiduciary Net Position	40,937	113,163	701,314
Plan Fiduciary Net Position - Beginning	11,055,871	10,942,708	10,241,394
Plan Fiduciary Net Position - Ending (b)	\$ 11,096,808	\$ 11,055,871	\$ 10,942,708
Net Pension Liability - Ending (a) - (b)	\$ 3,582,734	\$ 3,863,501	\$ 4,356,182
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	75.59%	74.10%	71.53%
Covered Payroll	N/A	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A	N/A

	09/30/2016	09/30/2015
Total Pension Liability		
Service Cost	753	2,151
Interest	988,019	1,008,600
Changes of benefit terms	(327,798)	-
Differences between Expected and Actual Experience	51,519	34,090
Changes of assumptions	508,618	-
Benefit Payments, including Refunds of Employee Contributions	(1,091,116)	(928,199)
Net Change in Total Pension Liability	129,995	116,642
Total Pension Liability - Beginning	14,987,164	14,870,522
Total Pension Liability - Ending (a)	\$ 15,117,159	\$ 14,987,164
Plan Fiduciary Net Position		
Contributions - Employer	738,676	704,515
Contributions - Employee	-	-
Net Investment Income	797,582	(101,832)
Benefit Payments, including Refunds of Employee Contributions	(1,091,116)	(928,199)
Administrative Expense	(37,853)	(44,104)
Net Change in Plan Fiduciary Net Position	407,289	(369,620)
Plan Fiduciary Net Position - Beginning	9,834,105	10,203,725
Plan Fiduciary Net Position - Ending (b)	\$ 10,241,394	\$ 9,834,105
Net Pension Liability - Ending (a) - (b)	\$ 4,875,765	\$ 5,153,059
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	67.75%	65.62%
rian riduciary net Position as a percentage of the rotal Pension Liability	07.75%	03.02%
Covered Payroll <sup>1</sup>	\$ 1,198,776	\$ 1,763,906
Net Pension Liability as a percentage of Covered Payroll	406.73%	292.14%

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

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

#### Changes of benefit terms:

For measurement date 09/30/2016, amounts reported as changes of benefit terms resulted from Ordinance 2016-22, adopted and effective July 5, 2016, provided a lump sum cash out option to active Members and prior Vested participants who were due a deferred monthly benefit.

#### Changes of assumptions:

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System.

The inflation assumption rate was lowered from 3.00% to 2.30%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

	09/30/2014	09/30/2013
Total Pension Liability		
Service Cost	2,197	2,053
Interest	999,070	976,287
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(801,953)	(504,068)
Net Change in Total Pension Liability	199,314	474,272
Total Pension Liability - Beginning	14,671,208	14,196,936
Total Pension Liability - Ending (a)	\$ 14,870,522	\$ 14,671,208
Plan Fiduciary Net Position		
Contributions - Employer	597,459	986,240
Contributions - Employee	-	153,500
Net Investment Income	896,778	865,756
Benefit Payments, including Refunds of Employee Contributions	(801,953)	(504,068)
Administrative Expense	(49,855)	(23,491)
Net Change in Plan Fiduciary Net Position	642,429	1,477,937
Plan Fiduciary Net Position - Beginning	9,561,296	8,083,359
Plan Fiduciary Net Position - Ending (b)	\$ 10,203,725	\$ 9,561,296
Net Pension Liability - Ending (a) - (b)	\$ 4,666,797	\$ 5,109,912
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	68.62%	65.17%
Covered Payroll	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A

## SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

				ntributions relation to					Contributions
	A	ctuarially	the	Actuarially	Co	ontribution			as a percentage
	De	etermined	De	etermined	D	eficiency		Covered	of Covered
Fiscal Year Ended	Co	ntribution	Co	ntributions	(Excess)		Payroll <sup>1</sup>		Payroll
09/30/2019	\$	758,168	\$	758,168	\$	-		N/A	N/A
09/30/2018	\$	742,489	\$	742,489	\$	-		N/A	N/A
09/30/2017	\$	679,109	\$	712,431	\$	(33,322)		N/A	N/A
09/30/2016	\$	738,676	\$	738,676	\$	-	\$	1,198,776	61.62%
09/30/2015	\$	704,515	\$	704,515	\$	-	\$	1,763,906	39.94%
09/30/2014	\$	597,459	\$	597,459	\$	-		N/A	N/A
09/30/2013	\$	986,240	\$	986,240	\$	-		N/A	N/A

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

#### Notes to Schedule

Valuation Date:

10/01/2017

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

Methods and assumptions used to determine contribution rates:

Mortality:	Healthy Active Lives	s:				
·	Female: RP2000 Ge	nerational, 100% White Collar, Scale BB.				
	Male: RP2000 Gene	erational, 50% White Collar / 50% Blue Collar, Scale BB.				
	Healthy Inactive Liv	ves:				
	Female: RP2000 Ge	nerational, 100% Annuitant White Collar, Scale BB.				
	Male: RP2000 Gene	erational, 50% Annuitant White Collar / 50% Annuitant Blue				
	Collar, Scale BB.					
	Disabled Lives:					
	Female: 100% RP20	000 Disabled Female set forward two years.				
		0 Disabled Male setback four years.				
		on rates were mandated by Chapter 2015-157, Laws of Florida.				
	-	he use of the assumption used in either of the two most recent				
		orida Retirement System (FRS). The above rates are those				
		outlined in the July 1, 2016 FRS valuation report for other than special risk				
	•	this assumption sufficiently accommodates future mortality				
	improvements.	I I I I I I I I I I I I I I I I I I I				
Termination Rates:	Table 1305, see sam	ple rates below.				
	%	Terminating During the Year				
	Age					
	20	17.2%				
	30	15.0%				
	40	8.2%				
	50	1.7%				
Retirement Age:	any Member who ha	age 55 and completion of 30 years of Credited Service. Also, as reached normal Retirement is assumed to continue additional year. We believe this assumption is reasonable based				

## GASB 67

# Town of Longboat Key General Employees' Retirement System

Early Retirement:	5% per year, for each year of eligibility, beginning at Age 50 with 15 years of Credited Service. We believe this assumption is reasonable based on the plan provisions.
Interest Rate:	7.0% per year, compounded annually, net of investment related expenses. This is supported by the target asset class allocation of the trust and the expected long-term return by asset class.
Salary Increases:	None.
Payroll Growth:	None.
Asset Valuation Method:	Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value return. It is possible that over time this technique will produce an insignificant bias above or below Market Value.
Funding Method:	Entry Age Normal Actuarial Cost Method. An interest load equal to 1.5 years has been applied for determination of the Total Required Contribution.
Amortization Method:	Level Percentage of Pay, Closed.
Remaining Amortization Period:	25 Years (as of 10/01/2017).

## SCHEDULE OF INVESTMENT RETURNS

Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2019	2.86%
09/30/2018	8.04%
09/30/2017	11.15%
09/30/2016	8.25%
09/30/2015	-1.01%
09/30/2014	9.53%
09/30/2013	10.30%

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2020)

#### General Information about the Pension Plan

#### 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, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	44
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	11
Active Plan Members	18
	73

#### 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, 2018 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 09/30/2019 as noted under the Notes to Schedule of Changes in Net Pension Liability and Related Ratios.

#### 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, 2019.

The measurement period for the pension expense was October 1, 2018 to September 30, 2019. The reporting period is October 1, 2019 through September 30, 2020.

The Sponsor's Net Pension Liability was measured as of September 30, 2019. The Total Pension Liability used to calculate the Net Pension Liability was determined as of that date.

#### Actuarial Assumptions:

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

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

GASB 68

Mortality Rate Healthy Active Lives:
Female: RP2000 Generational, 100% White Collar Combined Healthy, Scale BB.
Male: RP2000 Generational, 50% White Collar Combined Healthy / 50% Blue Collar, Scale BB.
Mortality Rate Healthy Inactive Lives:
Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.
Male: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB
Mortality Rate Disabled Lives:
Female: 100% RP2000 Disabled Female set forward two years.
Male: 100% RP2000 Disabled Male setback four years.
The assumed rates of mortality are mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the

used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2018 FRS actuarial valuation report for non-special risk lives. We feel this assumption sufficiently accommodates future mortality improvements.

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 2019 the inflation rate assumption of the investment advisor was 1.90%.

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

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2019 are summarized in the following table:

		Long Term Expected
Asset Class	Target Allocation	Real Rate of Return <sup>1</sup>
Large Cap US Equity	35.00%	5.70%
Small/Mid Cap US Equity	10.00%	5.93%
Non-US Equity Developed	15.00%	5.20%
US Corps Bonds-Core	25.00%	1.80%
Real Estate	10.00%	6.00%
MLPs/Infrastructure	5.00%	5.10%
Total	100.00%	

<sup>1</sup> 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			]	Net Pension	
		Liability	Net Position			Liability
		(a)		(b)		(a)-(b)
Reporting Period Ending September 30, 2019	\$	14,919,372	\$	11,055,871	\$	3,863,501
Changes for a Year:						
Service Cost		2,231		-		2,231
Interest		1,009,583		-		1,009,583
Differences between Expected and Actual Experience		(253,661)		-		(253,661)
Changes of assumptions		-		-		-
Changes of benefit terms		-		-		-
Contributions - Employer		-		758,168		(758,168)
Net Investment Income		-		308,291		(308,291)
Benefit Payments, including Refunds of Employee Contributions		(997,983)		(997,983)		-
Administrative Expense		-		(27,539)		27,539
Net Changes		(239,830)		40,937		(280,767)
Reporting Period Ending September 30, 2020	\$	14,679,542	\$	11,096,808	\$	3,582,734

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

	Current Discount					
	1% Decrease		% Decrease Rate		1	% Increase
		6.00%		7.00%		8.00%
Sponsor's Net Pension Liability	\$	5,110,136	\$	3,582,734	\$	2,295,157

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, 2019

For the year ended September 30, 2019, the Sponsor has recognized a Pension Expense of \$446,641. On September 30, 2019, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Inf	eferred flows of esources
Differences between Expected and Actual Experience	27,219		-
Changes of assumptions Net difference between Projected and Actual Earnings on Pension Plan investments	-		- 232.100
Employer Contributions subsequent to the measurement date	758,168		-
Total	\$ 785,387	\$	232,100

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, 2019. 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:	
2020	\$ 57,304
2021	\$ (131,259)
2022	\$ (106,688)
2023	\$ (24,238)
2024	\$ -
Thereafter	\$ -

## PRELIMINARY 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 will recognize 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	TBD		-
Total	TBD	\$	126,831

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, 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	\$ -

# SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Reporting Period Ending	09/30/2020	09/30/2019	09/30/2018
Measurement Date	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	2,231	2,272	4,174
Interest	1,009,583	1,020,110	1,020,584
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(253,661)	54,437	240,109
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(997,983)	(1,456,337)	(1,083,136)
Net Change in Total Pension Liability	(239,830)	(379,518)	181,731
Total Pension Liability - Beginning	14,919,372	15,298,890	15,117,159
Total Pension Liability - Ending (a)	\$ 14,679,542	\$ 14,919,372	\$ 15,298,890
Plan Fiduciary Net Position			
Contributions - Employer	758,168	742,489	712,431
Contributions - Employee	-	-	-
Net Investment Income	308,291	861,006	1,114,680
Benefit Payments, including Refunds of Employee Contributions	(997,983)	(1,456,337)	(1,083,136)
Administrative Expense	(27,539)	(33,995)	(42,661)
Net Change in Plan Fiduciary Net Position	40,937	113,163	701,314
Plan Fiduciary Net Position - Beginning	11,055,871	10,942,708	10,241,394
Plan Fiduciary Net Position - Ending (b)	\$ 11,096,808	\$ 11,055,871	\$ 10,942,708
Net Pension Liability - Ending (a) - (b)	\$ 3,582,734	\$ 3,863,501	\$ 4,356,182
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	75.59%	74.10%	71.53%
Covered Payroll	N/A	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A	N/A

Penerting Deried Ending	09/30/2017	09/30/2016
Reporting Period Ending Measurement Date	09/30/2017	09/30/2015
Total Pension Liability	09/30/2010	09/30/2013
Service Cost	753	2 151
		2,151
Interest Classification of the second	988,019	1,008,600
Changes of benefit terms	(327,798)	-
Differences between Expected and Actual Experience	51,519	34,090
Changes of assumptions	508,618	-
Benefit Payments, including Refunds of Employee Contributions	(1,091,116)	(928,199)
Net Change in Total Pension Liability	129,995	116,642
Total Pension Liability - Beginning	14,987,164	14,870,522
Total Pension Liability - Ending (a)	\$ 15,117,159	\$ 14,987,164
Plan Fiduciary Net Position		
Contributions - Employer	738,676	704,515
Contributions - Employee	-	-
Net Investment Income	797,582	(101,832)
Benefit Payments, including Refunds of Employee Contributions	(1,091,116)	(928,199)
Administrative Expense	(37,853)	(44,104)
Net Change in Plan Fiduciary Net Position	407,289	(369,620)
Plan Fiduciary Net Position - Beginning	9,834,105	10,203,725
Plan Fiduciary Net Position - Ending (b)	\$ 10,241,394	\$ 9,834,105
	¢ 10,2 .1,0 > .	\$ 3,00 1,100
Net Pension Liability - Ending (a) - (b)	\$ 4,875,765	\$ 5,153,059
	φ 1,075,705	φ 3,133,037
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	67.75%	65.62%
Covered Payroll <sup>1</sup>	\$ 1,198,776	\$ 1,763,906
Net Pension Liability as a percentage of Covered Payroll	406.73%	292.14%

#### Notes to Schedule:

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

#### Changes of benefit terms:

For measurement date 09/30/2016, amounts reported as changes of benefit terms resulted from Ordinance 2016-22, adopted and effective July 5, 2016, provided a lump sum cash out option to active Members and prior Vested participants who were due a deferred monthly benefit.

#### Changes of assumptions:

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System.

The inflation assumption rate was lowered from 3.00% to 2.30%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

Reporting Period Ending	09/30/2015	09/30/2014
Measurement Date	09/30/2014	09/30/2013
Total Pension Liability		
Service Cost	2,197	2,053
Interest	999,070	976,287
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(801,953)	(504,068)
Net Change in Total Pension Liability	199,314	474,272
Total Pension Liability - Beginning	14,671,208	14,196,936
Total Pension Liability - Ending (a)	\$ 14,870,522	\$ 14,671,208
Plan Fiduciary Net Position		
Contributions - Employer	597,459	986,240
Contributions - Employee	-	153,500
Net Investment Income	896,778	865,756
Benefit Payments, including Refunds of Employee Contributions	(801,953)	(504,068)
Administrative Expense	(49,855)	(23,491)
Net Change in Plan Fiduciary Net Position	642,429	1,477,937
Plan Fiduciary Net Position - Beginning	9,561,296	8,083,359
Plan Fiduciary Net Position - Ending (b)	\$ 10,203,725	\$ 9,561,296
Not Dansion Lightlitz, Ending (a) (b)	ф. 4 ссс <b>202</b>	¢ 5 100 010
Net Pension Liability - Ending (a) - (b)	\$ 4,666,797	\$ 5,109,912
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	68.62%	65.17%
Covered Payroll	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A

## SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

		ctuarially	in the	ntributions relation to Actuarially		Contributions as a percentage		
	De	etermined	D	etermined	D	eficiency	Covered	of Covered
Fiscal Year Ended	Contribution			ntributions	(	Excess)	Payroll <sup>1</sup>	Payroll
09/30/2019	\$	758,168	\$	758,168	\$	-	N/A	N/A
09/30/2018	\$	742,489	\$	742,489	\$	-	N/A	N/A
09/30/2017	\$	679,109	\$	712,431	\$	(33,322)	N/A	N/A
09/30/2016	\$	738,676	\$	738,676	\$	-	\$ 1,198,776	61.62%
09/30/2015	\$	704,515	\$	704,515	\$	-	\$ 1,763,906	39.94%
09/30/2014	\$	597,459	\$	597,459	\$	-	N/A	N/A
09/30/2013	\$	986,240	\$	986,240	\$	-	N/A	N/A

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

#### Notes to Schedule

Valuation Date:

10/01/2017

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

Methods and assumptions used to determine contribution rates:

Mortality:	<i>Healthy Active Lives:</i> Female: RP2000 Generational, 100% White Collar, Scale BB.											
		Generational, 50% White Collar / 50% Blue Collar, Scale BB.										
	Healthy Inacti											
	Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.											
	Male: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue											
	Collar, Scale E											
	Disabled Lives											
	Female: 100% RP2000 Disabled Female set forward two years.											
	Male: 100% RP2000 Disabled Male setback four years.											
	The above assumption rates were mandated by Chapter 2015-157, Laws of Florida.											
		ates the use of the assumption used in either of the two most recent										
	valuations of the Florida Retirement System (FRS). The above rates are those											
	outlined in the July 1, 2016 FRS valuation report for other than special risk											
	participants. We feel this assumption sufficiently accommodates future mortality											
	improvements.											
Termination Rates:	1	e sample rates below.										
	Age	% Terminating During the Year										
	20	17.2%										
	30	15.0%										
	40	8.2%										
	50	1.7%										
Retirement Age:	any Member w	52 or age 55 and completion of 30 years of Credited Service. Also, the has reached normal Retirement is assumed to continue or one additional year. We believe this assumption is reasonable based ovisions.										

## GASB 68

# Town of Longboat Key General Employees' Retirement System

Early Retirement:	5% per year, for each year of eligibility, beginning at Age 50 with 15 years of Credited Service. We believe this assumption is reasonable based on the plan provisions.
Interest Rate:	7.0% per year, compounded annually, net of investment related expenses. This is
Salary Increases:	None.
Payroll Growth:	None.
Asset Valuation Method:	Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value return. It is possible that over time this technique will produce an insignificant bias above or below Market Value.
Funding Method:	Entry Age Normal Actuarial Cost Method. An interest load equal to 1.5 years has been applied for determination of the Total Required Contribution.
Amortization Method:	Level Percentage of Pay, Closed.
Remaining Amortization Period:	25 Years (as of 10/01/2017).

# 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, 2019

	et Pension Liability	 Deferred Inflows	Deferred Outflows	 Pension Expense
Beginning balance	\$ 4,356,182	\$ 450,791	\$ 1,185,232	\$ -
Employer Contributions made after 09/30/2018	-	-	758,168	-
Total Pension Liability Factors:				
Service Cost	2,272	-	-	2,272
Interest	1,020,110	-	-	1,020,110
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience				
with regard to economic or demographic assumptions	54,437	-	54,437	-
Current year amortization of experience difference	-	-	(147,273)	147,273
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	(1,456,337)	 	-	 -
Net change	 (379,518)	 	665,332	 1,169,655
Plan Fiduciary Net Position:				
Contributions - Employer	742,489	-	(742,489)	-
Projected Net Investment Income	739,815	-	-	(739,815)
Difference between projected and actual earnings on				
Pension Plan investments	121,191	121,191	-	-
Current year amortization	-	(178,538)	(161,344)	(17,194)
Benefit Payments, including Refunds of Employee				
Contributions	(1,456,337)	-	-	-
Administrative Expenses	 (33,995)	-		 33,995
Net change	 113,163	 (57,347)	(903,833)	 (723,014)
Ending Balance	\$ 3,863,501	\$ 393,444	\$ 946,731	\$ 446,641

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

	N	let Pension Liability		Deferred Inflows	Deferred Outflows			Pension Expense
Beginning balance	\$	3,863,501	\$	393,444	\$ 946,7	31	\$	-
Employer Contributions made after 09/30/2019		-		-	TBD*			-
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)	(27,2	.19)		(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	(27,2	.19)		912,203
Plan Fiduciary Net Position:								
Contributions - Employer		758,168		-	(758,1	68)		-
Projected Net Investment Income		764,554		-				(764,554)
Difference between projected and actual earnings on		,						
Pension Plan investments		(456,263)		-	456,2	63		-
Current year amortization		-		(131,259)	(252,5	95)		121,336
Benefit Payments, including Refunds of Employee								,
Contributions		(997,983)		-	-			-
Administrative Expenses		(27,539)		-	-			27,539
Net change		40,937		(131,259)	(554,5	(00)		(615,679)
-				<u> </u>	i	<u> </u>		<u>,                                </u>
Ending Balance		3,582,734	\$	389,016	TBD	_	\$	296,524
			_				_	

\* Employer Contributions subsequent to the measurement date made after September 30, 2019 but made on or before September 30, 2020 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)	2019	2020	2021	2022	2023	2024	2025	2026		202	7	2028		20	029	
2019	\$	456,263	5	\$ -	\$ 91,251	\$ 91,253	\$ 91,253	\$ 91,253	\$ 91,253	\$ - \$		-	\$	-	\$	-	\$	-	
2018	\$	(121,191)	5	\$ (24,239)	\$ (24,238)	\$ (24,238)	\$ (24,238)	\$ (24,238)	\$ -	\$ - \$		-	\$	-	\$	-	\$	-	
2017	\$	(412,250)	5	\$ (82,450)	\$ (82,450)	\$ (82,450)	\$ (82,450)	\$ -	\$ -	\$ - \$		-	\$	-	\$	-	\$	-	
2016	\$	(122,855)	5	\$ (24,571)	\$ (24,571)	\$ (24,571)	\$ -	\$ -	\$ -	\$ - \$		-	\$	-	\$	-	\$	-	
2015	\$	806,720	5	\$ 161,344	\$ 161,344	\$ -	\$ -	\$ -	\$ -	\$ - \$		-	\$	-	\$	-	\$	-	
2014	\$	(236,389)	5	\$ (47,278)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - \$		-	\$	-	\$	-	\$	-	
																			_
Net Increas	e (De	crease) in Pension	Expense	\$ (17,194)	\$ 121,336	\$ (40,006)	\$ (15,435)	\$ 67,015	\$ 91,253	\$ - \$		-	\$	-	\$	-	\$		

## 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)	2019	2020	2021	2022		202	3	2024		202	.5	2026		2	2027		2028		2	.029	
2019	\$	(253,661)	2	\$ -	\$ (126,830)	\$ (126,831)	\$	-	\$	-	\$	-	\$	- \$		-	\$	-	. 9	5	-	\$		-
2018	\$	54,437	2	\$ 27,218	\$ 27,219	\$ -	\$	-	\$	-	\$	-	\$	- \$	i	-	\$	-	. 9	5	-	\$		-
2017	\$	240,109	2	\$ 120,055	\$ -	\$ -	\$	-	\$	-	\$	-	\$	- \$	5	-	\$	-		5	-	\$		-
Net Increas	e (De	ecrease) in Pension	Expense	\$ 147,273	\$ (99,611)	\$ (126,831)	\$	-	\$	-	\$	-	\$	- \$		-	\$	-		5	-	\$		-