

DESTIN FIRE CONTROL DISTRICT
FIREFIGHTERS' RETIREMENT TRUST FUND

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



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

November 25, 2019

Board of Trustees
Destin Fire Control District
Firefighters' Retirement Trust Fund
848 Airport Road
Destin, FL 32541

Re: Destin Fire Control District Firefighters' Retirement Trust Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Destin Fire Control District Firefighters' Retirement Trust Fund. Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflect laws and regulations issued to date pursuant to the provisions of Chapters 112 and 175, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuations, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience. 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 valuation, 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 Destin, 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 is familiar with the immediate and long-term aspects of pension valuations, and meets 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 Destin, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Fire Control District Firefighters' Retirement Trust Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

Foster & Foster, Inc.



Drew D. Ballard, EA, MAAA
Enrolled Actuary #17-8193



Amanda M. Brown, ASA, MAAA

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Destin Fire Control District Firefighters' Retirement Trust Fund, 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 the requirements determined as of October 1, 2018 and set forth in the Actuarial Impact Statement dated November 11, 2019, are as follows:

Valuation Date	10/1/2019	10/1/2018
Applicable to Fiscal Year Ending	<u>9/30/2021</u>	<u>9/30/2020</u>
Minimum Required Contribution	\$1,232,759	\$1,219,219
Member Contributions (Est.)	121,173	114,148
District And State Required Contribution	1,111,586	1,105,071
State Contribution (Est.) ¹	291,635	291,635
District Required Contribution ²	\$819,951	\$813,436

¹ Represents the amount received in calendar 2019. As per a Mutual Consent Agreement between the Membership and the District, all State Monies received each year will be available to offset the District's required contribution.

As displayed above, the Minimum Required Contribution reflects a slight increase when compared to the results determined in the Actuarial Impact Statement dated November 11, 2019. Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. The primary source of actuarial loss was an investment return of 6.38% (Actuarial Asset Basis) which fell short of the 7.40% assumption. This loss was offset in part by a gain associated with an average salary increase of 1.61% which fell short of the 4.28% assumption.

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 Pension Fund and do not provide for other additional benefits that are provided for in Florida Statutes Section 112.1816.

Actuarial Assumption/Method Changes

To the value the above plan change, the in-line-of duty assumption was increased from 75% of disablements to 90% of disablements for Firefighters, effective with the Actuarial Impact Statement dated November 11, 2019.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2019</u>	<u>10/1/2018</u>
A. Participant Data		
Actives	30	29
Service Retirees	14	13
DROP Retirees	2	2
Beneficiaries	1	1
Disability Retirees	1	1
Terminated Vested	<u>8</u>	<u>8</u>
Total	56	54
Total Annual Payroll	\$1,751,467	\$1,746,377
Payroll Under Assumed Ret. Age	1,640,607	1,546,829
Annual Rate of Payments to:		
Service Retirees	967,692	900,662
DROP Retirees	144,438	127,432
Beneficiaries	60,082	58,904
Disability Retirees	14,297	14,297
Terminated Vested	155,943	155,943
B. Assets		
Actuarial Value (AVA) ¹	22,023,268	20,578,226
Market Value (MVA) ¹	22,130,769	20,867,421
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	11,710,976	11,817,407
Disability Benefits	48,849	58,126
Death Benefits	29,471	30,157
Vested Benefits	432,133	496,668
Refund of Contributions	39,513	34,082
Service Retirees	14,309,819	13,343,889
DROP Retirees ¹	2,547,232	2,433,984
Beneficiaries	350,608	383,471
Disability Retirees	176,895	177,628
Terminated Vested	1,553,714	1,434,676
Share Plan Balances ¹	<u>0</u>	<u>0</u>
Total	31,199,210	30,210,088

C. Liabilities - (Continued)	<u>10/1/2019</u>	<u>10/1/2018</u>
Present Value of Future Salaries	10,603,342	10,571,564
Present Value of Future Member Contributions	721,027	718,866
Normal Cost (Retirement)	354,033	335,071
Normal Cost (Disability)	4,923	5,704
Normal Cost (Death)	2,317	2,073
Normal Cost (Vesting)	45,093	45,362
Normal Cost (Refunds)	<u>5,374</u>	<u>4,489</u>
Total Normal Cost	411,740	392,699
Present Value of Future Normal Costs	2,206,948	2,273,144
Accrued Liability (Retirement)	9,817,709	9,875,889
Accrued Liability (Disability)	16,239	16,150
Accrued Liability (Death)	14,248	16,058
Accrued Liability (Vesting)	203,617	251,366
Accrued Liability (Refunds)	2,181	3,833
Accrued Liability (Inactives) ¹	18,938,268	17,773,648
Share Plan Balances ¹	<u>0</u>	<u>0</u>
Total Actuarial Accrued Liability (EAN AL)	28,992,262	27,936,944
Unfunded Actuarial Accrued Liability (UAAL)	6,968,994	7,358,718
Funded Ratio (AVA / EAN AL)	76.0%	73.7%

D. Actuarial Present Value of		
Accrued Benefits	<u>10/1/2019</u>	<u>10/1/2018</u>
Vested Accrued Benefits		
Inactives + Share Plan Balances ¹	18,938,268	17,773,648
Actives	6,883,855	6,818,710
Member Contributions	<u>1,161,993</u>	<u>1,168,914</u>
Total	26,984,116	25,761,272
Non-vested Accrued Benefits	<u>1,237,431</u>	<u>1,187,821</u>
Total Present Value		
Accrued Benefits (PVAB)	28,221,547	26,949,093
Funded Ratio (MVA / PVAB)	78.4%	77.4%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	570,592	
Benefits Paid	(1,246,259)	
Interest	1,948,121	
Other	<u>0</u>	
Total	1,272,454	

Valuation Date	10/1/2019	10/1/2018
Applicable to Fiscal Year Ending	<u>9/30/2021</u>	<u>9/30/2020</u>

E. Pension Cost

Normal Cost ²	\$447,213	\$426,165
Administrative Expenses ²	42,927	32,335
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 24 years (as of 10/1/2019) ²	742,619	760,719
Minimum Required Contribution	1,232,759	1,219,219
Expected Member Contributions ²	121,173	114,148
Expected District and State Contribution	1,111,586	1,105,071

F. Past Contributions

Plan Years Ending:	<u>9/30/2019</u>
District and State Requirement	1,083,467
Actual Contributions Made:	
Members (excluding buyback)	114,324
District	1,017,878
State	<u>292,293</u>
Total	1,424,495

G. Net Actuarial (Gain)/Loss	76,228
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¹ The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2019 and 9/30/2018.

² Contributions developed as of 10/1/2019 displayed above have been adjusted to account for assumed salary increase and interest components.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2019	6,968,994
2020	6,750,391
2021	6,515,610
2027	4,693,598
2032	2,450,431
2038	19,144
2043	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2019	1.61%	4.28%
Year Ended 9/30/2018	1.31%	5.15%
Year Ended 9/30/2017	5.30%	4.61%
Year Ended 9/30/2016	-1.94%	4.63%
Year Ended 9/30/2015	0.70%	7.50%

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

	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended 9/30/2019	5.44%	6.38%	7.40%
Year Ended 9/30/2018	8.67%	7.28%	7.50%
Year Ended 9/30/2017	11.67%	7.03%	7.50%
Year Ended 9/30/2016	10.74%	7.75%	8.00%
Year Ended 9/30/2015	-5.49%	6.87%	8.00%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2019	\$1,640,607
	10/1/2009	2,125,540
(b) Total Increase		-22.81%
(c) Number of Years		10.00
(d) Average Annual Rate		-2.56%

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.



Drew D. Ballard, EA, MAAA
Enrolled Actuary #17-8193

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

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

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

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2018	\$7,358,718
(2)	Sponsor Normal Cost developed as of October 1, 2018	287,515
(3)	Expected administrative expenses for the year ended September 30, 2019	29,796
(4)	Expected interest on (1), (2) and (3)	566,924
(5)	Sponsor contributions to the System during the year ended September 30, 2019	1,310,171
(6)	Expected interest on (5)	40,016
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2019 (1)+(2)+(3)+(4)-(5)-(6)	6,892,766
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	76,228
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2019	6,968,994

Type of Base	Date Established	Years Remaining	10/1/2019 Amount	Amortization Amount
Benefit Improv.	10/1/2002	13	353,221	40,248
Benefit Improv.	10/1/2005	16	678,649	68,674
Actuarial Loss	10/1/2006	17	750,081	73,528
Method Change	10/1/2006	17	389,696	38,201
Actuarial Loss	10/1/2007	18	151,305	14,412
Benefit Improv.	10/1/2007	18	1,359,508	129,496
Benefit Improv.	10/1/2007	18	2,205,722	210,100
Actuarial Loss	10/1/2008	18	1,797,355	171,202
Method Change	10/1/2008	18	(109,242)	(10,406)
Actuarial Gain	10/1/2009	18	(648,871)	(61,807)
Assump Change	10/1/2009	18	227,223	21,644
Actuarial Loss	10/1/2010	18	372,490	35,481
Method Change	10/1/2010	18	(24,200)	(2,305)
Actuarial Gain	10/1/2011	18	(151,912)	(14,470)
Actuarial Gain	10/1/2012	18	(98,859)	(9,417)
Benefit Improv.	10/1/2012	18	483,316	46,037
Actuarial Gain	10/1/2013	19	(275,856)	(25,601)
Actuarial Gain	10/1/2014	20	(1,351,193)	(122,472)
Actuarial Gain	10/1/2015	21	(199,773)	(17,722)
Assump Change	10/1/2015	21	(19,265)	(1,709)
Assump Change	10/1/2016	22	1,323,345	115,116
Actuarial Gain	10/1/2016	22	(648,649)	(56,425)
Actuarial Loss	10/1/2017	23	349,261	29,842
Assump Change	10/1/2018	14	233,345	25,443
Actuarial Gain	10/1/2018	24	(253,005)	(21,266)
Benefit Improv.	10/1/2018	14	(926)	(101)
Actuarial Loss	10/1/2019	15	<u>76,228</u>	<u>7,991</u>
			6,968,994	683,714

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2018	\$7,358,718
(2) Expected UAAL as of October 1, 2019	6,892,766
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	211,508
Salary Increases	(125,462)
Active Decrements	(40,643)
Inactive Mortality	62,420
Other	<u>(31,595)</u>
Increase in UAAL due to (Gain)/Loss	76,228
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2019	\$6,968,994

ACTUARIAL ASSUMPTIONS AND METHODS

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:

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 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

7.40% 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.

Payroll Growth

None.

Administrative Expenses

\$39,522 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Early Retirement

Commencing with the earliest Early Retirement Age (50), members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. This assumption is based on the results of an experience study dated November 2018.

Normal Retirement

The assumed rates of normal retirement are below:

<u>Years Following First Eligibility</u>	<u>Rate</u>
0	80.0%
1	80.0%
2	100.0%

This assumption is based on the results of an experience study dated November 2018.

Salary Increases

The assumed rates of salary increase are shown below:

<u>Credited Service</u>	<u>Salary Increase</u>
0 – 1	6.5%
2 - 3	6.0%
4 – 5	5.5%
6 – 7	5.0%
8 – 9	4.5%
10+	4.0%

This assumption is based on the results of an experience study dated November 2018.

Disability Rate

Sample rates below (1201).

<u>Age</u>	<u>Rate</u>
20	0.03%
30	0.04%
40	0.07%
50	0.18%

It is assumed that 90% of disablements are service related (previously 75%). This assumption is based on the results of an experience study dated November 2018.

Termination Rate

The assumed rates of withdrawal are shown below:

<u>Credited Service</u>	<u>Rate</u>
0	10.0%
1 - 2	5.0%
3 - 4	4.5%
5 - 6	4.0%
7 - 8	3.5%
9 - 10	3.0%
11 - 14	2.5%
15+	2.0%

This assumption is based on the results of an experience study dated November 2018.

Marital Assumption

100% of active members are assumed to be married, with husbands 3 years older than their wives.

Funding Method

Entry Age Normal Actuarial Cost Method. The following loads are applied for determining the minimum required contribution:

Interest – A half-year, based on the current assumption of 7.40%

Salary – A full-year, based on the current assumption of 4.74%

Actuarial Asset Method

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

Amortization Method

Effective October 1, 2018, all future layers of UAAL are amortized over a 15-year period. This assumption is based on the results of an experience study dated November 2018.

GLOSSARY

Total Annual Payroll is the projected annual rate of pay for the fiscal year following the valuation date of all covered members.

Present Value of Benefits 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.

Normal (Current Year's) Cost is the current year's cost for benefits yet to be funded.

Unfunded Actuarial Accrued Liability (UAAL) is a liability which arises when a pension plan is initially established or improved and such establishment or improvement is applicable to all years of past service. Under the Entry Age Normal Actuarial Cost Method, there is also a new UAAL created each year equal to the actuarial gain or loss for that year.

Total Recommended Contribution is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over no more than 30 years. The recommended amount is adjusted for interest according to the timing of contributions during the year.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

(a) The normal cost accrual rate equals:

(i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by

(ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.

(b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.

(c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.

(d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined using various actuarial assumptions. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- Investment Return: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.
- Salary Increases: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.
- Demographic Assumptions: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.
- Contribution Risk: Risks associated with the items outlined above will inherently create varying liabilities and assets resulting in volatility in contributions. Actuarial losses on assets and liabilities will lead to higher contribution amounts, while actuarial gains on assets and liabilities will lead to lower contribution amounts.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, closed plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature closed plans with a substantial inactive liability. Similarly, mature closed plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled “Plan Maturity Measures and Other Risk Metrics”. Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has stayed about the same from October 1, 2016 to October 1, 2019, indicating that the plan's maturity level has not significantly changed during the period.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 65.3%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in larger increases in contribution requirements than would be needed for a less mature plan. Please note Chapter 112, Florida Statutes, requires that the plan sponsor contributes the minimum required contribution; thus, there is minimal solvency risk to the plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 64.4% on October 1, 2016 to 76.0% on October 1, 2019. This increase in the Funded Ratio is primarily attributable to the fact that the District has consistently contributed above the Minimum Required Contribution.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, stayed approximately the same from October 1, 2016 to October 1, 2019. The current Net Cash Flow Ratio of 0.6% indicates that contributions are generally covering the plan's benefit payments and administrative expenses.

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

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Support Ratio</u>				
Total Actives	25	28	29	30
Total Inactives ¹	22	23	24	25
Actives / Inactives ¹	113.6%	121.7%	120.8%	120.0%

Asset Volatility Ratio

Market Value of Assets (MVA)	15,601,817	18,376,893	20,867,421	22,130,769
Total Annual Payroll	1,507,040	1,709,674	1,746,377	1,751,467
MVA / Total Annual Payroll	1,035.3%	1,074.9%	1,194.9%	1,263.6%

Accrued Liability (AL) Ratio

Inactive Accrued Liability	15,794,354	17,463,713	17,773,648	18,938,268
Total Accrued Liability (EAN)	25,208,375	27,104,952	27,936,944	28,992,262
Inactive AL / Total AL	62.7%	64.4%	63.6%	65.3%

Funded Ratio

Actuarial Value of Assets (AVA)	16,222,499	18,308,131	20,578,226	22,023,268
Total Accrued Liability (EAN)	25,208,375	27,104,952	27,936,944	28,992,262
AVA / Total Accrued Liability (EAN)	64.4%	67.5%	73.7%	76.0%

Net Cash Flow Ratio

Net Cash Flow ²	195,063	912,188	904,109	128,990
Market Value of Assets (MVA)	15,601,817	18,376,893	20,867,421	22,130,769
Ratio	1.3%	5.0%	4.3%	0.6%

¹ Excludes terminated participants awaiting a refund of member contributions.

² Determined as total contributions minus benefit payments and administrative expenses.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	123,572.60	123,572.60
Total Cash and Equivalents	123,572.60	123,572.60
Receivables:		
Investment Income	15,017.89	15,017.89
Total Receivable	15,017.89	15,017.89
Investments:		
Mutual Funds:		
Fixed Income	6,395,539.69	6,554,839.86
Equity	11,158,671.90	13,408,049.31
Pooled/Common/Commingled Funds:		
Real Estate	1,969,284.82	2,039,135.30
Total Investments	19,523,496.41	22,002,024.47
Total Assets	19,662,086.90	22,140,614.96
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	7,762.97	7,762.97
Administrative Expenses	2,082.50	2,082.50
Total Liabilities	9,845.47	9,845.47
NET POSITION RESTRICTED FOR PENSIONS	19,652,241.43	22,130,769.49

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

ADDITIONS

Contributions:

Member	114,324.00
District	1,017,878.29
State	292,293.19

Total Contributions	1,424,495.48
---------------------	--------------

Investment Income:

Net Realized Gain (Loss)	16,150.20	
Unrealized Gain (Loss)	140,499.86	
Net Increase in Fair Value of Investments		156,650.06
Interest & Dividends		1,030,178.91
Less Investment Expense ¹		(52,470.08)

Net Investment Income	1,134,358.89
-----------------------	--------------

Total Additions	2,558,854.37
-----------------	--------------

DEDUCTIONS

Distributions to Members:

Benefit Payments	981,791.75
Lump Sum DROP Distributions	233,016.98
Refunds of Member Contributions	31,449.80

Total Distributions	1,246,258.53
---------------------	--------------

Administrative Expense	49,246.93
------------------------	-----------

Total Deductions	1,295,505.46
------------------	--------------

Net Increase in Net Position	1,263,348.91
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	20,867,420.58
-----------------------	---------------

End of the Year	22,130,769.49
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¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION
September 30, 2019

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year Ending	Gain/(Loss)	<u>Gains/Losses Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2019	2020	2021	2022	2023
09/30/2015	(1,940,329)	0	0	0	0	0
09/30/2016	359,088	71,816	0	0	0	0
09/30/2017	657,046	262,819	131,410	0	0	0
09/30/2018	174,248	104,548	69,698	34,848	0	0
09/30/2019	(414,603)	(331,682)	(248,761)	(165,840)	(82,919)	0
Total		107,501	(47,653)	(130,992)	(82,919)	0

Development of Investment Gain/Loss

Market Value of Assets, 09/30/2018	20,867,421
Contributions Less Benefit Payments & Admin Expenses	128,990
Expected Investment Earnings	1,548,962
Actual Net Investment Earnings	1,134,359
2019 Actuarial Investment Gain/(Loss)	<u>(414,603)</u>

*Expected Investment Earnings = $0.074 * (20,867,421 + 0.5 * 128,990)$

Development of Actuarial Value of Assets

(1) Market Value of Assets, 09/30/2019	22,130,769
(2) Gains/(Losses) Not Yet Recognized	<u>107,501</u>
(3) Actuarial Value of Assets, 09/30/2019, (1) - (2)	22,023,268

(A) 09/30/2018 Actuarial Assets: 20,578,226

(I) Net Investment Income:

1. Interest and Dividends	1,030,179
2. Realized Gain (Loss)	16,150
3. Unrealized Gain (Loss)	140,500
4. Change in Actuarial Value	181,694
5. Investment Expenses	<u>(52,470)</u>
Total	1,316,053

(B) 09/30/2019 Actuarial Assets: 22,023,268

Actuarial Assets Rate of Return = $2I/(A+B-I)$: 6.38%
Market Value of Assets Rate of Return: 5.44%

Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis) (211,508)

10/01/2019 Limited Actuarial Assets: 22,023,268

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

REVENUES

Contributions:		
Member	114,324.00	
District	1,017,878.29	
State	292,293.19	
Total Contributions		1,424,495.48
Earnings from Investments:		
Interest & Dividends	1,030,178.91	
Net Realized Gain (Loss)	16,150.20	
Unrealized Gain (Loss)	140,499.86	
Change in Actuarial Value	181,694.00	
Total Earnings and Investment Gains		1,368,522.97

EXPENDITURES

Distributions to Members:		
Benefit Payments	981,791.75	
Lump Sum DROP Distributions	233,016.98	
Refunds of Member Contributions	31,449.80	
Total Distributions		1,246,258.53
Expenses:		
Investment related ¹	52,470.08	
Administrative	49,246.93	
Total Expenses		101,717.01
Change in Net Assets for the Year		1,445,042.91
Net Assets Beginning of the Year		20,578,225.58
Net Assets End of the Year ²		22,023,268.49

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

²Net Assets may be limited for actuarial consideration.

DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2018 to September 30, 2019

Beginning of the Year Balance	264,566.67
Plus Additions	150,994.58
Investment Return Earned	18,465.14
Less Distributions	(233,016.98)
End of the Year Balance	201,009.41

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

(1) Required District and State Contributions	\$1,083,467.00
(2) Less Allowable State Contribution	<u>(292,293.19)</u>
(3) Required District Contribution for Fiscal 2019	791,173.81
(4) Less 2018 Prepaid Contribution	0.00
(5) Less Actual District Contributions	<u>(1,017,878.29)</u>
(6) District Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2019	(\$226,704.48)

STATISTICAL DATA

	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Actives - Hired Before 10/1/12</u>				
Number	21	20	19	18
Average Current Age	41.9	42.5	43.3	44.0
Average Age at Employment	26.8	27.0	26.8	26.8
Average Past Service	15.1	15.5	16.5	17.2
Average Annual Salary	\$63,454	\$67,579	\$68,159	\$68,001
<u>Actives - Hired On/After 10/1/12</u>				
Number	4	8	10	12
Average Current Age	31.8	30.2	30.4	31.3
Average Age at Employment	30.4	28.9	28.6	30.0
Average Past Service	1.4	1.3	1.8	1.3
Average Annual Salary	\$43,626	\$44,762	\$46,457	\$43,955
<u>Service Retirees</u>				
Number	10	10	13	14
Average Current Age	56.8	57.8	56.3	56.4
Average Annual Benefit	\$70,483	\$72,002	\$69,282	\$69,121
<u>DROP Retirees</u>				
Number	3	4	2	2
Average Current Age	46.8	48.7	48.0	51.5
Average Annual Benefit	\$56,223	\$63,970	\$63,716	\$72,219
<u>Beneficiaries</u>				
Number	1	1	1	1
Average Current Age	52.4	53.4	54.4	55.4
Average Annual Benefit	\$56,617	\$57,749	\$58,904	\$60,082
<u>Disability Retirees</u>				
Number	1	1	1	1
Average Current Age	52.9	53.9	54.9	55.9
Average Annual Benefit	\$14,297	\$14,297	\$14,297	\$14,297
<u>Terminated Vested</u>				
Number	7	8	8	8
Average Current Age ¹	38.1	39.1	40.8	41.8
Average Annual Benefit ²	\$22,161	\$22,147	\$22,278	\$22,278

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

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

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19												0
20 - 24	1		1									2
25 - 29	3											3
30 - 34	5					1						6
35 - 39							3	2				5
40 - 44			1				2	2	1			6
45 - 49						1	1	1	1			4
50 - 54							1	2				3
55 - 59									1			1
60 - 64												0
65+												0
Total	9	0	2	0	0	2	7	7	3	0	0	30

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2018	29
b. Terminations	
i. Vested (partial or full) with deferred annuity	
ii. Vested in refund of member contributions only	(1)
iii. Refund of member contributions or full lump sum distribution received	(6)
c. Deaths	
i. Beneficiary receiving benefits	
ii. No future benefits payable	
d. Disabled	
e. Retired	
f. DROP	(1)
g. Continuing participants	21
h. New entrants	<u>9</u>
i. Total active life participants in valuation	30

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

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	13	2	1	1	7	1	25
Retired	1	(1)					
DROP		1					1
Vested (Deferred Annuity)							
Vested (Due Refund)						1	1
Hired/Terminated in Same Year							
Death, With Survivor							
Death, No Survivor							
Disabled							
Refund of Contributions						(1)	(1)
Rehires							
Expired Annuities							
Data Corrections							
b. Number current valuation	14	2	1	1	7	1	26

SUMMARY OF CURRENT PLAN

<u>Board of Trustees</u>	Two District appointees, two Members of the Department elected by the membership, and a fifth Member elected by other 4 and appointed by the District.
<u>Eligibility</u>	Full-time employees who are classified as full-time certified firefighters participate in the System as a condition of employment.
<u>Credited Service</u>	Total years and fractional parts of years of employment with the District as a Firefighter.
<u>Salary</u>	Base pay, plus state supplemental education pay, plus EMT and Paramedic educational differential pay.
<u>Average Final Compensation</u>	Average Salary for the best 5 years during the 10 years immediately preceding retirement or termination.
<u>Member Contributions</u>	6.8% of Salary.
<u>District and State Contributions</u>	Remaining amount required in order to pay current costs and amortize any unfunded past service cost as provided in Part VII of Chapter 112, F.S.
<u>Normal Retirement</u>	
Date	Earlier of: 1) Age 55 and 10 years of Credited Service or 2) 20 Years of Credited Service regardless of age. Members hired on or after October 1, 2012 become eligible following the earlier of 1) Age 55 with 10 years of Credited Service or 2) Age 52 with 25 years of Credited Service.
Benefit	3.5% of Average Final Compensation <u>times</u> Credited Service (2.5% if hired on or after October 1, 2012)
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Eligibility	Age 50 and 10 Years of Credited Service.
Benefit	Accrued benefit, reduced 3% for each year prior to Normal Retirement.

Cost-of-Living Adjustment

Service retirees on and after 10/1/02 (hired before 10/1/12) receive annual 2% increases beginning the October 1 following one full year of retirement. Members hired on and after 10/1/12 are not eligible for the cost-of-living adjustment.

Vesting

Schedule

100% after 7 years of contributing service if hired before 10/1/12. Members hired on and after 10/1/12 are 100% vested after 10 years.

Benefit Amount

Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Disability

Eligibility

Service Incurred

Covered from Date of Employment.

Non-Service Incurred

10 years of Credited Service.

Exclusions

Disability resulting from use of drugs, illegal participation in riots, service in military, etc.

Benefit

Benefit accrued to date of disability but not less than 42% of Average Final Compensation (if Service Incurred).

Duration

Payable for life and ten years certain or until recovery (as determined by the Board). Options available.

Death Benefits

Pre-Retirement

Vested

Monthly accrued benefit payable to designated beneficiary for 10 years.

Non-Vested

Refund of accumulated contributions without interest.

Post-Retirement

Benefits payable to beneficiary in accordance with option selected at retirement.

Share Plan

Funded Status

Not currently funded.

Deferred Retirement Option Plan

Eligibility	Satisfaction of Normal Retirement requirements.
Participation	Not to exceed 60 months.
Rate of Return	<p>At Member's election:</p> <p>(1) Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs) credited each fiscal quarter, or</p> <p>(2) 6.5% per annum compounded monthly.</p> <p>Members may elect to change form of return one time.</p>
Form of Distribution	Cash lump sum (options available) at termination of employment.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	123,573
Total Cash and Equivalents	123,573
Receivables:	
Investment Income	15,018
Total Receivable	15,018
Investments:	
Mutual Funds:	
Fixed Income	6,554,840
Equity	13,408,049
Pooled/Common/Commingled Funds:	
Real Estate	2,039,135
Total Investments	22,002,024
Total Assets	22,140,615
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	7,763
Administrative Expenses	2,083
Total Liabilities	9,846
NET POSITION RESTRICTED FOR PENSIONS	22,130,769

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

ADDITIONS

Contributions:

Member	114,324	
District	1,017,878	
State	292,293	
Total Contributions		1,424,495
Investment Income:		
Net Realized Gain (Loss)	16,150	
Unrealized Gain (Loss)	140,500	
Net Increase in Fair Value of Investments	156,650	
Interest & Dividends	1,030,179	
Less Investment Expense ¹	(52,470)	
Net Investment Income		1,134,359
Total Additions		2,558,854

DEDUCTIONS

Distributions to Members:

Benefit Payments	981,792	
Lump Sum DROP Distributions	233,017	
Refunds of Member Contributions	31,450	
Total Distributions		1,246,259
Administrative Expense		49,247
Total Deductions		1,295,506
Net Increase in Net Position		1,263,348
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		20,867,421
End of the Year		22,130,769

¹Investment 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: Two District appointees, two Members of the Department elected by the membership, and a fifth Member elected by other four and appointed by the District.

Plan Membership as of October 1, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	17
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	8
Active Plan Members	29
	54

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the Destin Fire Control District Firefighters' Retirement Trust Fund 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: 6.8% of Salary.

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

Investments

Investment Policy:

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

Asset Class	Target Allocation
Domestic Equity	50.0%
International Equity	10.0%
Broad Market Fixed Income	25.0%
Fixed Income (Non-Core)	2.5%
Global Fixed Income	2.5%
Real Estate	10.0%
Total	100.0%

Concentrations:

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's Fiduciary Net Position.

Rate of Return:

For the year ended September 30, 2019, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 5.44 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.

Participation: Not to exceed 60 months.

Rate of Return: At Member's election:

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

(2) 6.5% per annum compounded monthly.

Members may elect to change form of return one time.

The DROP balance as September 30, 2019 is \$201,009.

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	\$ 29,060,566
Plan Fiduciary Net Position	\$ (22,130,769)
Sponsor's Net Pension Liability	<u>\$ 6,929,797</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	76.15%

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	2.50%
Salary Increases	Service based
Discount Rate	7.40%
Investment Rate of Return	7.40%

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 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.

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 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, 2016 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was dated November 30, 2018.

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 2.50%.

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

Best estimates of 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:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	7.50%
International Equity	8.50%
Broad Market Fixed Income	2.50%
Global Fixed Income	3.50%
Real Estate	4.50%

Discount Rate:
The Discount Rate used to measure the Total Pension Liability was 7.40 percent.
The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

	1% Decrease	Current	1% Increase
	6.40%	Discount Rate	8.40%
		7.40%	
Sponsor's Net Pension Liability	\$ 10,711,608	\$ 6,929,797	\$ 3,842,059

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	402,100	471,083	430,846
Interest	2,060,739	1,979,577	1,948,687
Changes of benefit terms	(926)	-	-
Differences between Expected and Actual Experience	(224,866)	378,098	(829,240)
Changes of assumptions	-	108,528	-
Benefit Payments, including Refunds of Employee Contributions	(1,246,259)	(1,581,570)	(775,745)
Net Change in Total Pension Liability	990,788	1,355,716	774,548
Total Pension Liability - Beginning	28,069,778	26,714,062	25,939,514
Total Pension Liability - Ending (a)	<u>\$ 29,060,566</u>	<u>\$ 28,069,778</u>	<u>\$ 26,714,062</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,017,878	2,134,887	1,275,999
Contributions - State	292,293	266,748	291,353
Contributions - Employee	114,324	113,840	112,630
Net Investment Income	1,134,359	1,586,419	1,862,888
Benefit Payments, including Refunds of Employee Contributions	(1,246,259)	(1,581,570)	(775,745)
Administrative Expense	(49,247)	(29,796)	(32,011)
Net Change in Plan Fiduciary Net Position	1,263,348	2,490,528	2,735,114
Plan Fiduciary Net Position - Beginning	20,867,421	18,376,893	15,641,779
Plan Fiduciary Net Position - Ending (b)	<u>\$ 22,130,769</u>	<u>\$ 20,867,421</u>	<u>\$ 18,376,893</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 6,929,797</u>	<u>\$ 7,202,357</u>	<u>\$ 8,337,169</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	76.15%	74.34%	68.79%
Covered Payroll	\$ 1,681,235	\$ 1,674,116	\$ 1,656,321
Net Pension Liability as a percentage of Covered Payroll	412.18%	430.22%	503.35%

Notes to Schedule:*Changes of benefit terms:*

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

Changes of assumptions:

For measurement date 09/30/2018, amounts reported as changes of assumptions resulted from an actuarial experience study dated November 30, 2018, the Board adopted the following changes:

- The investment return assumption was lowered from 7.5% per year to 7.4% per year, net of investment-related expenses.
- The assumed rates of salary increase have been amended.
- The assumed rates of normal retirement have been amended.
- The assumed rates of withdrawal have been amended.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

	09/30/2016	09/30/2015
Total Pension Liability		
Service Cost	412,422	540,120
Interest	1,854,384	1,893,391
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(240,493)	(1,748,273)
Changes of assumptions	1,634,737	(256,184)
Benefit Payments, including Refunds of Employee Contributions	(977,835)	(600,036)
Net Change in Total Pension Liability	2,683,215	(170,982)
Total Pension Liability - Beginning	23,256,299	23,427,281
Total Pension Liability - Ending (a)	<u>\$ 25,939,514</u>	<u>\$ 23,256,299</u>
Plan Fiduciary Net Position		
Contributions - Employer	836,684	687,531
Contributions - State	293,567	371,910
Contributions - Employee	107,918	104,560
Net Investment Income	1,482,436	(784,838)
Benefit Payments, including Refunds of Employee Contributions	(977,835)	(600,036)
Administrative Expense	(25,310)	(32,924)
Net Change in Plan Fiduciary Net Position	1,717,460	(253,797)
Plan Fiduciary Net Position - Beginning	13,924,319	14,178,116
Plan Fiduciary Net Position - Ending (b)	<u>\$ 15,641,779</u>	<u>\$ 13,924,319</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 10,297,735</u>	<u>\$ 9,331,980</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	60.30%	59.87%
Covered Payroll	\$ 1,587,030	\$ 1,537,650
Net Pension Liability as a percentage of Covered Payroll	648.87%	606.90%

Notes to Schedule:

Changes of assumptions:

For measurement date 09/30/2016, amounts reported as changes of assumptions resulted from the following changes:

- The investment return assumption was reduced from 8.00% to 7.50%.
- As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed from the RP-2000 Combined Healthy Tables to the mortality tables used by the Florida Retirement System for special risk employees.

For measurement date 09/30/2015, amounts reported as changes of assumptions were in conjunction with the August 28, 2015 experience study, the Board adopted the following assumption changes:

- Salary Increases change from 7.5% per year to a table based on service that grades down from 10% to 4%.
- Mortality Rates change from the RP 2000 table with no-projection for healthy lives to the RP-2000 table projected with scale BB through 2015 (disabled lives are set forward 5 years).

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	09/30/2014	09/30/2013
Total Pension Liability		
Service Cost	702,391	650,362
Interest	1,756,834	1,616,439
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(579,955)	(547,818)
Net Change in Total Pension Liability	1,879,270	1,718,983
Total Pension Liability - Beginning	21,548,011	19,829,028
Total Pension Liability - Ending (a)	<u>\$ 23,427,281</u>	<u>\$ 21,548,011</u>
Plan Fiduciary Net Position		
Contributions - Employer	697,413	882,319
Contributions - State	326,318	342,803
Contributions - Employee	126,109	141,681
Net Investment Income	1,510,241	1,092,797
Benefit Payments, including Refunds of Employee Contributions	(579,955)	(547,818)
Administrative Expense	(14,883)	(18,656)
Net Change in Plan Fiduciary Net Position	2,065,243	1,893,126
Plan Fiduciary Net Position - Beginning	12,112,873	10,219,747
Plan Fiduciary Net Position - Ending (b)	<u>\$ 14,178,116</u>	<u>\$ 12,112,873</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 9,249,165</u>	<u>\$ 9,435,138</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	60.52%	56.21%
Covered Payroll	\$ 1,854,542	\$ 2,083,542
Net Pension Liability as a percentage of Covered Payroll	498.73%	452.84%

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	Total Contributions as a percentage of Covered Payroll
09/30/2019	\$ 1,083,467	\$ 1,310,171	\$ (226,704)	\$ 1,681,235	77.93%
09/30/2018	\$ 1,213,734	\$ 2,401,635	\$ (1,187,901)	\$ 1,674,116	143.46%
09/30/2017	\$ 1,323,401	\$ 1,567,352	\$ (243,951)	\$ 1,656,321	94.63%
09/30/2016	\$ 1,090,290	\$ 1,130,251	\$ (39,961)	\$ 1,587,030	71.22%
09/30/2015	\$ 1,059,441	\$ 1,059,441	\$ -	\$ 1,537,650	68.90%
09/30/2014	\$ 1,023,707	\$ 1,023,731	\$ (24)	\$ 1,854,542	55.20%
09/30/2013	\$ 1,225,122	\$ 1,225,122	\$ -	\$ 2,083,542	58.80%

Notes to Schedule

Valuation Date: 10/01/2018

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

Methods and assumptions used to determine contribution rates:

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:

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 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, 2016 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate:

7.4% 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.

Payroll Growth:

None.

Salary Increases:

Credited Service	Salary Increase
0	6.5%
1	6.5%
2	6.0%
3	6.0%
4	5.5%
5	5.5%
6	5.0%
7	5.0%
8	4.5%
9	4.5%
10+	4.0%

This assumption is based on the results of an experience study dated November 2018.

Normal Retirement:

Years Following First Eligibility	Rate
0	80.0%
1	80.0%
2	100.0%

This assumption is based on the results of an experience study dated November 2018.

Early Retirement:

Commencing with the earliest Early Retirement Age (50), members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. This assumption is reasonable based on plan provisions.

Disability Rate:

Sample rates below (1201).

Age	Rate
20	0.03%
30	0.04%
40	0.07%
50	0.18%

It is assumed that 75% of disablements are service related. These assumptions are based on assumptions used for other plans containing municipal firefighters.

Termination Rate:

Credited Service	Rate
0	10.0%
1-2	5.0%
3-4	4.5%
5-6	4.0%
7-8	3.5%
9-10	3.0%
11-14	2.5%
15+	2.0%

This assumption is based on the results of an experience study dated November 2018.

Funding Method:

Entry Age Normal Actuarial Cost Method. The following loads are applied for determining the minimum required contribution:

Interest – A half-year, based on the current assumption of 7.40%

Salary – A full-year (none for fiscal 2019), based on the current assumption of 4.65%

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Actuarial Asset Method:

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year 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	5.44%
09/30/2018	8.67%
09/30/2017	11.67%
09/30/2016	10.74%
09/30/2015	-5.49%
09/30/2014	12.26%
09/30/2013	10.08%

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: Two District appointees, two Members of the Department elected by the membership, and a fifth Member elected by other four and appointed by the District.

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

Plan Membership as of October 1, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	17
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	8
Active Plan Members	29
	54
	54

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the Destin Fire Control District Firefighters' Retirement Trust Fund 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: 6.8% of Salary.

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

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	2.50%
Salary Increases	Service based
Discount Rate	7.40%
Investment Rate of Return	7.40%

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 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.

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 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, 2016 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was dated November 30, 2018.

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 2.50%.

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

Best estimates of 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:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	50.0%	7.50%
International Equity	10.0%	8.50%
Broad Market Fixed Income	25.0%	2.50%
Fixed Income (Non-Core)	2.5%	2.50%
Global Fixed Income	2.5%	3.50%
Real Estate	10.0%	4.50%
Total	100.0%	

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.40 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate.

Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current Plan Members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Reporting period ending at September 30, 2019	\$ 28,069,778	\$ 20,867,421	\$ 7,202,357
Changes for a Year:			
Service Cost	402,100	-	402,100
Interest	2,060,739	-	2,060,739
Differences between Expected and Actual Experience	(224,866)	-	(224,866)
Changes of assumptions	-	-	-
Changes of benefit terms	(926)	-	(926)
Contributions - Employer	-	1,017,878	(1,017,878)
Contributions - State	-	292,293	(292,293)
Contributions - Employee	-	114,324	(114,324)
Net Investment Income	-	1,134,359	(1,134,359)
Benefit Payments, including Refunds of Employee Contributions	(1,246,259)	(1,246,259)	-
Administrative Expense	-	(49,247)	49,247
Net Changes	990,788	1,263,348	(272,560)
Reporting period ending at September 30, 2020	\$ 29,060,566	\$ 22,130,769	\$ 6,929,797

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.40%	7.40%	8.40%
Sponsor's Net Pension Liability	\$ 10,711,608	\$ 6,929,797	\$ 3,842,059

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 \$762,426.

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	Deferred Inflows of Resources
Differences between Expected and Actual Experience	283,575	474,743
Changes of assumptions	490,080	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	289,197
Employer and State contributions subsequent to the measurement date	1,310,171	-
Total	<u>\$ 2,083,826</u>	<u>\$ 763,940</u>

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State contributions subsequent to the measurement date has been recognized as a reduction of the Net Pension Liability in the year ended September 30, 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	\$ 412,897
2021	\$ (323,730)
2022	\$ (44,602)
2023	\$ (34,850)
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 \$1,298,716.

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	189,050	387,202
Changes of assumptions	54,264	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	107,502
Employer and State contributions subsequent to the measurement date	TBD	-
Total	TBD	\$ 494,704

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended September 30, 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	\$ (285,782)
2022	\$ (6,654)
2023	\$ 3,098
2024	\$ 37,948
2025	\$ -
Thereafter	\$ -

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

Reporting Period Ending Measurement Date	09/30/2020 09/30/2019	09/30/2019 09/30/2018	09/30/2018 09/30/2017
Total Pension Liability			
Service Cost	402,100	471,083	430,846
Interest	2,060,739	1,979,577	1,948,687
Changes of benefit terms	(926)	-	-
Differences between Expected and Actual Experience	(224,866)	378,098	(829,240)
Changes of assumptions	-	108,528	-
Benefit Payments, including Refunds of Employee Contributions	(1,246,259)	(1,581,570)	(775,745)
Net Change in Total Pension Liability	990,788	1,355,716	774,548
Total Pension Liability - Beginning	28,069,778	26,714,062	25,939,514
Total Pension Liability - Ending (a)	<u>\$ 29,060,566</u>	<u>\$ 28,069,778</u>	<u>\$ 26,714,062</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,017,878	2,134,887	1,275,999
Contributions - State	292,293	266,748	291,353
Contributions - Employee	114,324	113,840	112,630
Net Investment Income	1,134,359	1,586,419	1,862,888
Benefit Payments, including Refunds of Employee Contributions	(1,246,259)	(1,581,570)	(775,745)
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Plan Fiduciary Net Position - Beginning	20,867,421	18,376,893	15,641,779
Plan Fiduciary Net Position - Ending (b)	<u>\$ 22,130,769</u>	<u>\$ 20,867,421</u>	<u>\$ 18,376,893</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 6,929,797</u>	<u>\$ 7,202,357</u>	<u>\$ 8,337,169</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	76.15%	74.34%	68.79%
Covered Payroll	\$ 1,681,235	\$ 1,674,116	\$ 1,656,321
Net Pension Liability as a percentage of Covered Payroll	412.18%	430.22%	503.35%

Notes to Schedule:

Changes of benefit terms:

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

Changes of assumptions:

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- The investment return assumption was lowered from 7.5% per year to 7.4% per year, net of investment-related expenses.
- The assumed rates of salary increase have been amended.
- The assumed rates of normal retirement have been amended.
- The assumed rates of withdrawal have been amended.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

Reporting Period Ending Measurement Date	09/30/2017 09/30/2016	09/30/2016 09/30/2015
Total Pension Liability		
Service Cost	412,422	540,120
Interest	1,854,384	1,893,391
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(240,493)	(1,748,273)
Changes of assumptions	1,634,737	(256,184)
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Administrative Expense	(25,310)	(32,924)
Net Change in Plan Fiduciary Net Position	1,717,460	(253,797)
Plan Fiduciary Net Position - Beginning	13,924,319	14,178,116
Plan Fiduciary Net Position - Ending (b)	\$ 15,641,779	\$ 13,924,319
Net Pension Liability - Ending (a) - (b)	\$ 10,297,735	\$ 9,331,980
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	60.30%	59.87%
Covered Payroll	\$ 1,587,030	\$ 1,537,650
Net Pension Liability as a percentage of Covered Payroll	648.87%	606.90%

Notes to Schedule:

Changes of assumptions:

For measurement date 09/30/2016, amounts reported as changes of assumptions resulted from the following changes:

- The investment return assumption was reduced from 8.00% to 7.50%. □
- As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed from the RP-2000 Combined Healthy Tables to the mortality tables used by the Florida Retirement System for special risk employees.

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SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

Reporting Period Ending Measurement Date	09/30/2015 09/30/2014	09/30/2014 09/30/2013
Total Pension Liability		
Service Cost	702,391	650,362
Interest	1,756,834	1,616,439
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(579,955)	(547,818)
Net Change in Total Pension Liability	1,879,270	1,718,983
Total Pension Liability - Beginning	21,548,011	19,829,028
Total Pension Liability - Ending (a)	<u>\$ 23,427,281</u>	<u>\$ 21,548,011</u>
Plan Fiduciary Net Position		
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Contributions - State	326,318	342,803
Contributions - Employee	126,109	141,681
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Administrative Expense	(14,883)	(18,656)
Net Change in Plan Fiduciary Net Position	2,065,243	1,893,126
Plan Fiduciary Net Position - Beginning	12,112,873	10,219,747
Plan Fiduciary Net Position - Ending (b)	<u>\$ 14,178,116</u>	<u>\$ 12,112,873</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 9,249,165</u>	<u>\$ 9,435,138</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	60.52%	56.21%
Covered Payroll	\$ 1,854,542	\$ 2,083,542
Net Pension Liability as a percentage of Covered Payroll	498.73%	452.84%

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	Total Contributions as a percentage of Covered Payroll
09/30/2019	\$ 1,083,467	\$ 1,310,171	\$ (226,704)	\$ 1,681,235	77.93%
09/30/2018	\$ 1,213,734	\$ 2,401,635	\$ (1,187,901)	\$ 1,674,116	143.46%
09/30/2017	\$ 1,323,401	\$ 1,567,352	\$ (243,951)	\$ 1,656,321	94.63%
09/30/2016	\$ 1,090,290	\$ 1,130,251	\$ (39,961)	\$ 1,587,030	71.22%
09/30/2015	\$ 1,059,441	\$ 1,059,441	\$ -	\$ 1,537,650	68.90%
09/30/2014	\$ 1,023,707	\$ 1,023,731	\$ (24)	\$ 1,854,542	55.20%
09/30/2013	\$ 1,225,122	\$ 1,225,122	\$ -	\$ 2,083,542	58.80%

Notes to Schedule

Valuation Date: 10/01/2018

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

Methods and assumptions used to determine contribution rates:

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

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 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, 2016 FRS valuation report for special risk employees.

We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate:

7.4% 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.

Payroll Growth:

None.

Salary Increases:

Credited Service	Salary Increase
0	6.50%
1	6.50%
2	6.00%
3	6.00%
4	5.50%
5	5.50%
6	5.00%
7	5.00%
8	4.50%
9	4.50%
10+	4.00%

This assumption is based on the results of an experience study dated November 2018.

Normal Retirement:

Years Following First Eligibility	Rate
0	80.0%
1	80.0%
2	100.0%

This assumption is based on the results of an experience study dated November 2018.

Early Retirement:

Commencing with the earliest Early Retirement Age (50), members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. This assumption is reasonable based on plan provisions.

Disability Rate:

Sample rates below (1201).

Age	Rate
20	0.03%
30	0.04%
40	0.07%
50	0.18%

It is assumed that 75% of disablements are service related. These assumptions are based on assumptions used for other plans containing municipal firefighters.

Termination Rate:

Credited Service	Rate
0	10.00%
1-2	5.00%
3-4	4.50%
5-6	4.00%
7-8	3.50%
9-10	3.00%
11-14	2.50%
15+	2.00%

This assumption is based on the results of an experience study dated November 2018.

Funding Method:

Entry Age Normal Actuarial Cost Method. The following loads are applied for determining the minimum required contribution:

Interest – A half-year, based on the current assumption of 7.40%

Salary – A full-year (none for fiscal 2019), based on the current assumption of 4.65%

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Actuarial Asset Method:

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

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	\$ 8,337,169	\$ 2,088,182	\$ 3,995,135	\$ -
Employer and State Contributions made after 09/30/2018	-	-	1,310,171	-
Total Pension Liability Factors:				
Service Cost	471,083	-	-	471,083
Interest	1,979,577	-	-	1,979,577
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	378,098	-	378,098	-
Current year amortization of experience difference	-	(704,501)	(94,523)	(609,978)
Change in assumptions about future economic or demographic factors or other inputs	108,528	-	108,528	-
Current year amortization of change in assumptions	-	(64,046)	(435,816)	371,770
Benefit Payments, including Refunds of Employee Contributions	(1,581,570)	-	-	-
Net change	<u>1,355,716</u>	<u>(768,547)</u>	<u>1,266,458</u>	<u>2,212,452</u>
Plan Fiduciary Net Position:				
Contributions - Employer	2,134,887	-	(2,134,887)	-
Contributions - State	266,748	-	(266,748)	-
Contributions - Employee	113,840	-	-	(113,840)
Projected Net Investment Income	1,412,171	-	-	(1,412,171)
Difference between projected and actual earnings on Pension Plan investments	174,248	174,248	-	-
Current year amortization	-	(341,877)	(388,066)	46,189
Benefit Payments, including Refunds of Employee Contributions	(1,581,570)	-	-	-
Administrative Expenses	(29,796)	-	-	29,796
Net change	<u>2,490,528</u>	<u>(167,629)</u>	<u>(2,789,701)</u>	<u>(1,450,026)</u>
Ending Balance	<u>\$ 7,202,357</u>	<u>\$ 1,152,006</u>	<u>\$ 2,471,892</u>	<u>\$ 762,426</u>

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2020

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 7,202,357	\$ 1,152,006	\$ 2,471,892	\$ -
Employer and State Contributions made after 09/30/2019	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	402,100	-	-	402,100
Interest	2,060,739	-	-	2,060,739
Changes in benefit terms	(926)	-	-	(926)
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(224,866)	224,866	-	-
Current year amortization of experience difference	-	(312,407)	(94,525)	(217,882)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(435,816)	435,816
Benefit Payments, including Refunds of Employee Contributions	(1,246,259)	-	-	-
Net change	<u>990,788</u>	<u>(87,541)</u>	<u>(530,341)</u>	<u>2,679,847</u>
Plan Fiduciary Net Position:				
Contributions - Employer	1,017,878	-	(1,017,878)	-
Contributions - State	292,293	-	(292,293)	-
Contributions - Employee	114,324	-	-	(114,324)
Projected Net Investment Income	1,548,962	-	-	(1,548,962)
Difference between projected and actual earnings on Pension Plan investments	(414,603)	-	414,603	-
Current year amortization	-	(238,077)	(470,985)	232,908
Benefit Payments, including Refunds of Employee Contributions	(1,246,259)	-	-	-
Administrative Expenses	(49,247)	-	-	49,247
Net change	<u>1,263,348</u>	<u>(238,077)</u>	<u>(1,366,553)</u>	<u>(1,381,131)</u>
Ending Balance	<u>\$ 6,929,797</u>	<u>\$ 826,388</u>	<u>TBD</u>	<u>\$ 1,298,716</u>

* Employer and State 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

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2019	\$ 414,603	5	\$ -	\$ 82,919	\$ 82,921	\$ 82,921	\$ 82,921	\$ 82,921	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (174,248)	5	\$ (34,848)	\$ (34,850)	\$ (34,850)	\$ (34,850)	\$ (34,850)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (657,046)	5	\$ (131,409)	\$ (131,409)	\$ (131,409)	\$ (131,409)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (359,090)	5	\$ (71,818)	\$ (71,818)	\$ (71,818)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 1,940,329	5	\$ 388,066	\$ 388,066	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2014	\$ (519,011)	5	\$ (103,802)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 46,189	\$ 232,908	\$ (155,156)	\$ (83,338)	\$ 48,071	\$ 82,921	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

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

Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2018	\$ 108,528	4	\$ 27,132	\$ 27,132	\$ 27,132	\$ 27,132	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 1,634,737	4	\$ 408,684	\$ 408,684	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ (256,184)	4	\$ (64,046)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 371,770	\$ 435,816	\$ 27,132	\$ 27,132	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

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

Plan Year Ending	Differences Between Expected and Actual Experience	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2019	\$ (224,866)	5	\$ -	\$ (44,974)	\$ (44,973)	\$ (44,973)	\$ (44,973)	\$ (44,973)	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ 378,098	4	\$ 94,523	\$ 94,525	\$ 94,525	\$ 94,525	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (829,240)	4	\$ (207,310)	\$ (207,310)	\$ (207,310)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (240,493)	4	\$ (60,123)	\$ (60,123)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ (1,748,273)	4	\$ (437,068)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			<u>\$ (609,978)</u>	<u>\$ (217,882)</u>	<u>\$ (157,758)</u>	<u>\$ 49,552</u>	<u>\$ (44,973)</u>	<u>\$ (44,973)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>