CITY OF EDGEWATER GENERAL EMPLOYEES' RETIREMENT PLAN

ACTUARIAL VALUATION AS OCTOBER 1, 2018

CONTRIBUTIONS APPLICABLE TO THE PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2020

GASB 67/68 DISCLOSURE INFORMATION AS OF SEPTEMBER 30, 2018





January 29, 2019

Board of Trustees City of Edgewater General Employees' Retirement Plan P.O. Box 100 Edgewater, FL 32132-0100

Re: City of Edgewater General Employees' Retirement Plan

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Edgewater General Employees' Retirement Plan. 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 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 City of Edgewater, 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, 2017. The total pension liability was

rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2018 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 City of Edgewater, nor does anyone at Foster &

Foster, Inc. act as a member of the Board of Trustees of the General Employees' Retirement Plan. 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.

Bv:

Douglas H. Lozen, EA, MAAA

Enrolled Actuary #17-7778

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Edgewater General Employees' Retirement Plan, performed as of October 1, 2018, 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, 2020.

The contribution requirements, compared with those set forth in the October 1, 2017 actuarial valuation report, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2018 <u>9/30/2020</u>	10/1/2017 <u>9/30/2019</u>
Minimum Required Contribution	\$801,756	\$785,421
Member Contributions (Est.)	2,575	4,260
City Required Contribution ²	\$799,181	\$781,161

¹ Please note that a shortfall contribution of \$8,204.71 is due in addition to the above stated requirements for the fiscal year ending September 30, 2019. An interest charge of \$46 is payable for each full month after September 30, 2018 until this shortfall contribution is deposited.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. The primary source of unfavorable experience was an investment return of 5.59% (Actuarial Asset Basis) which fell short of the 6.75% assumption. There were no significant sources of favorable experience.

The balance of this Report presents additional details of the actuarial valuation and the general operation of the Fund. The undersigned would be pleased to meet with the Board of Trustees in order to discuss the Report and any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.

Douglas H. Lozen, EA, MAAA

Dayl M. Dayghar, ESA, EA, MAA

CHANGES SINCE PRIOR VALUATION

Plan Changes

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

Actuarial Assumption/Method Changes

There have been no changes of actuarial assumptions or methods since the prior valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	10/1/2018	10/1/2017
A. Participant Data		
Actives	2	3
Service Retirees	90	88
Beneficiaries	5	5
Disability Retirees	1	1
Terminated Vested	<u>22</u>	<u>24</u>
Total	120	121
Total Annual Payroll	\$173,604	\$206,725
Payroll Under Assumed Ret. Age	95,801	158,507
Annual Rate of Payments to:		
Service Retirees	1,408,965	1,387,517
Beneficiaries	54,267	54,267
Disability Retirees	5,168	5,168
Terminated Vested	107,019	112,305
B. Assets		
Actuarial Value (AVA)	12,374,261	12,466,110
Market Value (MVA)	12,533,777	12,497,701
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits ¹	885,475	1,092,857
Disability Benefits	32,451	36,163
Death Benefits	2,456	2,934
Vested Benefits	0	0
Refund of Contributions	0	0
Service Retirees	16,783,881	16,705,872
Beneficiaries	638,440	647,168
Disability Retirees	44,682	45,639
Terminated Vested	<u>1,145,694</u>	<u>1,161,710</u>
Total	19,533,079	19,692,343

C. Liabilities - (Continued)	10/1/2018	10/1/2017
Present Value of Future Salaries	709,314	829,876
Present Value of Future		
Member Contributions	17,733	20,747
Normal Cost (Retirement)	16,005	26,971
Normal Cost (Disability)	1,730	2,555
Normal Cost (Death)	107	181
Normal Cost (Vesting)	0	0
Normal Cost (Refunds)	<u>0</u>	<u>0</u>
Total Normal Cost	17,842	29,707
Present Value of Future		
Normal Costs	149,465	175,702
Accrued Liability (Retirement)	749,613	932,296
Accrued Liability (Disability)	19,642	21,949
Accrued Liability (Death)	1,662	2,007
Accrued Liability (Vesting)	0	0
Accrued Liability (Refunds)	0	0
Accrued Liability (Inactives)	18,612,697	18,560,389
Total Actuarial Accrued Liability (EAN AL)	19,383,614	19,516,641
Unfunded Actuarial Accrued		
Liability (UAAL)	7,009,353	7,050,531
Funded Ratio (AVA / EAN AL)	63.8%	63.9%

D. Actuarial Present Value of		
Accrued Benefits	<u>10/1/2018</u>	<u>10/1/2017</u>
Vested Accrued Benefits		
Inactives	18,612,697	18,560,389
Actives	627,957	763,778
Member Contributions	<u>53,516</u>	64,447
Total	19,294,170	19,388,614
Non-vested Accrued Benefits	<u>0</u>	10,368
Total Present Value	_	
Accrued Benefits (PVAB)	19,294,170	19,398,982
Funded Ratio (MVA / PVAB)	65.0%	64.4%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	104,607	
Benefits Paid	(1,469,263)	
Interest	1,259,844	
Other	<u>0</u>	
Total	(104,812)	

Valuation Date Applicable to Fiscal Year Ending	10/1/2018 <u>9/30/2020</u>	10/1/2017 9/30/2019
E. Pension Cost		
Normal Cost ²	\$19,182	\$31,938
Administrative Expenses ²	50,748	47,538
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years (as of 10/1/2018) ²	731,826	705,945
Minimum Required Contribution	801,756	785,421
Expected Member Contributions ²	2,575	4,260
Expected City Contribution	799,181	781,161
F. Past Contributions		
Plan Years Ending:	9/30/2018	
City Requirement	744,629	
Actual Contributions Made:		
City	744,629	
G. Net Actuarial (Gain)/Loss	179,203	

¹ Includes a 2% load for Accumulated Leave.

² Contributions developed as of 10/1/2018 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:

	Projected Unfunded	
Year	Actuarial Accrued Liability	
2018	7,009,353	
2019	6,755,832	
2020	6,485,198	
2025	4,683,594	
2029	2,445,175	
2034	213,437	
2038	0	

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

		<u>Actual</u>	Assumed
Year Ended	9/30/2018	9.52%	4.00%
Year Ended	9/30/2017	11.43%	4.00%
Year Ended	9/30/2016	3.32%	4.00%
Year Ended	9/30/2015	3.33%	4.00%
Year Ended	9/30/2014	-2.60%	4.00%

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

		Market Value	Actuarial Value	<u>Assumed</u>
Year Ended	9/30/2018	6.63%	5.59%	6.75%
Year Ended	9/30/2017	8.92%	5.80%	6.75%
Year Ended	9/30/2016	8.40%	6.73%	6.75%
Year Ended	9/30/2015	-0.56%	10.55%	7.50%
Year Ended	9/30/2014	8.94%	10.97%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2018 10/1/2008	\$173,604 1,254,441
(b) Total Increase		-86.16%
(c) Number of Years		10.00
(d) Average Annual Rate		-17.94%

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 #17-7778

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

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2017	\$7,050,531
(2)	Sponsor Normal Cost developed as of October 1, 2017	25,744
(3)	Expected administrative expenses for the year ended September 30, 2018	44,217
(4)	Expected interest on (1), (2) and (3)	479,141
(5)	Sponsor contributions to the System during the year ended September 30, 2018	744,629
(6)	Expected interest on (5)	24,854
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2018 (1)+(2)+(3)+(4)-(5)-(6)	6,830,150
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	179,203
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2018	7,009,353

Type of	Date	Years	10/1/2018	Amortization
Base	Established	Remaining	<u>Amount</u>	<u>Amount</u>
Method Change	10/1/2012	14	5,193,085	547,945
Assumption Change	10/1/2012	14	129,700	13,685
Experience Gain	10/1/2013	5	(259,032)	(58,785)
Experience Gain	10/1/2014	6	(89,984)	(17,548)
Experience Gain	10/1/2015	7	(297,267)	(51,222)
Assumption Change	10/1/2015	17	1,119,812	105,591
Assumption Change	10/1/2016	18	608,773	55,674
Experience Loss	10/1/2016	8	97,040	15,076
Experience Loss	10/1/2017	9	328,023	46,663
Actuarial Loss	10/1/2018	10	<u>179,203</u>	<u>23,626</u>
			7,009,353	680,705

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2017	\$7,050,531
(2) Expected UAAL as of October 1, 2018	6,830,150
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	140,431
Salary Increases	37,145
Active Decrements	(3,193)
Inactive Mortality	34,383
Other	(29,563)
Increase in UAAL due to (Gain)/Loss	179,203
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2018	\$7,009,353

ACTUARIAL ASSUMPTIONS AND METHODS

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.

6.75% 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.

4% per year, based on results of an Experience Study

performed for the period October 1, 2003 through

October 1, 2012.

0.00% for purposes of amortizing the Unfunded

Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida

Statutes.

\$47,203 annually, based on actual expenses incurred in

the prior fiscal year.

Administrative Expenses

Interest Rate

Salary Increases

Payroll Growth

Normal Retirement

<u>Age</u>	Retirement Probability
55	50%
56	0%
57	0%
58	0%
59	0%
60 and older	100%

In addition to the above table, 100% Retirement is assumed upon the completion of 25 years of Credited Service.

The above rates are supported by an Experience Study performed for the period October 1, 2003 through October 1, 2012.

Early Retirement

None assumed, based on results of an Experience Study performed for the period October 1, 2003 through October 1, 2012.

Disability Rate

<u>Age</u>	<u>Rate</u>
40	0.30%
45	0.51%
50	1.00%
55	1.55%

These rates are consistent with other Florida General Employee retirement programs.

Termination Rate

None assumed, based on results of an Experience Study performed for the period October 1, 2003 through October 1, 2012.

Funding Method

Entry Age Normal Actuarial Cost Method

The following loads are applied for determination of the Sponsor funding requirement:

Interest – A half year, based on the current 6.75% assumption.

Salary - A full year, based on the current average assumption of 4.0%.

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 four-year period.

GLOSSARY

<u>Total Annual Payroll</u> is the projected annual rate of pay for the fiscal year following the valuation date of all covered Members.

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

<u>Entry Age Normal Cost Method</u> - 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.

STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2018

ASSETS	COST VALUE	MARKET VALUE
Cash and Cash Equivalents: Short Term Investments	444,618.28	444,618.28
Total Cash and Equivalents	444,618.28	444,618.28
Receivables:		
Additional City Contributions	8,204.71	8,204.71
Investment Income	53,501.96	53,501.96
Total Receivable	61,706.67	61,706.67
Investments:		
U. S. Bonds and Bills	712,406.44	699,081.60
Federal Agency Guaranteed Securities	1,465,642.81	1,436,313.41
Corporate Bonds Municipal Obligations	3,681,501.24 115,000.00	3,538,685.51 114,201.00
Mutual Funds:	113,000.00	114,201.00
Equity	4,984,864.42	6,250,696.37
Total Investments	10,959,414.91	12,038,977.89
Total Assets	11,465,739.86	12,545,302.84
LIABILITIES Poveblee		
Payables: Investment Expenses	9,229.60	9,229.60
Administrative Expenses	2,296.12	2,296.12
Total Liabilities	11,525.72	11,525.72
NET POSITION RESTRICTED FOR PENSIONS	11 454 214 14	12 522 777 12
NET FOSITION RESTRICTED FOR PENSIONS	11,454,214.14	12,533,777.12

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2018 Market Value Basis

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Co	ntri	butions:
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Member 4,842.82 City 744,629.00

Total Contributions 749,471.82

Investment Income:

Net Realized Gain (Loss) 49,511.76 Unrealized Gain (Loss) 34,963.07

Net Increase in Fair Value of Investments
84,474.83
Interest & Dividends
755,492.83
Less Investment Expense¹
(36,897.47)

Net Investment Income 803,070.19

Total Additions 1,552,542.01

DEDUCTIONS

Distributions to Members:

Benefit Payments 1,453,488.15 Refunds of Member Contributions 15,774.40

Total Distributions 1,469,262.55

Administrative Expense 47,203.37

Total Deductions 1,516,465.92

Net Increase in Net Position 36,076.09

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 12,497,701.03

End of the Year 12,533,777.12

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

ACTUARIAL ASSET VALUATION September 30, 2018

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a four year period. In the first year, 25% of the gain or loss is recognized. In the second year 50%, in the third year 75%, and in the fourth 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	Gains/Loss	ses Not Yet Recog	<u>nized</u> Jot Yet Recogniz	ed by Voluction	Voor	
Ending	Gain/Loss	2018	2019	2020	2021	
09/30/2015	(982,104)	0	0	0		
09/30/2016	170,986	42,745	0	0		
09/30/2017	255,500	127,750	63,875	0		
09/30/2018	(14,639)	(10,979)	(7,319)	(3,659)		
Total		159,516	56,556	(3,659)		
	Developmen	t of Investment Ga	in/Loss			
Actual Net Return on I				803,070		
Expected Investment E	Earnings*			817,709		
2018 Actuarial Investm	nent Gain/Loss			(14,639)		
*Expected Investment	Earnings = 0.0675 * [12,49	7,701 + 0.5 * (766	,994)]			
	Development of	of Actuarial Value	of Assets			
(1) Market Value of A				12,533,777		
(2) Gains/(Losses) No				159,516 12,374,261		
(3) Actuarial Value of	Assets, 09/30/2018, (1) - (2	2)		12,374,261		
(A) 09/30/2017 Actuar	rial Assets:			12,466,110		
(I) Net Investment Inc						
1. Interest and Divid				755,493		
2. Realized Gains (49,512		
2. Change in Actuar				(92,962)		
3. Investment Exper				(36,897)		
	Total			675,145		
(B) 09/30/2015 Actuar	rial Assets:			12,374,261		
Actuarial Assets Rate	of Return = $2I/(A+B-I)$:			5.59%		
Market Value of Asset				6.63%		
Actuarial Gain/(Loss)	due to Investment Return (A	Actuarial Asset Bas	sis)	(140,431)		
10/01/2018 Limited	Actuarial Assets:			12,374,261		

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CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS SEPTEMBER 30, 2018 Actuarial Asset Basis

REVENUES

	TE VELVEES	
Contributions: Member City	4,842.82 744,629.00	
Total Contributions		749,471.82
Earnings from Investments: Interest & Dividends Net Realized Gain (Loss) Change in Actuarial Value	755,492.83 49,511.76 (92,961.93)	
Total Earnings and Investment Gains		712,042.66
	EXPENDITURES	
Distributions to Members: Benefit Payments Refunds of Member Contributions	1,453,488.15 15,774.40	
Total Distributions		1,469,262.55
Expenses: Investment related ¹ Administrative	36,897.47 47,203.37	
Total Expenses		84,100.84
Change in Net Assets for the Year		(91,848.91)
Net Assets Beginning of the Year		12,466,110.03
Net Assets End of the Year ²		12,374,261.12

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

²Net Assets may be limited for actuarial consideration.

RECONCILIATION OF CITY'S SHORTFALL/(PREPAID) CONTRIBUTION FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2018

(1)	Required City Contributions	\$744,629.00
(1)	Required City Contribution for Fiscal 2018	744,629.00
(2)	Less 2017 Prepaid Contribution	0.00
(3)	Less Actual City Contributions	(736,424.29)
(4)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2018	\$8,204.71

STATISTICAL DATA

	10/1/2015	10/1/2016	10/1/2017	10/1/2018
Actives				
Average Current Age Average Age at Employment	50.8 29.0	50.4 30.9	48.5 27.4	50.4 29.9
Average Past Service	21.8	19.5	21.1	20.5
Average Annual Salary	\$52,271	\$57,567	\$68,908	\$86,802
Active Members - Fund 1				
Average Current Age		45.8	46.8	47.8
Average Age at Employment		31.8	31.8	31.8
Average Past Service		14.0	15.0	16.0
Average Annual Salary		\$78,967	\$93,839	\$95,801
Active Members - Fund 440				
Average Current Age	49.5	51.6	49.3	53.0
Average Age at Employment	27.7	30.7	25.1	28.1
Average Past Service	21.8	20.9	24.2	24.9
Average Annual Salary	\$52,653	\$52,217	\$56,443	\$77,804
Active Members - Fund 448				
Average Current Age	54.6			
Average Age at Employment	32.7			
Average Past Service	21.9			
Average Annual Salary	\$51,125			

STATISTICAL DATA

	10/1/2015	10/1/2016	10/1/2017	10/1/2018
All Inactive Members				
Average Current Age Average Annual Benefit	59.8 \$13,038	60.8 \$13,093	61.7 \$13,214	62.6 \$13,351
<u>Inactive Members - Fund 1</u>				
Average Current Age Average Annual Benefit	60.5 \$13,718	61.5 \$13,727	62.5 \$13,867	63.6 \$14,078
<u>Inactive Members - Fund 440</u>				
Average Current Age Average Annual Benefit	59.3 \$14,584	60.3 \$14,588	61.0 \$14,706	61.7 \$14,828
<u>Inactive Members - Fund 447</u>				
Average Current Age Average Annual Benefit	58.9 \$10,785	59.9 \$10,813	60.9 \$10,806	61.9 \$10,832
<u>Inactive Members - Fund 448</u>				
Average Current Age Average Annual Benefit	66.0 \$8,446	65.1 \$10,092	66.1 \$10,092	67.1 \$10,092
<u>Inactive Members - Fund 502</u>				
Average Current Age Average Annual Benefit	49.0 \$2,756	50.0 \$2,756	51.5 \$2,756	52.5 \$2,756

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	0	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	0	0	0	0	0	0	0
30 - 34	0	0	0	0	0	0	0	0	0	0	0	0
35 - 39	0	0	0	0	0	0	0	0	0	0	0	0
40 - 44	0	0	0	0	0	0	0	0	0	0	0	0
45 - 49	0	0	0	0	0	0	0	1	0	0	0	1
50 - 54	0	0	0	0	0	0	0	0	1	0	0	1
55 - 59	0	0	0	0	0	0	0	0	0	0	0	0
60 - 64	0	0	0	0	0	0	0	0	0	0	0	0
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	1	0	0	2

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2017	3
b. Terminations	
i. Vested (partial or full) with deferred benefits	0
ii. Non-vested 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	(1)
f. Continuing participants	2
g. New entrants	0
h. Total active life participants in valuation	$\frac{0}{2}$

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

	Service Retirees, Vested Receiving Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested <u>Deferred</u>	<u>Total</u>
a. Number prior valuation	88	5	1	24	118
Retired	3	0	0	(2)	1
Vested Deferred	0	0	0	0	0
Death, With Survivor	0	0	0	0	0
Death, No Survivor	(1)	0	0	0	(1)
Disabled	0	0	0	0	0
Refund of Contributions	0	0	0	0	0
Rehires	0	0	0	0	0
Expired Annuities	0	0	0	0	0
Data Corrections	0	0	0	0	0
b. Number current valuation	90	5	1	22	118

SUMMARY OF CURRENT PLAN (Through Ordinance 2016-O-24)

Eligibility Regular, full-time general employees after attaining age

18 with 3 months of service. On and after October 1, 1996, no further employees will become active under this Plan. A one-time window for participation was opened for certain City employees during the fiscal year

ending September 30, 2016.

<u>Compensation</u> Total Compensation, including up to 300 hours of

overtime compensation per calendar year. Additionally, the sum total of overtime hours, unused sick leave, and unused annual leave that was accrued prior to October 1, 2013, for which the retiree receives payment at the time of retirement, will also be included in Compensation for

pension purposes.

Average Final Compensation (AFC) Average Compensation for the highest 3 years during the

10 years immediately preceding retirement or

termination.

<u>Credited Service</u> Total years and fractional parts of years of service with

the City.

Member Contributions 2.5% of Compensation.

Normal Retirement

Date The earlier of: 1) age 55 and the completion of 5 years of

Credited Service, or 2) the completion of 25 years of

Credited Service, regardless of age.

Benefit 2.0% of Average Final Compensation times Credited

Service.

Form of Benefit Single Life Annuity (options available).

Early Retirement

Date The earlier of: 1) age 50 and the completion of 5 years of

Credited Service, or 2) the completion of 20 years of

Credited Service, regardless of age.

Benefit Determined as for Normal Retirement and reduced 5.0%

for each year that Early Retirement precedes Normal

Retirement.

Disability Benefit

Eligibility 5 years of Credited Service.

Benefit Benefit accrued to date of disability. Minimum benefit

is 25% of AFC.

Duration Payable until normal retirement, death or until recovery

(as determined by the Board).

Death Benefits

Pre-Retirement

Vested A monthly benefit determined assuming the participant

terminated employment on his date of death, survived to his earliest retirement date, elected a 50% qualified joint

and survivor annuity and then died the next day.

Not Vested Refund of accumulated contributions without interest.

Post-Retirement According to optional form of benefit selected.

<u>Termination of Employment</u>

Benefit

Less than 5 years Refund of accumulated contributions without interest.

5 or more Refund of Contributions or Accrued benefit payable at

retirement age.

STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2018

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	444,618
Total Cash and Equivalents	444,618
Receivables:	
Additional City Contributions	8,205
Investment Income	53,502
Total Receivable	61,707
Investments:	
U. S. Bonds and Bills	699,082
Federal Agency Guaranteed Securities	1,436,313
Corporate Bonds	3,538,686
Municipal Obligations	114,201
Mutual Funds:	
Equity	6,250,696
Total Investments	12,038,978
Total Assets	12,545,303
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	9,230
Administrative Expenses	2,296
Total Liabilities	11,526
NET POSITION RESTRICTED FOR PENSIONS	12,533,777

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2018

Market Value Basis

A	D	DI	Π	Ί(ŊΝ	IS.

Contributi	ons.

Member	4,662
City	744,629

Total Contributions	749,291
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Investment Income:

Net Increase in Fair Value of Investments	84,475
Interest & Dividends	755,493
Less Investment Expense ¹	(36,898)

Net Investment Income 803,070

Total Additions 1,552,361

DEDUCTIONS

Distributions to Members:

Benefit Payments 1,453,488
Refunds of Member Contributions 15,775

Total Distributions 1,469,263

Administrative Expense 47,203

Total Deductions 1,516,466

Net Increase in Net Position 35,895

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 12,497,882

End of the Year 12,533,777

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

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2018)

Plan Description

Plan Administration

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

- (1) Two of whom, unless otherwise prohibited by law, must be legal residents of the municipality and must be appointed by the governing body of the municipality.
- (2) Two of whom are current or retired members of the plan who are currently employed by the City who are elected by a majority of current and retired members who are currently employed by the City.
- (3) The fifth member shall be a union representative for the General Employees as appointed by the union. The fifth member shall have the same rights as each of the other four members.
- (4) If the majority of the members of the plan fails to elect a member as a Trustee, the city manager shall appoint either a resident or an employee that is a resident of the City.
- (5) Two un-excused absences, as determined by the Board, within a twelve month period shall be a deemed resignation.

Regular, full-time general employees after attaining age 18 with 3 months of service. On and after October 1, 1996, no further employees will become active under this Plan.

Plan Membership as of October 1, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	94
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	24
Active Plan Members	3
	121

Benefits Provided

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

Normal Retirement:

Date: The earlier of: 1) age 55 and the completion of 5 years of Credited Service, or 2) the completion of 25 years of Credited Service, regardless of age.

Benefit: 2.0% of Average Final Compensation times Credited Service.

Early Retirement:

Date: The earlier of: 1) age 50 and the completion of 5 years of Credited Service, or 2) the completion of 20 years of Credited Service, regardless of age.

Benefit: Determined as for Normal Retirement and reduced 5.0% for each year that Early Retirement precedes Normal Retirement.

Disability Benefit:

Eligibility: 5 years of Credited Service.

Benefit: Benefit accrued to date of disability. Minimum benefit is 25% of AFC.

Pre-Retirement Death Benefits:

Vested: A monthly benefit determined assuming the participant terminated employment on his date of death, survived to his earliest retirement date, elected a 50% qualified joint and survivor annuity and then died the next day.

Not Vested: Refund of accumulated contributions without interest.

Termination of Employment:

Less than 5 years: Refund of accumulated contributions without interest.

5 or more: Refund of Contributions or Accrued benefit payable at retirement age.

Contributions

Member Contributions: 2.5% of Salary.

City: Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability as provided for in Part VII in Chapter 112, Florida Statutes.

Investments

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2018:

Asset Class	Target Allocation
Domestic Equity	40.0%
International Equity	10.0%
Bonds	50.0%
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, 2018, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 6.63 percent.

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

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2018 were as follows:

Total Pension Liability \$ 19,346,842
Plan Fiduciary Net Position \$ (12,533,777)
Sponsor's Net Pension Liability \$ 6,813,065
Plan Fiduciary Net Position as a percentage of Total Pension Liability 64.78%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2017 updated to September 30, 2018 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	4.00%
Discount Rate	6.75%
Investment Rate of Return	6.75%

Mortality Rate Healthy Active Lives:

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

Male: RP2000 Generational, 50% White Collar / 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 most recent actuarial experience study used to review the other significant assumptions was dated June 13, 2013.

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 2018 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, 2018 are summarized in the following table:

	Long Term Expected Real Rate of
Asset Class	Return
Domestic Equity	8.1%
International Equity	3.4%
Bonds	3.6%

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 6.75 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
	5.75%	6.75% 7.75%	
Sponsor's Net Pension Liability	\$ 8,794,362	\$ 6,813,065	\$ 5,141,032

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

	09/30/2018	09/30/2017	09/30/2016
Total Pension Liability			
Service Cost	29,715	53,793	34,222
Interest	1,254,084	1,254,173	1,250,244
Changes of benefit terms	=	-	-
Differences between Expected and Actual Experience	248,369	176,321	(50,657)
Changes of assumptions	=	-	1,777,486
Contributions - Buy Back	-	-	299,746
Benefit Payments, including Refunds of Employee Contributions	(1,469,263)	(1,453,783)	(1,386,624)
Net Change in Total Pension Liability	62,905	30,504	1,924,417
Total Pension Liability - Beginning	19,283,937	19,253,433	17,329,016
Total Pension Liability - Ending (a)	\$ 19,346,842	\$ 19,283,937	\$ 19,253,433
Plan Fiduciary Net Position			
Contributions - Employer	744,629	667,440	661,699
Contributions - Employee	4,662	6,091	5,851
Contributions - Buy Back	-	-	299,746
Net Investment Income	803,070	1,055,669	950,355
Benefit Payments, including Refunds of Employee Contributions	(1,469,263)	(1,453,783)	(1,386,624)
Administrative Expense	(47,203)	(44,217)	(40,442)
Net Change in Plan Fiduciary Net Position	35,895	231,200	490,585
Plan Fiduciary Net Position - Beginning	12,497,882	12,266,682	11,776,097
Plan Fiduciary Net Position - Ending (b)	\$ 12,533,777	\$ 12,497,882	\$ 12,266,682
Net Pension Liability - Ending (a) - (b)	\$ 6,813,065	\$ 6,786,055	\$ 6,986,751
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	64.78%	64.81%	63.71%
Covered Employee Payroll ¹ Net Pension Liability as a percentage of Covered Employee Payroll	\$ 193,713 3517.10%	\$ 236,414 2870.41%	\$ 349,034 2001.74%

Notes to Schedule:

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 2.50%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

The net of fees investment return assumption was reduced from 7.50% to 6.75%.

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

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

	09/30/2015	09/30/2014	09/30/2013
Total Pension Liability			
Service Cost	60,573	91,269	84,901
Interest	1,238,859	1,241,107	1,237,145
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	259,399	-	-
Changes of assumptions	-	-	-
Contributions - Buy Back	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(1,374,722)	(1,288,586)	(1,262,597)
Net Change in Total Pension Liability	184,109	43,790	59,449
Total Pension Liability - Beginning	17,144,907	17,101,117	17,041,668
Total Pension Liability - Ending (a)	\$ 17,329,016	\$ 17,144,907	\$ 17,101,117
Plan Fiduciary Net Position			
Contributions - Employer	713,396	772,605	475,794
Contributions - Employee	8,535	13,178	15,348
Contributions - Buy Back	-	-	-
Net Investment Income	(67,754)	1,059,400	1,563,721
Benefit Payments, including Refunds of Employee Contributions	(1,374,722)	(1,288,586)	(1,262,597)
Administrative Expense	(48,589)	(42,302)	(76,889)
Net Change in Plan Fiduciary Net Position	(769,134)	514,295	715,377
Plan Fiduciary Net Position - Beginning	12,545,231	12,030,936	11,315,559
Plan Fiduciary Net Position - Ending (b)	\$ 11,776,097	\$ 12,545,231	\$ 12,030,936
Net Pension Liability - Ending (a) - (b)	\$ 5,552,919	\$ 4,599,676	\$ 5,070,181
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	67.96%	73.17%	70.35%
Covered Employee Payroll ¹ Net Pension Liability as a percentage of Covered Employee Payroll	\$ 341,408 1626.47%	\$ 567,030 811.19%	\$ 613,927 825.86%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

				ntributions relation to					Contributions as a percentage				
	A	ctuarially	the	Actuarially	Co	ntribution	(Covered	of Covered				
	De	etermined	D	etermined	D	eficiency	E	imployee	Employee				
Fiscal Year Ended	Contribution		Contribution		Contributions		(Excess)		(Excess) Payroll ¹		Payroll ¹		Payroll
09/30/2018	\$	744,629	\$	744,629	\$	-	\$	193,713	384.40%				
09/30/2017	\$	667,440	\$	667,440	\$	-	\$	236,414	282.32%				
09/30/2016	\$	657,825	\$	661,699	\$	(3,874)	\$	349,034	189.58%				
09/30/2015	\$	719,822	\$	713,396	\$	6,426	\$	341,408	208.96%				
09/30/2014	\$	766,179	\$	772,605	\$	(6,426)	\$	567,030	136.25%				
09/30/2013	\$	475,794	\$	475,794	\$	-	\$	613,927	77.50%				

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

Notes to Schedule

Valuation Date:

10/01/2016

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 Rate:

Healthy 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 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, 2015 FRS valuation report for other than special risk participants. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate:

6.75% 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.

Normal Retirement:

<u>Age</u>	Retirement Probability
55	50%
56	0%
57	0%
58	0%
59	0%
60 and older	100%

In addition to the above table, 100% Retirement is assumed upon the completion of 25 years of Credited Service.

The above rates are supported by an Experience Study performed for the period

October 1, 2003 through October 1, 2012.

Disability Rate: See table on following page. These rates are consistent with other Florida General

Employee retirement programs.

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Termination Rate: None assumed, based on results of an Experience Study performed for the period

October 1, 2003 through October 1, 2012.

Salary Increases: 4% per year, based on results of an Experience Study performed for the period

October 1, 2003 through October 1, 2012.

Early Retirement: None assumed, based on results of an Experience Study performed for the period

October 1, 2003 through October 1, 2012.

Funding Method: Entry Age Normal Actuarial Cost Method

The following loads are applied for determination of the Sponsor funding

requirement:

Interest - A half year, based on the current 6.75% assumption.

Salary - A full year, based on the current average assumption of 4.0%.

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 four-year

period.

Termination and Disability Rates:

	Disabled	% Terminating
	During the	During the
Age	Year	Year
40	0.30%	0.00%
45	0.51%	0.00%
50	1.00%	0.00%
55	1.55%	0.00%

SCHEDULE OF INVESTMENT RETURNS

Last 10 Fiscal Years

Annual Money-Weighted Rate of Return

	, U
Fiscal Year Ended	Net of Investment Expense
09/30/2018	6.63%
09/30/2017	8.92%
09/30/2016	8.40%
09/30/2015	-0.56%
09/30/2014	8.94%
09/30/2013	13.50%

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2019)

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:

- (1) Two of whom, unless otherwise prohibited by law, must be legal residents of the municipality and must be appointed by the governing body of the municipality.
- (2) Two of whom are current or retired members of the plan who are currently employed by the City who are elected by a majority of current and retired members who are currently employed by the City.
- (3) The fifth member shall be a union representative for the General Employees as appointed by the union. The fifth member shall have the same rights as each of the other four members.
- (4) If the majority of the members of the plan fails to elect a member as a Trustee, the city manager shall appoint either a resident or an employee that is a resident of the City.
- (5) Two un-excused absences, as determined by the Board, within a twelve month period shall be a deemed resignation. Regular, full-time general employees after attaining age 18 with 3 months of service. On and after October 1, 1996, no further employees will become active under this Plan.

Plan Membership as of October 1, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	94
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	24
Active Plan Members	3
	121

Benefits Provided

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

Normal Retirement:

Date: The earlier of: 1) age 55 and the completion of 5 years of Credited Service, or 2) the completion of 25 years of Credited Service, regardless of age.

Benefit: 2.0% of Average Final Compensation times Credited Service.

Early Retirement:

Date: The earlier of: 1) age 50 and the completion of 5 years of Credited Service, or 2) the completion of 20 years of Credited Service, regardless of age.

Benefit: Determined as for Normal Retirement and reduced 5.0% for each year that Early Retirement precedes Normal Retirement.

Disability Benefit:

Eligibility: 5 years of Credited Service.

Benefit: Benefit accrued to date of disability. Minimum benefit is 25% of AFC.

Pre-Retirement Death Benefits:

Vested: A monthly benefit determined assuming the participant terminated employment on his date of death, survived to his earliest retirement date, elected a 50% qualified joint and survivor annuity and then died the next day.

Not Vested: Refund of accumulated contributions without interest.

<u>Termination of Employment:</u>

Less than 5 years: Refund of accumulated contributions without interest.

5 or more: Refund of Contributions or Accrued benefit payable at retirement age.

Contributions

Member Contributions: 2.5% of Salary.

City: Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability as provided for in Part VII in Chapter 112, Florida Statutes.

Net Pension Liability

The measurement date is September 30, 2018.

The measurement period for the pension expense was October 1, 2017 to September 30, 2018.

The reporting period is October 1, 2018 through September 30, 2019.

The Sponsor's Net Pension Liability was measured as of September 30, 2018.

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, 2017 updated to September 30, 2018 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	4.00%
Discount Rate	6.75%
Investment Rate of Return	6.75%

Mortality Rate Healthy Active Lives:

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

Male: RP2000 Generational, 50% White Collar / 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 most recent actuarial experience study used to review the other significant assumptions was dated June 13, 2013.

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 2018 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, 2018 are summarized in the following table:

		Long Term Expected
Asset Class	Target Allocation	Real Rate of Return
Domestic Equity	40.0%	8.1%
International Equity	10.0%	3.4%
Bonds	50.0%	3.6%
Total	100.0%	

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Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 6.75 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 Pen				Net Pension	
		Liability	N	let Position		Liability
		(a)		(b)		(a)-(b)
Reporting Period Ending September 30, 2018	\$	19,283,937	\$	12,497,882	\$	6,786,055
Changes for a Year:						
Service Cost		29,715		-		29,715
Interest		1,254,084		-		1,254,084
Differences between Expected and Actual Experience		248,369		-		248,369
Changes of assumptions		-		-		-
Changes of benefit terms		-		-		-
Contributions - Employer		-		744,629		(744,629)
Contributions - Employee		-		4,662		(4,662)
Contributions - Buy Back		-		-		-
Net Investment Income		-		803,070		(803,070)
Benefit Payments, including Refunds of Employee Contributions		(1,469,263)		(1,469,263)		-
Administrative Expense		-		(47,203)		47,203
Net Changes		62,905		35,895		27,010
Reporting Period Ending September 30, 2019	\$ 19,346,842 \$ 12,533,777 \$		6,813,065			

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

	Current Discount					
	1% Decrease 5.75%					% Increase
						7.75%
Sponsor's Net Pension Liability	\$	8,794,362	\$	6,813,065	\$	5,141,032

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, 2018

For the year ended September 30, 2018, the Sponsor has recognized a Pension Expense of \$665,854. On September 30, 2018, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Οι	Deferred atflows of esources	Inflo	ferred ows of ources
Differences between Expected and Actual Experience		-		-
Changes of assumptions		-		-
Net difference between Projected and Actual Earnings on Pension Plan investments		102,404		-
Employer contributions subsequent to the measurement date		744,629		-
Total	\$	847,033	\$	-

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, 2018. 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:	
2019	\$ 92,988
2020	\$ 128,492
2021	\$ (67,977)
2022	\$ (51,099)
2023	\$ -
Thereafter	\$ -

Payable to the Pension Plan

On September 30, 2017, the Sponsor reported a payable of \$11,098 for the outstanding amount of contributions of the Pension Plan required for the year ended September 30, 2017.

PRELIMINARY 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 will recognize a Pension Expense of \$852,911. 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	-	-
Changes of assumptions	-	-
Net difference between Projected and Actual Earnings on Pension Plan investments	21,132	-
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, 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	\$ 131,421
2021	\$ (65,048)
2022	\$ (48,170)
2023	\$ 2,929
2024	\$ -
Thereafter	\$ -

Payable to the Pension Plan

On September 30, 2018, the Sponsor reported a payable of \$8,205 for the outstanding amount of contributions of the Pension Plan required for the year ended September 30, 2018.

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

Reporting Period Ending	09/30/2019	09/30/2018	09/30/2017
Measurement Date	09/30/2018	09/30/2017	09/30/2016
Total Pension Liability			
Service Cost	29,715	53,793	34,222
Interest	1,254,084	1,254,173	1,250,244
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	248,369	176,321	(50,657)
Changes of assumptions	-	-	1,777,486
Contributions - Buy Back	-	-	299,746
Benefit Payments, including Refunds of Employee Contributions	(1,469,263)	(1,453,783)	(1,386,624)
Net Change in Total Pension Liability	62,905	30,504	1,924,417
Total Pension Liability - Beginning	19,283,937	19,253,433	17,329,016
Total Pension Liability - Ending (a)	\$ 19,346,842	\$ 19,283,937	\$ 19,253,433
Plan Fiduciary Net Position			
Contributions - Employer	744,629	667,440	661,699
Contributions - Employee	4,662	6,091	5,851
Contributions - Buy Back	-	-	299,746
Net Investment Income	803,070	1,055,669	950,355
Benefit Payments, including Refunds of Employee Contributions	(1,469,263)	(1,453,783)	(1,386,624)
Administrative Expense	(47,203)	(44,217)	(40,442)
Net Change in Plan Fiduciary Net Position	35,895	231,200	490,585
Plan Fiduciary Net Position - Beginning	12,497,882	12,266,682	11,776,097
Plan Fiduciary Net Position - Ending (b)	\$ 12,533,777	\$ 12,497,882	\$ 12,266,682
Net Pension Liability - Ending (a) - (b)	\$ 6,813,065	\$ 6,786,055	\$ 6,986,751
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	64.78%	64.81%	63.71%
Covered Employee Payroll ¹	\$ 193,713	\$ 236,414	\$ 349,034
Net Pension Liability as a percentage of Covered Employee Payroll	3517.10%	2870.41%	2001.74%

Notes to Schedule:

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 2.50%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

The net of fees investment return assumption was reduced from 7.50% to 6.75%.

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

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

Reporting Period Ending	09/30/2016	09/30/2015	09/30/2014
Measurement Date	09/30/2015	09/30/2014	09/30/2013
Total Pension Liability			
Service Cost	60,573	91,269	84,901
Interest	1,238,859	1,241,107	1,237,145
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	259,399	-	-
Changes of assumptions	, -	=	-
Contributions - Buy Back	_	-	-
Benefit Payments, including Refunds of Employee Contributions	(1,374,722)	(1,288,586)	(1,262,597)
Net Change in Total Pension Liability	184,109	43,790	59,449
Total Pension Liability - Beginning	17,144,907	17,101,117	17,041,668
Total Pension Liability - Ending (a)	\$ 17,329,016	\$ 17,144,907	\$ 17,101,117
, ,			
Plan Fiduciary Net Position			
Contributions - Employer	713,396	772,605	475,794
Contributions - Employee	8,535	13,178	15,348
Contributions - Buy Back	-	-	-
Net Investment Income	(67,754)	1,059,400	1,563,721
Benefit Payments, including Refunds of Employee Contributions	(1,374,722)	(1,288,586)	(1,262,597)
Administrative Expense	(48,589)	(42,302)	(76,889)
Net Change in Plan Fiduciary Net Position	(769,134)	514,295	715,377
Plan Fiduciary Net Position - Beginning	12,545,231	12,030,936	11,315,559
Plan Fiduciary Net Position - Ending (b)	\$ 11,776,097	\$ 12,545,231	\$ 12,030,936
N. D. C. Million B. R. (C. (A)			
Net Pension Liability - Ending (a) - (b)	\$ 5,552,919	\$ 4,599,676	\$ 5,070,181
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	67.96%	73.17%	70.35%
Covered Employee Permelli	¢ 241.400	\$ 567,020	\$ 612,027
Covered Employee Payroll ¹ Net Pension Liability as a percentage of Covered Employee Payroll	\$ 341,408 1626.47%	\$ 567,030 811.19%	\$ 613,927 825.86%
Not relision Liability as a percentage of Covered Employee Payton	1020.47%	811.19%	843.80%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

		ctuarially etermined	in the	ntributions relation to Actuarially etermined		ntribution eficiency	Covered Imployee	Contributions as a percentage of Covered Employee
Fiscal Year Ended	Co	ntribution	Co	ntributions	()	Excess)	 Payroll ¹	Payroll
09/30/2018	\$	744,629	\$	744,629	\$	-	\$ 193,713	384.40%
09/30/2017	\$	667,440	\$	667,440	\$	-	\$ 236,414	282.32%
09/30/2016	\$	657,825	\$	661,699	\$	(3,874)	\$ 349,034	189.58%
09/30/2015	\$	719,822	\$	713,396	\$	6,426	\$ 341,408	208.96%
09/30/2014	\$	766,179	\$	772,605	\$	(6,426)	\$ 567,030	136.25%
09/30/2013	\$	475,794	\$	475,794	\$	-	\$ 613,927	77.50%

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

Notes to Schedule

Valuation Date:

10/01/2016

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 Rate:

Healthy 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 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, 2015 FRS valuation report for other than special risk participants. We feel this assumption sufficiently accommodates future mortality improvements.

6.75% 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.

<u>Age</u>	Retirement Probability
55	50%
56	0%
57	0%
58	0%
59	0%
60 and older	100%

In addition to the above table, 100% Retirement is assumed upon the completion of 25 years of Credited Service.

The above rates are supported by an Experience Study performed for the period

October 1, 2003 through October 1, 2012.

See table on following page. These rates are consistent with other Florida General

Employee retirement programs.

Interest Rate:

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Termination Rate: None assumed, based on results of an Experience Study performed for the period

October 1, 2003 through October 1, 2012.

Salary Increases: 4% per year, based on results of an Experience Study performed for the period

October 1, 2003 through October 1, 2012.

Early Retirement: None assumed, based on results of an Experience Study performed for the period

October 1, 2003 through October 1, 2012.

Funding Method: Entry Age Normal Actuarial Cost Method

The following loads are applied for determination of the Sponsor funding

requirement:

Interest - A half year, based on the current 6.75%

Salary - A full year, based on the current average assumption of $4.0\%\,.$

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 four-year

period.

Termination and Disability Rates:

		% Becoming	
		Disabled	% Terminating
		During the	During the
_	Age	Year	Year
	40	0.30%	0.00%
	45	0.51%	0.00%
	50	1.00%	0.00%
	55	1.55%	0.00%

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

The 1	fol	lowing i	inf	format	ion	is not	t required	l to	be	disc	losed	but	t is	provi	ded	fo	r in	format	ional	pur	poses.
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FINAL COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2018

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning Balance	\$ 6,986,751	\$ 287,893	\$ 1,256,847	\$ -
Employer contributions made after 09/30/2017	-	-	744,629	-
Total Pension Liability Factors:				
Service Cost	53,793	-	-	53,793
Interest	1,254,173	-	_	1,254,173
Changes in benefit terms	-	-	_	-
Differences between Expected and Actual Experience with				
regard to economic or demographic assumptions	176,321	-	176,321	-
Current year amortization of experience difference	-	=	(176,321)	176,321
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	(1,453,783)	-		
Net change	30,504	-	744,629	1,484,287
Plan Fiduciary Net Position:				
Contributions - Employer	667,440	_	(667,440)	_
Contributions - Employee	6,091	_	-	(6,091)
Projected Net Investment Income	800,175	_	_	(800,175)
Difference between projected and actual earnings on				(***,)
Pension Plan investments	255,494	255,494	_	-
Current year amortization	-	(252,853)	(196,469)	(56,384)
Benefit Payments, including Refunds of Employee		(- ,,	(,,	(/
Contributions	(1,453,783)) -	_	_
Administrative Expenses	(44,217)		_	44,217
Net change	231,200	2,641	(863,909)	(818,433)
	- ,- •	,,,,,	(,	(,)
Ending Balance	\$ 6,786,055	\$ 290,534	\$ 1,137,567	\$ 665,854

PRELIMINARY COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2019

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 6,786,055	\$ 290,534	\$ 1,137,567	\$ -
Employer Contributions made after 09/30/2018	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	29,715	-	-	29,715
Interest	1,254,084	-	-	1,254,084
Changes in benefit terms	-	-	=	=
Differences between Expected and Actual Experience				
with regard to economic or demographic assumptions	248,369	-	248,369	-
Current year amortization of experience difference	-	-	(248, 369)	248,369
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	(1,469,263)			
Net change	62,905			1,532,168
Plan Fiduciary Net Position:				
Contributions - Employer	744,629	-	(744,629)	_
Contributions - Employee	4,662	-	-	(4,662)
Contributions - Buy Back	-	_	_	-
Projected Net Investment Income	817,715	_	_	(817,715)
Difference between projected and actual earnings on	,			, , ,
Pension Plan investments	(14,645)	-	14,645	-
Current year amortization	-	(103,481)	(199,398)	95,917
Benefit Payments, including Refunds of Employee		, , ,	, , ,	
Contributions	(1,469,263)	-	-	-
Administrative Expenses	(47,203)	-	=	47,203
Net change	35,895	(103,481)	(929,382)	(679,257)
Ending Balance	\$ 6,813,065	\$ 187,053	TBD	\$ 852,911

^{*} Employer Contributions subsequent to the measurement date made after September 30, 2018 but made on or before September 30, 2019 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		rences Between eted and Actual	Recognition																							
Ending		Earnings	Period (Years)		2018		2019		2020		2021		2022		2023		2024	202	25		2026		2027		20	028
2012	Φ	(7.46.067)	~	Φ	(1.40.072)	Φ		Φ		Φ		Φ		Φ		Φ	a	,		Φ		Φ			ħ	
2013	\$	(746,867)	5	\$	(149,373)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	- \$	•	-	\$	-	\$		- :	5	-
2014	\$	(177,521)	5	\$	(35,504)	\$	(35,504)	\$	-	\$	-	\$	-	\$	-	\$	- \$	6	-	\$	-	\$		- :	\$	-
2015	\$	982,345	5	\$	196,469	\$	196,469	\$	196,469	\$	-	\$	-	\$	-	\$	- \$	6	-	\$	-	\$		- :	\$	-
2016	\$	(84,389)	5	\$	(16,878)	\$	(16,878)	\$	(16,878)	\$	(16,878)	\$	-	\$	-	\$	- \$	6	-	\$	-	\$		- :	\$	-
2017	\$	(255,494)	5	\$	(51,098)	\$	(51,099)	\$	(51,099)	\$	(51,099)	\$	(51,099)	\$	-	\$	- \$	6	-	\$	-	\$		- :	\$	-
2018	\$	14,645	5	\$	-	\$	2,929	\$	2,929	\$	2,929	\$	2,929	\$	2,929	\$	- \$	5	-	\$	-	\$		- :	\$	-
Net Increas	e (Decr	ease) in Pension	Expense	\$	(56,384)	\$	95,917	\$	131,421	\$	(65,048)	\$	(48,170)	\$	2.929	\$	- \$			\$		\$			\$	

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	Expected	ces Between d and Actual perience	Recognition Period (Years)		2018	2019		2020		2021			2022			2023		2024		202	25		2026		2027		202	28
2017 2018	\$ \$	176,321 248,369	1 1	\$ \$	176,321	248,369	\$ \$		-	T.		\$ \$		-	-		- \$ - \$		-			\$ \$		- S	5	- \$ - \$		-
Net Increas	e (Decreas	se) in Pension	Expense	\$	176,321	\$ 248,369	\$		_	\$	_	\$		_	\$		- \$		_	\$		\$		- 5	6	- \$	<u>s</u>	