

CITY OF WINTER GARDEN
PENSION PLAN FOR FIREFIGHTERS AND POLICE OFFICERS
ACTUARIAL VALUATION
AS OF OCTOBER 1, 2018
CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2020
GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2018



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

February 14, 2019

Board of Trustees
c/o Ms. Susy Pita, Plan Administrator
City of Winter Garden
Pension Plan for Firefighters and Police Officers
P. O. Box 490857
Leesburg, FL 34749

Re: City of Winter Garden Pension Plan for Firefighters and Police Officers

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Winter Garden Pension Plan for Firefighters and Police Officers. 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, 175, and 185, 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 Winter Garden, 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 are 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 Winter Garden, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Pension Plan for Firefighters and Police Officers. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

Foster & Foster, Inc.



Douglas H. Lozen, EA, MAAA



Sara Carlson, ASA, EA, MAAA

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Winter Garden Pension Plan for Firefighters and Police Officers, 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 % of Projected Annual Payroll	20.51%	21.52%
Member Contributions (Est.) % of Projected Annual Payroll	3.50%	3.50%
City And State Required Contribution % of Projected Annual Payroll	17.01%	18.02%
State Contribution (Est.) ¹ % of Projected Annual Payroll	\$277,807 3.79%	\$277,807 3.79%
City Required Contribution ² % of Projected Annual Payroll	13.22%	14.23%

¹ Reflects Mutual Consent between the City and Membership, as required under Chapter 2015-39, Laws of Florida. Beginning with the fiscal year ending September 30, 2017, Chapter 175 premium tax revenues in excess of \$46,100.85 will be equally allocated between the Firefighters’ portion of the Share Plan and a credit to the Unfunded Actuarial Accrued Liability (UAAL); Chapter 185 premium tax revenues in excess of \$231,706.15 will be equally allocated between the Police Officers’ portion of the Share Plan and a credit to the UAAL. In absence of a UAAL, the City’s 50% portion of Excess premium tax revenues will directly offset the City’s annual contribution requirement to the Police and Fire Pension Plan.

² The required contribution from the combination of City and State sources for the year ending September 30, 2020, is 17.01% of the actual payroll realized in that year. As a budgeting tool, the City may contribute 13.22% of each Member's Salary and then make a one-time adjustment to account for the actual State Monies received. Please note that the City has access to a prepaid contribution of \$152,596.50 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2019.

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. Sources of favorable experience included more turnover than expected, an average salary increase of 2.79% which fell short of the 5.11% assumption, and an investment return of 8.28% (Actuarial Asset Basis) which exceeded the 7.25% assumption. There were no significant sources of unfavorable experience.

CHANGES SINCE PRIOR VALUATION

Plan Changes

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

Actuarial Assumption/Method Changes

In conjunction with this valuation, a fresh-start on the UAAL was implemented, effectively consolidating all existing UAAL layers into one single layer which will be amortized over a five-year period. All future layers of UAAL will be amortized as a level dollar over a 15-year period.

CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2017	14.30%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	-0.07%
Change in Normal Cost Rate	0.06%
Change in Administrative Expense Percentage	0.02%
Payroll Change Effect on UAAL Amortization	-0.01%
Investment Return (Actuarial Asset Basis)	-0.73%
Salary Increases	-0.79%
Active Decrements	-0.90%
Inactive Mortality	-0.03%
State Monies Credit	-0.21%
UAAL Fresh Start	1.34%
Other	<u>0.24%</u>
Total Change in Contribution	-1.08%
(3) Contribution Determined as of October 1, 2018	13.22%

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Method <u>10/1/2018</u>	Old Method <u>10/1/2018</u>	<u>10/1/2017</u>
A. Participant Data			
Actives	112	112	115
Service Retirees	33	33	33
DROP Retirees	2	2	2
Beneficiaries	2	2	2
Disability Retirees	8	8	8
Terminated Vested	<u>63</u>	<u>63</u>	<u>50</u>
Total	220	220	210
Total Annual Payroll	\$7,466,896	\$7,466,896	\$7,608,808
Payroll Under Assumed Ret. Age	7,330,806	7,330,806	7,476,562
Annual Rate of Payments to:			
Service Retirees	1,139,755	1,139,755	1,163,922
DROP Retirees	169,475	169,475	169,475
Beneficiaries	58,940	58,940	44,733
Disability Retirees	228,149	228,149	228,149
Terminated Vested	342,137	342,137	205,936
B. Assets			
Actuarial Value (AVA) ¹	40,627,013	40,627,013	37,286,544
Market Value (MVA) ¹	42,310,653	42,310,653	37,909,109
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	27,524,683	27,524,683	26,846,739
Disability Benefits	1,567,516	1,567,516	1,612,129
Death Benefits	347,935	347,935	356,524
Vested Benefits	2,243,295	2,243,295	2,387,855
Refund of Contributions	51,486	51,486	52,121
Service Retirees	12,201,375	12,201,375	12,711,728
DROP Retirees ¹	2,487,337	2,487,337	2,311,504
Beneficiaries	627,264	627,264	342,867
Disability Retirees	2,592,104	2,592,104	2,618,031
Terminated Vested	2,238,802	2,238,802	1,378,891
Share Plan Balances ¹	<u>545,899</u>	<u>545,899</u>	<u>340,261</u>
Total	52,427,696	52,427,696	50,958,650

C. Liabilities - (Continued)	New Method <u>10/1/2018</u>	Old Method <u>10/1/2018</u>	<u>10/1/2017</u>
Present Value of Future Salaries	68,996,558	68,996,558	72,162,794
Present Value of Future Member Contributions	2,414,880	2,414,880	2,525,698
Normal Cost (Retirement)	1,020,003	1,020,003	1,034,191
Normal Cost (Disability)	117,477	117,477	114,755
Normal Cost (Death)	16,493	16,493	17,077
Normal Cost (Vesting)	147,402	147,402	155,629
Normal Cost (Refunds)	<u>12,546</u>	<u>12,546</u>	<u>13,489</u>
Total Normal Cost	1,313,921	1,313,921	1,335,141
Present Value of Future Normal Costs	11,479,542	11,479,542	11,985,332
Accrued Liability (Retirement)	18,260,769	18,260,769	17,191,019
Accrued Liability (Disability)	674,282	674,282	690,495
Accrued Liability (Death)	204,489	204,489	203,876
Accrued Liability (Vesting)	1,107,185	1,107,185	1,175,595
Accrued Liability (Refunds)	8,648	8,648	9,051
Accrued Liability (Inactives) ¹	20,146,882	20,146,882	19,363,021
Share Plan Balances ¹	<u>545,899</u>	<u>545,899</u>	<u>340,261</u>
Total Actuarial Accrued Liability (EAN AL)	40,948,154	40,948,154	38,973,318
Unfunded Actuarial Accrued Liability (UAAL)	321,141	321,141	1,686,774
Funded Ratio (AVA / EAN AL)	99.2%	99.2%	95.7%

D. Actuarial Present Value of Accrued Benefits	New Method <u>10/1/2018</u>	Old Method <u>10/1/2018</u>	<u>10/1/2017</u>
Vested Accrued Benefits			
Inactives + Share Plan Balances ¹	20,692,781	20,692,781	19,703,282
Actives	9,316,704	9,316,704	8,389,916
Member Contributions	<u>1,470,144</u>	<u>1,470,144</u>	<u>1,370,233</u>
Total	31,479,629	31,479,629	29,463,431
Non-vested Accrued Benefits	<u>1,174,428</u>	<u>1,174,428</u>	<u>1,128,666</u>
Total Present Value Accrued Benefits (PVAB)	32,654,057	32,654,057	30,592,097
Funded Ratio (MVA / PVAB)	129.6%	129.6%	123.9%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	0	0	
New Accrued Benefits	0	1,392,145	
Benefits Paid	0	(1,493,956)	
Interest	0	2,163,771	
Other	<u>0</u>	<u>0</u>	
Total	0	2,061,960	

	New Method	Old Method	
Valuation Date	10/1/2018	10/1/2018	10/1/2017
Applicable to Fiscal Year Ending	<u>9/30/2020</u>	<u>9/30/2020</u>	<u>9/30/2019</u>

E. Pension Cost

Normal Cost (with interest)			
% of Total Annual Payroll ²	18.57	18.57	18.51
Administrative Expenses (with interest)			
% of Total Annual Payroll ²	0.90	0.90	0.88
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 5 years (as of 10/1/2018, with interest)			
% of Total Annual Payroll ²	1.04	(0.30)	2.13
Minimum Required Contribution			
% of Total Annual Payroll ²	20.51	19.17	21.52
Expected Member Contributions			
% of Total Annual Payroll ²	3.50	3.50	3.50
Expected City and State Contribution			
% of Total Annual Payroll ²	17.01	15.67	18.02

F. Past Contributions

Plan Years Ending:	<u>9/30/2018</u>
City and State Requirement	1,215,501
Actual Contributions Made:	
Members (excluding buyback)	248,932
City	937,694
State	<u>277,807</u>
Total	1,464,433

G. Net Actuarial (Gain)/Loss (1,280,614)

¹ The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2018 and 9/30/2017.

² Contributions developed as of 10/1/2018 are expressed as a percentage of total annual payroll at 10/1/2018 of \$7,330,806.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2018	321,141
2019	265,576
2020	205,982
2021	142,068
2022	73,520
2023	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2018	2.79%	5.11%
Year Ended 9/30/2017	6.98%	5.11%
Year Ended 9/30/2016	2.94%	6.05%
Year Ended 9/30/2015	1.47%	6.22%
Year Ended 9/30/2014	6.55%	6.28%

(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 9/30/2018	10.99%	8.28%	7.25%
Year Ended 9/30/2017	11.19%	8.12%	7.25%
Year Ended 9/30/2016	8.61%	8.74%	7.50%
Year Ended 9/30/2015	1.72%	7.80%	7.50%
Year Ended 9/30/2014	9.20%	9.08%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2018	\$7,466,896
	10/1/2008	6,059,891
(b) Total Increase		23.22%
(c) Number of Years		10.00
(d) Average Annual Rate		2.11%

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 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
(Prior to UAAL Fresh Start)

(1) Unfunded Actuarial Accrued Liability as of October 1, 2017	\$1,686,774
(2) Sponsor Normal Cost developed as of October 1, 2017	1,073,461
(3) Expected administrative expenses for the year ended September 30, 2018	63,529
(4) Expected interest on (1), (2) and (3)	202,420
(5) Sponsor contributions to the System during the year ended September 30, 2018	1,215,501
(6) Expected interest on (5)	41,479
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2018 (1)+(2)+(3)+(4)-(5)-(6)	1,769,204
(8) State Monies Credit	(167,449)
(9) Change to UAAL due to Actuarial (Gain)/Loss	(1,280,614)
(10) Unfunded Actuarial Accrued Liability as of October 1, 2018	321,141

<u>Type of Base</u>	<u>Date Established</u>	<u>Years Remaining</u>	<u>10/1/2018 Amount</u>	<u>Amortization Amount</u>
Method Change	10/1/2010	12	1,607,113	191,182
Benefit Change	10/1/2010	12	5,846	695
Reconciliation Base	10/1/2011	3	(357,007)	(127,422)
Actuarial Loss	10/1/2011	3	363,768	129,835
Benefit Change	10/1/2011	13	(60,922)	(6,893)
Actuarial Loss	10/1/2012	4	238,001	65,885
Actuarial Loss	10/1/2013	5	75,942	17,385
Actuarial Gain	10/1/2014	6	(116,716)	(23,008)
Actuarial Gain	10/1/2015	7	(611,619)	(106,740)
Benefit Change	10/1/2015	27	159,266	12,683
Reserve Credit	10/1/2015	17	(1,192,071)	(115,823)
Reconciliation Base	10/1/2016	18	(206,031)	(19,443)
State Monies Credit	10/1/2016	18	(171,071)	(16,144)
Assumption Changes	10/1/2016	18	2,556,152	241,228
Actuarial Gain	10/1/2016	8	(816,397)	(128,716)
State Monies Credit	10/1/2017	19	(153,175)	(14,078)
Actuarial Loss	10/1/2017	9	448,125	64,815
Actuarial Gain	10/1/2018	10	(1,280,614)	(171,975)
State Monies Credit	10/1/2018	20	<u>(167,449)</u>	<u>(15,025)</u>
			321,141	(21,559)

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES
(Following UAAL Fresh Start)

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2017	\$1,686,774
(2)	Sponsor Normal Cost developed as of October 1, 2017	1,073,461
(3)	Expected administrative expenses for the year ended September 30, 2018	63,529
(4)	Expected interest on (1), (2) and (3)	202,420
(5)	Sponsor contributions to the System during the year ended September 30, 2018	1,215,501
(6)	Expected interest on (5)	41,479
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2018 (1)+(2)+(3)+(4)-(5)-(6)	1,769,204
(8)	State Monies Credit	(167,449)
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(1,280,614)
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2018	321,141

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2018 <u>Amount</u>	Amortization <u>Amount</u>
UAAL Fresh Start	10/1/2018	5	<u>321,141</u>	<u>73,518</u>
			321,141	73,518

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2017	\$1,686,774
 (2) Expected UAAL as of October 1, 2018	 1,769,204
 (3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(386,841)
Salary Increases	(415,796)
Active Decrements	(471,794)
Inactive Mortality	(15,223)
Other	<u>9,040</u>
Increase in UAAL due to (Gain)/Loss	(1,280,614)
State Monies Credit	<u>(167,449)</u>
 (4) Actual UAAL as of October 1, 2018	 \$321,141

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

7.25% 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

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.

Funding Method

Entry Age Normal Actuarial Cost Method.

Salary Increases

<u>Credited Service</u>	<u>Rates</u>
First Year	12.0%
1-4	5.0%
5-14	4.5%
15+	4.0%

The above rates were adopted by the Board of Trustees in conjunction with the August 31, 2016 Experience Study.

Normal Retirement Rates

<u>Service</u>	<u>Age</u>	<u>Probability of Retirement</u>
6-24	55	40%
	56-63	10%
	64+	100%
25-27	All	0%
28+	All	100%

The above rates were adopted by the Board as the result of an Experience Study dated August 31, 2016.

Early Retirement Rates

<u>Age</u>	<u>Rates</u>
50	2.4%
51	2.2%
52	2.0%
53	1.8%
54	1.6%

The above rates were reviewed and maintained by the Board of Trustees in conjunction with the August 31, 2016 Experience Study.

Termination Rates

<u>Credited Service</u>	<u>Rates</u>
First Year	9.0%
1	8.0%
2	8.0%
3	9.0%
4	9.0%
5-9	4.0%
10-14	4.0%
15+	2.0%

The above rates were adopted by the Board of Trustees in conjunction with the August 31, 2016 Experience Study.

Terminal Leave Pay

<u>Present Value of Retirement Liability</u>	<u>Hired prior to 7/1/2001</u>	<u>Percentage Increase to Liability</u>	
		<u>Hired 7/1/2001 – 7/1/2006</u>	<u>Hired after 7/1/2006</u>
Normal	5.0%	3.75%	2.5%
Early	2.5%	1.875%	1.25%
Vesting	2.5%	1.875%	1.25%
Death	2.5%	1.875%	1.25%
Disability	2.5%	1.875%	1.25%

The assumed rates are based on data provided by the City. Also, no liability increases are utilized for Members hired after June 30, 2011.

Disability Rates

<u>Age</u>	<u>Probability of Disability</u>
20	0.14%
25	0.15%
30	0.18%
35	0.23%
40	0.30%
45	0.51%
50	1.00%

The above rates were adopted by the Board as the result of a prior Experience Study.

Additionally, it is assumed that 75% of disablements are service-related.

Administrative Expenses

\$63,781 annually, based on actual expenses incurred in the prior fiscal year.

Actuarial Value of Assets

The Actuarial Value of Assets utilizes a five-year smoothing methodology. The annual difference between expected and actual investment earnings (Market Value, net of investment-related expenses), is phased-in over a five-year period.

GLOSSARY

Total Annual Payroll is the projected annual rate of pay as of the valuation date for 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.

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

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.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
1998	99,825.42	_____%
1999	109,431.71	9.6%
2000	116,285.25	6.3%
2001	143,255.06	23.2%
2002	154,813.02	8.1%
2003	167,494.78	8.2%
2004	212,965.87	27.1%
2005	235,167.58	10.4%
2006	292,419.90	24.3%
2007	315,397.91	7.9%
2008	375,416.07	19.0%
2009	479,938.23	27.8%
2010	394,816.89	-17.7%
2011	385,389.67	-2.4%
2012	407,306.15	5.7%
2013	436,384.06	7.1%
2014	449,044.38	2.9%
2015	464,800.33	3.5%
2016	527,034.80	13.4%
2017	569,314.24	8.0%
2018	612,706.30	7.6%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2018

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	1,378,006.56	1,378,006.56
Cash	256,804.73	256,804.73
Total Cash and Equivalents	1,634,811.29	1,634,811.29
Receivables:		
Investment Income	91,044.38	91,044.38
Total Receivable	91,044.38	91,044.38
Investments:		
U. S. Bonds and Bills	4,182,939.18	4,156,969.55
Federal Agency Guaranteed Securities	423,235.11	405,568.54
Corporate Bonds	2,826,021.69	2,834,582.05
Stocks	11,219,441.28	13,430,256.84
Mutual Funds:		
Fixed Income	1,985,164.21	1,773,849.22
Equity	11,084,231.49	13,986,513.70
Pooled/Common/Commingled Funds:		
Real Estate	3,294,573.00	4,173,655.00
Total Investments	35,015,605.96	40,761,394.90
Total Assets	36,741,461.63	42,487,250.57
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	15,637.80	15,637.80
Administrative Expenses	5,979.67	5,979.67
Miscellaneous	15.91	15.91
To General Employees' Trust Fund	46.14	46.14
Prepaid Member Contribution	2,321.26	2,321.26
Prepaid City Contribution	152,596.50	152,596.50
Total Liabilities	176,597.28	176,597.28
NET POSITION RESTRICTED FOR PENSIONS	36,564,864.35	42,310,653.29

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

ADDITIONS

Contributions:			
Member		248,932.40	
City		937,693.91	
State		612,706.30	
Total Contributions			1,799,332.61
Investment Income:			
Net Realized Gain (Loss)	889,356.89		
Unrealized Gain (Loss)	2,345,334.54		
Net Increase in Fair Value of Investments		3,234,691.43	
Interest & Dividends		1,086,585.16	
Less Investment Expense ¹		(161,327.63)	
Net Investment Income			4,159,948.96
Total Additions			5,959,281.57

DEDUCTIONS

Distributions to Members:			
Benefit Payments		1,433,612.44	
Lump Sum DROP Distributions		0.00	
Lump Sum Share Distributions		0.00	
Lump Sum PLOP Distributions		27,360.73	
Refunds of Member Contributions		32,983.20	
Total Distributions			1,493,956.37
Administrative Expense			63,780.94
Total Deductions			1,557,737.31
Net Increase in Net Position			4,401,544.26

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year		37,909,109.03
End of the Year		42,310,653.29

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

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS AS OF SEPTEMBER 30

	2018	2019	2020	2021	2022
A. Preliminary Actuarial Value Prior Year	37,286,544				
B. Market Value Beginning of Year	37,909,109				
C. Market Value End of Year	42,310,653				
D. Non-investment net cash flow	241,595				
E. Investment Return					
1. Actual market return net of investment expenses: C - B - D	4,159,949				
2. Expected return of 7.25%: (B + D/2) * 0.0725	2,757,168				
3. Excess/(shortfall): E1 - E2	1,402,781				
F. Phased-in recognition of Investment Return					
1. Current year: 20% of E3	280,556				
2. 20% from first prior year	262,252	280,556			
3. 20% from second prior year	63,226	262,252	280,556		
4. 20% from third prior year	(351,789)	63,226	262,252	280,556	
5. 20% from fourth prior year	87,461	(351,790)	63,224	262,254	280,557
6. Total phased in investment return	341,706	254,244	606,032	542,810	280,557
G. Actuarial Value (AV) End of Year					
1. Preliminary AV end of year: A + D + E2 + F6	40,627,013				
2. Upper corridor limit: 120% * C	50,772,784				
3. Lower corridor limit: 80% * C	33,848,523				
4. Actuarial value end of year	40,627,013				
H. Difference between MV and AV:	1,683,641				
I. Net Investment Income:					
1. Interest and Dividends	1,086,585				
2. Realized Gains (Losses)	889,357				
2. Change in Actuarial Value	1,284,259				
3. Investment Expenses	(161,328)				
	3,098,874				
Actuarial Assets Rate of Return = 2I/(A+G-I):	8.28%				
Market Value of Assets Rate of Return:	10.99%				
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	386,841				

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

REVENUES

Contributions:		
Member	248,932.40	
Buy-Back	0.00	
City	937,693.91	
City for Members	0.00	
State	612,706.30	
 Total Contributions		 1,799,332.61
Earnings from Investments:		
Interest & Dividends	1,086,585.16	
Miscellaneous Income	0.00	
Net Realized Gain (Loss)	889,356.89	
Change in Actuarial Value	1,284,259.28	
 Total Earnings and Investment Gains		 3,260,201.33
 Other		 0.00

EXPENDITURES

Distributions to Members:		
Benefit Payments	1,433,612.44	
Lump Sum DROP Distributions	0.00	
Lump Sum Share Distributions	0.00	
Lump Sum PLOP Distributions	27,360.73	
Refunds of Member Contributions	32,983.20	
 Total Distributions		 1,493,956.37
Expenses:		
Investment related ¹	161,327.63	
Administrative	63,780.94	
 Total Expenses		 225,108.57
 Change in Net Assets for the Year		 3,340,469.00
 Net Assets Beginning of the Year		 37,286,543.69
 Net Assets End of the Year ²		 40,627,012.69

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, 2017 to September 30, 2018

Beginning of the Year Balance	49,769.35
Plus Additions	169,474.80
Investment Return Earned	15,691.34
Less Distributions	0.00
End of the Year Balance	234,935.49

SUPPLEMENTAL CHAPTER 185 SHARE PLAN ACTIVITY
October 1, 2017 through September 30, 2018

9/30/2017 Balance	340,261.00
Prior Year Adjustment	272.52
Plus Additions	167,449.66
Investment Return Earned	37,935.42
Administrative Fees	(19.25)
Less Distributions	0.00
9/30/2018 Balance	545,899.35

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

(1)	Total Required Contribution Rate	20.59%
(2)	Pensionable Payroll Derived from Member Contributions	\$7,112,354.29
(3)	Total Required Contribution (1) x (2)	1,464,433.75
(4)	Less Actual Member Contributions	(248,932.40)
(5)	Less Allowable State Contribution	<u>(277,807.44)</u>
(6)	Equals Required City Contribution for Fiscal 2018	937,693.91
(7)	Less 2017 Prepaid Contribution	(144,134.63)
(8)	Less Actual City Contributions	<u>(946,155.78)</u>
(9)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2018	(\$152,596.50)

STATISTICAL DATA

	<u>10/1/2015</u>	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>
<u>Actives</u>				
Number	117	114	115	112
Average Current Age	38.4	38.0	38.4	38.7
Average Age at Employment	29.7	29.3	29.6	29.6
Average Past Service	8.7	8.7	8.8	9.1
Average Annual Salary	\$64,429	\$63,635	\$66,164	\$66,669
<u>Service Retirees</u>				
Number	29	33	33	33
Average Current Age	64.8	64.5	65.5	66.4
Average Annual Benefit	\$33,258	\$35,270	\$35,270	\$34,538
<u>DROP Retirees</u>				
Number	0	0	2	2
Average Current Age	N/A	N/A	49.8	50.8
Average Annual Benefit	N/A	N/A	\$84,738	\$84,738
<u>Beneficiaries</u>				
Number	2	2	2	2
Average Current Age	59.9	60.9	61.9	65.1
Average Annual Benefit	\$22,367	\$22,367	\$22,367	\$29,470
<u>Disability Retirees</u>				
Number	8	8	8	8
Average Current Age	54.2	55.2	56.2	57.2
Average Annual Benefit	\$28,519	\$28,519	\$28,519	\$28,519
<u>Terminated Vested</u>				
Number	38	46	50	63
Average Current Age ¹	44.3	43.8	43.4	44.2
Average Annual Benefit ²	\$12,850	\$14,068	\$15,841	\$18,007

¹ 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	0	0	0	0	0	0	0	0	0	0	0
20 - 24	4	1	0	0	0	0	0	0	0	0	0	5
25 - 29	6	2	4	0	0	2	0	0	0	0	0	14
30 - 34	1	1	2	3	1	6	5	0	0	0	0	19
35 - 39	1	2	1	0	1	7	12	5	0	0	0	29
40 - 44	0	0	0	0	0	5	4	4	0	0	0	13
45 - 49	1	0	0	0	0	2	7	4	2	0	0	16
50 - 54	1	0	0	0	1	2	4	0	1	1	0	10
55 - 59	0	0	0	0	0	2	1	1	0	0	0	4
60 - 64	0	1	0	0	0	0	0	0	0	0	0	1
65+	0	0	0	0	0	0	1	0	0	0	0	1
Total	14	7	7	3	3	26	34	14	3	1	0	112

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2017	115
b. Terminations	
i. Vested (partial or full) with deferred benefits	(14)
ii. Non-vested or full lump sum distribution received	(3)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(1)
f. DROP	<u>0</u>
g. Continuing participants	97
h. New entrants	<u>15</u>
i. Total active life participants in valuation	112

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 <u>Deferred</u>	<u>Total</u>
a. Number prior valuation	33	2	2	8	50	95
Retired	1	0	0	0	0	1
DROP	0	0	0	0	0	0
Vested Deferred	0	0	0	0	16	16
Death, With Survivor	(1)	0	1	0	0	0
Death, No Survivor	0	0	0	0	0	0
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	(3)	(3)
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	(1)	0	0	(1)
Data Corrections	0	0	0	0	0	0
b. Number current valuation	33	2	2	8	63	108

SUMMARY OF CURRENT PLAN
(Through Ordinance 17-35)

<u>Eligibility</u>	Full-time employees who are classified as Police Officers or Firefighters participate as a condition of employment.
<u>Credited Service</u>	Total years and fractional parts of years of employment with the City as a Police Officer or Firefighter.
<u>Salary</u>	Gross Compensation, excluding extra duty detail work performed for a second party.
<u>Average Final Compensation</u>	Average Salary for the 5 best years of the 10 years immediately preceding retirement or termination.
<u>Member Contributions</u>	3.5% of Salary.
<u>City and State Contributions</u>	Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII, Chapter 112, F.S.
<u>Normal Retirement</u>	
Date	Earlier of: 1) age 55 with 6 years of Credited Service, or 2) the completion of 25 years of Credited Service, regardless of age.
Benefit	3.0% of Average Final Compensation for each year of Credited Service.
Maximum Benefit	95% of Average Final Compensation.
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Eligibility	Age 50 with 6 years of Credited Service.
Benefit	Accrued benefit, reduced 3% per year that the benefit commencement date precedes age 55.
<u>Vesting</u>	
Schedule	100% after 6 years of Credited Service.
Benefit Amount	Member will receive the vested portion of his (her) accrued benefit payable at the Early (reduced) or 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 (25% for Non-Service Incurred). The maximum benefit is 95% of Average Final Compensation.
Duration	Payable for life (with 120 payments guaranteed) or until recovery (as determined by the Board). Optional forms of payment are available.

Death Benefits

10 or more years of Credited Service	Monthly accrued benefit payable to designated beneficiary for 10 years at otherwise Early (reduced) or Normal (unreduced) Retirement Date.
Less than 10 years of Credited Service	Refund of accumulated contributions.
Post-Retirement	Benefits payable to beneficiary in accordance with option selected at retirement.

Deferred Retirement Option Plan

Eligibility	Firefighters only upon satisfaction of Normal Retirement requirements.
Participation	Up to thirty-six (36) months, but not beyond age 58. For firefighters who had first reached age 55 prior to the effective date the DROP option was added to this plan, participation up to 36 months is permitted without regard to the age 58 limitation.
Rate of Return	Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs) credited each Plan/Fiscal quarter.
Form of Distribution	Cash lump sum (options available) at termination of employment.

Supplement Benefit

Initial Crediting	Pursuant to a Mutual Consent Agreement between the City and Membership, \$81,875.69 from the Excess State Monies Reserve is allocated to eligible Firefighters for the fiscal year ended September 30, 2015.
Annual Crediting	50% of annual Chapter 185 Premium tax revenues received by the City in excess of \$231,706.15 (beginning with the fiscal year ending September 30, 2017) and 50% of annual Chapter 175 Premium tax revenues received by the City in excess of \$46,100.85 shall be allocated based on a Credited Service methodology.
Investment earnings	Eligible Share Accounts shall be credited or debited annually, based on the Plan's net-of-fees investment performance for the immediately preceding Plan Year.
Expenses	Allocated annually in proportion to individual Share Account Balances as a percentage of total plan assets.
Vesting	100% upon completion of six years of Credited Service, unless eligible for payment of benefits upon termination of employment.
Eligibility for Distribution	As soon as administratively practicable following the valuation date after termination of employment.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2018

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	1,378,007
Cash	256,805
Total Cash and Equivalents	1,634,812
Receivables:	
Investment Income	91,044
Total Receivable	91,044
Investments:	
U. S. Bonds and Bills	4,156,970
Federal Agency Guaranteed Securities	405,568
Corporate Bonds	2,834,582
Stocks	13,430,257
Mutual Funds:	
Fixed Income	1,773,849
Equity	13,986,514
Pooled/Common/Commingled Funds:	
Real Estate	4,173,655
Total Investments	40,761,395
Total Assets	42,487,251
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	15,638
Administrative Expenses	5,980
Miscellaneous	16
To General Employees' Trust Fund	46
Total Liabilities	21,680
NET POSITION RESTRICTED FOR PENSIONS	42,465,571

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

ADDITIONS

Contributions:

Member	271,701	
City	946,156	
State	612,706	
 Total Contributions		 1,830,563
 Investment Income:		
Net Increase in Fair Value of Investments	3,234,692	
Interest & Dividends	1,086,585	
Less Investment Expense ¹	(161,328)	
 Net Investment Income		 4,159,949
 Total Additions		 5,990,512

DEDUCTIONS

Distributions to Members:

Benefit Payments	1,433,613	
Lump Sum DROP Distributions	0	
Lump Sum Share Distributions	0	
Lump Sum PLOP Distributions	27,361	
Refunds of Member Contributions	32,983	
 Total Distributions		 1,493,957
 Administrative Expense		 63,781
 Total Deductions		 1,557,738
 Net Increase in Net Position		 4,432,774
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		38,032,797
 End of the Year		 42,465,571

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 City of Winter Garden Pension Plan for Firefighters and Police Officers is a single employer defined benefit pension plan administered by a Board of Trustees which acts as the administrator of the plan. The Board consists of 5 Trustees, 2 of whom are legal residents of the City who are appointed by the City Commission, 1 of whom is a Firefighter member and 1 of whom is a Police Officer member who are elected by a majority of the Firefighters and Police Officers who are members of the plan and a fifth Trustee who is chosen by a majority of the first 4 Trustees.

Plan Membership as of October 1, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	45
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	50
Active Plan Members	115
	210
	210

Benefits Provided

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

Normal Retirement:

Date: Earlier of: 1) age 55 with 6 years of Credited Service, or 2) the completion of 25 years of Credited Service, regardless of age.

Benefit: 3.0% of Average Final Compensation for each year of Credited Service.

Maximum Benefit: 95% of Average Final Compensation.

Early Retirement:

Eligibility: Age 50 with 6 years of Credited Service.

Accrued benefit, reduced 3% per year that the benefit commencement date precedes age 55.

Vesting:

Schedule: 100% after 6 years of Credited Service.

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

Disability:

Eligibility: Service Incurred: Covered from Date of Employment.

Non-Service Incurred: 10 years of Credited Service.

Benefit accrued to date of disability but not less than 42% of Average Final Compensation (25% for Non-Service Incurred). The maximum benefit is 95% of Average Final Compensation.

Death Benefits:

10 or more years of Credited Service: Monthly accrued benefit payable to designated beneficiary for 10 years at otherwise Early (reduced) or Normal (unreduced) Retirement Date.

Less than 10 years of Credited Service: Refund of accumulated contributions.

Supplemental Benefit:

Initial Crediting: Pursuant to a Mutual Consent Agreement between the City and Membership, \$81,875.69 from the Excess State Monies Reserve is allocated to eligible Firefighters for the fiscal year ended September 30, 2015.

Annual Crediting: 50% of annual Chapter 185 Premium tax revenues received by the City in excess of \$231,706.15 (beginning with the fiscal year ending September 30, 2017) and 50% of annual Chapter 175 Premium tax revenues received by the City in excess of \$46,100.85 shall be allocated based on a Credited Service methodology.

Investment earnings: Eligible Share Accounts shall be credited or debited annually, based on the Plan's net-of-fees investment performance for the immediately preceding Plan Year.

Expenses: Allocated annually in proportion to individual Share Account Balances as a percentage of total plan assets.

Vesting: 100% upon completion of six years of Credited Service, unless eligible for payment of benefits upon termination of employment.

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Contributions

Member Contributions: 3.5% of Salary.

City and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided 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:

<u>Asset Class</u>	<u>Target Allocation</u>
Domestic Equity	50.0%
International Equity	10.0%
Broad Market Fixed Income	25.0%
Global Fixed Income	5.0%
<u>Real Estate</u>	<u>10.0%</u>
<u>Total</u>	<u>100.0%</u>

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 10.99 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: Firefighters only upon satisfaction of Normal Retirement requirements

Participation: Up to thirty-six (36) months, but not beyond age 58. For firefighters who had first reached age 55 prior to the effective date the DROP option was added to this plan, participation up to 36 months is permitted without regard to the age 58 limitation.

Rate of Return: Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs) credited each Plan/Fiscal quarter.

The DROP balance as September 30, 2018 is \$234,935.

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	\$ 41,173,589
Plan Fiduciary Net Position	\$ (42,465,571)
Sponsor's Net Pension Liability	<u>\$ (1,291,982)</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	103.14%

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	Service based
Discount Rate	7.25%
Investment Rate of Return	7.25%

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 Active Lives:

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

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

Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

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

The most recent actuarial experience study used to review the other significant assumptions was dated August 31, 2016.

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:

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

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Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.25 percent.

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

	1% Decrease	Current Discount Rate	1% Increase
	6.25%	7.25%	8.25%
Sponsor's Net Pension Liability	\$ 4,603,334	\$ (1,291,982)	\$ (6,130,748)

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	1,326,301	1,249,018	1,285,416
Interest	2,768,703	2,588,829	2,406,315
Change in Excess State Money	-	-	(1,201,957)
Share Plan Allocation	167,449	145,812	-
Changes of benefit terms	-	-	142,867
Differences between Expected and Actual Experience	795,401	(97,499)	(608,444)
Changes of assumptions	-	-	2,060,985
Benefit Payments, including Refunds of Employee Contributions	(1,493,957)	(1,470,879)	(1,497,286)
Net Change in Total Pension Liability	3,563,897	2,415,281	2,587,896
Total Pension Liability - Beginning	37,609,691	35,194,410	32,606,514
Total Pension Liability - Ending (a)	<u>\$ 41,173,588</u>	<u>\$ 37,609,691</u>	<u>\$ 35,194,410</u>
Plan Fiduciary Net Position			
Contributions - Employer	946,156	939,856	1,035,014
Contributions - State	612,706	569,430	527,035
Contributions - Employee	271,701	240,164	262,084
Net Investment Income	4,159,949	3,780,423	2,655,638
Benefit Payments, including Refunds of Employee Contributions	(1,493,957)	(1,470,879)	(1,497,286)
Administrative Expense	(63,781)	(63,529)	(52,087)
Net Change in Plan Fiduciary Net Position	4,432,774	3,995,465	2,930,398
Plan Fiduciary Net Position - Beginning	38,032,797	34,037,332	31,106,934
Plan Fiduciary Net Position - Ending (b)	<u>\$ 42,465,571</u>	<u>\$ 38,032,797</u>	<u>\$ 34,037,332</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (1,291,983)</u>	<u>\$ (423,106)</u>	<u>\$ 1,157,078</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	103.14%	101.12%	96.71%
Covered Employee Payroll	\$ 7,112,354	\$ 7,456,214	\$ 7,478,083
Net Pension Liability as a percentage of Covered Employee Payroll	-18.17%	-5.67%	15.47%

Notes to Schedule:

Changes of benefit terms

For measurement date 09/30/2016, amounts reported as changes of benefit terms resulted from Ordinances 16-60 and 16-61, adopted and effective November 10, 2016 implemented the following changes:

1. A 3.0% benefit accrual rate for all years of Credited Service. Previously, the benefit accrual rate was 3.0% for the first 25 years of Credited Service, and 2.0% per year thereafter. The maximum benefit limitation of 95% of Average Final Compensation remains unchanged.
2. Establishment of a Share Plan.
3. Establishment of a DROP option upon satisfaction of Normal Retirement eligibility.
4. Compliance language pursuant to requirements under the Internal Revenue
5. The use of State Monies per Collective Bargaining Agreements between Plan Members and the City.

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Changes of assumptions:

For measurement date 09/30/2016, amounts reported as changes of assumptions was a result of the Experience Study dated August 31, 2016, the Board has adopted changes to the following assumptions in conjunction with this valuation of the Plan:

- Salary Increases
- Mortality Rates
- Normal Retirement Rates
- Withdrawal Rates
- Investment Return

Details of the above assumption changes can be found in the Actuarial Assumptions and Methods section of the 10/01/2016 Valuation Report.

Additionally, 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.

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

	<u>09/30/2015</u>	<u>09/30/2014</u>
Total Pension Liability		
Service Cost	1,247,782	1,170,789
Interest	2,207,981	2,055,663
Change in Excess State Money	186,993	171,237
Share Plan Allocation	-	-
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	368,676	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	<u>(1,223,698)</u>	<u>(1,321,368)</u>
Net Change in Total Pension Liability	2,787,734	2,076,321
Total Pension Liability - Beginning	<u>29,818,780</u>	<u>27,742,459</u>
Total Pension Liability - Ending (a)	<u>\$ 32,606,514</u>	<u>\$ 29,818,780</u>
Plan Fiduciary Net Position		
Contributions - Employer	1,043,187	992,159
Contributions - State	464,800	449,044
Contributions - Employee	242,212	247,075
Net Investment Income	515,399	2,495,803
Benefit Payments, including Refunds of Employee Contributions	<u>(1,223,698)</u>	<u>(1,321,368)</u>
Administrative Expense	<u>(43,046)</u>	<u>(35,402)</u>
Net Change in Plan Fiduciary Net Position	998,854	2,827,311
Plan Fiduciary Net Position - Beginning	<u>30,108,080</u>	<u>27,280,769</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 31,106,934</u>	<u>\$ 30,108,080</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 1,499,580</u>	<u>\$ (289,300)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	95.40%	100.97%
Covered Employee Payroll	\$ 6,920,183	\$ 7,059,293
Net Pension Liability as a percentage of Covered Employee Payroll	21.67%	-4.10%

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 Employee Payroll	Contributions as a percentage of Covered Employee Payroll
09/30/2018	\$ 1,215,501	\$ 1,223,964	\$ (8,463)	\$ 7,112,354	17.21%
09/30/2017	\$ 1,124,397	\$ 1,217,663	\$ (93,266)	\$ 7,456,214	16.33%
09/30/2016	\$ 1,312,404	\$ 1,312,821	\$ (417)	\$ 7,478,083	17.56%
09/30/2015	\$ 1,270,544	\$ 1,320,994	\$ (50,450)	\$ 6,920,183	19.09%
09/30/2014	\$ 1,269,966	\$ 1,269,966	\$ -	\$ 7,059,293	17.99%

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:

Funding Method: Entry Age Normal Actuarial Cost Method.
 Amortization Method: Level Dollar, Closed.
 Remaining Amortization Period: 29 Years (as of 10/01/2016).
 Mortality: *Healthy 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 assumed rates of mortality 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 the July 1, 2015 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements

Interest Rate: 7.25% 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 Rates:	Service	Age	Probability of Retirement
	6-24	55	40%
		56-63	10%
		64+	100%
	25-27	All	0%
	28+	All	100%

The above rates were adopted by the Board as the result of an Experience Study dated August 31, 2016.

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Early Retirement Rates:

Age	Rates
50	2.4%
51	2.2%
52	2.0%
53	1.8%
54	1.6%

The above rates were reviewed and maintained by the Board of Trustees in conjunction with the August 31, 2016 Experience Study.

Termination Rates:

Credited Service	Rates
First Year	9.0%
1	8.0%
2	8.0%
3	9.0%
4	9.0%
5-9	4.0%
10-14	4.0%
15+	2.0%

The above rates were adopted by the Board of Trustees in conjunction with the August 31, 2016 Experience Study.

Salary Increases:

Credited Service	Rates
First Year	12.0%
1-4	5.0%
5-14	4.5%
15+	4.0%

The above rates were adopted by the Board of Trustees in conjunction with the August 31, 2016 Experience Study.

Terminal Leave Pay:

Present Value of Retirement Liability	Percentage Increase to Liability		
	Hired prior to 07/01/2001	Hired 07/01/2001 - 07/01/2006	Hired after 07/01/2006
Normal	5.0%	3.75%	2.50%
Early	2.5%	1.875%	1.25%
Vesting	2.5%	1.875%	1.25%
Death	2.5%	1.875%	1.25%
Disability	2.5%	1.875%	1.25%

The assumed rates are based on data provided by the City. Also, no liability increases are utilized for Members hired after June 30, 2011.

Disability Rates:

Age	Probability of Disability
20	0.14%
25	0.15%
30	0.18%
35	0.23%
40	0.30%
45	0.51%
50	1.00%

The above rates were adopted by the Board as the result of a prior Experience Study. Additionally, it is assumed that 75% of disablements and active Member deaths are service related.

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Cost-of-Living Adjustments:
Payroll Increases:
Asset Valuation Method:

None.

None.

The Actuarial Value of Assets utilizes a five-year smoothing methodology. The annual difference between expected and actual investment earnings (Market Value, net of investment-related expenses), is phased-in 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
09/30/2018	10.99%
09/30/2017	11.19%
09/30/2016	8.61%
09/30/2015	1.72%
09/30/2014	9.20%

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2018)

General Information about the Pension Plan

Plan Description

The City of Winter Garden Pension Plan for Firefighters and Police Officers is a single employer defined benefit pension plan administered by a Board of Trustees which acts as the administrator of the plan. The Board consists of 5 Trustees, 2 of whom are legal residents of the City who are appointed by the City Commission, 1 of whom is a Firefighter member and 1 of whom is a Police Officer member who are elected by a majority of the Firefighters and Police Officers who are members of the plan and a fifth Trustee Full-time employees who are classified as Police Officers or Firefighters participate as a condition of employment.

Plan Membership as of October 1, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	45
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	50
Active Plan Members	115
	210
	210

Benefits Provided

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

Normal Retirement:

Date: Earlier of: 1) age 55 with 6 years of Credited Service, or 2) the completion of 25 years of Credited Service, regardless of age.

Benefit: 3.0% of Average Final Compensation for each year of Credited Service.

Maximum Benefit: 95% of Average Final Compensation.

Early Retirement:

Eligibility: Age 50 with 6 years of Credited Service.

Accrued benefit, reduced 3% per year that the benefit commencement date precedes age 55.

Vesting:

Schedule: 100% after 6 years of Credited Service.

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

Disability:

Eligibility: Service Incurred: Covered from Date of Employment.

Non-Service Incurred: 10 years of Credited Service.

Benefit accrued to date of disability but not less than 42% of Average Final Compensation (25% for Non-Service Incurred). The maximum benefit is 95% of Average Final Compensation.

Death Benefits:

10 or more years of Credited Service: Monthly accrued benefit payable to designated beneficiary for 10 years at otherwise Early (reduced) or Normal (unreduced) Retirement Date.

Less than 10 years of Credited Service: Refund of accumulated contributions.

Supplemental Benefit:

Initial Crediting: Pursuant to a Mutual Consent Agreement between the City and Membership, \$81,875.69 from the Excess State Monies Reserve is allocated to eligible Firefighters for the fiscal year ended September 30, 2015.

Annual Crediting: 50% of annual Chapter 185 Premium tax revenues received by the City in excess of \$231,706.15 (beginning with the fiscal year ending September 30, 2017) and 50% of annual Chapter 175 Premium tax revenues received by the City in excess of \$46,100.85 shall be allocated based on a Credited Service methodology.

Investment earnings: Eligible Share Accounts shall be credited or debited annually, based on the Plan's net-of-fees investment performance for the immediately preceding Plan Year.

Expenses: Allocated annually in proportion to individual Share Account Balances as a percentage of total plan assets.

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Contributions

Member Contributions: 3.5% of Salary.

City and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided 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, 2017 through September 30, 2018.

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	Service based
Discount Rate	7.25%
Investment Rate of Return	7.25%

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 Active Lives:

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

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

Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

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

The most recent actuarial experience study used to review the other significant assumptions was dated August 31, 2016.

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:

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%
Global Fixed Income	5.0%	3.50%
Real Estate	10.0%	4.50%
Total	100.0%	

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Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.25 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)
Balance at September 30, 2017	\$ 37,609,691	\$ 38,032,797	\$ (423,106)
Changes for a Year:			
Service Cost	1,326,301	-	1,326,301
Interest	2,768,703	-	2,768,703
Share Plan Allocation	167,449	-	167,449
Differences between Expected and Actual Experience	795,401	-	795,401
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	946,156	(946,156)
Contributions - State	-	612,706	(612,706)
Contributions - Employee	-	271,701	(271,701)
Net Investment Income	-	4,159,949	(4,159,949)
Benefit Payments, including Refunds of Employee Contributions	(1,493,957)	(1,493,957)	-
Administrative Expense	-	(63,781)	63,781
Net Changes	3,563,897	4,432,774	(868,877)
Balance at September 30, 2018	\$ 41,173,588	\$ 42,465,571	\$ (1,291,983)

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.25%	7.25%	8.25%
Sponsor's Net Pension Liability	\$ 4,603,334	\$ (1,291,983)	\$ (6,130,748)

Pension Plan Fiduciary Net Position.

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

**PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED
INFLOWS OF RESOURCES RELATED TO PENSIONS**

For the year ended September 30, 2018, the Sponsor will recognize a Pension Expense of \$1,406,100.

On September 30, 2018, 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	804,666	417,324
Changes of assumptions	1,177,704	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	1,669,855
Total	\$ 1,982,370	\$ 2,087,179

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	\$	118,836
2020	\$	(233,331)
2021	\$	(232,314)
2022	\$	28,670
2023	\$	99,701
Thereafter	\$	113,629

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	1,326,301	1,249,018	1,285,416
Interest	2,768,703	2,588,829	2,406,315
Change in Excess State Money	-	-	(1,201,957)
Share Plan Allocation	167,449	145,812	-
Changes of benefit terms	-	-	142,867
Differences between Expected and Actual Experience	795,401	(97,499)	(608,444)
Changes of assumptions	-	-	2,060,985
Benefit Payments, including Refunds of Employee Contributions	(1,493,957)	(1,470,879)	(1,497,286)
Net Change in Total Pension Liability	3,563,897	2,415,281	2,587,896
Total Pension Liability - Beginning	37,609,691	35,194,410	32,606,514
Total Pension Liability - Ending (a)	<u>\$ 41,173,588</u>	<u>\$ 37,609,691</u>	<u>\$ 35,194,410</u>
Plan Fiduciary Net Position			
Contributions - Employer	946,156	939,856	1,035,014
Contributions - State	612,706	569,430	527,035
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Benefit Payments, including Refunds of Employee Contributions	(1,493,957)	(1,470,879)	(1,497,286)
Administrative Expense	(63,781)	(63,529)	(52,087)
Net Change in Plan Fiduciary Net Position	4,432,774	3,995,465	2,930,398
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Plan Fiduciary Net Position - Ending (b)	<u>\$ 42,465,571</u>	<u>\$ 38,032,797</u>	<u>\$ 34,037,332</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (1,291,983)</u>	<u>\$ (423,106)</u>	<u>\$ 1,157,078</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	103.14%	101.12%	96.71%
Covered Employee Payroll	\$ 7,112,354	\$ 7,456,214	\$ 7,478,083
Net Pension Liability as a percentage of Covered Employee Payroll	-18.17%	-5.67%	15.47%

Notes to Schedule:*Changes of benefit terms*

For measurement date 09/30/2016, amounts reported as changes of benefit terms resulted from Ordinances 16-60 and 16-61, adopted and effective November 10, 2016 implemented the following changes:

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2. Establishment of a Share Plan.
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4. Compliance language pursuant to requirements under the Internal Revenue Code.
5. The use of State Monies per Collective Bargaining Agreements between Plan Members and the City.

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Changes of assumptions:

For measurement date 09/30/2016, amounts reported as changes of assumptions was a result of the Experience Study dated August 31, 2016, the Board has adopted changes to the following assumptions in conjunction with this valuation of the Plan:

- Salary Increases
- Mortality Rates
- Normal Retirement Rates
- Withdrawal Rates
- Investment Return

Details of the above assumption changes can be found in the Actuarial Assumptions and Methods section of the 10/01/2016 Valuation Report.

Additionally, 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.

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

	<u>09/30/2015</u>	<u>09/30/2014</u>
Total Pension Liability		
Service Cost	1,247,782	1,170,789
Interest	2,207,981	2,055,663
Change in Excess State Money	186,993	171,237
Share Plan Allocation	-	-
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	368,676	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	<u>(1,223,698)</u>	<u>(1,321,368)</u>
Net Change in Total Pension Liability	2,787,734	2,076,321
Total Pension Liability - Beginning	29,818,780	27,742,459
Total Pension Liability - Ending (a)	<u>\$ 32,606,514</u>	<u>\$ 29,818,780</u>
Plan Fiduciary Net Position		
Contributions - Employer	1,043,187	992,159
Contributions - State	464,800	449,044
Contributions - Employee	242,212	247,075
Net Investment Income	515,399	2,495,803
Benefit Payments, including Refunds of Employee Contributions	(1,223,698)	(1,321,368)
Administrative Expense	<u>(43,046)</u>	<u>(35,402)</u>
Net Change in Plan Fiduciary Net Position	998,854	2,827,311
Plan Fiduciary Net Position - Beginning	30,108,080	27,280,769
Plan Fiduciary Net Position - Ending (b)	<u>\$ 31,106,934</u>	<u>\$ 30,108,080</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 1,499,580</u>	<u>\$ (289,300)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	95.40%	100.97%
Covered Employee Payroll	\$ 6,920,183	\$ 7,059,293
Net Pension Liability as a percentage of Covered Employee Payroll	21.67%	-4.10%

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 Employee Payroll	Contributions as a percentage of Covered Employee Payroll
09/30/2018	\$ 1,215,501	\$ 1,223,964	\$ (8,463)	\$ 7,112,354	17.21%
09/30/2017	\$ 1,124,397	\$ 1,217,663	\$ (93,266)	\$ 7,456,214	16.33%
09/30/2016	\$ 1,312,404	\$ 1,312,821	\$ (417)	\$ 7,478,083	17.56%
09/30/2015	\$ 1,270,544	\$ 1,320,994	\$ (50,450)	\$ 6,920,183	19.09%
09/30/2014	\$ 1,269,966	\$ 1,269,966	\$ -	\$ 7,059,293	17.99%

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:

Funding Method: Entry Age Normal Actuarial Cost Method.

Amortization Method: Level Dollar, Closed.

Remaining Amortization Period: 29 Years (as of 10/01/2016).

Mortality: *Healthy 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 assumed rates of mortality 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 the July 1, 2015 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements

Interest Rate: 7.25% 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 Rates:

Service	Age	Probability of Retirement
6-24	55	40%
	56-63	10%
	64+	100%
25-27	All	0%
28+	All	100%

The above rates were adopted by the Board as the result of an Experience Study dated August 31, 2016.

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Early Retirement Rates:

<u>Age</u>	<u>Rates</u>
50	2.4%
51	2.2%
52	2.0%
53	1.8%
54	1.6%

The above rates were reviewed and maintained by the Board of Trustees in conjunction with the August 31, 2016 Experience Study.

Termination Rates:

<u>Credited Service</u>	<u>Rates</u>
First Year	9.0%
1	8.0%
2	8.0%
3	9.0%
4	9.0%
5-9	4.0%
10-14	4.0%
15+	2.0%

The above rates were adopted by the Board of Trustees in conjunction with the August 31, 2016 Experience Study.

Salary Increases:

<u>Credited Service</u>	<u>Rates</u>
First Year	12.0%
1-4	5.0%
5-14	4.5%
15+	4.0%

The above rates were adopted by the Board of Trustees in conjunction with the August 31, 2016 Experience Study.

Terminal Leave Pay:

<u>Present Value of Retirement Liability</u>	<u>Percentage Increase to Liability</u>		
	<u>Hired prior to 07/01/2001</u>	<u>Hired 07/01/2001 - 07/01/2006</u>	<u>Hired after 07/01/2006</u>
Normal	5.00%	3.75%	2.50%
Early	2.50%	1.88%	1.25%
Vesting	2.50%	1.88%	1.25%
Death	2.50%	1.88%	1.25%
Disability	2.50%	1.88%	1.25%

The assumed rates are based on data provided by the City. Also, no liability increases are utilized for Members hired after June 30, 2011.

Disability Rates:

<u>Age</u>	<u>Probability of Disability</u>
20	0.14%
25	0.15%
30	0.18%
35	0.23%
40	0.30%
45	0.51%
50	1.00%

The above rates were adopted by the Board as the result of a prior Experience Study. Additionally, it is assumed that 75% of disablements and active Member deaths are service related.

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Cost-of-Living Adjustments:	None.
Payroll Increases:	None.
Asset Valuation Method:	The Actuarial Value of Assets utilizes a five-year smoothing methodology. The annual difference between expected and actual investment earnings (Market Value, net of investment-related expenses), is phased-in 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.

COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2018

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Balance at September 30, 2017	\$ (423,106)	\$ 1,749,497	\$ 2,360,803	\$ -
Total Pension Liability Factors:				
Service Cost	1,326,301	-	-	1,326,301
Interest	2,768,703	-	-	2,768,703
Share Plan Allocation	167,449	-	-	167,449
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	795,401	-	795,401	-
Current year amortization of experience difference	-	(100,848)	(175,073)	74,225
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(294,427)	294,427
Benefit Payments, including Refunds of Employee Contributions	(1,493,957)	-	-	-
Net change	<u>3,563,897</u>	<u>(100,848)</u>	<u>325,901</u>	<u>4,631,105</u>
Plan Fiduciary Net Position:				
Contributions - Employer	946,156	-	-	-
Contributions - State	612,706	-	-	-
Contributions - Employee	271,701	-	-	(271,701)
Projected Net Investment Income	2,767,268	-	-	(2,767,268)
Difference between projected and actual earnings on Pension Plan investments	1,392,681	1,392,681	-	-
Current year amortization	-	(601,984)	(352,167)	(249,817)
Benefit Payments, including Refunds of Employee Contributions	(1,493,957)	-	-	-
Administrative Expenses	(63,781)	-	-	63,781
Net change	<u>4,432,774</u>	<u>790,697</u>	<u>(352,167)</u>	<u>(3,225,005)</u>
Balance at September 30, 2018	<u><u>\$ (1,291,983)</u></u>	<u><u>\$ 2,439,346</u></u>	<u><u>\$ 2,334,537</u></u>	<u><u>\$ 1,406,100</u></u>

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)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2015	\$ 1,760,837	5	\$ 352,167	\$ 352,167	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (312,314)	5	\$ (62,463)	\$ (62,463)	\$ (62,463)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (1,304,921)	5	\$ (260,984)	\$ (260,984)	\$ (260,984)	\$ (260,984)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (1,392,681)	5	\$ (278,537)	\$ (278,536)	\$ (278,536)	\$ (278,536)	\$ (278,536)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (249,817)	\$ (249,816)	\$ (601,983)	\$ (539,520)	\$ (278,536)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

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)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2016	\$ 2,060,985	7	\$ 294,427	\$ 294,426	\$ 294,426	\$ 294,426	\$ 294,426	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 294,427	\$ 294,426	\$ 294,426	\$ 294,426	\$ 294,426	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

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)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2015	\$ 368,676	6	\$ 61,446	\$ 61,446	\$ 61,446	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (608,444)	7	\$ (86,920)	\$ (86,921)	\$ (86,921)	\$ (86,921)	\$ (86,921)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (97,499)	7	\$ (13,928)	\$ (13,928)	\$ (13,928)	\$ (13,928)	\$ (13,928)	\$ (13,928)	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ 795,401	7	\$ 113,627	\$ 113,629	\$ 113,629	\$ 113,629	\$ 113,629	\$ 113,629	\$ 113,629	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 74,225	\$ 74,226	\$ 74,226	\$ 12,780	\$ 12,780	\$ 99,701	\$ 113,629	\$ -	\$ -	\$ -	\$ -