# CITY OF WINTER GARDEN PENSION PLAN FOR GENERAL EMPLOYEES

# ACTUARIAL VALUATION REPORT AS OF OCTOBER 1, 2016

CONTRIBUTIONS APPLICABLE TO THE CITY'S PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2018



March 6, 2017

Board of Trustees City of Winter Garden Pension Plan for General Employees 300 West Plant Street Winter Garden, FL 32787-3009

Re: City of Winter Garden

Pension Plan for General Employees

#### 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 General Employees. The 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. Please note that this valuation may not be applicable for any other purposes.

The valuation has 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 reflects 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 this valuation, 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.

In conducting the valuation, we have relied on personnel, plan design, financial reports, and asset information supplied by the Board of Trustees, in addition to 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 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 Winter Garden, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the City of Winter Garden Pension Plan for General Employees. 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.

By:

Douglas H. Lozen, EA, MAAA Enrolled Actuary #14-7778

DHL/lke

Enclosures

## TABLE OF CONTENTS

Section	Title	Page
I	Introduction	
	a. Summary of Report	5
	b. Contribution Impact of Annual Changes	7
	c. Changes Since Prior Report	8
	d. Requirements of Chapter 112, Part VII, Florida Statutes	9
П	Valuation Information	
	<ul> <li>Reconciliation and Derivation of the Unfunded Actuarial Accrued Liability</li> </ul>	15
	b. Detailed Actuarial (Gain)/Loss Analysis	16
	c. Actuarial Assumptions and Methods	17
	d. Valuation Notes	20
III	Trust Fund	21
IV	Member Statistics	
	a. Statistical Data	26
	b. Age and Service Distribution	27
	c. Member Reconciliation	28
V	Summary of Plan Provisions	29
VI	Governmental Accounting Standards Board Disclosure Information	31

#### SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Winter Garden Pension Plan for General Employees, performed as of October 1, 2016, has been completed, and the results are presented in this Report. The contribution amounts developed in this valuation are applicable to the plan/fiscal year ended September 30, 2018.

The contribution requirements, compared with amounts developed in the October 1, 2015 actuarial valuation, are as follows:

Valuation Date	10/1/2016	10/1/2015
Applicable to Plan/Fiscal Year Ending	9/30/2018	9/30/2017
Total Required Contribution		
% of Total Annual Payroll	12.34%	12.05%
Member Contributions (Est.)		
% of Total Annual Payroll	2.50%	2.50%
Balance from City <sup>1</sup>		
% of Total Annual Payroll	9.84%	9.55%

<sup>&</sup>lt;sup>1</sup> Please note the City has access to a prepaid contribution of \$42,634.27 to offset a portion of the above stated requirements for the fiscal year ending September 30, 2017.

Experience during the last twelve months has been more favorable than expected, relative to the Plan's actuarial assumptions. The primary sources of favorable experience included a 9.20% investment return (Actuarial Asset Basis), exceeding the 7.25% assumption and average increases in pensionable compensation that were less than the assumption. These gains were partially offset by unfavorable employee turnover.

In spite of this favorable experience, it can be seen that the Total Required Contribution has increased slightly since the previous valuation. This increase in funding requirements is primarily due to incorporating a mandated change to the assumed rates of mortality.

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 to discuss the Report and answer any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.

Bv:

Douglas H. Lozen, EA, MAAA

By:

Drew D. Ballard, EA, MAAA

# CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2015	9.55%
(2) Summary of Contribution Impact by component:	
Investment Return (Actuarial Asset Basis)	-0.8%
Salary Increases	-0.6%
Change in Normal Cost Rate	-0.3%
Change in Administrative Expense Percentage	-0.1%
Payroll Change Effect on UAAL Amortization	0.0%
Active Decrements	0.7%
Inactive Mortality	-0.3%
Assumption Change	2.1%
Other	<u>-0.4%</u>
Total Change in Contribution	0.29%
(3) Contribution Determined as of October 1, 2016	9.84%

## CHANGES SINCE PRIOR VALUATION

## Plan Changes

There were no changes in benefits since the prior valuation.

## Actuarial Assumption/Method Changes

As 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 and Early Retirement Rates
- Withdrawal Rates

Details of the above assumption changes can be found in the Actuarial Assumptions and Methods section of this report.

# COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump <u>10/1/2016</u>	Old Assump <u>10/1/2016</u>	10/1/2015
A. Participant Data			
Actives	151	151	150
Service Retirees	54	54	50
Beneficiaries	7	7	6
Disability Retirees	3	3	3
Terminated Vested	<u>91</u>	<u>91</u>	<u>91</u>
Total	306	306	300
Total Annual Payroll	\$7,790,281	\$7,860,626	\$7,567,014
Payroll Under Assumed Ret. Age	7,744,628	7,815,927	7,522,960
Annual Rate of Payments to:			
Service Retirees	1,036,617	1,036,617	1,012,058
Beneficiaries	59,173	59,173	49,018
Disability Retirees	46,605	46,605	46,605
Terminated Vested	460,626	460,626	493,481
B. Assets			
Actuarial Value (AVA)	24,989,486	24,989,486	23,084,361
Market Value (MVA)	24,622,751	24,622,751	23,058,359
C. Liabilities			
Present Value of Benefits Actives			
Retirement Benefits	14,324,344	13,259,036	12,584,444
Disability Benefits	1,027,573	1,387,992	1,344,742
Death Benefits	323,108	432,243	424,271
Vested Benefits	2,270,297	2,384,562	2,237,864
Refund of Contributions	30,808	27,622	29,225
Service Retirees	10,455,825	10,050,549	9,751,527
Beneficiaries	549,493	518,381	473,363
Disability Retirees	512,308	512,992	520,267
Terminated Vested	<u>2,076,225</u>	<u>1,982,055</u>	<u>2,061,620</u>
Total	31,569,981	30,555,432	29,427,323

C. Liebilities (Continued)	New Assump	Old Assump	10/1/2015
C. Liabilities - (Continued)	10/1/2016	<u>10/1/2016</u>	10/1/2015
Present Value of Future Salaries	54,740,332	62,058,039	60,107,665
Normal Cost (Retirement)	512,697	520,562	523,919
Normal Cost (Disability)	53,878	80,584	79,763
Normal Cost (Death)	15,733	20,985	21,457
Normal Cost (Vesting)	161,761	168,756	158,390
Normal Cost (Refunds)	<u>7,776</u>	<u>6,485</u>	<u>7,109</u>
Total Normal Cost	751,845	797,372	790,638
Present Value of Future			
Normal Costs	4,783,379	5,762,966	5,787,872
Accrued Liability (Retirement)	11,019,270	9,415,620	8,671,542
Accrued Liability (Disability)	680,055	818,516	766,028
Accrued Liability (Death)	219,380	267,723	252,716
Accrued Liability (Vesting)	1,267,650	1,221,432	1,138,732
Accrued Liability (Refunds)	6,396	5,198	3,656
Accrued Liability (Inactives)	<u>13,593,851</u>	13,063,977	12,806,777
Total Actuarial Accrued Liability (AL)	26,786,602	24,792,466	23,639,451
Unfunded Actuarial Accrued			
Liability (UAAL)	1,797,116	(197,020)	555,090
Funded Ratio (AVA / AL)	93.3%	100.8%	97.7%

D. Actuarial Present Value of	New Assump	Old Assump	
Accrued Benefits	10/1/2016	10/1/2016	10/1/2015
Vested Accrued Benefits			
Inactives	13,593,851	13,063,977	12,806,777
Actives	6,013,480	5,354,447	5,210,601
Member Contributions	<u>642,682</u>	642,682	497,237
Total	20,250,013	19,061,106	18,514,615
Non-vested Accrued Benefits	1,829,274	<u>1,419,863</u>	1,239,239
Total Present Value		<del></del>	<del></del>
Accrued Benefits (PVAB)	22,079,287	20,480,969	19,753,854
Funded Ratio (MVA / PVAB)	111.5%	120.2%	116.7%
Increase (Decrease) in Present Value of			
Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	1,598,318	0	
New Accrued Benefits	0	530,249	
Benefits Paid	0	(1,192,076)	
Interest	0	1,388,942	
Other	<u>0</u>	<u>0</u>	
Total	1,598,318	727,115	
	jj- "	, -	

Valuation Date Applicable to Fiscal Year Ending	New Assump 10/1/2016 9/30/2018	Old Assump 10/1/2016 9/30/2018	10/1/2015 9/30/2017
E. Pension Cost			
Normal Cost (with interest)	40.06		40.00
% of Total Annual Payroll <sup>1</sup>	10.06	10.57	10.89
Administrative Expenses (with interest)			
% of Total Annual Payroll <sup>1</sup>	0.43	0.43	0.57
Payment Required to Amortize			
Unfunded Actuarial Accrued			
Liability over 20 years (as of 10/1/2016, with interest)			
% of Total Annual Payroll <sup>1</sup>	1.85	(0.72)	0.59
Total Required Contribution			
% of Total Annual Payroll 1	12.34	10.28	12.05
Expected Member Contributions			
% of Total Annual Payroll <sup>1</sup>	2.50	2.50	2.50
Expected City Contribution			
% of Total Annual Payroll <sup>1</sup>	9.84	7.78	9.55
F. Past Contributions			
Plan Years Ending:	9/30/2016		
Total Required Contribution	1,014,259		
City Requirement	819,059		
Actual Contributions Made:			
Members (excluding buyback)	195,200		
City	<u>819,059</u>		
Total	1,014,259		
G. Net Actuarial (Gain)/Loss	(632,519)		

<sup>&</sup>lt;sup>1</sup> Contributions developed as of 10/1/2016 are expressed as a percentage of total annual payroll at 10/1/2016 of \$7,744,628.

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

	Projected Unfunded
<u>Year</u>	Actuarial Accrued Liability
2016	1,797,116
2017	1,794,145
2018	1,790,958
2023	1,846,369
2027	1,584,311
2032	646,363
2036	0

# I. (i) 3 Year Comparison of Actual and Assumed Salary Increases

	<u>Actual</u>	Assumed
9/30/2016	4.20%	6.25%
9/30/2015	4.81%	6.01%
9/30/2014	3.25%	6.20%
	9/30/2015	9/30/2016 4.20% 9/30/2015 4.81%

# (ii) 3 Year Comparison of Investment Return on Actuarial Value

		Actual	Assumed
Year Ended	9/30/2016	9.20%	7.25%
Year Ended	9/30/2015	8.92%	7.25%
Year Ended	9/30/2014	10.71%	7.25%

# (iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2016	\$7,790,281
	10/1/2006	5,908,433
(b) Total Increase		31.85%
(c) Number of Years		10.00
(d) Average Annual Rate		2.80%

#### 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 #14-7778

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, 2015				\$555,090
(2)	) Sponsor Normal Cost developed as of October 1, 2015				602,564
(3)	Expected administ	rative expenses fo	r the year ended Septer	mber 30, 2016	41,173
(4)	Expected interest of	on (1), (2) and (3)			85,422
(5)	Sponsor contributi	ons to the System	during the year ended	September 30, 2016	819,059
(6)	Expected interest of	on (5)			29,691
(7)	Expected Unfunde		•		
	September 30, 201	6 (1)+(2)+(3)+(4)	)-(5)-(6)		435,499
(8)	Change to UAAL	due to Assumption	n Change		1,994,136
(9)	Change to UAAL	due to Actuarial (	Gain)/Loss		(632,519)
(10) Unfunded Actuarial Accrued Liability as of October 1, 2016				1,797,116	
	Type of	Date	Years	10/1/2016	Amortization
	Base	<b>Established</b>	Remaining	<u>Amount</u>	Amount
	Method Change	10/1/2010	14	\$767,369	\$83,044
A	ssumption Change	10/1/2010	14	(32,325)	(3,498)
	econciliation Base	10/1/2011	5	(295,578)	(67,666)
	Actuarial Loss	10/1/2011	5	379,982	86,989
	Actuarial Loss	10/1/2012	6	152,317	30,026
A	ssumption Change	10/1/2012	16	283,647	28,462
	Actuarial Gain	10/1/2013	7	(60,171)	(10,501)
	Actuarial Gain	10/1/2014	8	(514,759)	(81,159)
	Actuarial Gain	10/1/2015	9	(244,983)	(35,434)
	Actuarial Gain	10/1/2016	10	(632,519)	(84,942)
Ass	sumption Changes	10/1/2016	20	1,994,136	178,933
				1,797,116	124,254
Maximum of 30 Year Amortization of UAAL or					
	Total of Individual Amortization Amounts,				138,440

# DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2015	\$555,090
(2) Expected UAAL as of October 1, 2016	435,499
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(449,167)
Salary Increases	(322,064)
Active Decrements	401,487
Inactive Mortality	(154,711)
Other	(108,064)
Increase in UAAL due to (Gain)/Loss	(632,519)
Assumption Changes	<u>1,994,136</u>
(4) Actual UAAL as of October 1, 2016	\$1,797,116

#### **ACTUARIAL ASSUMPTIONS AND METHODS**

## **Mortality Rates**

## 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.

Prior assumption: RP 2000 Combined Healthy (sex distinct), projected to the valuation year using scale AA. Disabled lives were set forward 5 years.

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.

#### Normal Retirement Rates

Years Following	Probability of
First Eligibility	Retirement
0	60%
1-2	50%
3-6	20%
7+	100%

This assumption was approved in conjunction with an actuarial experience dated August 31, 2016.

## **Early Retirement Rates**

	Probability of
<u>Age</u>	Retirement
60	5%
61-64	10%

This assumption was approved in conjunction with an actuarial experience dated August 31, 2016.

## **Termination Rates**

	Probability of
Credited Service	<b>Termination</b>
Less than 3	18%
3-6	12%
7-24	6%
25+	0%

This assumption was approved in conjunction with an actuarial experience dated August 31, 2016.

## 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.

## Cost of Living Adjustments

None.

## Payroll Increases

None.

## Administrative Expenses

\$32,228 annually, based on prior year's actual expenses.

### Funding Method

Entry Age Normal Actuarial Cost Method.

## Salary Increases

Credited Service	Assumed Rate
First Year	6.00%
1	5.75%
2-4	5.50%
5-9	5.25%
10-14	5.00%
15-24	4.50%
25+	4.00%

This assumption was approved in conjunction with an actuarial experience dated August 31, 2016.

# Terminal Leave Pay

Present Value of Retirement Liability	Percentage Increase to Liability (Hired Before October 1, 2000)	Percentage Increase to Liability (Hired After September 30, 2000)
Normal	6.0%	3.0%
Early	3.0%	1.5%
Vesting	3.0%	1.5%
Death	3.0%	1.5%
Disability	3.0%	1.5%

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		Probability of
	<u>Age</u>	<u>Disability</u>
	20	0.07%
	25	0.09%
	30	0.11%
	35	0.14%
	40	0.19%
	45	0.30%
	50	0.51%
	55	0.96%
	60	1.66%
	65	0.00%

This assumption was reviewed in conjunction with an actuarial experience study as of September 30, 2007.

#### VALUATION NOTES

- Total Annual Payroll is the projected annual rate of pay as of 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.
- Normal (Current Year's) Cost is determined for each participant as the present value of future benefits, determined as of the Member's entry age, amortized as a level percentage of compensation over the anticipated number of years of participation, determined as of the entry age.
- Individual Entry Age Normal Actuarial Cost Method (Level Percent of Compensation) is the method used to determine required contributions under the Plan. The use of this method involves the systematic funding of the Normal Cost (described above) and the Unfunded Accrued (Past Service) Liability. The actuarial accrued liability for active participants is the difference between the present value of future benefits and the present value of future Normal Costs. The actuarial accrued liability for inactive participants is the present value of future benefits.
- <u>Unfunded Actuarial Accrued Liability (UAAL)</u> is the difference between the actuarial accrued liability (described above) and the actuarial value of assets. Under the Entry Age Normal Actuarial Cost Method, an actuarial gain or loss, based on actual versus expected UAAL, is determined in conjunction with each valuation of the plan.
- <u>Total Required Contribution</u> is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over no more than 30 years. The required amount is adjusted for interest according to the timing of contributions during the year.

# STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2016

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	1,112,074.75	1,112,074.75
Total Cash and Equivalents	1,112,074.75	1,112,074.75
Receivables:		
Member Contributions	324.07	324.07
Benefit Due for Overpayment Recovery	539.53	539.53
Investment Income	45,808.19	45,808.19
Total Receivable	46,671.79	46,671.79
Investments:		
U. S. Bonds and Bills	3,075,294.43	3,180,864.10
Federal Agency Guaranteed Securities	1,494,737.43	1,495,975.39
Corporate Bonds	1,450,403.62	1,454,560.50
Stocks	13,677,948.54	14,624,386.23
Mutual Funds:		
Fixed Income	1,073,149.19	927,166.21
Equity	73,163.19	67,035.50
Pooled/Common/Commingled Funds:		
Real Estate	1,660,799.00	1,772,986.00
Total Investments	22,505,495.40	23,522,973.93
Total Assets	23,664,241.94	24,681,720.47
LIABILITIES		
Payables:		
Investment Expenses	11,883.13	11,883.13
Administrative Expenses	1,488.45	1,488.45
Prepaid Member Contribution	2,963.25	2,963.25
Prepaid City Contribution	42,634.27	42,634.27
Total Liabilities	58,969.10	58,969.10
NET POSITION RESTRICTED FOR PENSIONS	23,605,272.84	24,622,751.37

## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2016 Market Value Basis

#### **ADDITIONS**

$\sim$	• •		
( 'on	trahı	itions	٠
COII	uioi	auons.	

Member 195,200.05 City 819,059.41

Total Contributions 1,014,259.46

**Investment Income:** 

Net Realized Gain (Loss) 617,284.75 Unrealized Gain (Loss) 696,842.58

Net Increase in Fair Value of Investments 1,314,127.33
Interest & Dividends 591,298.34
Less Investment Expense<sup>1</sup> (130,988.88)

Net Investment Income 1,774,436.79

Total Additions 2,788,696.25

#### **DEDUCTIONS**

Distributions to Members:

Benefit Payments 1,161,734.88 Lump Sum PLOP Distributions 8,613.32 Refunds of Member Contributions 21,727.48

Total Distributions 1,192,075.68

Administrative Expense 32,228.01

Total Deductions 1,224,303.69

Net Increase in Net Position 1,564,392.56

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 23,058,358.81

End of the Year 24,622,751.37

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

# DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS AS OF SEPTEMBER 30

	2016	2017	2018	2019	2020
A. Preliminary Actuarial Value Prior Year	23,084,361				
B. Market Value Beginning of Year	23,058,359				
C. Market Value End of Year	24,622,751				
D. Non-investment net cash flow	(210,044)				
<ul><li>E. Investment Return</li><li>1. Actual market return net of investment</li></ul>					
expenses: C - B - D	1,774,437				
2. Expected return of 7.25%: (B + D/2) * 0.0725	1,664,117				
3. Excess/(shortfall): E1 - E2	110,320				
F. Phased-in recognition of Investment Return					
1. Current year: 20% of E3	22,064				
2. 20% from first prior year	(306,279)	22,064			
3. 20% from second prior year	150,668	(306,279)	22,064		
4. 20% from third prior year	162,511	150,668	(306,279)	22,064	
5. 20% from fourth prior year	422,088	162,509	150,669	(306,281)	22,065
6. Total phased in investment return	451,052	28,962	(133,546)	(284,217)	22,065
<ul> <li>G. Actuarial Value (AV) End of Year</li> <li>1. Preliminary AV end of year:     A + D + E2 + F6</li> <li>2. Upper corridor limit: 120% * C</li> <li>3. Lower corridor limit: 80% * C</li> <li>4. Actuarial value end of year</li> </ul>	24,989,486 29,547,302 19,698,201 24,989,486				
H. Difference between MV and AV:	(366,735)				
Net Investment Income:     1. Interest and Dividends	591,298				
2. Realized Gains (Losses)	617,285				
2. Change in Actuarial Value	1,037,575				
3. Investment Expenses	(130,989)				
3. Investment Expenses	2,115,169				
Actuarial Assets Rate of Return = $2I/(A+G-I)$ :	9.20%				
Market Value of Assets Rate of Return:	7.76%				
Actuarial Gain/(Loss) due to Investment Return: (Actuarial Asset Basis)	449,167				

## CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS **SEPTEMBER 30, 2016 Actuarial Asset Basis**

## **REVENUES**

Contributions: Member	195,200.05	
City	819,059.41	
Total Contributions		1,014,259.46
Earnings from Investments:		
Interest & Dividends	591,298.34	
Net Realized Gain (Loss)	617,284.75	
Change in Actuarial Value	1,037,574.79	
Total Earnings and Investment Gains		2,246,157.88
	EXPENDITURES	
Distributions to Members:	EAFENDITURES	
Benefit Payments	1,161,734.88	
Lump Sum PLOP Distributions	8,613.32	
Refunds of Member Contributions	21,727.48	
Total Distributions		1,192,075.68
Expenses:		
Investment related <sup>1</sup>	130,988.88	
Administrative	32,228.01	
Total Expenses		163,216.89
•		
Change in Net Assets for the Year		1,905,124.77
Net Assets Beginning of the Year		23,084,361.20
Net Assets End of the Year <sup>2</sup>		24,989,485.97

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

# RECONCILIATION OF CITY'S SHORTFALL/(PREPAID) CONTRIBUTION FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2016

(1)	Total Required Contribution Rate	12.99%
(2)	Pensionable Payroll Derived from Member Contributions	7,808,002.00
(3)	Total Required Contribution (1) x (2)	1,014,259.46
(4)	Less Actual Member Contributions	(195,200.05)
(5)	Equals Required City Contribution for Fiscal 2016	819,059.41
(6)	Less 2015 Prepaid Contribution	0.00
(7)	Less Actual City Contributions	(861,693.68)
(8)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2016	(42,634.27)

# STATISTICAL DATA

	10/1/2013	10/1/2014	<u>10/1/2015</u>	<u>10/1/2016</u>
Actives				
Number	130	131	150	151
Average Current Age	45.8	45.7	45.2	44.6
Average Age at Employment	37.7	37.7	37.7	36.8
Average Past Service	8.1	8.0	7.5	7.8
Average Annual Salary	\$48,373	\$50,433	\$50,447	\$51,591
Service Retirees				
Number		49	50	54
Average Current Age		68.9	69.5	69.2
Average Annual Benefit		\$19,719	\$20,241	\$19,197
<u>Beneficiaries</u>				
Number		5	6	7
Average Current Age		65.3	66.3	69.2
Average Annual Benefit		\$14,567	\$8,170	\$8,453
Disability Retirees				
Number		2	3	3
Average Current Age		63.4	61.1	62.1
Average Annual Benefit		\$16,917	\$15,535	\$15,535
Terminated Vested				
Number		81	91	91
Average Current Age		47.4	46.4	47.3
Average Annual Benefit 1		\$8,358	\$8,508	\$8,375

<sup>&</sup>lt;sup>1</sup> 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	1	0	0	0	0	0	0	0	0	0	0	1
20 - 24	1	2	0	1	0	0	0	0	0	0	0	4
25 - 29	3	6	2	0	1	0	0	0	0	0	0	12
30 - 34	3	6	1	3	1	4	1	0	0	0	0	19
35 - 39	2	1	3	3	1	1	4	2	0	0	0	17
40 - 44	4	4	1	2	0	2	6	2	0	0	0	21
45 - 49	2	1	1	1	2	6	4	0	2	1	0	20
50 - 54	0	3	2	1	0	3	6	1	1	2	1	20
55 - 59	1	2	1	1	0	3	8	2	2	1	0	21
60 - 64	0	0	1	0	1	4	4	4	0	0	0	14
65+	0	0	1	0	0	1	0	0	0	0	0	2
Total	17	25	13	12	6	24	33	11	5	4	1	151

# VALUATION PARTICIPANT RECONCILIATION

# 1. Active lives

a. Number in prior valuation 10/1/2015	150
b. Terminations	
i. Vested (partial or full) with deferred benefits	(6)
ii. Non-vested or full lump sum distribution received	(6)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	<u>(4)</u>
f. Continuing participants	134
g. New entrants	<u>17</u>
h. Total active life participants in valuation	151

# 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	50	6	3	91	150
Retired	7	0	0	(3)	4
Vested Deferred	0	0	0	7	7
Death, With Survivor	(1)	1	0	0	0
Death, No Survivor	(2)	0	0	0	(2)
Disabled	0	0	0	0	0
Refund of Contributions	0	0	0	(4)	(4)
Rehires	0	0	0	0	0
Expired Annuities	0	0	0	0	0
Data Corrections	0	0	0	0	0
b. Number current valuation	54	7	3	91	155

# PENSION PLAN FOR GENERAL EMPLOYEES SUMMARY OF PLAN PROVISIONS

(Through Ordinance No. 13-65)

Eligibility Full-time General Employees participate in the

Plan as a condition of employment unless they have chosen to opt out and participate in the

City's Defined Contribution Plan.

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

employment with the City as a General

Employee.

Salary Gross Compensation for services rendered to the

City as a General Employee. Effective July 1, 2011, overtime is limited to 300 hours per calendar year. Additionally, accruals of unused

sick and annual leave payments are not

considered for benefit purposes after June 30,

2011.

<u>Average Final Compensation</u> Average Salary for the 3 best years of the 10

years immediately preceding retirement or

termination.

<u>Member Contributions</u> 2.5% of Salary, effective November 1,

2011.

<u>City 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.

Normal Retirement

Date Earlier of: 1) age 65 with 5 years of Credited

Service, 2) the completion of 30 years of Credited Service, regardless of age, or 3) the attainment of age 70, regardless of Credited

Service.

Benefit 2.5% of Average Final Compensation for each

year of Credited Service.

Form of Benefit Life Annuity (options available).

## Early Retirement

Eligibility Age 60 with 5 years of Credited Service.

Benefit Accrued benefit, reduced 5% per year that the

benefit commencement date precedes age 65.

Vesting

Schedule 100% after 5 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 10 years of Credited Service.

Benefit 2.0% of Average Final Compensation for the

first 20 years of Credited Service, plus 1.0% of Average Final Compensation for Credited

Service in excess of 20 years.

Minimum Benefit The greater of \$100 or 40% of Average

Final Compensation.

Duration Payable for life. Optional forms of payment are

available.

**Death Benefits** 

Eligibility 5 years of Credited Service.

Benefit Monthly accrued benefit payable to

Designated beneficiary for 10 years at otherwise Early (reduced) or Normal

(unreduced) Retirement Date.

Post-Retirement Benefits payable to beneficiary in accordance

with option selected at retirement.

# STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2016

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	1,112,075
Total Cash and Equivalents	1,112,075
Receivables:	
Investment Income	45,104
Total Receivable	45,104
Investments:	
U. S. Bonds and Bills	3,180,864
Federal Agency Guaranteed Securities	1,495,975
Corporate Bonds	1,454,561
Stocks	14,624,386
Mutual Funds:	
Fixed Income	927,166
Equity	67,036
Real Estate	1,772,986
Total Investments	23,522,974
Total Assets	24,680,153
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	11,883
Administrative Expenses	1,489
r	-,
Total Liabilities	13,372
NET POSITION RESTRICTED FOR PENSIONS	24,666,781

# STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2016

#### Market Value Basis

<u>ADDITIONS</u>
------------------

~			
Con	trib	utio	nc.
COII	uio	uuo	ınə.

Member 196,288 City 861,694

Total Contributions 1,057,982

**Investment Income:** 

Net Increase in Fair Value of Investments

1,314,128

Interest & Dividends

590,594

Less Investment Expense<sup>1</sup>

(130,989)

Net Investment Income 1,773,733

Total Additions 2,831,715

## **DEDUCTIONS**

Distributions to Members:

Benefit Payments1,159,577Lump Sum PLOP Distributions8,613Refunds of Member Contributions21,728

Total Distributions 1,189,918

Administrative Expense 32,228

Total Deductions 1,222,146

Net Increase in Net Position 1,609,569

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 23,057,212

End of the Year 24,666,781

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

#### NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2016)

#### Plan Description

#### Plan Administration

The City of Winter Garden Pension Plan for General Employees 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 appointed by the City Commission, 2 of whom are members of the plan who are elected by a majority of the General Employees 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, 2015:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	59
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	91
Active Plan Members	150
	300

#### Benefits Provided

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

#### Normal Retirement:

Date: Earlier of: 1) age 65 with 5 years of Credited Service, 2) the completion of 30 years of Credited Service, regardless of age, or 3) the attainment of age 70, regardless of Credited Service.

Benefit: 2.5% of Average Final Compensation for each year of Credited Service.

#### **Early Retirement:**

Eligibility: Age 60 with 5 years of Credited Service.

Accrued benefit, reduced 5% per year that the benefit commencement date precedes age 65.

#### Vesting:

Schedule: 100% after 5 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: 10 years of Credited Service.

Benefit 2.0% of Average Final Compensation for the first 20 years of Credited Service, plus 1.0% of Average Final Compensation for Credited Service in excess of 20 years.

Minimum Benefit: The greater of \$100 or 40% of Average Final Compensation.

#### **Death Benefits:**

Eligibility: 5 years of Credited Service.

Benefit: Monthly accrued benefit payable to Designated beneficiary for 10 years at otherwise Early (reduced) or Normal (unreduced) Retirement Date.

#### Contributions

Member Contributions: 2.5% of Salary, effective November 1, 2011.

City Contributions: 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

#### Investments

#### Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2016:

Asset Class	Target Allocation
Domestic Equity	45%
International Equity	15%
Broad Market Fixed Income	30%
Global Bonds	5%
Real Estate	5%
Total	100%

#### 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, 2016, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 7.76 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, 2016 were as follows:

Total Pension Liability	\$ 26,638,334
Plan Fiduciary Net Position	\$ (24,666,781)
Sponsor's Net Pension Liability	\$ 1,971,553
Plan Fiduciary Net Position as a percentage of Total Pension Liability	92.60%

#### Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2015 updated to September 30, 2016 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 Lives:

Mortality Table - RP2000 Fully Generational with Scale BB, with collar and annuitant adjustments as follows:

Males – 50% Annuitant White Collar, 50% Annuitant Blue Collar.

Females – 100% Annuitant White Collar.

Mortality Rate Disabled Lives:

Mortality Table - RP2000 without projection, with the following adjustments:

Males – 100% Disabled Male with four year setback

Females – 100% Disabled Female with two year set forward.

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 was 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 2016 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 arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2016 are summarized in the following table:

	Long Term Expected Real Rate of
Asset Class	Return
Domestic Equity	7.5%
International Equity	8.5%
Broad Market Fixed Income	2.5%
Global Bonds	3.5%
Real Estate	4 5%

#### 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.

	Current					
	19	% Decrease	Di	scount Rate	19	% Increase
	6.25%		7.25%		8.25%	
Sponsor's Net Pension Liability	\$	5,479,595	\$	1,971,553	\$	(935,834)

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

	09/30/2016	09/30/2015	09/30/2014
Total Pension Liability			
Service Cost	778,104	672,735	772,422
Interest	1,703,548	1,644,735	1,568,252
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(4,370)	(472,681)	-
Changes of assumptions	2,036,904	-	-
Benefit Payments, including Refunds of Employee Contributions	(1,189,918)	(1,087,969)	(1,284,131)
Net Change in Total Pension Liability	3,324,268	756,820	1,056,543
Total Pension Liability - Beginning	23,314,066	22,557,246	21,500,703
Total Pension Liability - Ending (a)	\$ 26,638,334	\$ 23,314,066	\$ 22,557,246
Plan Fiduciary Net Position			
Contributions - Employer	861,694	986,645	883,975
Contributions - Employee	196,288	166,914	164,064
Net Investment Income	1,773,733	129,983	2,259,429
Benefit Payments, including Refunds of Employee Contributions	(1,189,918)	(1,087,969)	(1,284,131)
Administrative Expense	(32,228)	(41,173)	(24,454)
Net Change in Plan Fiduciary Net Position	1,609,569	154,400	1,998,883
Plan Fiduciary Net Position - Beginning	23,057,212	22,902,812	20,903,929
Plan Fiduciary Net Position - Ending (b)	\$ 24,666,781	\$ 23,057,212	\$ 22,902,812
Net Pension Liability - Ending (a) - (b)	\$ 1,971,553	\$ 256,854	\$ (345,566)
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	92.60%	98.90%	101.53%
Covered Employee Payroll	\$ 7,808,002	\$ 6,617,337	\$ 6,562,550
Net Pension Liability as a percentage of Covered Employee Payroll	25.25%	3.88%	-5.27%

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

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 the following assumptions changes:

- Salary Increases
- Mortality Rates
- Normal and Early Retirement Rates
- Withdrawal Rates

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 CONTRIBUTIONS

Last 10 Fiscal Years

	0	9/30/2016	0	9/30/2015	0	9/30/2014
Actuarially Determined Contribution		819,059		986,645		883,975
Contributions in relation to the Actuarially						
Determined Contributions		861,694		986,645		883,975
Contribution Deficiency (Excess)	\$	(42,635)	\$	-	\$	-
Covered Employee Payroll	\$	7,808,002	\$	6,617,337	\$	6,562,550
Contributions as a percentage of Covered						
Employee Payroll		11.04%		14.91%		13.47%

#### Notes to Schedule

Valuation Date: 10/01/2014

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 Percentage of Pay, Closed. Remaining Amortization Period: 18 Years (as of 10/01/2014).

Mortality: RP 2000 Combined Healthy projected to the valuation date with Schedule AA.

Disabled lives set forward 5 years.

Interest Rate: 7.25% per year, compounded annually, net of investment-related expenses.

Normal Retirement Rates:	Eligibility Date First eligible After first eligible, until age 69 Age 70 and later		Probability of Retirement 40% 20% 100%
Early Retirement Rates:	Age 60 61 62 63 64	Rates 3.4% 3.2% 3.0% 2.5% 2.0%	
Salary Increases:	Age 20 25 30 35 40 45 50 66	Rates 13.00% 10.00% 8.35% 7.75% 6.95% 6.10% 5.35% 4.75% 4.10% 3.05%	

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-Cost-of-Living Adjustments: None.

Payroll Growth: None.

Terminal Leave Pay:	Present Value		Percentage Increase to Liability
	of Retirement	Percentage Increase of Liability	(Hired After September 30,
	Liability	(Hired Before October 1, 2000)	2000)
	Normal	6.0%	3.0%
	Early	3.0%	1.5%
	Vesting	3.0%	1.5%
	Death	3.0%	1.5%
	Disability	3.0%	1.5%
Termination Rates:	<u>Age</u>	Rates	
	20	22.7%	
	25	18.2%	
	30	15.5%	
	35	12.9%	
	40	11.2%	
	45	8.1%	
	50	6.1%	
	55	4.9%	
Disability Rates:	<u>Age</u>	<b>Probability of Disability</b>	
	20	0.07%	
	25	0.09%	
	30	0.11%	
	35	0.14%	
	40	0.19%	
	45	0.30%	
	50	0.51%	
	55	0.96%	
	60	1.66%	
	65	0.00%	

# SCHEDULE OF INVESTMENT RETURNS

Last 10 Fiscal Years

	09/30/2016	09/30/2015	09/30/2014
Annual Money-Weighted Rate of Return			
Net of Investment Expense	7.76%	0.58%	10.97%

#### NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2016)

#### General Information about the Pension Plan

#### Plan Description

The City of Winter Garden Pension Plan for General Employees 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 appointed by the City Commission, 2 of whom are members of the plan who are elected by a majority of the General Employees who are members of the plan and a fifth Trustee who is chosen by a majority of the first 4 Trustees.

Full-time General Employees participate in the Plan as a condition of employment unless they have chosen to opt out and participate in the City's Defined Contribution Plan.

Plan Membership as of October 1, 2015:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	59
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	91
Active Plan Members	150
	300

#### Benefits Provided

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

#### Normal Retirement:

Date: Earlier of: 1) age 65 with 5 years of Credited Service, 2) the completion of 30 years of Credited Service, regardless of age, or 3) the attainment of age 70, regardless of Credited Service.

Benefit: 2.5% of Average Final Compensation for each year of Credited Service.

#### Early Retirement:

Eligibility: Age 60 with 5 years of Credited Service.

Accrued benefit, reduced 5% per year that the benefit commencement date precedes age 65.

#### Vesting:

Schedule: 100% after 5 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: 10 years of Credited Service.

Benefit 2.0% of Average Final Compensation for the first 20 years of Credited Service, plus 1.0% of Average Final Compensation for Credited Service in excess of 20 years.

Minimum Benefit: The greater of \$100 or 40% of Average Final Compensation.

#### Death Benefits:

Eligibility: 5 years of Credited Service.

#### Contributions

Member Contributions: 2.5% of Salary, effective November 1, 2011.

City Contributions: 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

#### Net Pension Liability

The measurement date is September 30, 2016.

The measurement period for the pension expense was October 1, 2015 to September 30, 2016.

The reporting period is October 1, 2015 through September 30, 2016.

The Sponsor's Net Pension Liability was measured as of September 30, 2016.

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, 2015 updated to September 30, 2016 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 Lives:

Mortality Table - RP2000 Fully Generational with Scale BB, with collar and annuitant adjustments as follows:

Males – 50% Annuitant White Collar, 50% Annuitant Blue Collar.

Females - 100% Annuitant White Collar.

Mortality Rate Disabled Lives:

Mortality Table - RP2000 without projection, with the following adjustments:

Males – 100% Disabled Male with four year setback

Females – 100% Disabled Female with two year set forward.

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 was 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 2016 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 arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2016 are summarized in the following table:

		Long Term Expected
Asset Class	Target Allocation	Real Rate of Return
Domestic Equity	45%	7.5%
International Equity	15%	8.5%
Broad Market Fixed Income	30%	2.5%
Global Bonds	5%	3.5%
Real Estate	5%	4.5%
Total	100%	

### GASB 68

#### 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 Plan Fiduciary Net P			Net Pension		
		Liability	Net Position			Liability
		(a)		(b)		(a)-(b)
Balance at September 30, 2015	\$	23,314,066	\$	23,057,212	\$	256,854
Changes for a Year:						
Service Cost		778,104		-		778,104
Interest		1,703,548		-		1,703,548
Differences between Expected and Actual Experience		(4,370)		-		(4,370)
Changes of assumptions		2,036,904		-		2,036,904
Changes of benefit terms		-		-		-
Contributions - Employer		-		861,694		(861,694)
Contributions - Employee		-		196,288		(196,288)
Net Investment Income		-		1,773,733		(1,773,733)
Benefit Payments, including Refunds of Employee Contributions		(1,189,918)		(1,189,918)		-
Administrative Expense		-		(32,228)		32,228
Net Changes		3,324,268		1,609,569		1,714,699
Balance at September 30, 2016	\$	26,638,334	\$	24,666,781	\$	1,971,553

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

	Current Discount					
	1% Decrease		1% Decrease Rate		1% Increase	
	6.25%		6.25% 7.25%		8.25%	
Sponsor's Net Pension Liability	\$	5,479,595	\$	1,971,553	\$	(935,834)

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, 2016, the Sponsor will recognize a Pension Expense of \$1,350,156. On September 30, 2016, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred	De	eferred
	Outflows of	Inf	lows of
_	Resources	Re	sources
			_
Differences between Expected and Actual Experience	-		286,886
Changes of assumptions	1,527,678		-
Net difference between Projected and Actual Earnings on Pension Plan investments	832,385		-
Total	\$ 2,360,063	\$	286,886

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:	
2017	\$ 698,262
2018	\$ 698,261
2019	\$ 698,261
2020	\$ (21,607)
2021	\$ -
Thereafter	\$ -

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

	09/30/2016	09/30/2015	09/30/2014
Total Pension Liability			
Service Cost	778,104	672,735	772,422
Interest	1,703,548	1,644,735	1,568,252
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(4,370)	(472,681)	-
Changes of assumptions	2,036,904	-	-
Benefit Payments, including Refunds of Employee Contributions	(1,189,918)	(1,087,969)	(1,284,131)
Net Change in Total Pension Liability	3,324,268	756,820	1,056,543
Total Pension Liability - Beginning	23,314,066	22,557,246	21,500,703
Total Pension Liability - Ending (a)	\$ 26,638,334	\$ 23,314,066	\$ 22,557,246
Plan Fiduciary Net Position			
Contributions - Employer	861,694	986,645	883,975
Contributions - Employee	196,288	166,914	164,064
Net Investment Income	1,773,733	129,983	2,259,429
Benefit Payments, including Refunds of Employee Contributions	(1,189,918)	(1,087,969)	(1,284,131)
Administrative Expense	(32,228)	(41,173)	(24,454)
Net Change in Plan Fiduciary Net Position	1,609,569	154,400	1,998,883
Plan Fiduciary Net Position - Beginning	23,057,212	22,902,812	20,903,929
Plan Fiduciary Net Position - Ending (b)	\$ 24,666,781	\$ 23,057,212	\$ 22,902,812
Net Pension Liability - Ending (a) - (b)	\$ 1,971,553	\$ 256,854	\$ (345,566)
		<u> </u>	
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	92.60%	98.90%	101.53%
Covered Employee Payroll	\$ 7,808,002	\$ 6,617,337	\$ 6,562,550
Net Pension Liability as a percentage of Covered Employee Payroll	25.25%	3.88%	-5.27%

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

Changes of assumptions:

For measurement date 09/30/2016, amounts reported as changes of assumptions was a result of the Experience Study dated

- Salary Increases
- Mortality Rates
- Normal and Early Retirement Rates
- Withdrawal Rates

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 CONTRIBUTIONS

Last 10 Fiscal Years

	0	9/30/2016	0	9/30/2015	 09/30/2014
Actuarially Determined Contribution		819,059		986,645	883,975
Contributions in relation to the					
Actuarially Determined Contributions		861,694		986,645	883,975
Contribution Deficiency (Excess)	\$	(42,635)	\$	=	\$ -
Covered Employee Payroll	\$	7,808,002	\$	6,617,337	\$ 6,562,550
Contributions as a percentage of					
Covered Employee Payroll		11.04%		14.91%	13.47%

#### Notes to Schedule

Valuation Date: 10/01/2014

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 Percentage of Pay, Closed. Remaining Amortization Period: 18 Years (as of 10/01/2014).

Mortality: RP 2000 Combined Healthy projected to the valuation date with Schedule AA.

Disabled lives set forward 5 years.

Interest Rate: 7.25% per year, compounded annually, net of investment-related expenses.

Normal Retirement Rates:	First e After first eligi	lity Date Eligible ble, until age 69 and later	Probability of Retirement 40% 20% 100%
Early Retirement Rates:	Age 60 61 62 63 64	Rates 3.40% 3.20% 3.00% 2.50% 2.00%	
Salary Increases:	Age 20 25 30 35 40 45 50 55 60 65	Rates 13.00% 10.00% 8.35% 7.75% 6.95% 6.10% 5.35% 4.75% 4.10% 3.05%	

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.

Cost-of-Living Adjustments: None.

Payroll Growth:	None.		
Terminal Leave Pay:	Present Value of Retirement Liability	Percentage Increase of Liability (Hired Before October 1, 2000)	Percentage Increase to Liability (Hired After September 30, 2000)
	Normal	6.00%	3.00%
	Early	3.00%	1.50%
	Vesting	3.00%	1.50%
	Death	3.00%	1.50%
	Disability	3.00%	1.50%
Termination Rates:	<u>Age</u>	<u>Rates</u>	
	20	22.70%	
	25	18.20%	
	30	15.50%	
	35	12.90%	
	40	11.20%	
	45	8.10%	
	50	6.10%	
	55	4.90%	
Disability Rates:		Probability of	
	<u>Age</u>	<u>Disability</u>	
	20	0.07%	
	25	0.09%	
	30	0.11%	
	35	0.14%	
	40	0.19%	
	45	0.30%	
	50	0.51%	
	55	0.96%	
	60	1.66%	
	65	0.00%	

# COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2016

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Balance at September 30, 2015	\$ 256,854	\$ 378,144	\$ 1,225,084	\$ -
Total Pension Liability Factors:				
Service Cost	778,104	-	-	778,104
Interest	1,703,548	-	-	1,703,548
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience				
with regard to economic or demographic assumptions	(4,370)	4,370	-	=
Current year amortization of experience difference	=	(95,628)	-	(95,628)
Change in assumptions about future economic or				
demographic factors or other inputs	2,036,904	=	2,036,904	=
Current year amortization of change in assumptions	=	=	(509,226)	509,226
Benefit Payments	(1,189,918)			(1,189,918)
Net change	3,324,268	(91,258)	1,527,678	1,705,332
Plan Fiduciary Net Position:				
Contributions - Employer	861,694	-	-	-
Contributions - State	-	-	-	-
Contributions - Employee	196,288	-	-	(196,288)
Net Investment Income	1,665,697	-	-	(1,665,697)
Difference between projected and actual earnings on				
Pension Plan investments	108,036	108,036	-	-
Current year amortization	-	(21,608)	(306,271)	284,663
Benefit Payments	(1,189,918)	-	-	1,189,918
Administrative Expenses	(32,228)	-	-	32,228
Net change	1,609,569	86,428	(306,271)	(355,176)
Balance at September 30, 2016	\$ 1,971,553	\$ 373,314	\$ 2,446,491	\$ 1,350,156

### AMORTIZATION SCHEDULE - INVESTMENTS

Increase (Decrease) in Pension Expense Arising from the Recognition of the of Differences Between Projected and Actual Earnings on Pension Plan Investments

	Diff	erences Between																
Plan Year	Proj	ected and Actual	Recognition															
Ending		Earnings	Period (Years)	2015	2016	2017	2018	2019	2020	2021	2022		2023		2024		2025	
2015	\$	1,531,356	5	\$ 306,272	\$ 306,271	\$ 306,271	\$ 306,271	\$ 306,271	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-
2016	\$	(108,036)	5	\$ -	\$ (21,608)	\$ (21,607)	\$ (21,607)	\$ (21,607)	\$ (21,607)	\$ -	\$	-	\$	-	\$	-	\$	-
Net Increas	crease) in Pension	\$ 306,272	\$ 284,663	\$ 284,664	\$ 284,664	\$ 284,664	\$ (21,607)	\$ -	\$	-	\$	-	\$		\$			

### 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)	2	2015	2016		2017		2018		2019		2020		2021		2022		2023		2024		2025	<u>;                                    </u>
2015 2016	\$ \$	2,036,904	5 4	\$ \$		\$ 509,226	\$ \$		\$ \$	509,226	\$ \$	509,226	\$ \$		- \$ - \$		- \$	;	- :	\$	- :	\$ \$	- \$ - \$		-
Net Increase	e (D	ecrease) in Pension	Expense	\$	-	\$ 509,226	\$	509,226	\$	509,226	\$	509,226	\$		- \$		- \$	;	- :	\$	- :	\$	- \$		

### 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		erences Between ected and Actual Experience	Recognition Period (Years)		2015		2016	2	2017	2018	2019	2020	)		2021		2022		202	3	202	4		2025	_
2015 2016	\$ \$	(472,681) (4,370)	5 4	\$ \$	(94,537)	\$ \$	(94,536) (1,092)		(94,536) \$ (1,092) \$	. , ,				· \$		- \$ - \$		-	4	-	\$ \$		\$ \$		-
Net Increas	se (Dec	crease) in Pension	Expense	\$	(94,537)	\$	(95,628)	\$	(95,628) \$	(95,629)	\$ (95,629) \$	<u> </u>		- \$		- \$		-	\$	_	\$	-	\$		_