

CITY OF NAPLES  
GENERAL RETIREMENT SYSTEM

ACTUARIAL VALUATION REPORT  
AS OF OCTOBER 1, 2017

CONTRIBUTIONS APPLICABLE TO THE CITY'S  
PLAN/FISCAL YEAR ENDED SEPTEMBER 30, 2019

December 4, 2017

Board of Trustees  
City of Naples General Retirement system  
c/o City of Naples Finance Department  
735 8<sup>th</sup> Street, South  
Naples, FL 34102

Re: City of Naples  
General Retirement System

Dear Board:

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

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and 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 valuations, we have relied on personnel, plan design, and asset information supplied by the City of Naples, 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, 2016. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2017 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.

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

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Naples, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the City of Naples General Retirement System. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

Foster & Foster, Inc.

By:

A handwritten signature in dark ink, appearing to read "Douglas H. Lozen", written over a horizontal line.

Douglas H. Lozen, EA, MAAA  
Enrolled Actuary #17-7778

DHL/lke

Enclosures

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## SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Naples General Retirement System, performed as of October 1, 2017, has been completed, and the results are presented in this Report. The contribution amounts set forth herein are applicable to the City's plan/fiscal year ending September 30, 2019. Funding requirements are projected for a lump sum City deposit on October 1, 2018, based on the Board's adoption of a Beginning of Year Funding Method.

The funding requirements, compared with the amounts developed in the October 1, 2016, actuarial valuation, are as follows:

Valuation Date	10/1/2017	10/1/2016
Applicable Plan Year End	<u>9/30/2019</u>	<u>9/30/2018</u>
Total Required Contribution		
% of Total Annual Payroll	16.35%	16.08%
Member Contributions (Est.)		
% of Total Annual Payroll	4.13%	4.24%
City Required Contribution <sup>1</sup>		
% of Total Annual Payroll	12.22%	11.84%

<sup>1</sup> Additionally, the City has an \$97,262.72 prepaid contribution for the fiscal year ended September 30, 2017.

Experience since the last valuation has been more favorable than expected, relative to the Plan's actuarial assumptions. The primary sources of favorable experience included a 9.09% net-of-fees investment return (Actuarial Asset Basis), exceeding the 7.50% assumption, favorable turnover and retirement experience, and lower than expected increases in pensionable compensation.


In spite of this experience, the City's funding obligation (as a percentage of payroll) increases slightly due to a mandated change to the assumed rates of active employee mortality, a reduction in expected member contributions, a reduction in total annual payroll, and a reduction in the payroll growth assumption. The reductions in total annual payroll and the payroll growth assumption resulted in an increase in the amortization payment for the Unfunded Actuarial Accrued Liability, when expressed as a percentage of payroll.

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

Respectfully submitted,

FOSTER & FOSTER, INC.

By:   
Douglas H. Lozen, EA, MAAA

By:   
Tyler Koftan

## CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2016	11.84%
(2) Summary of Contribution Impact by component:	
Change in Normal Cost Rate	-0.2%
Change in Administrative Expense Percentage	0.0%
Reduction in Payroll Growth Assumption	1.1%
Investment Return (Actuarial Asset Basis)	-0.3%
Salary Increases	0.0%
Active Decrements	-0.2%
Inactive Mortality	0.0%
Reduction in Member Contribution Rate	0.1%
Other	<u>-0.2%</u>
Total Change in Contribution	0.38%
(3) Contribution Determined as of October 1, 2017	12.22%

## CHANGES SINCE PRIOR VALUATION

### Plan Changes

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

### Actuarial Assumption/Method Changes

Pursuant to the provisions of Chapter 2015-157, Laws of Florida, the mortality assumption reflects a change from the rates utilized by the Florida Retirement System in the July 1, 2015 valuation to those utilized in the July 1, 2016 valuation. A description of this change is found in the Actuarial Assumptions and Funding Methods section of this report; the impact on liabilities and funding requirements is set forth in the Comparative Summary of Principal Valuation Results section of this report.

For compliance with Part VII of Chapter 112, Florida Statutes, the payroll growth assumption was lowered to 1.6% (the ten-year payroll growth average as of October 1, 2017).



## COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2017</u>	<u>10/1/2016</u>
<b>A. Participant Data</b>		
Actives	301	302
Service Retirees	228	221
Beneficiaries	18	21
Disability Retirees	1	1
Terminated Vested	<u>77</u>	<u>53</u>
Total	625	598
 Total Annual Payroll	 16,199,103	 16,216,214
 Annual Rate of Payments to:		
Service Retirees	3,857,483	3,600,497
Beneficiaries	179,445	191,417
Disability Retirees	10,171	10,171
Terminated Vested	405,261	386,938
 <b>B. Assets</b>		
Actuarial Value (AVA)	55,002,953	52,278,036
Market Value (MVA)	56,221,282	51,937,865
 <b>C. Liabilities</b>		
 Present Value of Benefits		
Actives		
Retirement Benefits	30,803,611	31,775,601
Disability Benefits	523,164	545,949
Death Benefits	381,110	542,023
Vested Benefits	1,277,716	1,251,827
Refund of Contributions	1,158,674	1,068,066
Service Retirees	37,940,626	36,157,861
Beneficiaries	1,658,129	1,735,258
Disability Retirees	72,860	74,264
Terminated Vested	<u>2,777,567</u>	<u>2,793,282</u>
Total	76,593,457	75,944,131

C. Liabilities - (Continued)	<u>10/1/2017</u>	<u>10/1/2016</u>
Present Value of Future Salaries	112,301,462	110,480,106
Present Value of Future Member Contributions	4,634,206	4,850,077
Normal Cost (Retirement)	1,046,902	1,066,586
Normal Cost (Disability)	26,189	27,310
Normal Cost (Death)	24,564	36,834
Normal Cost (Vesting)	83,730	84,467
Normal Cost (Refunds)	<u>140,928</u>	<u>138,148</u>
Total Normal Cost	1,322,313	1,353,345
Present Value of Future Normal Costs	8,137,650	8,041,086
Accrued Liability (Retirement)	24,345,111	25,414,161
Accrued Liability (Disability)	368,204	388,648
Accrued Liability (Death)	212,140	287,673
Accrued Liability (Vesting)	729,881	711,051
Accrued Liability (Refunds)	351,289	340,847
Accrued Liability (Inactives)	<u>42,449,182</u>	<u>40,760,665</u>
Total Actuarial Accrued Liability (EAN AL)	68,455,807	67,903,045
Unfunded Actuarial Accrued Liability (UAAL)	13,452,854	15,625,009
Funded Ratio (AVA / EAN AL)	80.3%	77.0%

D. Actuarial Present Value of		
Accrued Benefits	<u>10/1/2017</u>	<u>10/1/2016</u>
Vested Accrued Benefits		
Inactives	42,449,182	40,760,665
Actives	13,620,993	15,476,978
Member Contributions	<u>7,659,655</u>	<u>7,609,095</u>
Total	63,729,830	63,846,738
Non-vested Accrued Benefits	<u>1,073,794</u>	<u>761,647</u>
Total Present Value		
Accrued Benefits (PVAB)	64,803,624	64,608,385
Funded Ratio (MVA / PVAB)	86.8%	80.4%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	(244,235)	
Benefits Paid	(4,246,896)	
Interest	4,686,370	
Other	<u>0</u>	
Total	195,239	

Valuation Date	10/1/2017	10/1/2016
Applicable to Fiscal Year Ending	<u>9/30/2019</u>	<u>9/30/2018</u>

#### E. Pension Cost

Normal Cost (with interest)		
% of Total Annual Payroll <sup>1</sup>	8.16	8.35
Administrative Expenses (with interest)		
% of Total Annual Payroll <sup>1</sup>	0.94	0.90
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years (as of 10/1/2017, with interest)		
% of Total Annual Payroll <sup>1</sup>	7.25	6.83
Total Required Contribution		
% of Total Annual Payroll <sup>1</sup>	16.35	16.08
Expected Member Contributions		
% of Total Annual Payroll <sup>1</sup>	4.13	4.24
Expected City Contribution		
% of Total Annual Payroll <sup>1</sup>	12.22	11.84

#### F. Past Contributions

Plan Years Ending:	<u>9/30/2017</u>
City Requirement	1,785,446
Actual Contributions Made:	
Members (excluding buyback)	670,402
City	<u>1,785,446</u>
Total	2,455,848

G. Net Actuarial (Gain)/Loss	(2,291,302)
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<sup>1</sup> Contributions developed as of 10/1/2017 are expressed as a percentage of total annual payroll at 10/1/2017 of \$16,199,103.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2017	13,452,854
2018	13,198,957
2019	12,905,813
2026	9,446,401
2033	2,546,944
2047	0

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

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2017	3.87%	5.30%
Year Ended	9/30/2016	3.30%	5.28%
Year Ended	9/30/2015	3.21%	5.27%

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

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2017	9.09%	7.50%
Year Ended	9/30/2016	10.36%	7.50%
Year Ended	9/30/2015	9.76%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2017	\$16,199,103
	10/1/2007	13,816,182
(b) Total Increase		17.25%
(c) Number of Years		10.00
(d) Average Annual Rate		1.60%

## 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

# RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2016	\$15,625,009
(2)	Sponsor Normal Cost developed as of October 1, 2016	665,778
(3)	Expected administrative expenses for the year ended September 30, 2017	145,459
(4)	Expected interest on (1), (2) and (3)	1,227,264
(5)	Sponsor contributions to the System during the year ended September 30, 2017	1,785,446
(6)	Expected interest on (5)	133,908
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2017 (1)+(2)+(3)+(4)-(5)-(6)	15,744,156
(8)	Change to UAAL due to Actuarial (Gain)/Loss	(2,291,302)
(9)	Unfunded Actuarial Accrued Liability as of October 1, 2017	13,452,854

Type of Base	Date Established	Years Remaining	10/1/2017 Amount	Amortization Amount
Experience Loss	10/1/2002	15	1,877,122	180,371
Experience Loss	10/1/2003	16	696,668	64,293
Experience Loss	10/1/2004	17	3,181,800	283,050
Amendment	10/1/2004	17	26,949	2,397
Experience Gain	10/1/2005	18	(2,092,964)	(180,053)
Experience Gain	10/1/2006	19	(204,347)	(17,049)
Amendment	10/1/2006	19	69,150	5,769
Experience Loss	10/1/2007	20	816,335	66,216
Method/Assump Change	10/1/2007	20	4,825,307	391,399
Experience Loss	10/1/2008	21	5,995,520	473,889
Assump Changes	10/1/2009	22	(33,968)	(2,622)
Experience Loss	10/1/2009	22	7,498,280	578,689
Experience Loss	10/1/2010	23	667,464	50,389
Benefit Change	10/1/2010	23	(9,516,504)	(718,432)
Experience Loss	10/1/2011	24	2,915,388	215,648
Benefit Change	10/1/2011	24	375,433	27,770
Experience Loss	10/1/2012	25	1,106,071	80,283
Experience Gain	10/1/2013	26	(350,880)	(25,025)
Experience Gain	10/1/2014	27	(1,126,180)	(79,022)
Assump Change	10/1/2014	27	158,701	11,136
Actuarial Gain	10/1/2015	28	(2,566,468)	(177,372)

Experience Loss	10/1/2002	15	1,877,122	180,371
Experience Loss	10/1/2003	16	696,668	64,293
Actuarial Gain	10/1/2016	29	(1,072,150)	(73,058)
Assump Change	10/1/2016	29	2,497,429	170,180
Experience Gain	10/1/2017	30	<u>(2,291,302)</u>	<u>(154,091)</u>
			13,452,854	1,174,755



## DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2016	\$15,625,009
(2) Expected UAAL as of October 1, 2017	15,744,156
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(817,348)
Salary Increases	(85,527)
Active Decrements	(445,856)
Inactive Mortality	(17,480)
Lower than Expected Benefit Payments	(1,124,311)
Other	<u>199,220</u>
Increase in UAAL due to (Gain)/Loss	(2,291,302)
(4) Actual UAAL as of October 1, 2017	\$13,452,854

## ACTUARIAL METHODS AND ASSUMPTIONS

### Mortality Rates

#### *Healthy Inactive Lives:*

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

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

#### *Healthy Active Lives:*

**Female:** RP2000 Generational, 100% Combined Healthy (previously Annuitant) White Collar, Scale BB

**Male:** RP2000 Generational, 50% Combined Healthy (previously Annuitant) White Collar / 50% Combined Healthy (previously 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, 2016 FRS valuation report. We feel this assumption sufficiently accommodates future mortality improvements.

### Termination Rates

Sample Ages	Years of Service	% of Active Members Separating Within Next Year
ALL	0	20.0%
	1	18.0%
	2	16.0%
	3	10.0%
	4	6.0%
20	5+	16.2%
25		13.2%
30		10.8%
35		9.4%
40		7.8%
45		5.8%
50		3.2%
55+		0.8%

The above rates were incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

Interest Rate

7.50% per year, compounded annually, net of investment related expenses. This assumption was adopted by the Board in conjunction with a revision to the October 1, 2009 valuation and is supported by the Plan's investment policy and long-term expected returns by asset class.

Disability Rates

Sample Ages	% Becoming Disabled During the Year
20	0.05%
25	0.05%
30	0.06%
35	0.09%
40	0.12%
45	0.28%
50	0.43%

The above rates are consistent with the national average for general employee public pension plans.

Salary Increases

Years of Service	Increase
1 to 2	6.0%
3	5.5%
4	5.5%
5	5.5%
6	5.5%
7 to 8	5.5%
9	5.5%
10 to 19	5.0%
20+	4.0%

The above rates were incorporated with the October 1, 2014 valuation as the result of an Experience Study.

### Normal Retirement Rates

<u>Number of Years After First Eligibility For Normal Retirement</u>	<u>Probability of Retirement</u>
0	25%
1	25%
2	50%
3	50%
4	60%
5	80%
6	100%

The above rates were incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

For Members hired after September 30, 2011, 100% retirement is assumed at the earlier of 1) Age 65 with 8 years of Credited Service, and 2) the completion of 33 years of Credited Service, regardless of Age. This assumption is reasonable, based on Plan provisions and historical experience.

### Early Retirement Rates

Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. This assumption was incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

### Payroll Growth

1.6% (previously 3.5%) per year for amortization of the Unfunded Actuarial Accrued Liability. This assumption is consistent limited by the ten-year payroll growth average as of October 1, 2017.

### Actuarial Asset Method

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

### Administrative Expenses

\$153,053, based on actual incurred administrative expenses from the prior fiscal year.

### Funding Method

Entry Age Actuarial Cost Method.

## VALUATION NOTES

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.

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.

Unfunded Actuarial Accrued Liability (UAAL) 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.

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.

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2017

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Checking Account	3,352.14	3,352.14
Money Market	1,716,886.00	1,716,886.00
Cash	511.42	511.42
Total Cash and Equivalents	1,720,749.56	1,720,749.56
Receivables:		
Member Contributions in Transit	25,352.12	25,352.12
City Contributions in Transit	119,324.00	119,324.00
Total Receivable	144,676.12	144,676.12
Investments:		
Fixed Income	9,572,302.03	9,557,080.45
Equities	29,898,162.28	37,936,174.92
Mutual Funds:		
Fixed Income	697,725.00	709,185.50
Pooled/Common/Commingled Funds:		
Fixed Income	232,782.00	284,797.00
Hedge	1,330,000.00	1,466,722.16
Real Estate	3,792,410.75	4,500,316.79
Total Investments	45,523,382.06	54,454,276.82
Total Assets	47,388,807.74	56,319,702.50
<u>LIABILITIES</u>		
Prepaid Member Contribution	1,157.54	1,157.54
Prepaid City Contribution	97,262.72	97,262.72
Total Liabilities	98,420.26	98,420.26
NET POSITION RESTRICTED FOR PENSIONS	47,290,387.48	56,221,282.24

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FOR THE YEAR ENDED SEPTEMBER 30, 2017  
Market Value Basis

ADDITIONS

Contributions:

Member	670,402.09
City	1,785,446.40

Total Contributions		2,455,848.49
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Investment Income:

Net Realized Gain (Loss)	2,607,685.86	
Unrealized Gain (Loss)	2,795,760.89	
Net Increase in Fair Value of Investments		5,403,446.75
Interest & Dividends		1,093,504.34
Less Investment Expense <sup>1</sup>		(269,433.26)

Net Investment Income		6,227,517.83
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Total Additions		8,683,366.32
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DEDUCTIONS

Distributions to Members:

Benefit Payments	3,877,446.29
Lump Sum DROP Distributions	0.00
Lump Sum Benefit Distributions	316,440.26
Refunds of Member Contributions	53,009.92

Total Distributions		4,246,896.47
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Administrative Expense		153,052.68
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Total Deductions		4,399,949.15
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Net Increase in Net Position		4,283,417.17
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year		51,937,865.07
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End of the Year		56,221,282.24
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<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

# ACTUARIAL ASSET VALUATION

September 30, 2017

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

Plan Year Ending	Gain/(Loss)	<u>Gains/Losses Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2017	2018	2019	2020	2021
09/30/2013	2,501,369	0	0	0	0	0
09/30/2014	2,414,626	482,926	0	0	0	0
09/30/2015	(3,380,710)	(1,352,284)	(676,142)	0	0	0
09/30/2016	277,664	166,598	111,066	55,532	0	0
09/30/2017	2,401,361	1,921,089	1,440,817	960,544	480,273	0
Total		1,218,329	875,741	1,016,076	480,273	0

<u>Development of Investment Gain/(Loss)</u>	
Market Value of Assets, including Prepaid Contributions, 09/30/2016	51,938,672
Contributions Less Benefit Payments & Admin Expenses	(1,846,488)
Expected Investment Earnings*	3,826,157
Actual Net Investment Earnings	6,227,518
2017 Actuarial Investment Gain/(Loss)	<u>2,401,361</u>

\*Expected Investment Earnings =  $0.075 * [51,938,672 + 0.5 * (1,846,488)]$

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2017	56,221,282
(2) Gains/(Losses) Not Yet Recognized	<u>1,218,329</u>
(3) Actuarial Value of Assets, 09/30/2017, (1) - (2)	55,002,953

(A) 09/30/2016 Actuarial Assets, including Prepaid Contributions: 52,278,843

(I) Net Investment Income:	
1. Interest and Dividends	1,093,504
2. Realized Gains (Losses)	2,607,686
3. Change in Actuarial Value	1,237,261
4. Investment Expenses	<u>(269,433)</u>
Total	4,669,018

(B) 09/30/2017 Actuarial Assets, including Prepaid Contributions: 55,101,374

Actuarial Assets Rate of Return =  $2I/(A+B-I)$ : 9.09%  
Market Value of Assets Rate of Return: 12.00%

Actuarial Gain/(Loss) due to Investment Return (actuarial Asset Basis) 817,348

10/01/2017 Limited Actuarial Assets (not including Prepaid): 55,002,953



CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS  
SEPTEMBER 30, 2017  
Actuarial Asset Basis

REVENUES

Contributions:		
Member	670,402.09	
City	1,785,446.40	
Total Contributions		2,455,848.49
Earnings from Investments:		
Interest & Dividends	1,093,504.34	
Net Realized Gain (Loss)	2,607,685.86	
Change in Actuarial Value	1,237,260.89	
Total Earnings and Investment Gains		4,938,451.09

EXPENDITURES

Distributions to Members:		
Benefit Payments	3,877,446.29	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	53,009.92	
Total Distributions		4,246,896.47
Expenses:		
Investment related <sup>1</sup>	269,433.26	
Administrative	153,052.68	
Total Expenses		422,485.94
Change in Net Assets for the Year		2,724,917.17
Net Assets Beginning of the Year		52,278,036.07
Net Assets End of the Year <sup>2</sup>		55,002,953.24

<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, 2017

(1) City Required Contribution Rate	11.15%
(2) Pensionable Payroll Derived from Member Contributions	\$16,012,972.20
(3) City Required Contribution (1) x (2)	1,785,446.40
(4) Less 2016 Prepaid Contribution	0.00
(5) Less Actual City Contributions	<u>(1,882,709.12)</u>
(6) Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2017	(\$97,262.72)

## STATISTICAL DATA

	<u>10/1/2014</u>	<u>10/1/2015</u>	<u>10/1/2016</u>	<u>10/1/2017</u>
<u>Actives - Hired before October 1, 2011</u>				
Number	212	191	170	149
Average Current Age	50.6	51.6	52.4	52.9
Average Age at Employment	38.1	38.2	38.0	37.7
Average Past Service	12.5	13.4	14.5	15.2
Average Annual Salary	\$53,980	\$55,822	\$55,939	\$56,865
<u>Actives - Hired after September 30, 2011</u>				
Number	89	108	132	152
Average Current Age	41.3	41.1	42.9	43.6
Average Age at Employment	39.5	39.1	40.6	40.8
Average Past Service	1.8	2.0	2.3	2.8
Average Annual Salary	\$49,346	\$49,513	\$50,807	\$50,831
<u>Service Retirees</u>				
Number	222	219	221	228
Average Current Age	N/A	70.6	71.1	71.4
Average Annual Benefit	\$15,160	\$15,883	\$16,292	\$16,919
<u>Beneficiaries</u>				
Number	16	17	21	18
Average Current Age	N/A	70.8	71.6	73.3
Average Annual Benefit	\$8,270	\$7,845	\$9,115	\$9,969
<u>Disability Retirees</u>				
Number	1	1	1	1
Average Current Age	N/A	66.2	67.2	68.2
Average Annual Benefit	\$10,171	\$10,171	\$10,171	\$10,171
<u>Terminated Vested</u>				
Number	27	38	53	77
Average Current Age	N/A	50.3	50.5	44.4
Average Annual Benefit <sup>1</sup>	\$13,182	\$13,172	\$14,331	\$15,010

<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	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	3	1	0	0	0	0	0	0	0	0	0	4
25 - 29	9	3	3	2	1	2	0	0	0	0	0	20
30 - 34	6	3	2	3	2	5	2	0	0	0	0	23
35 - 39	0	1	6	3	1	9	7	1	0	0	0	28
40 - 44	2	4	6	3	2	7	4	5	1	0	0	34
45 - 49	6	4	4	1	1	9	6	2	1	1	0	35
50 - 54	4	6	1	4	4	11	10	3	7	0	1	51
55 - 59	6	3	1	2	1	13	10	8	4	4	3	55
60 - 64	0	1	2	2	2	3	10	6	4	3	2	35
65+	1	1	1	0	1	3	5	1	2	0	1	16
Total	37	27	26	20	15	62	54	26	19	8	7	301

## VALUATION PARTICIPANT RECONCILIATION

### 1. Active lives

a. Number in prior valuation 10/1/2016	302
b. Terminations	
i. Vested (partial or full) with deferred benefits <sup>1 2</sup>	(19)
ii. Non-vested or full lump sum distribution received	(8)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	<u>(11)</u>
f. Continuing participants	264
g. New entrants	<u>37</u>
h. Total active life participants in valuation	301

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

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested <u>Deferred</u> <sup>2</sup>	<u>Total</u>
a. Number prior valuation	221	21	1	53	296
Retired	13	0	0	(2)	11
Vested Deferred	0	0	0	28	28
Death, With Survivor	0	0	0	0	0
Death, No Survivor	(6)	(2)	0	0	(8)
Disabled	0	0	0	0	0
Refund of Contributions	0	0	0	(2)	(2)
Rehires	0	0	0	0	0
Expired Annuities	0	(1)	0	0	(1)
Data Corrections	0	0	0	0	0
b. Number current valuation	228	18	1	77	324

<sup>1</sup> Includes one pre-retiree death, due only a refund of Member Contributions.

<sup>2</sup> Includes non-vested participants, due only a refund of Member Contributions.

GENERAL RETIREMENT SYSTEM  
SUMMARY OF PLAN PROVISIONS  
(Through Ordinance 12-13142)

<u>Eligibility</u>	Full-time General Employees hired prior to 3/1/95 enter the Plan on employment. Those hired after 2/28/95 enter following 6 months of service.
<u>Compensation</u>	Base pay, including holiday, vacation, longevity, and sick pay, but excluding overtime and all other pay.
<u>Final Average Compensation</u>	Average of Compensation paid during the eight (8) highest consecutive years of service. The average cannot be less than the three-year average determined as of September 30, 2011.
<u>Credited Service</u>	Years and completed months of service as a General Employee. Service for which the member received a refund of contributions shall not be counted.
<u>Normal Retirement</u>	
Date	Earlier of 1) the attainment of age 60 and the completion of 5 years of service, or 2) the date when age plus service equals 85 (Rule of 85).  For Members hired after September 30, 2011, the Normal Retirement Date is the earlier of 1) Age 65 with 8 years of Credited Service, or 2) the completion of 33 years of Credited Service, regardless of Age.
Benefit	The sum of the following:  a.) 2.5% of Final Average Compensation (using a three-year average, determined as of September 30, 2011) for each year of Credited Service as of September 30, 2011, plus  b.) 1.6% of Final Average Compensation (using an eight-year average) for Credited Service after September 30, 2011.
Form of Benefit	Life annuity, ceasing upon death (options available).

### Early Retirement

Date	The attainment of age 55 and the completion of 5 years of service.
Benefit	<p>Determined as for Normal Retirement, reduced 3% per year for each year that the Early Retirement Date precedes age 60. The reduction is prorated monthly.</p> <p>For Members hired after September 30, 2011, the reduction is 5% per year, for each year that the Early Retirement Date precedes age 65. The reduction is prorated monthly.</p>

### Termination of Employment

Members hired before  
October 1, 2011

Less Than 5 Years	Return of member contributions with interest.
5 to 10 Years, But Less Than Age 50	Return of member contributions with interest plus an amount equal to the accumulated contributions that would have existed had the member contributed at the rate contributed by the City.
10 or More Years or Upon Attaining Age 50 and 5 Years	Accrued monthly benefit payable at Normal or Early (reduced basis) Retirement Date, or return of member contributions with interest.

Members hired after  
September 30, 2011

Less Than 8 Years	Return of member contributions with interest.
8 or More Years	The accrued benefit, payable at the Normal (unreduced), or Early (reduced) Retirement Date.

### Pre-Retirement Death

Less Than 5 Years and 6 Months	Return of member contributions with interest.
More than 5 Years and 6 Months	Return of member contributions with interest plus an amount equal to the accumulated contributions that would have existed had the member contributed at the rate contributed by the City.

### Deferred Retirement Option Plan

Eligibility	Non-union members who had 30 years of service in June, 2005.
Participation	Not to exceed 84 months.
Rate of Return	Actual net rate of investment return realized by the system from the short term investment fund or money market fund in which the DROP account is invested.
Form of Distribution	Cash lump sum at termination of employment.

### Contributions

Members	5.0% of Compensation. The contribution rate is 3% for Members hired after September 30, 2011.
City	Remaining amount necessary to fund the Normal Cost and amortize the Unfunded Actuarial Accrued Liability over not more than 30 years.

### Board of Trustees

Two Council appointees, three City Manager appointees, one retiree of the Plan elected by the membership, and a seventh Member elected by the other 6 who is a City resident.



STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2017

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Checking Account	3,352
Money Market	1,716,886
Cash	512
Total Cash and Equivalents	1,720,750
Receivables:	
Member Contributions in Transit	25,352
City Contributions in Transit	119,324
Total Receivable	144,676
Investments:	
Fixed Income	9,557,080
Equities	37,936,175
Mutual Funds:	
Fixed Income	709,186
Pooled/Common/Commingled Funds:	
Fixed Income	284,797
Hedge	1,466,722
Real Estate	4,500,317
Total Investments	54,454,277
Total Assets	56,319,703
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	56,319,703

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FOR THE YEAR ENDED SEPTEMBER 30, 2017  
Market Value Basis

ADDITIONS

## Contributions:

Member	670,753	
City	1,882,709	
Total Contributions		2,553,462
Investment Income:		
Net Increase in Fair Value of Investments	5,403,447	
Interest & Dividends	1,093,504	
Less Investment Expense <sup>1</sup>	(269,433)	
Net Investment Income		6,227,518
Total Additions		8,780,980

DEDUCTIONS

## Distributions to Members:

Benefit Payments	3,877,446	
Lump Sum DROP Distributions	0	
Lump Sum Benefit Distributions	316,440	
Refunds of Member Contributions	53,010	
Total Distributions		4,246,896
Administrative Expense		153,053
Total Deductions		4,399,949
Net Increase in Net Position		4,381,031
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		51,938,672
End of the Year		56,319,703

<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, 2017)

### Plan Description

#### *Plan Administration*

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

- a. Two Council appointees;
- b. Three City Manager appointees;
- c. One retiree of the Plan elected by the Membership, and a
- d. Seventh Member elected by the other six who is a City resident.

#### *Plan Membership as of October 1, 2016:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	243
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	53
Active Plan Members	302
	598

#### *Benefits Provided*

The Plan provides retirement, termination, and death benefits.

##### Normal Retirement:

Date: Earlier of 1) the attainment of age 60 and the completion of 5 years of service, or 2) the date when age plus service equals 85 (Rule of 85). For Members hired after September 30, 2011, the Normal Retirement Date is the earlier of 1) Age 65 with 8 years of Credited Service, or 2) the completion of 33 years of Credited Service, regardless of Age.

Benefit: The sum of the following:

- a.) 2.5% of Final Average Compensation (using a three-year average, determined as of September 30, 2011) for each year of Credited Service as of September 30, 2011, plus
- b.) 1.6% of Final Average Compensation (using an eight-year average) for Credited Service after September 30, 2011.

##### Early Retirement:

Date: The attainment of age 55 and the completion of 5 years of service.

Benefit: Determined as for Normal Retirement, reduced 3% per year for each year that the Early Retirement Date precedes age 60. The reduction is prorated monthly.

For Members hired after September 30, 2011, the reduction is 5% per year, for each year that the Early Retirement Date precedes age 65. The reduction is prorated monthly.

##### Termination of Employment:

Members hired before October 1, 2011:

Less Than 5 Years: Return of Member contributions with interest.

5 to 10 Years, But Less Than Age 50: Return of Member contributions with interest plus an amount equal to the accumulated contributions that would have existed had the Member contributed at the rate contributed by the City.

10 or More Years or Upon Attaining Age 50 and 5 Years: Accrued monthly benefit payable at Normal or Early (reduced basis) Retirement Date, or return of Member contributions with interest.

Members hired after September 30, 2011:

Less Than 8 Years: Return of Member contributions with interest.

8 or More Years: The accrued benefit, payable at the Normal (unreduced), or Early (reduced) Retirement Date.

##### Pre-Retirement Death Benefits:

Less Than 5 Years and 6 Months: Return of Member contributions with interest.

More than 5 Years and 6 Months: Return of Member contributions with interest plus an amount equal to the accumulated contributions that would have existed had the Member contributed at the rate contributed by the City.

*Contributions*

Members: 5% of Compensation. The contribution rate is 3% for Members hired after September 30, 2011.

City: Remaining amount necessary to fund the Normal Cost and amortize the Unfunded Actuarial Accrued Liability over not more than 30 years.

*Investments**Investment Policy:*

The following was the Board's adopted asset allocation policy as of September 30, 2017:

Asset Class	Target Allocation
Domestic Equity	52.5%
International Equity	10.0%
Fixed Income	17.5%
Real Estate	10.0%
Hedge Funds	5.0%
MLPs	5.0%
Total	100.00%

*Concentrations:*

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

*Rate of Return:*

For the year ended September 30, 2017, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 12.00 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: Non-union members who had 30 years of service in June, 2005.

Participation: Not to exceed 84 months.

Rate of Return: Actual net rate of investment return realized by the system from the short term investment fund or money market fund in which the DROP account is invested.

The DROP balance as September 30, 2017 is \$0.

## NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2017 were as follows:

Total Pension Liability	\$ 68,709,548
Plan Fiduciary Net Position	\$ (56,319,703)
Sponsor's Net Pension Liability	<u>\$ 12,389,845</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	81.97%

*Actuarial Assumptions:*

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2016 updated to September 30, 2017 using the following actuarial assumptions:

Inflation	2.30%
Salary Increases	4.00% - 6.00%
Discount Rate	7.50%
Investment Rate of Return	7.50%

*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 4, 2017.

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 2017 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, 2017 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	6.02%
International Equity	5.60%
Fixed Income	2.12%
Real Estate	2.97%
Hedge Funds	2.72%
MLPs	4.75%

Discount Rate:  
The Discount Rate used to measure the Total Pension Liability was 7.50 percent.  
The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

	1% Decrease	Current	1% Increase
	6.50%	Discount Rate	8.50%
	7.50%		
Sponsor's Net Pension Liability	\$ 19,270,932	\$ 12,389,845	\$ 6,547,796

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

	09/30/2017	09/30/2016
Total Pension Liability		
Service Cost	1,550,588	1,515,025
Interest	4,929,787	4,717,437
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	172,717	(1,619,494)
Changes of assumptions	-	2,509,683
Benefit Payments, including Refunds of Employee Contributions	(4,246,896)	(4,406,881)
Net Change in Total Pension Liability	2,406,196	2,715,770
Total Pension Liability - Beginning	66,303,352	63,587,582
Total Pension Liability - Ending (a)	<u>\$ 68,709,548</u>	<u>\$ 66,303,352</u>
Plan Fiduciary Net Position		
Contributions - Employer	1,882,709	1,969,372
Contributions - Employee	670,753	712,547
Net Investment Income	6,227,518	3,947,936
Benefit Payments, including Refunds of Employee Contributions	(4,246,896)	(4,406,881)
Administrative Expense	(153,053)	(145,459)
Net Change in Plan Fiduciary Net Position	4,381,031	2,077,515
Plan Fiduciary Net Position - Beginning	51,938,672	49,861,157
Plan Fiduciary Net Position - Ending (b)	<u>\$ 56,319,703</u>	<u>\$ 51,938,672</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 12,389,845</u>	<u>\$ 14,364,680</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	81.97%	78.33%
Covered Employee Payroll <sup>1</sup>	\$ 16,012,972	\$ 16,535,449
Net Pension Liability as a percentage of Covered Employee Payroll	77.37%	86.87%

**Notes to Schedule:**

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

*Changes of assumptions*

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

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

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

	09/30/2015	09/30/2014
Total Pension Liability		
Service Cost	1,500,184	1,471,441
Interest	4,553,080	4,418,330
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	504,129	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(4,354,731)	(3,888,957)
Net Change in Total Pension Liability	2,202,662	2,000,814
Total Pension Liability - Beginning	61,384,920	59,384,106
Total Pension Liability - Ending (a)	<u>\$ 63,587,582</u>	<u>\$ 61,384,920</u>
Plan Fiduciary Net Position		
Contributions - Employer	2,023,395	1,924,183
Contributions - Employee	694,975	715,147
Net Investment Income	397,133	5,868,861
Benefit Payments, including Refunds of Employee Contributions	(4,354,731)	(3,888,957)
Administrative Expense	(135,760)	(128,474)
Net Change in Plan Fiduciary Net Position	(1,374,988)	4,490,760
Plan Fiduciary Net Position - Beginning	51,236,145	46,745,385
Plan Fiduciary Net Position - Ending (b)	<u>\$ 49,861,157</u>	<u>\$ 51,236,145</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 13,726,425</u>	<u>\$ 10,148,775</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	78.41%	83.47%
Covered Employee Payroll <sup>1</sup>	\$ 18,135,744	\$ 15,618,366
Net Pension Liability as a percentage of Covered Employee Payroll	75.69%	64.98%

**Notes to Schedule:**

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



## SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	09/30/2017	09/30/2016	09/30/2015	09/30/2014
Actuarially Determined Contribution	1,785,446	1,969,372	2,023,395	1,924,183
Contributions in relation to the Actuarially Determined Contributions	1,882,709	1,969,372	2,023,395	1,924,183
Contribution Deficiency (Excess)	\$ (97,263)	\$ -	\$ -	\$ -
Covered Employee Payroll <sup>1</sup>	\$ 16,012,972	\$ 16,535,449	\$ 18,135,744	\$ 15,618,366
Contributions as a percentage of Covered Employee Payroll	11.76%	11.91%	11.16%	12.32%

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

Notes to Schedule

Valuation Date: 10/01/2015

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: 30 Years.

Mortality: RP-2000 Sex-Distinct Healthy Mortality Table, projected to Valuation Date using Scale AA. Disabled lives are set forward 5 years.  
We believe this assumption sufficiently accommodates expected future mortality improvements.

Interest Rate: 7.50% per year, compounded annually, net of investment related expenses. This assumption was adopted by the Board in conjunction with a revision to the October 1, 2009 valuation.

Termination Rates:	Sample Ages	Years of Service	% of Active Members Separating Within Next Year
	ALL	0	20.0%
		1	18.0%
		2	16.0%
		3	10.0%
		4	6.0%
	20	5+	16.2%
	25		13.2%
	30		10.8%
	35		9.4%
	40		7.8%
	45		5.8%
	50		3.2%
	55+		0.8%

The above rates were incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

## Disability Rates:

Sample Ages	% Becoming Disabled During the Year
20	0.05%
25	0.05%
30	0.06%
35	0.09%
40	0.12%
45	0.28%
50	0.43%

The above rates are consistent with the national average for general employee public

## Salary Increases:

Years of Service	Increase
1 to 2	6.00%
3	5.50%
4	5.50%
5	5.50%
6	5.50%
7 to 8	5.50%
9	5.50%
10 to 19	5.00%
20+	4.00%

The above rates were incorporated with the October 1, 2014 valuation as the result of an Experience Study

## Normal Retirement Rates:

Number of Years After First Eligibility For Normal	Probability of Retirement
0	25%
1	25%
2	50%
3	50%
4	60%
5	80%
6	100%

The above rates were incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

For Members hired after September 30, 2011, 100% retirement is assumed at the earlier of 1) Age 65 with 8 years of Credited Service, and 2) the completion of 33 years of Credited Service, regardless of Age. This assumption is reasonable, based on Plan provisions and historical experience.

## Early Retirement Rates:

Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. This assumption was incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

## Payroll Growth:

3.5% per year for amortization of the Unfunded Actuarial Accrued Liability. This assumption is consistent with the long-term payroll growth average, and therefore deemed reasonable.

## Actuarial Asset Method:

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

**SCHEDULE OF INVESTMENT RETURNS**  
Last 10 Fiscal Years

	<u>09/30/2017</u>	<u>09/30/2016</u>	<u>09/30/2015</u>	<u>09/30/2014</u>
Annual Money-Weighted Rate of Return				
Net of Investment Expense	12.00%	7.93%	0.79%	12.72%

## NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2018)

### General Information about the Pension Plan

#### *Plan Description*

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

- a. Two Council appointees;
- b. Three City Manager appointees;
- c. One retiree of the Plan elected by the Membership, and a
- d. Seventh Member elected by the other six who is a City resident.

Full-time General Employees hired prior to 3/1/95 enter the Plan on employment. Those hired after 2/28/95 enter following 6 months of service.

#### *Plan Membership as of October 1, 2016:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	243
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	53
Active Plan Members	302
	<u>598</u>

#### *Benefits Provided*

The Plan provides retirement, termination, and death benefits.

##### Normal Retirement:

Date: Earlier of 1) the attainment of age 60 and the completion of 5 years of service, or 2) the date when age plus service equals 85 (Rule of 85). For Members hired after September 30, 2011, the Normal Retirement Date is the earlier of 1) Age 65 with 8 years of Credited Service, or 2) the completion of 33 years of Credited Service, regardless of Age.

Benefit: The sum of the following:

- a.) 2.5% of Final Average Compensation (using a three-year average, determined as of September 30, 2011) for each year of Credited Service as of September 30, 2011, plus
- b.) 1.6% of Final Average Compensation (using an eight-year average) for Credited Service after September 30, 2011.

##### Early Retirement:

Date: The attainment of age 55 and the completion of 5 years of service.

Benefit: Determined as for Normal Retirement, reduced 3% per year for each year that the Early Retirement Date precedes age 60. The reduction is prorated monthly.

For Members hired after September 30, 2011, the reduction is 5% per year, for each year that the Early Retirement Date precedes age 65. The reduction is prorated monthly.

##### Termination of Employment:

Members hired before October 1, 2011:

Less Than 5 Years: Return of Member contributions with interest.

5 to 10 Years, But Less Than Age 50: Return of Member contributions with interest plus an amount equal to the accumulated contributions that would have existed had the Member contributed at the rate contributed by the City.

10 or More Years or Upon Attaining Age 50 and 5 Years: Accrued monthly benefit payable at Normal or Early (reduced basis) Retirement Date, or return of Member contributions with interest.

Members hired after September 30, 2011:

Less Than 8 Years: Return of Member contributions with interest.

8 or More Years: The accrued benefit, payable at the Normal (unreduced), or Early (reduced) Retirement Date.

##### Pre-Retirement Death Benefits:

Less Than 5 Years and 6 Months: Return of Member contributions with interest.

More than 5 Years and 6 Months: Return of Member contributions with interest plus an amount equal to the accumulated contributions that would have existed had the Member contributed at the rate contributed by the City.

*Contributions*

Members: 5% of Compensation. The contribution rate is 3% for Members hired after September 30, 2011.

City: Remaining amount necessary to fund the Normal Cost and amortize the Unfunded Actuarial Accrued Liability over not more than 30 years.

*Net Pension Liability*

The measurement date is September 30, 2017.

The measurement period for the pension expense was October 1, 2016 to September 30, 2017.

The reporting period is October 1, 2017 through September 30, 2018.

The Sponsor's Net Pension Liability was measured as of September 30, 2017.

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, 2016 updated to September 30, 2017 using the following actuarial assumptions:

Inflation	2.30%
Salary Increases	4.00% - 6.00%
Discount Rate	7.50%
Investment Rate of Return	7.50%

*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 4, 2017.

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 2017 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, 2017 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	52.50%	6.02%
International Equity	10.00%	5.60%
Fixed Income	17.50%	2.12%
Real Estate	10.00%	2.97%
Hedge Funds	5.00%	2.72%
MLPs	5.00%	4.75%
Total	100.00%	

### Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.50 percent.

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

## CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Reporting Period Ending September 30, 2017	\$ 66,303,352	\$ 51,938,672	\$ 14,364,680
Changes for a Year:			
Service Cost	1,550,588	-	1,550,588
Interest	4,929,787	-	4,929,787
Differences between Expected and Actual Experience	172,717	-	172,717
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	1,882,709	(1,882,709)
Contributions - Employee	-	670,753	(670,753)
Net Investment Income	-	6,227,518	(6,227,518)
Benefit Payments, including Refunds of Employee Contributions	(4,246,896)	(4,246,896)	-
Administrative Expense	-	(153,053)	153,053
Net Changes	2,406,196	4,381,031	(1,974,835)
Reporting Period Ending September 30, 2018	\$ 68,709,548	\$ 56,319,703	\$ 12,389,845

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.50%	7.50%	8.50%
Sponsor's Net Pension Liability	\$ 19,270,932	\$ 12,389,845	\$ 6,547,796

*Pension Plan Fiduciary Net Position.*

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

**FINAL PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND  
DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS  
FISCAL YEAR SEPTEMBER 30, 2017**

For the year ended September 30, 2017, the Sponsor has recognized a Pension Expense of \$2,481,706.

On September 30, 2017, 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	252,064	1,214,621
Changes of assumptions	1,882,263	-
Net difference between Projected and Actual Earnings on Pension Plan investments	838,829	-
Employer contributions subsequent to the measurement date	1,882,709	-
Total	<u>\$ 4,855,865</u>	<u>\$ 1,214,621</u>

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer contributions subsequent to the measurement date has been recognized as a reduction of the Net Pension Liability in the year ended September 30, 2017.

Other amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:	
2018	\$ 485,780
2019	\$ 485,779
2020	\$ 842,674
2021	\$ (55,698)
2022	\$ -
Thereafter	\$ -

**Payable to the Pension Plan**

On September 30, 2016, the Sponsor reported a payable of \$82,641 for the outstanding amount of contributions of the Pension Plan required for the year ended September 30, 2016.



**PRELIMINARY PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND  
DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS  
FISCAL YEAR SEPTEMBER 30, 2018**

For the year ended September 30, 2018, the Sponsor will recognize a Pension Expense of \$2,185,205.

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	255,569	809,748
Changes of assumptions	1,254,842	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	1,219,459
Employer contributions subsequent to the measurement date	TBD	-
Total	<u>TBD</u>	<u>\$ 2,029,207</u>

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended September 30, 2018.

Other amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:

2019	\$ 48,686
2020	\$ 405,581
2021	\$ (492,791)
2022	\$ (480,272)
2023	\$ -
Thereafter	\$ -

# SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

## Last 10 Fiscal Years

Reporting Period Ending Measurement Date	09/30/2018 09/30/2017	09/30/2017 09/30/2016
Total Pension Liability		
Service Cost	1,550,588	1,515,025
Interest	4,929,787	4,717,437
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	172,717	(1,619,494)
Changes of assumptions	-	2,509,683
Benefit Payments, including Refunds of Employee Contributions	(4,246,896)	(4,406,881)
Net Change in Total Pension Liability	2,406,196	2,715,770
Total Pension Liability - Beginning	66,303,352	63,587,582
Total Pension Liability - Ending (a)	<u>\$ 68,709,548</u>	<u>\$ 66,303,352</u>
Plan Fiduciary Net Position		
Contributions - Employer	1,882,709	1,969,372
Contributions - Employee	670,753	712,547
Net Investment Income	6,227,518	3,947,936
Benefit Payments, including Refunds of Employee Contributions	(4,246,896)	(4,406,881)
Administrative Expense	(153,053)	(145,459)
Net Change in Plan Fiduciary Net Position	4,381,031	2,077,515
Plan Fiduciary Net Position - Beginning	51,938,672	49,861,157
Plan Fiduciary Net Position - Ending (b)	<u>\$ 56,319,703</u>	<u>\$ 51,938,672</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 12,389,845</u>	<u>\$ 14,364,680</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	81.97%	78.33%
Covered Employee Payroll <sup>1</sup>	\$ 16,012,972	\$ 16,535,449
Net Pension Liability as a percentage of Covered Employee Payroll	77.37%	86.87%

### **Notes to Schedule:**

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

### *Changes of assumptions*

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

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

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

Reporting Period Ending	09/30/2016	09/30/2015
Measurement Date	09/30/2015	09/30/2014
Total Pension Liability		
Service Cost	1,500,184	1,471,441
Interest	4,553,080	4,418,330
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	504,129	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(4,354,731)	(3,888,957)
Net Change in Total Pension Liability	2,202,662	2,000,814
Total Pension Liability - Beginning	61,384,920	59,384,106
Total Pension Liability - Ending (a)	<u>\$ 63,587,582</u>	<u>\$ 61,384,920</u>
Plan Fiduciary Net Position		
Contributions - Employer	2,023,395	1,924,183
Contributions - Employee	694,975	715,147
Net Investment Income	397,133	5,868,861
Benefit Payments, including Refunds of Employee Contributions	(4,354,731)	(3,888,957)
Administrative Expense	(135,760)	(128,474)
Net Change in Plan Fiduciary Net Position	(1,374,988)	4,490,760
Plan Fiduciary Net Position - Beginning	51,236,145	46,745,385
Plan Fiduciary Net Position - Ending (b)	<u>\$ 49,861,157</u>	<u>\$ 51,236,145</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 13,726,425</u>	<u>\$ 10,148,775</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	78.41%	83.47%
Covered Employee Payroll <sup>1</sup>	\$ 18,135,744	\$ 15,618,366
Net Pension Liability as a percentage of Covered Employee Payroll	75.69%	64.98%

**Notes to Schedule:**

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

## SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	09/30/2017	09/30/2016	09/30/2015	09/30/2014
Actuarially Determined Contribution	1,785,446	1,969,372	2,023,395	1,924,183
Contributions in relation to the				
Actuarially Determined Contributions	1,882,709	1,969,372	2,023,395	1,924,183
Contribution Deficiency (Excess)	\$ (97,263)	\$ -	\$ -	\$ -
Covered Employee Payroll <sup>1</sup>	\$ 16,012,972	\$ 16,535,449	\$ 18,135,744	\$ 15,618,366
Contributions as a percentage of				
Covered Employee Payroll	11.76%	11.91%	11.16%	12.32%

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

Notes to Schedule

Valuation Date: 10/01/2015

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: 30 Years.  
Mortality: RP-2000 Sex-Distinct Healthy Mortality Table, projected to Valuation Date using Scale AA. Disabled lives are set forward 5 years.  
We believe this assumption sufficiently accommodates expected future mortality improvements.  
Interest Rate: 7.50% per year, compounded annually, net of investment related expenses. This assumption was adopted by the Board in conjunction with a revision to the October 1, 2009 valuation.

Termination Rates:	Years of Service	% of Active Members Separating Within Next Year
Sample Ages		
ALL	0	20.0%
0	1	18.0%
0	2	16.0%
0	3	10.0%
0	4	6.0%
20	5+	16.2%
25		13.2%
30		10.8%
35		9.4%
40		7.8%
45		5.8%
50		3.2%
55+		0.8%

The above rates were incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

Disability Rates:	% Becoming Disabled During	
	Sample Ages	the Year
	20	0.05%
	25	0.05%
	30	0.06%
	35	0.09%
	40	0.12%
	45	0.28%
	50	0.43%

The above rates are consistent with the national average for general employee public pension plans.

Salary Increases:	Years of	Increase
	Service	
	1 to 2	6.0%
	3	5.5%
	4	5.5%
	5	5.5%
	6	5.5%
	7 to 8	5.5%
	9	5.5%
	10 to 19	5.0%
	20+	4.0%

The above rates were incorporated with the October 1, 2014 valuation as the result of an Experience Study

Normal Retirement Rates:	Number of Years After First	Probability of
	Eligibility For Normal	
	0	25%
	1	25%
	2	50%
	3	50%
	4	60%
	5	80%
	6	100%

The above rates were incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

For Members hired after September 30, 2011, 100% retirement is assumed at the earlier of 1) Age 65 with 8 years of Credited Service, and 2) the completion of 33 years of Credited Service, regardless of Age. This assumption is reasonable, based on Plan provisions and historical experience.

**Early Retirement Rates:** Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. This assumption was incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

**Payroll Growth:** 3.5% per year for amortization of the Unfunded Actuarial Accrued Liability. This assumption is consistent with the long-term payroll growth average, and therefore deemed reasonable.

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

**FINAL COMPONENTS OF PENSION EXPENSE**  
**FISCAL YEAR SEPTEMBER 30, 2017**

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 13,726,425	\$ 1,448,781	\$ 5,050,767	\$ -
Employer Contributions made after September 30, 2016	-	-	1,882,709	-
Total Pension Liability Factors:				
Service Cost	1,515,025	-	-	1,515,025
Interest	4,717,437	-	-	4,717,437
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(1,619,494)	1,619,494	-	-
Current year amortization of experience difference	-	(404,873)	(126,032)	(278,841)
Change in assumptions about future economic or demographic factors or other inputs	2,509,683	-	2,509,683	-
Current year amortization of change in assumptions	-	-	(627,420)	627,420
Benefit Payments	(4,406,881)	-	-	-
Net change	<u>2,715,770</u>	<u>1,214,621</u>	<u>3,638,940</u>	<u>6,581,041</u>
Plan Fiduciary Net Position:				
Contributions - Employer	1,969,372	-	(1,969,372)	-
Contributions - Employee	712,547	-	-	(712,547)
Projected Net Investment Income	3,669,446	-	-	(3,669,446)
Difference between projected and actual earnings on Pension Plan investments	278,490	278,490	-	-
Current year amortization	-	(538,625)	(675,824)	137,199
Benefit Payments	(4,406,881)	-	-	-
Administrative Expenses	(145,459)	-	-	145,459
Net change	<u>2,077,515</u>	<u>(260,135)</u>	<u>(2,645,196)</u>	<u>(4,099,335)</u>
Ending Balance	<u><u>\$ 14,364,680</u></u>	<u><u>\$ 2,403,267</u></u>	<u><u>\$ 6,044,511</u></u>	<u><u>\$ 2,481,706</u></u>

**PRELIMINARY COMPONENTS OF PENSION EXPENSE**  
**FISCAL YEAR SEPTEMBER 30, 2018**

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 14,364,680	\$ 2,403,267	\$ 6,044,511	\$ -
Employer Contributions made after September 30, 2017	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	1,550,588	-	-	1,550,588
Interest	4,929,787	-	-	4,929,787
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	172,717	-	172,717	-
Current year amortization of experience difference	-	(404,873)	(169,212)	(235,661)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(627,421)	627,421
Benefit Payments	(4,246,896)	-	-	-
Net change	<u>2,406,196</u>	<u>(404,873)</u>	<u>(623,916)</u>	<u>6,872,135</u>
Plan Fiduciary Net Position:				
Contributions - Employer	1,882,709	-	(1,882,709)	-
Contributions - Employee	670,753	-	-	(670,753)
Projected Net Investment Income	3,826,157	-	-	(3,826,157)
Difference between projected and actual earnings on Pension Plan investments	2,401,361	2,401,361	-	-
Current year amortization	-	(1,018,898)	(675,825)	(343,073)
Benefit Payments	(4,246,896)	-	-	-
Administrative Expenses	(153,053)	-	-	153,053
Net change	<u>4,381,031</u>	<u>1,382,463</u>	<u>(2,558,534)</u>	<u>(4,686,930)</u>
Ending Balance	<u>\$ 12,389,845</u>	<u>\$ 3,380,857</u>	<u>TBD</u>	<u>\$ 2,185,205</u>

\* Employer Contributions subsequent to the measurement date made after September 30, 2017 but made on or before September 30, 2018 need to be added.

## AMORTIZATION SCHEDULE - INVESTMENTS

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

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2014	\$ (2,414,635)	5	\$ (482,927)	\$ (482,927)	\$ (482,927)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 3,379,123	5	\$ 675,824	\$ 675,825	\$ 675,825	\$ 675,825	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (278,490)	5	\$ (55,698)	\$ (55,698)	\$ (55,698)	\$ (55,698)	\$ (55,698)	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (2,401,361)	5	\$ -	\$ (480,273)	\$ (480,272)	\$ (480,272)	\$ (480,272)	\$ (480,272)	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 137,199	\$ (343,073)	\$ (343,072)	\$ 139,855	\$ (535,970)	\$ (480,272)	\$ -	\$ -	\$ -	\$ -



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)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2016	\$ 2,509,683	4	\$ 627,420	\$ 627,421	\$ 627,421	\$ 627,421	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 627,420	\$ 627,421	\$ 627,421	\$ 627,421	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

## 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)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2015	\$ 504,129	4	\$ 126,032	\$ 126,032	\$ 126,032	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (1,619,494)	4	\$ (404,873)	\$ (404,873)	\$ (404,874)	\$ (404,874)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 172,717	4	\$ -	\$ 43,180	\$ 43,179	\$ 43,179	\$ 43,179	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (278,841)	\$ (235,661)	\$ (235,663)	\$ (361,695)	\$ 43,179	\$ -	\$ -	\$ -	\$ -	\$ -