

**CITY OF LARGO MUNICIPAL POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT PLAN  
ACTUARIAL VALUATION REPORT AS OF OCTOBER 1, 2016**

**ANNUAL EMPLOYER CONTRIBUTION FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2018**





January 11, 2017

Board of Trustees  
City of Largo Police Officers' and  
Firefighters' Retirement Plan  
Largo, Florida

Dear Board Members:

The results of the October 1, 2016 Annual Actuarial Valuation of the City of Largo Municipal Police Officers' and Firefighters' Retirement Plan are presented in this report.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purpose of the valuation is to measure the System's funding progress, to determine the employer contribution rate for the fiscal year ending September 30, 2018, and to present the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 67. This report also includes estimated GASB Statement No. 67 information for the fiscal year ending September 30, 2017. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The computed contribution rate shown on page 1 is best viewed as a minimum contribution rate that complies with the Board's funding policy. Users of this report should be aware that contributions made at that rate do not guarantee benefit security. Given the importance of benefit security to any retirement system, we suggest that contributions to the System in excess of those presented in the report be considered.

The contribution rate in this report is determined using actuarial assumptions and methods disclosed in Section B of this report. This report includes risk metrics in Section A but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment. We encourage a review and assessment of investment and other significant risks that may have a material effect on the Plan's financial condition.

The findings in this report are based on data or other information through September 30, 2016. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The valuation was based upon information furnished by the Plan Administrator and the City concerning Retirement Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the Plan Administrator and the City.

In addition, this report was prepared using certain assumptions approved by the Board and prescribed by the Florida Statutes as described in the section of this report entitled Actuarial Assumptions and Methods. The prescribed assumptions are the assumed mortality rates detailed in the Actuarial Assumptions and Methods section of this report, in accordance with Florida House Bill 1309 (codified in Chapter 2015-157).

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Retirement Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and with applicable statutes.

Melissa R. Moskovitz and Jeffrey Amrose are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

This actuarial valuation and/or cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate. In our opinion, the techniques and assumptions used are reasonable, meet the requirements and intent of Part VII, Chapter 112, Florida Statutes, and are based on generally accepted actuarial principles and practices. 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.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

By Melissa R. Moskovitz  
Melissa R. Moskovitz, EA, MAAA, FCA  
Enrolled Actuary No. 14-6467

By Jeff Amrose  
Jeffrey Amrose, EA, MAAA  
Enrolled Actuary No. 14-6599

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## **SECTION A**



### **DISCUSSION OF VALUATION RESULTS**

## DISCUSSION OF VALUATION RESULTS

### COMPARISON OF REQUIRED EMPLOYER CONTRIBUTIONS

A comparison of the required employer contribution developed in this year's actuarial valuation and the previous valuation is as follows:

	<b>For FYE 9/30/2018 Based on 10/1/2016 Valuation</b>	<b>For FYE 9/30/2017 Based on 10/1/2015 Valuation</b>	<b>Increase (Decrease)</b>
Required Employer/State Contribution	\$ 6,261,450	\$ 5,373,176	\$ 888,274
As % of Covered Payroll	39.88 %	38.19 %	1.69 %
Estimated State Contribution*	1,187,377	1,187,377	0
As % of Covered Payroll	7.56	8.44	(0.88)
Required Employer Contribution	5,074,073	4,185,799	888,274
As % of Covered Payroll	32.32	29.75	2.57

\* Based on amount received in fiscal year ending 2016 of \$612,474 for police officers and \$574,903 for firefighters. If the actual State revenue received falls below these amounts, or if a portion of the State revenue is used to fund the Share Plan, the difference may need to be made up by the City.

The required employer contribution has been adjusted for interest on the basis that contributions are made in equal payments biweekly.

The contribution has also been computed under the assumption that the amount to be received from the State on behalf of police officers and firefighters in 2017 and 2018 will be \$1,187,377 (\$612,474 for police officers and \$574,903 for firefighters). The City may take credit for the full State revenue in fiscal years ending September 30, 2017 and 2018 (assuming the funded ratio as of October 1, 2017 is under 80%). If the actual State revenue received falls below these amounts, the difference may need to be made up by the City.

The actual employer and State contributions for the fiscal year ending September 30, 2016 were \$3,460,575 and \$1,187,377, respectively, for a total of \$4,647,952. The required contribution was \$4,647,952.

**REVISIONS IN BENEFITS**

There have been no revisions in benefits since the previous valuation.

**REVISIONS IN ACTUARIAL ASSUMPTIONS OR METHODS**

An experience study for the six-year period ending September 30, 2015 was completed (dated August 15, 2016). As a result of this experience study, the following assumption changes were adopted by the Board of Trustees:

- The investment return assumption was lowered from 7.50% to 6.75%.
- Salary increases were changed from 5.0% per year to rates that vary by age as shown in the Actuarial Assumptions and Methods section of this Report.
- The assumed rate of payroll growth for purposes of amortizing the Unfunded Actuarial Accrued Liability was lowered from 3.0% to 2.5%.
- The assumed rates of retirement were updated from rates that vary by age or years of service to rates that vary based on age and years of service as shown in the Actuarial Assumptions and Methods section of this Report.
- The rates of employment separation have been updated from rates that are based on years of service or age to rates that are based on years of service as shown in the Actuarial Assumptions and Methods section of this Report.
- The mortality assumption was changed from the RP-2000 Combined Healthy Participant Mortality Table for males and females with mortality improvements projected to all future years after 2000 using Scale AA to the mortality assumption used by the Florida Retirement System (FRS) for Special Risk Class members in the actuarial valuation as of July 1, 2016. The current FRS mortality tables are the RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years after 2000 using Scale BB. For males, the base mortality rates include a 90% blue collar adjustment and a 10% white collar adjustment. For females, the base mortality rates include a 100% white collar adjustment. This change was made in



compliance with Florida House Bill 1309, which requires all public pension plans in Florida to use the same mortality tables used in either of the last two actuarial valuations reports of FRS no later than October 1, 2016.

The assumptions changes described above increased the Employer Contribution Rate by 5.31% of covered payroll.

#### **ACTUARIAL EXPERIENCE**

There was a net actuarial loss of \$265,168 since the last valuation which means that actual experience was less favorable than expected. The loss was primarily due to higher than expected salary increases (8.8% actual versus 5.0% expected). This loss was partially offset by a higher than expected return on assets. The investment return was 8.3% based on market value of assets versus 7.5% expected. The net loss caused the required employer contribution to increase by 0.12% of covered payroll.

#### **ANALYSIS OF CHANGE IN EMPLOYER CONTRIBUTION**

The components of change in the actuarially required employer contribution are as follows:

Contribution Rate Last Year	29.75 %
Assumption Changes	5.31
Experience (Gains) or Losses	0.12
Change in Employer Normal Cost Rate	(0.41)
Amortization of UAAL	(3.36) *
State Contribution	0.91
Contribution Rate This Year	32.32 %

\* The payroll growth assumption for purposes of amortizing the UAAL increased from 0.87%, but is still capped at 1.62% due to the 10-year payroll growth cap pursuant to Chapter 112, Florida Statutes.

#### **FUNDED RATIO**

This year's funded ratio is 70.6% compared to 73.6% last year. The ratio is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability. The funded ratio was 74.6% before the changes in assumptions described above. Since the funded ratio is less than 80%, all Premium Tax Revenue for the year will be used to fund the minimum benefits.

### **VARIABILITY OF FUTURE CONTRIBUTION RATES**

The Actuarial Cost Method used to determine the contribution rate is intended to produce contribution rates which are generally level as a percent of payroll. Even so, when experience differs from the assumptions, as it often does, the employer's contribution rate can vary significantly from year-to-year.

Over time, if the year-to-year gains and losses offset each other, the contribution rate would be expected to return to the current level, but this does not always happen.

Another potential area of variability has to do with the annual payment on the unfunded accrued liability (UAL). This payment is computed as a level percent of covered payroll under the assumption that covered payroll will rise by 2.5% per year. According to Chapter 112, Florida Statutes, this payroll growth assumption may not exceed the average growth over the last ten years which was 1.62%. If the ten-year average falls below this rate next year, the amortization payments will increase. For example, if the payroll growth assumption is lowered to 0%, the UAL payment will increase from \$3,484,373 next year to \$4,202,075.

### **CONCLUSION**

The remainder of this Report includes detailed actuarial valuation results, financial information, miscellaneous information and statistics, and a summary of plan provisions.

### STATE CONTRIBUTION RESERVE

Increments in Chapter revenue over that received in 1998 must first be used to fund the cost of compliance with minimum benefits. As of the valuation date, there were no cost-related changes needed to be made to comply with minimum benefits.

<b>Actuarial Confirmation of the Use of State Chapter Money</b>			
	<b>Police</b>	<b>Fire</b>	<b>Total</b>
1. Base Amount Previous Plan Year	\$ 562,962	\$ 614,795	\$ 1,177,757
2. Amount Received for Previous Plan Year	612,474	574,903	1,187,377
3. Benefit Improvements Made in Previous Plan Year	0	0	0
4. Excess Funds for Previous Plan Year*	0	0	0
5. Accumulated Excess at Beginning of Previous Year	0	0	0
6. Prior Excess Used in Previous Plan Year	0	0	0
7. Accumulated Excess as of Valuation Date (Available for Benefit Improvements): (5) - (6)	0	0	0
8. Base Amount This Plan Year*	612,474	574,903	1,187,377

\* Pursuant to Ordinance No. 2014-32, the employer may use all Chapter revenue to fund the contribution requirements for fiscal year ending September 30, 2016 since the funded ratio is less than 80%.

The Accumulated Excess shown in line 7 (if any) is being held in reserve and is subtracted from Plan assets (see Section C of this Report). The Base Amount in line 8 is the amount the employer may take as a credit against its required contribution. Refer to Section F (Summary of Plan Provisions) for details on the amount of State revenue that may be used as a credit against the required contribution.

## **SECTION B**



## **VALUATION RESULTS**

<b>PARTICIPANT DATA</b>			
	October 1, 2016 <i>After Assumption Changes</i>	October 1, 2016 <i>Before Assumption Changes</i>	October 1, 2015
<b>ACTIVE MEMBERS</b>			
Number	241	241	226
Covered Annual Payroll	\$ 15,243,424	\$ 15,302,986	\$ 13,659,795
Average Annual Payroll	\$ 63,251	\$ 63,498	\$ 60,442
Average Age	39.3	39.3	39.3
Average Past Service	10.4	10.4	10.5
Average Age at Hire	28.9	28.9	28.8
<b>RETIREES, BENEFICIARIES &amp; DROP</b>			
Number	198	198	196
Annual Benefits	\$ 7,700,576	\$ 7,700,576	\$ 7,585,503
Average Annual Benefit	\$ 38,892	\$ 38,892	\$ 38,702
Average Age	61.7	61.7	61.2
<b>DISABILITY RETIREES</b>			
Number	19	19	19
Annual Benefits	\$ 420,461	\$ 420,461	\$ 420,461
Average Annual Benefit	\$ 22,130	\$ 22,130	\$ 22,130
Average Age	59.9	59.9	58.9
<b>TERMINATED VESTED MEMBERS</b>			
Number	15	15	14
Annual Benefits	\$ 371,544	\$ 371,544	\$ 332,209
Average Annual Benefit	\$ 24,770	\$ 24,770	\$ 23,729
Average Age	43.3	43.3	43.6

**ACTUARIALLY DETERMINED CONTRIBUTION (ADC)**

	October 1, 2016 <i>After Assumption Changes</i>	October 1, 2016 <i>Before Assumption Changes</i>	October 1, 2015
A. Valuation Date			
B. ADC to Be Paid During Fiscal Year Ending	9/30/2018	9/30/2018	9/30/2017
C. Assumed Dates of Employer Contributions	Biweekly	Biweekly	Biweekly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 3,484,373	\$ 3,098,224	\$ 3,191,995
E. Employer Normal Cost	2,396,475	1,996,896	1,836,651
F. ADC if Paid on the Valuation Date: D+E	5,880,848	5,095,120	5,028,646
G. ADC Adjusted for Frequency of Payments	6,079,327	5,286,187	5,217,220
H. ADC as % of Covered Payroll	39.88 %	34.54 %	38.19 %
I. Assumed Rate of Increase in Covered Payroll to Contribution Year	3.00 %	3.00 %	3.00 %
J. Covered Payroll as of Contribution Date	15,700,727	15,762,076	14,069,589
K. ADC for Contribution Year: H x J	6,261,450	5,444,221	5,373,176
L. Estimate of State Revenue in Contribution Year*	1,187,377	1,187,377	1,187,377
M. Required Employer Contribution (REC) in Contribution Year	5,074,073	4,256,844	4,185,799
N. REC as % of Covered Payroll in Contribution Year: M ÷ J	32.32 %	27.01 %	29.75 %

\*Based on amount received in fiscal year ending 2016 of \$612,474 for police officers and \$574,903 for firefighters. If the actual State revenue received falls below these amounts, or if a portion of the State revenue is used to fund the Share Plan, the difference may need to be made up by the City.

**ACTUARIAL VALUE OF BENEFITS AND ASSETS**

A. Valuation Date	October 1, 2016 <i>After Assumption Changes</i>	October 1, 2016 <i>Before Assumption Changes</i>	October 1, 2015
B. Actuarial Present Value of All Projected Benefits for			
1. Active Members			
a. Service Retirement Benefits	\$ 78,689,680	\$ 73,860,875	\$ 66,346,580
b. Vesting Benefits	5,064,058	3,969,732	3,741,077
c. Disability Benefits	4,147,896	3,904,866	3,631,966
d. Preretirement Death Benefits	1,289,594	718,715	686,802
e. Return of Member Contributions	416,903	467,491	364,612
f. Total	<u>89,608,131</u>	<u>82,921,679</u>	<u>74,771,037</u>
2. Inactive Members			
a. Service Retirees & Beneficiaries	92,350,199	86,054,500	85,502,640
b. Disability Retirees	4,165,262	4,220,255	4,293,916
c. Terminated Vested Members	<u>3,651,420</u>	<u>3,394,535</u>	<u>3,028,580</u>
d. Total	<u>100,166,881</u>	<u>93,669,290</u>	<u>92,825,136</u>
3. Total for All Members	189,775,012	176,590,969	167,596,173
C. Actuarial Accrued (Past Service) Liability per Entry Age Normal Method	162,363,949	153,602,469	146,270,825
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	146,990,090	136,900,959	131,399,067
E. Plan Assets			
1. Market Value	114,633,342	114,633,342	107,652,607
2. Actuarial Value	114,633,342	114,633,342	107,652,607
F. Unfunded Actuarial Accrued Liability (EAN Method): C - E2	47,730,607	38,969,127	38,618,218
G. Funded Ratio: E2 / C	70.6%	74.6%	73.6%
H. Actuarial Present Value of Projected Covered Payroll	121,561,138	115,354,712	105,453,257
I. Actuarial Present Value of Projected Member Contributions	9,724,891	9,228,377	8,436,261
J. Accumulated Contributions of Active Members	7,632,507	7,632,507	6,775,981

<b>CALCULATION OF EMPLOYER NORMAL COST</b>			
A. Valuation Date	October 1, 2016 <i>After Assumption Changes</i>	October 1, 2016 <i>Before Assumption Changes</i>	October 1, 2015
B. Normal Cost for			
1. Service Retirement Benefits	\$ 2,634,109	\$ 2,319,535	\$ 2,097,871
2. Vesting Benefits	313,153	241,011	217,591
3. Disability Benefits	320,819	312,546	277,542
4. Preretirement Death Benefits	77,527	40,528	37,002
5. Return of Member Contributions	129,001	166,175	148,143
6. Total for Future Benefits	<u>3,474,609</u>	<u>3,079,795</u>	<u>2,778,149</u>
7. Assumed Amount for Administrative Expenses	141,340	141,340	151,286
8. Total Normal Cost	<u>3,615,949</u>	<u>3,221,135</u>	<u>2,929,435</u>
C. Expected Member Contribution	1,219,474	1,224,239	1,092,784
D. Employer Normal Cost: B8-C	2,396,475	1,996,896	1,836,651
E. Employer Normal Cost as a % of Covered Payroll	15.72%	13.05%	13.45%



<b>DERIVATION OF CURRENT UAAL</b>	
1. Last Year's UAAL	\$ 38,618,218
2. Employer Normal Cost in Previous Year	1,836,651
3. Last Year's Contributions	4,647,952
4. Interest at the Assumed Rate on:	
a. 1 and 2 for one year	3,034,115
b. 3 from dates paid	137,073
c. a - b	<u>2,897,042</u>
5. This Year's Expected UAAL Prior to Revision: 1 + 2 - 3 + 4c	38,703,959
6. Change in UAAL Due to Plan Amendments and/or Changes in Actuarial Assumptions/Methods	8,761,480
7. This Year's Expected UAAL: 5 + 6	47,465,439
8. This Year's Actual UAAL	47,730,607
9. This Year's Gain (Loss): 7 - 8	(265,168)
10. Gain (Loss) due to Investments	925,397
11. Gain (Loss) due to Other Causes	(1,190,565)

### LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

UAAL AMORTIZATION PERIOD AND PAYMENTS						
Original UAAL				Current UAAL		
Years	Source	Amortization Period (Years)	Amount	Years Remaining	Amount	Payment
10/1/2003	Initial UAL	30	\$ 5,858,728	17	\$ 6,747,692	\$ 571,806
10/1/2004	(Gain)/Loss	30	2,118,869	18	2,331,230	190,560
10/1/2004	Method Change	30	(1,272,715)	18	(1,400,275)	(114,462)
10/1/2005	(Gain)/Loss	30	(1,042,295)	19	(1,158,808)	(91,637)
10/1/2006	(Gain)/Loss	30	834,799	20	950,450	72,899
10/1/2007	(Gain)/Loss	30	(4,296,887)	21	(4,869,322)	(363,073)
10/1/2007	Assumption Changes	30	9,156,710	21	10,376,579	773,712
10/1/2008	(Gain)/Loss	30	19,638,389	22	20,911,815	1,518,991
10/1/2008	Plan Change	30	72,734	22	77,452	5,626
10/1/2009	(Gain)/Loss	30	6,723,070	23	6,800,209	482,102
10/1/2009	Plan Change	30	231,112	23	233,762	16,573
10/1/2010	(Gain)/Loss	30	132,188	24	130,162	9,022
10/1/2010	Assumption Changes	30	4,966,741	24	4,890,613	338,979
10/1/2011	(Gain)/Loss	30	5,934,769	25	5,987,526	406,371
10/1/2012	(Gain)/Loss	30	(10,095,570)	26	(9,985,155)	(664,522)
10/1/2012	Plan Change	30	133,568	26	132,106	8,792
10/1/2013	(Gain)/Loss	30	(8,842,615)	27	(8,712,056)	(569,267)
10/1/2014	(Gain)/Loss	30	(2,592,536)	28	(2,576,251)	(165,478)
10/1/2015	(Gain)/Loss	30	7,732,410	29	7,836,230	495,325
10/1/2016	(Gain)/Loss	30	265,168	30	265,168	16,511
10/1/2016	Assumption Changes	30	<u>8,761,480</u>	30	<u>8,761,480</u>	<u>545,543</u>
			44,418,117		47,730,607	3,484,373

The UAAL is being amortized as a level percent of payroll. The expected amortization schedule is as follows:

AMORTIZATION SCHEDULE	
Year	Expected UAAL
2016	\$ 47,730,607
2017	47,232,853
2018	46,641,245
2019	45,948,471
2020	45,146,709
2021	44,227,595
2026	37,536,026
2031	26,270,765
2036	11,204,781
2041	3,221,981
2046	0

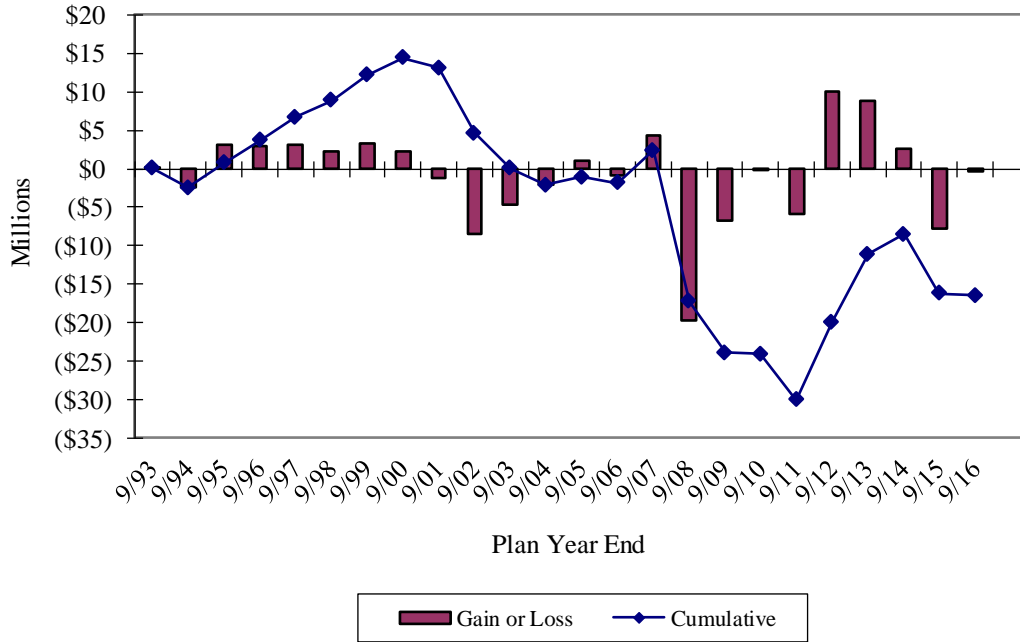
## ACTUARIAL GAINS AND LOSSES

The assumptions used to anticipate mortality, employment turnover, investment income, expenses, salary increases, and other factors have been based on long range trends and expectations. Actual experience can vary from these expectations. If significant long term experience reveals consistent deviation from what has been expected and that deviation is expected to continue, the assumptions should be modified.

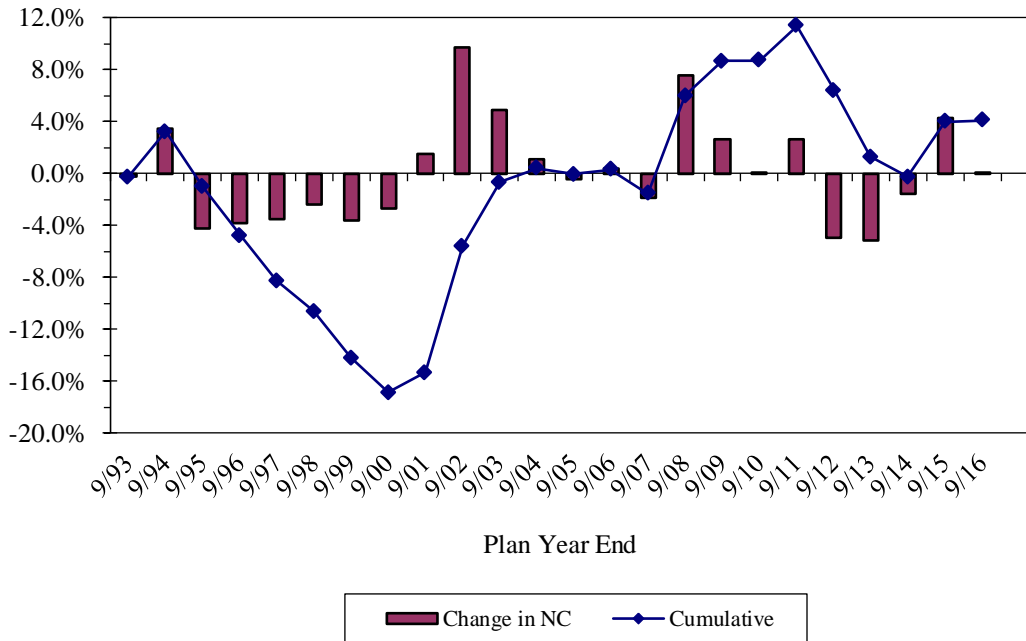
Net actuarial gains in previous years have been as follows:

Year Ending 9/30	Change in Contribution Rate	Net Gain (Loss)
1993	(0.25) %	\$ 16,599
1994	3.49	(2,436,222)
1995	(4.23)	3,138,520
1996	(3.78)	2,926,631
1997	(3.46)	3,062,491
1998	(2.38)	2,185,878
1999	(3.57)	3,290,722
2000	(2.66)	2,231,200
2001	1.50	(1,269,020)
2002	9.75	(8,492,245)
2003	4.96	(4,617,928)
2004	1.07	(2,118,869)
2005	(0.47)	1,042,295
2006	0.36	(834,799)
2007	(1.86)	4,296,887
2008	7.56	(19,638,389)
2009	2.66	(6,723,070)
2010	0.05	(132,188)
2011	2.65	(5,934,769)
2012	(4.97)	10,095,570
2013	(5.14)	8,842,615
2014	(1.52)	2,592,536
2015	4.25	(7,732,410)
2016	0.12	(265,168)

ACTUARIAL GAIN (+) OR LOSS (-)



CHANGE IN EMPLOYER COST RATE DUE TO GAIN OR LOSS

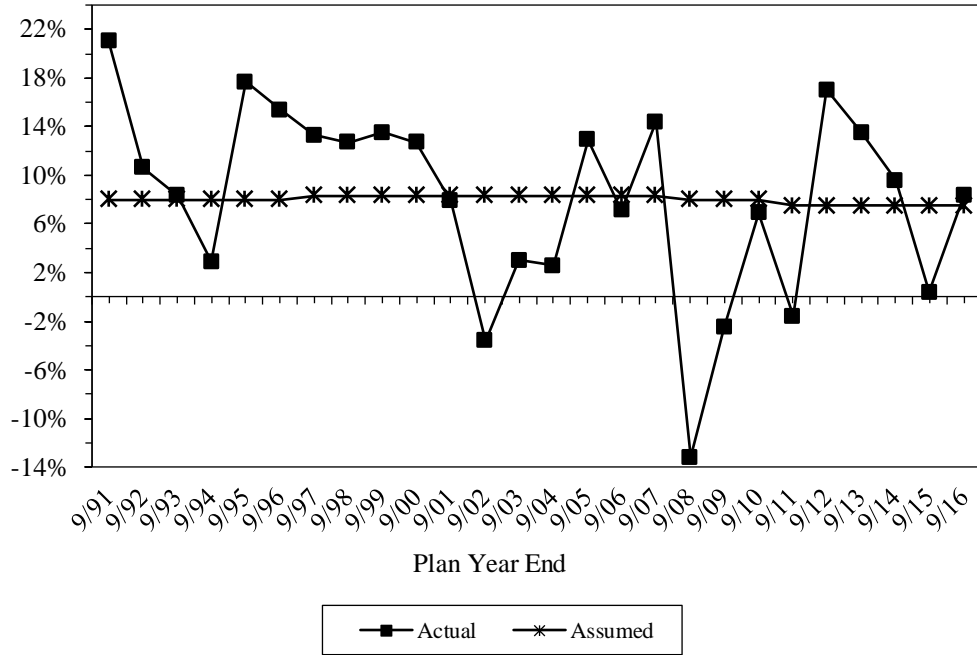


The fund earnings and salary increase assumptions have considerable impact on the cost of the Plan so it is important that they are in line with the actual experience. The following table shows the actual fund earnings and salary increase rates compared to the assumed rates for the last few years:

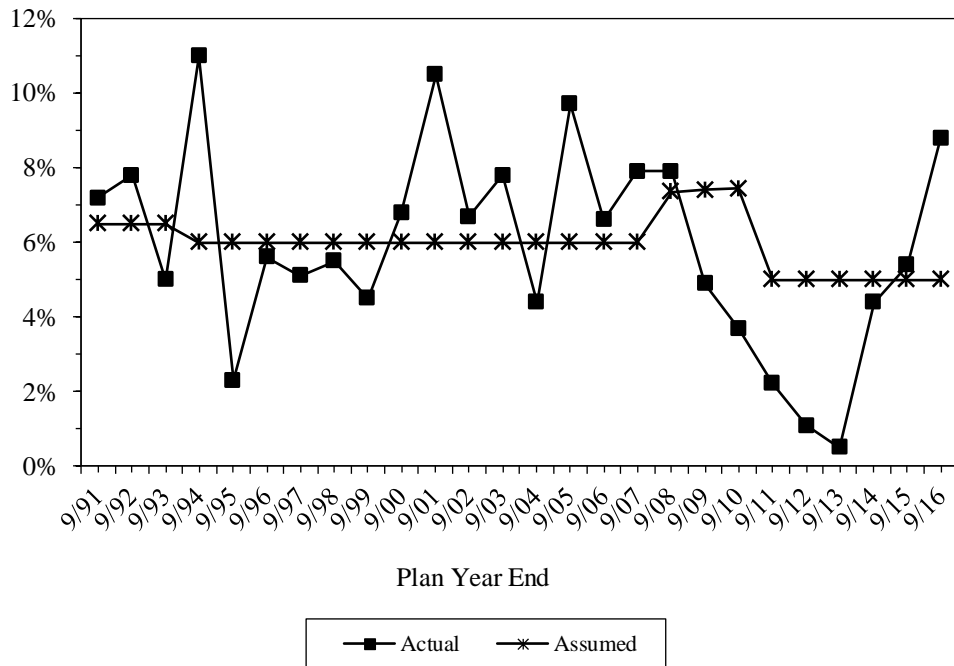
Year Ending	Investment Return		Salary Increases	
	Actual	Assumed	Actual	Assumed
9/30/1991	21.0 %	8.00 %	7.2 %	6.50 %
9/30/1992	10.6	8.00	7.8	6.50
9/30/1993	8.3	8.00	5.0	6.50
9/30/1994	2.9	8.00	11.0	6.00
9/30/1995	17.7	8.00	2.3	6.00
9/30/1996	15.4	8.00	5.6	6.00
9/30/1997	13.3	8.33	5.1	6.00
9/30/1998	12.7	8.33	5.5	6.00
9/30/1999	13.5	8.33	4.5	6.00
9/30/2000	12.7	8.33	6.8	6.00
9/30/2001	7.9	8.33	10.5	6.00
9/30/2002	(3.6)	8.33	6.7	6.00
9/30/2003	3.0	8.33	7.8	6.00
9/30/2004	2.6	8.33	4.4	6.00
9/30/2005	12.9	8.33	9.7	6.00
9/30/2006	7.1	8.33	6.6	6.00
9/30/2007	14.4	8.33	7.9	6.00
9/30/2008	(13.2)	8.00	7.9	7.36
9/30/2009	(2.5)	8.00	4.9	7.41
9/30/2010	6.9	8.00	3.7	7.45
9/30/2011	(1.6)	7.50	2.2	5.00
9/30/2012	17.0	7.50	1.1	5.00
9/30/2013	13.5	7.50	0.5	5.00
9/30/2014	9.6	7.50	4.4	5.00
9/30/2015	0.4	7.50	5.4	5.00
9/30/2016	8.3	7.50	8.8	5.00
Averages	7.8	N/A	5.9	N/A

The actual investment return rates shown above are based on the actuarial value of assets. The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuations both at the beginning and the end of each year.

### HISTORY OF INVESTMENT RETURN BASED ON ACTUARIAL VALUE OF ASSETS



### HISTORY OF SALARY INCREASES



<b>Actual (A) Compared to Expected (E) Decrements Among Active Employees</b>													
<b>Year Ended</b>	<b>Number Added During Year</b>		<b>Service &amp; DROP Retirement</b>		<b>Disability Retirement</b>		<b>Death</b>		<b>Terminations</b>				<b>Active Members End of Year</b>
	<b>A</b>	<b>E</b>	<b>A</b>	<b>E</b>	<b>A</b>	<b>E</b>	<b>A</b>	<b>E</b>	<b>Vested</b>	<b>Other</b>	<b>Totals</b>		
									<b>A</b>	<b>A</b>	<b>A</b>	<b>E</b>	
9/30/2002	21	21	3	7	0	1	0	0	3	15	18	8	<b>236</b>
9/30/2003	25	20	7	5	1	1	0	0	2	10	12	7	<b>241</b>
9/30/2004	32	22	3	7	0	1	0	0	4	15	19	7	<b>251</b>
9/30/2005	22	19	8	11	0	1	1	0	1	9	10	8	<b>254</b>
9/30/2006	27	26	10	14	0	1	0	0	2	14	16	8	<b>255</b>
9/30/2007	19	22	5	13	0	1	0	0	1	16	17	8	<b>252</b>
9/30/2008	19	16	5	21	1	1	0	0	1	9	10	15	<b>255</b>
9/30/2009	5	19	13	21	0	1	1	0	2	3	5	15	<b>241</b>
9/30/2010	22	22	17	17	0	1	0	0	1	4	5	12	<b>241</b>
9/30/2011	7	20	11	12	0	1	0	0	3	6	9	14	<b>228</b>
9/30/2012	11	14	8	11	1	1	0	0	0	5	5	12	<b>225</b>
9/30/2013	16	22	10	9	0	1	0	0	3	9	12	11	<b>219</b>
9/30/2014	17	19	9	7	1	1	0	0	2	7	9	11	<b>217</b>
9/30/2015	18	9	2	5	0	1	1	0	2	4	6	11	<b>226</b>
9/30/2016	24	9	3	8	0	1	0	0	3	3	6	12	<b>241</b>
9/30/2017				9		1		0				11	
15 Yr Totals *	285	280	114	168	4	15	3	0	30	129	159	159	

\*Totals are through current Plan Year only.

## RECENT HISTORY OF VALUATION RESULTS

Valuation Date	Number of		Covered Annual Payroll	Actuarial Value of Assets	Unfunded Actuarial Liability	Employer Normal Cost	
	Active Members	Inactive Members				Amount	% of Payroll
10/1/1992	227	33	\$6,842,937	\$23,977,776	\$(3,748,343)	\$1,148,443	16.78 %
10/1/1993	224	35	7,539,018	26,776,264	0	966,172	12.82
10/1/1994	230	48	8,193,573	28,396,221	0	1,323,230	16.15
10/1/1995	243	57	8,510,098	34,145,027	0	1,335,480	15.69
10/1/1996	240	71	8,599,843	38,325,573	0	849,024	9.87
10/1/1997	249	78	9,016,720	44,203,596	0	563,996	6.26
10/1/1998	253	84	9,431,360	49,629,025	0	356,137	3.78
10/1/1999	248	96	9,416,426	55,837,398	0	22,013	0.23
10/1/2000	249	100	9,989,645	62,394,934	0	465,540	4.66
10/1/2001	236	111	10,014,078	66,233,988	0	770,640	7.70
10/1/2002	236	117	10,577,345	62,271,752	0	1,836,237	17.36
10/1/2003	241	125	11,291,527	62,389,893	5,858,728	1,779,324	15.76
10/1/2004	251	132	11,653,693	64,127,507	7,110,056	1,844,426	15.83
10/1/2005	254	141	12,529,043	72,556,721	6,116,101	1,985,344	15.85
10/1/2006	255	153	12,974,773	77,610,753	6,886,070	2,059,657	15.87
10/1/2007	252	157	13,734,013	88,514,589	11,847,272	2,589,963	18.86
10/1/2008	255	159	14,759,177	75,432,887	32,424,152	2,814,421	19.07
10/1/2009	241	173	14,378,470	72,605,836	41,346,158	2,723,886	18.94
10/1/2010	241	191	14,215,052	77,602,424	47,783,116	2,338,824	16.45
10/1/2011	228	204	13,458,669	77,099,070	52,692,372	2,226,503	16.54
10/1/2012	225	210	13,224,720	90,132,758	43,804,890	2,097,057	15.86
10/1/2013	219	218	12,623,764	101,647,204	34,987,733	1,824,775	14.46
10/1/2014	217	227	12,732,998	109,704,649	31,843,372	1,702,326	13.37
10/1/2015	226	229	13,659,795	107,652,607	38,618,218	1,836,651	13.45
10/1/2016	241	232	15,243,424	114,633,342	47,730,607	2,396,475	15.72



## RECENT HISTORY OF UAAL AND FUNDED RATIO

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) - Entry Age (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL As % of Covered Payroll (b-a)/(c)
10/1/1992	\$ 23,977,776	\$ 20,229,433	\$ (3,748,343)	118.5 %	\$ 6,842,937	(54.8) %
10/1/1993	26,803,826	27,627,745	823,919	97.0	7,539,018	10.9
10/1/1994	28,396,221	31,884,418	3,488,197	89.1	8,193,573	42.6
10/1/1995	34,145,027	36,282,610	2,137,583	94.1	8,510,098	25.1
10/1/1996	38,325,573	36,802,353	(1,523,220)	104.1	8,599,843	(17.7)
10/1/1997	44,203,596	39,531,142	(4,672,454)	111.8	9,016,720	(51.8)
10/1/1998	49,629,025	42,591,070	(7,037,955)	116.5	9,431,360	(74.6)
10/1/1999	55,837,398	45,503,739	(10,333,659)	122.7	9,416,426	(109.7)
10/1/2000	62,394,934	53,111,211	(9,283,723)	117.5	9,989,645	(92.9)
10/1/2001	66,233,988	59,244,836	(6,989,152)	111.8	10,014,078	(69.8)
10/1/2002	62,271,752	63,551,789	1,280,037	98.0	10,577,345	12.1
10/1/2003	62,389,893	68,248,621	5,858,728	91.4	11,291,527	51.9
10/1/2004	64,127,507	71,237,563	7,110,056	90.0	11,653,693	61.0
10/1/2005	72,556,721	78,672,822	6,116,101	92.2	12,529,043	48.8
10/1/2006	77,610,753	84,496,823	6,886,070	91.9	12,974,773	53.1
10/1/2007	88,514,589	100,361,861	11,847,272	88.2	13,734,013	86.3
10/1/2008	75,432,887	107,857,039	32,424,152	69.9	14,759,177	219.7
10/1/2009	72,605,836	113,951,994	41,346,158	63.7	14,378,470	287.6
10/1/2010	77,602,424	125,385,540	47,783,116	61.9	14,215,052	336.1
10/1/2011	77,099,070	129,791,442	52,692,372	59.4	13,458,669	391.5
10/1/2012	90,132,758	133,937,648	43,804,890	67.3	13,224,720	331.2
10/1/2013	101,647,204	136,634,937	34,987,733	74.4	12,623,764	277.2
10/1/2014	109,704,649	141,548,021	31,843,372	77.5	12,732,998	250.1
10/1/2015	107,652,607	146,270,825	38,618,218	73.6	13,659,795	282.7
10/1/2016	114,633,342	162,363,949	47,730,607	70.6	15,243,424	313.1

RECENT HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS										
Valuation	End of Year To Which Valuation Applies	Required Contributions						Actual Contributions		
		Employer & State		Estimated State		Net Employer		Employer	State	Total
		Amount	% of Payroll	Amount	% of Payroll	Amount	% of Payroll			
10/1/1992	9/30/1993	\$858,866	12.55 %	\$465,000	6.80 %	\$393,866	5.76 %	\$408,469	\$495,364	\$903,833
10/1/1993	9/30/1994	1,004,819	13.33	495,364	6.57	509,455	6.76	496,855	507,964	1,004,819
10/1/1993	9/30/1995	1,085,204	14.40	560,105	7.43	525,099	6.97	532,169	560,105	1,092,274
10/1/1994	9/30/1996	1,486,252	18.14	560,105	6.84	926,147	11.30	951,919	641,598	1,593,517
10/1/1995	9/30/1997	1,500,011	17.63	560,105	6.59	939,906	11.04	959,487	692,298	1,651,785
10/1/1996	9/30/1998	958,056	11.14	641,598	7.46	316,458	3.68	321,864	699,273	1,021,137
10/1/1997	9/30/1999	636,425	7.06	692,298	7.68	0	0.00	275,599	721,301	996,900
10/1/1998	9/30/2000	401,873	4.26	699,273	7.41	0	0.00	287,929	728,001	1,015,930
10/1/1999	9/30/2001	24,840	0.26	697,984	7.41	0	0.00	134,348	713,714	848,062
10/1/2000	9/30/2002	652,444	6.28	721,707	6.95	0	0.00	---	733,861	733,861
10/1/2001	9/30/2003	835,254	8.02	710,278	6.82	124,976	1.20	124,485	733,861	858,346
10/1/2002	9/30/2004	1,988,879	18.08	733,861	6.67	1,255,018	11.41	1,277,657	733,861	2,011,518
10/1/2003	9/30/2005	2,286,399	19.47	733,861	6.25	1,552,538	13.22	1,660,804	733,861	2,394,665
10/1/2004	9/30/2006	2,440,936	20.14	733,861	6.06	1,707,075	14.08	1,762,982	733,861	2,496,843
10/1/2005	9/30/2007	2,543,496	19.52	733,861	5.63	1,809,635	13.89	1,809,660	735,681	2,545,341
10/1/2006	9/30/2008	2,675,813	19.83	733,861	5.44	1,941,952	14.39	2,047,686	735,681	2,783,367
10/1/2007	9/30/2009	3,535,135	24.75	735,681	5.15	2,799,454	19.60	2,800,024	735,681	3,535,705
10/1/2008	9/30/2010	5,013,161	32.66	735,681	4.79	4,277,480	27.87	3,985,628	758,112	4,743,740
10/1/2009	9/30/2011	5,487,975	36.70	758,112	5.07	4,729,863	31.63	4,275,526	758,112	5,033,638
10/1/2010	9/30/2012	5,606,232	38.29	758,112	5.18	4,848,120	33.11	4,345,474	758,112	5,103,586
10/1/2011	9/30/2013	5,848,559	42.19	758,112	5.47	5,090,447	36.72	4,195,013	1,154,739	5,349,752
10/1/2012	9/30/2014	5,454,033	40.04	1,154,739	8.48	4,299,294	31.56	3,816,408	1,170,897	4,987,305
10/1/2013	9/30/2015	4,908,435	37.75	1,170,897	9.01	3,737,538	28.74	3,847,225	1,177,757	5,024,982
10/1/2014	9/30/2016	4,647,952	35.44	1,177,757	8.98	3,470,195	26.46	3,460,575	1,187,377	4,647,952
10/1/2015	9/30/2017	5,373,176	38.19	1,187,377	8.44	4,185,799	29.75	---	---	---
10/1/2016	9/30/2018	6,261,450	39.88	1,187,377	7.56	5,074,073	32.32	---	---	---

## ACTUARIAL ASSUMPTIONS AND METHODS

### Valuation Methods

**Actuarial Cost Method** - Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

- (i) the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

**Financing of Unfunded Actuarial Accrued Liabilities** - Unfunded Actuarial Accrued Liabilities (full funding credit if assets exceed liabilities) were amortized by level (principal & interest combined) percent-of-payroll contributions over a reasonable period of future years.

**Actuarial Value of Assets** - The Actuarial Value of Assets is equal to Market Value.

### Valuation Assumptions

**The actuarial assumptions used** in the valuation are shown in this Section. The decrement assumptions were established following the Experience Study Report dated August 15, 2016.

### Economic Assumptions

**The investment return rate** assumed in the valuation is 6.75% per year, compounded annually (net after investment expenses).

The **Inflation Rate** assumed in this valuation is 2.50% per year. The Inflation Rate is defined to be the long-term rate of annual increases in goods and services.

The assumed **real rate of return** over wage inflation is defined to be the portion of total investment return that is more than the assumed inflation rate. Considering other economic assumptions, the 6.75% investment return rate translates to an assumed real rate of return over inflation of 4.25%.

The active member population is assumed to remain constant. For purposes of financing the unfunded liabilities, total payroll is assumed to grow at 2.5% per year. The most recent ten year average is 1.62%.

**The payroll growth assumption** used to project total covered payroll to the following fiscal year is 3.0% per year.

*The rate of salary increase* for individual active members is shown in the table below. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

#### Salary Increases for Active Members

<b>Age</b>	<b>Assumed Inflation Increase</b>	<b>Assumed Merit Increase</b>	<b>Total Assumed Salary Increase</b>
Less than 25	2.50%	3.25%	5.75%
25-39	2.50%	2.00%	4.50%
40-49	2.50%	1.50%	4.00%
50+	2.50%	1.25%	3.75%

#### Demographic Assumptions

*The mortality table* is RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years after 2000 using Scale BB. For males, the base mortality rates include a 90% blue collar adjustment and a 10% white collar adjustment. For females, the base mortality rates include a 100% white collar adjustment. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS), as mandated by Florida House Bill 1309.

#### FRS Healthy Post-Retirement Mortality for Special Risk Class Members

<b>Sample Attained Ages (in 2016)</b>	<b>Probability of Dying Next Year</b>		<b>Future Life Expectancy (years)</b>	
	<b>Men</b>	<b>Women</b>	<b>Men</b>	<b>Women</b>
50	0.54 %	0.23 %	33.78	38.21
55	0.67	0.32	29.14	33.19
60	0.91	0.48	24.56	28.29
65	1.32	0.75	20.17	23.56
70	2.04	1.25	16.05	19.10
75	3.31	2.12	12.34	15.04
80	5.45	3.55	9.15	11.43

This assumption is used to measure the probabilities of each benefit payment being made after retirement.

#### FRS Healthy Pre-Retirement Mortality for Special Risk Class Members

<b>Sample Attained Ages (in 2016)</b>	<b>Probability of Dying Next Year</b>		<b>Future Life Expectancy (years)</b>	
	<b>Men</b>	<b>Women</b>	<b>Men</b>	<b>Women</b>
50	0.23 %	0.15 %	34.77	38.56
55	0.39	0.24	29.65	33.42
60	0.72	0.40	24.77	28.40
65	1.24	0.71	20.21	23.58
70	2.04	1.25	16.05	19.10
75	3.31	2.12	12.34	15.04
80	5.45	3.55	9.15	11.43

This assumption is used to measure the probabilities of active members dying prior to retirement.

For disabled retirees, the mortality table used was 60% of the RP-2000 for Disabled Annuitants and 40% of the RP2000 Annuitant Mortality Table with a White Collar adjustment, set back 4 years for males and set forward 2 years for females, with no provision being made for future mortality improvements. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS), as mandated by Florida House Bill 1309.

### FRS Disabled Mortality for Special Risk Class Members

Sample Attained Ages (in 2016)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	1.67 %	0.91 %	33.78	38.21
55	2.03	1.26	29.14	33.19
60	2.47	1.67	24.56	28.29
65	3.07	2.24	20.17	23.56
70	3.90	3.18	16.05	19.10
75	5.30	4.60	12.34	15.04
80	7.59	6.66	9.15	11.43

*The rates of retirement* used to measure the probability of eligible members retiring during the next year were as follows:

### Annual Rate of Retirement for Those Eligible for Normal Retirement

Members Hired Before October 1, 2013			Members Hired On and After October 1, 2013		
Years of Service	Age	Probability of Normal Retirement	Years of Service	Age	Probability of Normal Retirement
10 - 22	55 - 61	40%	10 - 24	55 - 61	40%
	Under 51	40%		Under 51	40%
23	51 - 54	60%	25	51 - 54	60%
	55 & Over	100%		55 & Over	100%
24 - 25	Under 55	30%	26 - 27	Under 55	30%
	55 & Over	100%		55 & Over	100%
26	Under 55	60%	28	Under 55	60%
	55 & Over	100%		55 & Over	100%
27 & Over	All	100%	29 & Over	All	100%

**Note: If age 62 or older, the probability of retirement is 100%.**

**Note: If age 62 or older, the probability of retirement is 100%.**

### Annual Rate of Retirement for Those Eligible for Early Retirement

Year of Eligibility	Probability of Early Retirement
1	5 %
2	10
3	10
4	10
5	10

*Rates of separation from active membership* were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

<b>Years of Service</b>	<b>% of Active Members Separating Within Next Year</b>
Less than 1	20.0%
1	10.0%
2	9.0%
3	7.5%
4	6.5%
5	5.5%
6-7	5.0%
8-9	3.0%
10-14	2.5%
15 & Over	1.6%

*Rates of disability* among active members (75% of disabilities are assumed to be service-connected).

<b>Sample Ages</b>	<b>% Becoming Disabled within Next Year</b>
20	0.14 %
25	0.15
30	0.18
35	0.23
40	0.30
45	0.51
50	1.00
55	1.55

***Changes from previous valuation:***

- The investment return assumption was lowered from 7.50% to 6.75%.
- Salary increases were changed from 5.0% per year to rates that vary by age as shown above.
- The assumed rate of payroll growth for purposes of amortizing the Unfunded Actuarial Accrued Liability was lowered from 3.0% to 2.5%.
- The assumed rates of retirement were updated from rates that vary by age or years of service to rates that vary based on age and years of service as shown above.
- The rates of employment separation have been updated from rates that are based on years of service or age to rates that are based on years of service as shown above.
- The mortality assumption was changed from the RP-2000 Combined Healthy Participant Mortality Table for males and females with mortality improvements projected to all future years after 2000 using Scale AA to the mortality assumption used by the Florida Retirement System (FRS) for Special Risk Class members in the actuarial valuation as of July 1, 2016.

## Miscellaneous and Technical Assumptions

<i>Administrative &amp; Investment Expenses</i>	The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to the average of the prior two years' expenses. Assumed administrative expenses are added to the Normal Cost.
<i>Benefit Service</i>	Exact fractional service is used to determine the amount of benefit payable.
<i>Decrement Operation</i>	Disability and mortality decrements operate during retirement eligibility.
<i>Decrement Timing</i>	Decrements of all types are assumed to occur at the beginning of the year.
<i>Eligibility Testing</i>	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
<i>Forfeitures</i>	For vested separations from service, it is assumed that 0% of members separating will withdraw their contributions and forfeit an employer financed benefit. It was further assumed that the liability at termination is the greater of the vested deferred benefit (if any) or the member's accumulated contributions.
<i>Incidence of Contributions</i>	Employer contributions are assumed to be made biweekly. Member contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
<i>Marriage Assumption</i>	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.
<i>Normal Form of Benefit</i>	10-year certain and life annuity is the normal form of benefit.
<i>Pay Increase Timing</i>	Middle of fiscal year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
<i>Service Credit Accruals</i>	It is assumed that members accrue one year of service credit per year.

## GLOSSARY OF TERMS

<i><b>Actuarial Accrued Liability (AAL)</b></i>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<i><b>Actuarial Assumptions</b></i>	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.
<i><b>Actuarial Cost Method</b></i>	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.
<i><b>Actuarial Equivalent</b></i>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<i><b>Actuarial Present Value (APV)</b></i>	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
<i><b>Actuarial Present Value of Future Benefits (APVFB)</b></i>	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
<i><b>Actuarial Valuation</b></i>	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 67.
<i><b>Actuarial Value of Assets</b></i>	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially required contribution (ARC).



<b><i>Amortization Method</i></b>	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.
<b><i>Amortization Payment</i></b>	That portion of the plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<b><i>Amortization Period</i></b>	The period used in calculating the Amortization Payment.
<b><i>Actuarially Determined Contribution (ADC)</i></b>	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ARC consists of the Employer Normal Cost and Amortization Payment.
<b><i>Closed Amortization Period</i></b>	A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.
<b><i>Employer Normal Cost</i></b>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<b><i>Equivalent Single Amortization Period</i></b>	For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.
<b><i>Experience Gain/Loss</i></b>	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.

<b><i>Funded Ratio</i></b>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
<b><i>GASB</i></b>	Governmental Accounting Standards Board.
<b><i>GASB No. 67</i></b>	These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 67 sets accounting rules for the public retirement systems.
<b><i>Normal Cost</i></b>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<b><i>Open Amortization Period</i></b>	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.
<b><i>Unfunded Actuarial Accrued Liability</i></b>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<b><i>Valuation Date</i></b>	The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.

## SECTION C



### PENSION FUND INFORMATION

**Statement of Plan Assets at Market Value**

Item	September 30	
	2016	2015
A. Cash and Cash Equivalents (Operating Cash)	\$ -	\$ -
B. Receivables:		
1. Member Contributions	\$ 68,608	\$ -
2. Employer Contributions	-	12,730
3. State Contributions	19,256	51,205
4. Investment Income and Other Receivables	-	-
5. Prepaid Expenses	-	-
6. Total Receivables	\$ 87,864	\$ 63,935
C. Investments		
1. Short Term Investments	\$ 4,564,102	\$ 2,287,215
2. Domestic Equities	59,009,106	55,553,478
3. International Equities	18,013,702	16,699,914
4. Domestic Fixed Income	22,399,859	23,285,956
5. International Fixed Income	-	-
6. Real Estate	10,604,634	9,762,109
7. Private Equity	-	-
8. ICMA & VOYA Accounts (for DROP)	9,300,837	10,158,382
9. Share Plan Account	3,419,847	3,422,255
10. Total Investments	\$ 127,312,087	\$ 121,169,309
D. Liabilities		
1. Benefits Payable	\$ -	\$ -
2. Prepaid City Contribution	(45,925)	-
3. Accrued Expenses and Other Payables	-	-
4. Total Liabilities	\$ (45,925)	\$ -
E. Total Market Value of Assets Available for Benefits	\$ 127,354,026	\$ 121,233,244
F. Reserves		
1. State Contribution Reserve	\$ -	\$ -
2. Share Plan Balance	(3,419,847)	(3,422,255)
3. DROP Accounts	(9,300,837)	(10,158,382)
4. Total Reserves	\$ (12,720,684)	\$ (13,580,637)
G. Market Value Net of Reserves	\$ 114,633,342	\$ 107,652,607
H. Allocation of Investments		
1. Short Term Investments	3.6%	1.9%
2. Domestic Equities	46.4%	45.8%
3. International Equities	14.1%	13.8%
4. Domestic Fixed Income	17.6%	19.2%
5. International Fixed Income	0.0%	0.0%
6. Real Estate	8.3%	8.1%
7. Private Equity	0.0%	0.0%
8. ICMA Account (for DROP)	7.3%	8.4%
9. Share Plan Account	2.7%	2.8%
10. Total Investments	100.0%	100.0%

### Reconciliation of Plan Assets

Item	September 30	
	2016	2015
A. Market Value of Assets at Beginning of Year	\$ 121,233,244	\$ 122,885,391
B. Revenues and Expenditures		
1. Contributions		
a. Employee Contributions	\$ 1,183,955	\$ 939,891
b. Employer Contributions	3,460,575	3,847,225
c. State Contributions	1,187,377	1,177,757
d. Purchased Service Credit	23,862	-
e. Other Income	-	-
f. Total	<u>\$ 5,855,769</u>	<u>\$ 5,964,873</u>
2. Investment Income		
a. Interest and Dividends	\$ 2,230,673	\$ 2,288,847
b. Net Realized/Unrealized Gains/(Losses)*	7,788,726	(1,478,650)
c. Investment Earnings on DROP and Share Plan Accounts	410,121	241,796
d. Investment Expenses	<u>(552,489)</u>	<u>(555,392)</u>
e. Net Investment Income	\$ 9,877,031	\$ 496,601
3. Benefits and Refunds		
a. Regular Monthly Benefits	\$ (6,302,617)	\$ (5,942,335)
b. Refunds	(118,729)	(39,186)
c. Lump Sum Benefits	-	-
d. DROP Disbursements	(2,817,992)	(1,790,397)
e. Share Plan Disbursements	<u>(238,546)</u>	<u>(193,158)</u>
f. Total	\$ (9,477,884)	\$ (7,965,076)
4. Administrative and Miscellaneous Expenses	\$ (134,134)	\$ (148,545)
5. Transfers	\$ -	\$ -
C. Market Value of Assets at End of Year	\$ 127,354,026	\$ 121,233,244
D. Reserves		
1. State Contribution Reserve	\$ -	\$ -
2. Share Plan Balance	(3,419,847)	(3,422,255)
3. DROP Accounts	<u>(9,300,837)</u>	<u>(10,158,382)</u>
4. Total Reserves	\$ (12,720,684)	\$ (13,580,637)
E. Market Value Net of Reserves	\$ 114,633,342	\$ 107,652,607

\* We were not provided with the breakdown of this amount between realized gains/(losses) and unrealized gains/(losses).

**Reconciliation of DROP Accounts**

<b>Year Ended 9/30</b>	<b>Balance at Beginning of Year</b>	<b>Credits</b>	<b>Interest</b>	<b>Distributions</b>	<b>Adjustment</b>	<b>Balance at End of Year</b>
2010	\$ 3,408,577	\$ 1,240,722	\$ 111,479	\$ (1,020,089)	\$ -	\$ 3,740,689
2011	3,740,689	1,852,484	131,369	(396,199)	-	5,328,343
2012	5,328,343	2,102,314	156,228	(612,463)	-	6,974,422
2013	6,974,422	2,372,311	167,624	(841,390)	1,882	8,674,849
2014	8,674,849	2,382,567	162,002	(1,584,314)	(1,882)	9,633,222
2015	9,633,222	2,141,655	173,902	(1,790,397)	-	10,158,382
2016	10,158,382	1,786,464	173,983	(2,817,992)	-	9,300,837

**Reconciliation of Firefighters Share Plan Balance**

<b>Year Ended 9/30</b>	<b>Balance at Beginning of Year</b>	<b>Allocation of Excess Chapter 175 Revenue</b>	<b>Administrative Expenses</b>	<b>Interest</b>	<b>Distributions</b>	<b>Adjustment</b>	<b>Balance at End of Year</b>
2010	\$ -	\$ 1,447,933	\$ (27,234)	\$ -	\$ -	\$ -	\$ 1,420,699
2011	1,420,699	283,578	(5,376)	(13,339)	(59,056)	-	1,626,506
2012	1,626,506	308,692	(4,115)	138,865	(74,499)	-	1,995,449
2013	1,995,449	315,570	(5,393)	147,425	(60,657)	(446)	2,391,948
2014	2,391,948	0	0	151,248	(163,761)	4,601	2,384,036
2015	2,384,036	0	0	51,242	(170,597)	(3,675)	2,261,006
2016	2,261,006	0	0	160,186	(109,723)	-	2,311,469

**Reconciliation of Police Officers Share Plan Balance**

<b>Year Ended 9/30</b>	<b>Balance at Beginning of Year</b>	<b>Allocation of Excess Chapter 185 Revenue</b>	<b>Administrative Expenses</b>	<b>Interest</b>	<b>Distributions</b>	<b>Adjustment</b>	<b>Balance at End of Year</b>
2012	\$ -	\$ 1,033,014	\$ (11,190)	\$ 3,890	\$ (16,061)	\$ -	\$ 1,009,653
2013	1,009,653	79,763	(4,170)	51,927	(23,532)	5,266	1,118,907
2014	1,118,907	0	0	59,715	(17,290)	2,152	1,163,484
2015	1,163,484	0	0	16,652	(22,561)	3,674	1,161,249
2016	1,161,249	0	0	75,952	(128,823)	-	1,108,378

## INVESTMENT RATE OF RETURN

<u>Year Ending September 30th</u>	<u>Actuarial Value Basis</u>	<u>Market Value Basis</u>
1991	21.0 %	21.0 %
1992	10.6	10.6
1993	8.3	8.9
1994	2.9	3.3
1995	17.7	18.3
1996	15.4	16.0
1997	13.3	26.0
1998	12.7	7.7
1999	13.5	13.9
2000	12.7	7.2
2001	7.9	(8.7)
2002	(3.6)	(8.2)
2003	3.0	15.1
2004	2.6	12.6
2005	12.9	12.9
2006	7.1	7.1
2007	14.4	14.4
2008	(13.2)	(13.2)
2009	(2.5)	(2.5)
2010	6.9	6.9
2011	(1.6)	(1.6)
2012	17.0	17.0
2013	13.5	13.5
2014	9.6	9.6
2015	0.4	0.4
2016	8.3	8.3
<b>Average Returns:</b>		
Last 5 Years	9.6 %	9.6 %
Last 10 Years	4.9 %	4.9 %
All Years	7.8 %	7.9 %

The above rates are based on the retirement systems financial information reported to the actuary. They may differ from figures that the investment consultant reports, in part because of differences in the handling of administrative and investment expenses, and in part because of differences in the handling of cash flows.

**SECTION D**



**FINANCIAL ACCOUNTING INFORMATION**



**FASB NO. 35 INFORMATION**

A. Valuation Date	October 1, 2016	October 1, 2015
<b>B. Actuarial Present Value of Accumulated Plan Benefits</b>		
1. Vested Benefits		
a. Members Currently Receiving Payments	\$ 96,515,461	\$ 89,796,556
b. Terminated Vested Members	3,651,420	3,028,580
c. Other Members	43,018,598	35,417,580
d. Total	<u>143,185,479</u>	<u>128,242,716</u>
2. Non-Vested Benefits	3,804,611	3,156,351
3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2	146,990,090	131,399,067
4. Accumulated Contributions of Active Members	7,632,507	6,775,981
<b>C. Changes in the Actuarial Present Value of Accumulated Plan Benefits</b>		
1. Total Value at Beginning of Year	131,399,067	127,642,309
2. Increase (Decrease) During the Period Attributable to:		
a. Plan Amendment	0	0
b. Change in Actuarial Assumptions	10,089,131	0
c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period	13,709,702	11,879,934
d. Benefits Paid (net basis)	<u>(8,207,810)</u>	<u>(8,123,176)</u>
e. Net Increase	15,591,023	3,756,758
3. Total Value at End of Period	146,990,090	131,399,067
<b>D. Market Value of Assets</b>	114,633,342	107,652,607
<b>E. Actuarial Assumptions - See page entitled Actuarial Assumptions and Methods</b>		

**SCHEDULE OF CHANGES IN THE EMPLOYER'S  
NET PENSION LIABILITY AND RELATED RATIOS  
GASB Statement No. 67**

Fiscal year ending September 30,	2017*	2016	2015	2014
<b>Total pension liability</b>				
Service Cost	\$ 3,079,795	\$ 2,778,149	\$ 2,572,283	\$ 2,574,964
Interest	12,272,318	11,915,555	11,488,590	11,080,170
Benefit Changes	-	-	-	-
Difference between actual & expected experience	1,429,348	(1,057,151)	147,608	(564,291)
Assumption Changes	8,537,140	-	-	-
Benefit Payments	(8,785,022)	(9,359,155)	(7,925,890)	(7,307,066)
Refunds	(99,811)	(118,729)	(39,186)	(17,836)
Other (DROP and Share Plan Adjustments)	-	-	-	4,871
<b>Net Change in Total Pension Liability</b>	16,433,768	4,158,669	6,243,405	5,770,812
<b>Total Pension Liability - Beginning</b>	164,993,527	160,834,858	154,591,453	148,820,641
<b>Total Pension Liability - Ending (a)</b>	\$ 181,427,295	\$ 164,993,527	\$ 160,834,858	\$ 154,591,453
<b>Plan Fiduciary Net Position</b>				
Contributions - Employer	\$ 4,185,799	\$ 3,460,575	\$ 3,847,225 **	\$ 3,419,781 ***
Contributions - Employer (From State)	1,187,377	1,187,377	1,177,757	1,170,897
Contributions - Non-Employer Contributing Entity	-	-	-	-
Contributions - Employee	1,219,474	1,207,817	939,891	705,943
Net Investment Income	9,460,295	9,877,031	496,601	10,838,163
Benefit Payments	(8,785,022)	(9,359,155)	(7,925,890)	(7,307,066)
Refunds	(99,811)	(118,729)	(39,186)	(17,836)
Administrative Expense	(141,340)	(134,134)	(148,545)	(154,026)
Other	-	-	-	-
<b>Net Change in Plan Fiduciary Net Position</b>	7,026,772	6,120,782	(1,652,147)	8,655,856
<b>Plan Fiduciary Net Position - Beginning</b>	127,354,026	121,233,244	122,885,391	114,229,535
<b>Plan Fiduciary Net Position - Ending (b)</b>	\$ 134,380,798	\$ 127,354,026	\$ 121,233,244	\$ 122,885,391 ****
<b>Net Pension Liability - Ending (a) - (b)</b>	47,046,497	37,639,501	39,601,614	31,706,062
<b>Plan Fiduciary Net Position as a Percentage of Total Pension Liability</b>	74.07 %	77.19 %	75.38 %	79.49 %
<b>Covered Payroll</b>	\$ 15,243,424	\$ 13,659,795	\$ 12,732,998	\$ 12,623,764
<b>Net Pension Liability as a Percentage of Covered Payroll</b>	308.63 %	275.55 %	311.02 %	251.16 %

\* These figures are estimates only. Actual figures will be provided after the end of the fiscal year.

\*\* Includes \$520,523 in prepaid City contribution as of September 30, 2014 that was applied to the City's contribution requirement for the 2015 fiscal year.

\*\*\* Adjusted amount to reflect the \$396,627 excess City contribution for fiscal year ending September 30, 2013.

\*\*\*\* Pursuant to confirmation of City's auditor, this amount excludes \$520,523 prepaid City contribution as of September 30, 2014 that was applied to the City's contribution requirement for the 2015 fiscal year.

**SCHEDULE OF THE EMPLOYER'S NET PENSION LIABILITY**  
**GASB Statement No. 67**

FY Ending September 30,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
2014	\$ 154,591,453	\$ 122,885,391	** \$ 31,706,062	79.49%	\$ 12,623,764	251.16%
2015	160,834,858	121,233,244	39,601,614	75.38%	12,732,998	311.02%
2016	164,993,527	127,354,026	37,639,501	77.19%	13,659,795	275.55%
2017*	181,427,295	134,380,798	47,046,497	74.07%	15,243,424	308.63%

**\* These figures are estimates only. Actual figures will be provided after the end of the fiscal year.**

\*\* Pursuant to confirmation of City's auditor, this amount excludes \$520,523 prepaid City contribution as of September 30, 2014 that was applied to the City's contribution requirement for the 2015 fiscal year.

**NOTES TO NET PENSION LIABILITY**  
**GASB Statement No. 67**

Valuation Date: October 1, 2016  
 Measurement Date: September 30, 2017

**Methods and Assumptions Used to Determine Net Pension Liability:**

Actuarial Cost Method	Entry Age Normal
Inflation	2.5%
Salary Increases	3.75% to 5.75% depending on Member Age.
Investment Rate of Return	6.75%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years after 2000 using Scale BB. For males, the base mortality rates include a 90% blue collar adjustment and a 10% white collar adjustment. For females, the base mortality rates include a 100% white collar adjustment. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS), as mandated by Florida House Bill 1309.

**Other Information:**

Notes See Discussion of Valuation Results in the October 1, 2016 Actuarial Valuation Report.

**SCHEDULE OF CONTRIBUTIONS**  
**GASB Statement No. 67**

FY Ending September 30,	Actuarially Determined Contribution	Actual Contribution		Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2014	\$ 4,987,305	\$ 4,590,678	**	396,627	\$ 12,623,764	36.37%
2015	5,024,982	5,024,982	***	-	12,732,998	39.46%
2016	4,647,952	4,647,952		-	13,659,795	34.03%
2017*	5,373,176	5,373,176		-	15,243,424	35.25%

**\* These figures are estimates only. Actual figures will be provided after the end of the fiscal year.**

\*\*This is an adjusted amount to reflect the \$396,627 excess City contribution for fiscal year ending 9/30/2013.

\*\*\*Includes \$520,523 in prepaid City contributions.

**NOTES TO SCHEDULE OF CONTRIBUTIONS**  
**GASB Statement No. 67**

**Valuation Date:** October 1, 2015  
**Notes** Actuarially determined contribution rates are calculated as of October 1, which is two year(s) prior to the end of the fiscal year in which contributions are reported.

**Methods and Assumptions Used to Determine Contribution Rates:**

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Remaining Amortization Period	30
Asset Valuation Method	Market Value
Inflation	3.0%
Salary Increases	5.0%, including inflation.
Investment Rate of Return	7.50%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	RP-2000 Combined Healthy Participant Mortality Table for males and females with mortality improvement projected to all future years after 2000 using Scale AA.

**Other Information:**

**Notes** See Discussion of Valuation Results in the October 1, 2015 Actuarial Valuation Report dated January 8, 2016.

**SINGLE DISCOUNT RATE  
GASB Statement No. 67**

A single discount rate of 6.75% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 6.75%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between the total actuarially determined contribution rates and the member rate. Based on these 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 (6.75%) was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 6.75%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

**Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption**

<b>Fiscal Year Ending</b>	<b>Current Single Discount</b>		
<b>September 30</b>	<b>1% Decrease</b>	<b>Rate Assumption</b>	<b>1% Increase</b>
	<b>5.75%</b>	<b>6.75%</b>	<b>7.75%</b>
2017*	\$ 67,800,592	\$ 47,046,497	\$ 29,847,707

\* These figures are estimates only. Actual figures will be provided after the end of the fiscal year.

## **SECTION E**



### **MISCELLANEOUS INFORMATION**



<b>RECONCILIATION OF MEMBERSHIP DATA</b>		
	<b>From 10/1/15 To 10/1/16</b>	<b>From 10/1/14 To 10/1/15</b>
<b>A. Active Members</b>		
1. Number Included in Last Valuation	226	217
2. New Members Included in Current Valuation	24	18
3. Non-Vested Employment Terminations	(3)	(4)
4. Vested Employment Terminations	(3)	(2)
5. Service Retirements	(1)	0
6. DROP Retirements	(2)	(2)
7. Disability Retirements	0	0
8. Deaths	0	(1)
9. Rehires	0	0
10. Other	0	0
11. Number Included in This Valuation	<u>241</u>	<u>226</u>
<b>B. Terminated Vested Members</b>		
1. Number Included in Last Valuation	14	13
2. Additions from Active Members	3	2
3. Lump Sum Payments/Refunds	0	0
4. Payments Commenced	(2)	(1)
5. Deaths	0	0
6. Other	0	0
7. Number Included in This Valuation	<u>15</u>	<u>14</u>
<b>C. DROP Participation</b>		
1. Number Included in Last Valuation	39	45
2. Additions from Active Members	2	2
3. Payments commenced	(12)	(8)
4. Deaths	0	0
5. Other	0	0
6. Number Included in This Valuation	<u>29</u>	<u>39</u>
<b>D. Service Retirees, Disability Retirees and Beneficiaries</b>		
1. Number Included in Last Valuation	176	169
2. Additions from Active Members	1	0
3. Additions from Terminated Vested Members	2	1
4. Additions from DROP	12	8
5. Deaths Resulting in No Further Payments	(3)	(3)
6. Deaths Resulting in New Survivor Benefits	0	1
7. End of Certain Period - No Further Payments	0	0
8. Other	0	0
9. Number Included in This Valuation	<u>188</u>	<u>176</u>

**SCHEDULE OF ACTIVE PARTICIPANTS AS OF OCTOBER 1, 2016**

Age Group	Years of Service							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	
20-24	5	1	0	0	0	0	0	6
Total Pay	208,872	48,555	0	0	0	0	0	257,427
Avg Pay	41,774	48,555	0	0	0	0	0	42,905
25-29	21	4	0	0	0	0	0	25
Total Pay	979,611	221,555	0	0	0	0	0	1,201,166
Avg Pay	46,648	55,389	0	0	0	0	0	48,047
30-34	24	18	7	0	0	0	0	49
Total Pay	1,117,280	1,045,975	454,440	0	0	0	0	2,617,695
Avg Pay	46,553	58,110	64,920	0	0	0	0	53,422
35-39	7	14	14	4	0	0	0	39
Total Pay	334,728	829,944	873,177	316,560	0	0	0	2,354,409
Avg Pay	47,818	59,282	62,370	79,140	0	0	0	60,369
40-44	7	6	17	15	4	0	0	49
Total Pay	325,767	340,507	1,131,834	1,161,669	314,084	0	0	3,273,861
Avg Pay	46,538	56,751	66,578	77,445	78,521	0	0	66,813
45-49	4	2	16	8	9	4	0	43
Total Pay	179,596	129,791	1,002,220	602,016	759,162	350,529	0	3,023,314
Avg Pay	44,899	64,896	62,639	75,252	84,351	87,632	0	70,310
50-54	2	2	3	7	8	4	0	26
Total Pay	132,623	103,289	177,818	509,766	624,325	393,143	0	1,940,964
Avg Pay	66,312	51,645	59,273	72,824	78,041	98,286	0	74,652
55-59	0	1	2	0	1	0	0	4
Total Pay	0	50,910	118,861	0	66,611	0	0	236,382
Avg Pay	0	50,910	59,431	0	66,611	0	0	59,096
60-64	0	0	0	0	0	0	0	0
Total Pay	0	0	0	0	0	0	0	0
Avg Pay	0	0	0	0	0	0	0	0
65 & Up	0	0	0	0	0	0	0	0
Total Pay	0	0	0	0	0	0	0	0
Avg Pay	0	0	0	0	0	0	0	0
Total No.	70	48	59	34	22	8	0	241
Total Pay	3,278,477	2,770,526	3,758,350	2,590,011	1,764,182	743,672	0	14,905,218
Avg Pay	46,835	57,719	63,701	76,177	80,190	92,959	0	61,847

**SCHEDULE OF INACTIVE PARTICIPANTS AS OF OCTOBER 1, 2016**

<b>Age</b>	<b>Terminated Vested</b>		<b>Disabled</b>		<b>Retirees and Beneficiaries</b>	
	<b>No.</b>	<b>Annual Benefits</b>	<b>No.</b>	<b>Annual Benefits</b>	<b>No.</b>	<b>Annual Benefits</b>
Under 45	7	\$ 130,537	0	\$ -	3	\$ 26,990
45-49	7	204,284	2	37,852	9	461,235
50-54	1	36,723	5	138,194	39	1,773,993
55-59	0	0	3	50,699	44	2,109,469
60-64	0	0	3	77,535	42	1,655,230
65-69	0	0	2	35,588	24	791,645
70-74	0	0	4	80,593	16	450,068
75-79	0	0	0	0	13	284,214
80-84	0	0	0	0	6	131,384
85-89	0	0	0	0	1	9,070
90 & Up	0	0	0	0	1	7,278
<b>Total</b>	<b>15</b>	<b>\$371,544</b>	<b>19</b>	<b>\$420,461</b>	<b>198</b>	<b>\$7,700,576</b>

## **SECTION F**



### **SUMMARY OF PLAN PROVISIONS**

## SUMMARY OF PLAN PROVISIONS

### A. Ordinances

The Plan was established by Ordinance No. 93-73 under the Code of Ordinances for the City of Largo, Florida, and was most recently amended under Ordinance Number 2014-67, adopted May 20, 2014. The Plan is also governed by certain provisions of Chapters 175 and 185, Florida Statutes, Part VII, Chapter 112, Florida Statutes (F.S.) and the Internal Revenue Code.

### B. Effective Date

January 1, 1980

### C. Plan Year

October 1 through September 30

### D. Type of Plan

Qualified, governmental defined benefit retirement plan; for GASB purposes it is a single employer plan.

### E. Eligibility Requirements

All full-time police officers and firefighters are eligible for membership on the date of employment.

### F. Credited Service

Service is measured as the total number of years and completed months of service as a police officer or firefighter. No service is credited for any periods of employment for which the member received a refund of employee contributions.

### G. Compensation

Compensation for services rendered, including pay for sick and vacation hours, personal option hours, retroactive pay, various incentive pay, etc. but not including payment for accrued sick leave, accrued annual leave, severance pay, bonuses, overtime (if hired after January 1, 1980), etc.

### H. Average Final Compensation (AFC)

For members who are hired before October 1, 2013, AFC is the average of Compensation over the highest 3 years out of the last 10 years of Credited Service immediately preceding retirement or termination. For members who are hired on or after October 1, 2013, AFC is the average of Compensation over the highest 5 years out of the last 10 years of Credited Service immediately preceding retirement or termination.

**I. Normal Retirement**

Eligibility: For members hired before October 1, 2013, a member may retire on the first day of the month coincident with or next following the earliest of:

- (1) age 55 with 10 years of Credited Service, or
- (2) 23 years of Credited Service regardless of age, or
- (3) age 62 regardless of Credited Service.

For members hired on or after October 1, 2013, a member may retire on the first day of the month coincident with or next following the earliest of:

- (1) age 55 with 10 years of Credited Service, or
- (2) 25 years of Credited Service regardless of age, or
- (3) age 62 regardless of Credited Service.

Benefit: For members hired before October 1, 2013, 3.25% of AFC multiplied by Credited Service with a maximum equal to 95% of AFC.

For members hired on or after October 1, 2013, 2.75% of AFC multiplied by Credited Service with a maximum equal to 95% of AFC.

Normal Form of Benefit: 10-Year Certain and Life Annuity. Other options are also available.

COLA: None

**J. Early Retirement**

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility upon attainment of age 50 with 10 years of Credited Service.

Benefit: The Normal Retirement Benefit is reduced by 3.0% for each year by which the Early Retirement date precedes the Normal Retirement date.

Normal Form of Benefit: 10-Year Certain and Life Annuity. Other options are also available.

COLA: None

**K. Delayed Retirement**

Same as Normal Retirement taking into account compensation earned and service credited until the date of actual retirement.

**L. Service Connected Disability**

Eligibility: Any member who becomes totally and permanently disabled and unable to render useful and efficient service to the City as a result of an act occurring in the performance of service for the City is immediately eligible for a disability benefit.

Benefit: 60% of AFC. If the total of this benefit plus Workers' Compensation benefits exceeds 100% of AFC, the excess over 100% will be used to reduce the disability benefit.

Normal Form

of Benefit: 10-Year Certain and Life Annuity. Other options are also available.

COLA: None

#### **M. Non-Service Connected Disability**

Eligibility: Any member with 10 or more years of Credited Service who becomes totally and permanently disabled and unable to render useful and efficient service to the City is immediately eligible for a disability benefit.

Benefit: 50% of AFC. If the total of this benefit plus Workers' Compensation benefits exceeds 100% of AFC, the excess over 100% will be used to reduce the disability benefit.

Normal Form

of Benefit: 10-Year Certain and Life Annuity. Other options are also available.

COLA: None

#### **N. Death in the Line of Duty**

Eligibility: Members who die as a direct result of the performance of the member's duties are eligible for survivor benefits regardless of Credited Service.

Benefit: The survivor benefit payable to the designated beneficiary is the greater of:

(1) the single sum value of the member's accrued Normal Retirement Benefit as of the date of death, or

(2) the lesser of 24 times AFC or 100 times the member's anticipated monthly pension at the Normal Retirement date.

Normal Form

of Benefit: The lump sum benefit determined above is converted to a monthly benefit payable to the member's beneficiary for 10 Years Certain and Life thereafter; other options are also available.

COLA: None

#### **O. Other Pre-Retirement Death**

Eligibility: Members are eligible for non-duty related death benefits regardless of Credited Service.

Benefit: The survivor benefit payable to the designated beneficiary is the greater of:

(1) the single sum value of the member's accrued Normal Retirement Benefit as of the date of death, or

(2) the lesser of 24 times AFC (12 times AFC for members with less than 10 years of Credited Service) or 100 times the member's anticipated monthly pension at the Normal Retirement date.

Normal Form  
of Benefit: The lump sum benefit determined above is converted to a monthly benefit payable to the member's beneficiary for 10 Years Certain and Life thereafter; other options are also available.

COLA: None

#### **P. Post Retirement Death**

Benefit determined by the form of benefit elected upon retirement.

#### **Q. Optional Forms**

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees are the Single Life Annuity for police officers, the 10-Year Certain and Life Annuity for firefighters, the 50%, 66 2/3%, 75% or 100% Joint and Survivor options, or the Social Security Leveling Option.

#### **R. Vested Termination**

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of 10 years of Credited Service.

Benefit: The benefit is the member's accrued Normal Retirement Benefit as of the date of termination. Benefit begins on the member's Normal Retirement date. Alternatively, members with 10 or more years of Credited Service may elect to receive benefits any time after age 50. The benefit will be reduced for Early Retirement, when applicable.

Normal Form  
of Benefit: 10-Year Certain and Life Annuity. Other options are also available.

COLA: None

#### **S. Refunds**

Eligibility: All members terminating employment with less than 10 years of Credited Service are eligible. Optionally, vested members (those with 10 or more years of Credited Service) may elect a refund in lieu of the vested benefits otherwise due.

Benefit: Refund of the member's accumulated contributions without interest.

#### **T. Member Contributions**

5% of Compensation before May 6, 2014. For members who are hired before October 1, 2013, effective the first full payroll period after May 6, 2014, the member contribution rate increases to 6% of Compensation. The member contribution rate increases to 7% of Compensation effective October 1, 2014 and to 8% of Compensation effective October 1, 2015. However, the annual increase in the member contribution rate shall not exceed one-half of the percentage of the general wage increase that is granted to each class of employee, respectively (police officer, firefighter, and non-represented) in that fiscal year.

For members who are hired on or after October 1, 2013, effective the first full payroll period after May 6, 2014, the member contribution rate increases to 8% of Compensation.



## U. State Contributions

Chapter 175 and 185 Premium Tax Refunds

## V. Employer Contributions

Any additional amount determined by the actuary needed to fund the plan properly according to State laws.

Effective October 1, 2013, Additional Premium Tax Revenues (APTR) is first used to fund the Chapter 175/185 minimum plan benefits and reduce the City's required contribution. If the amount of APTR is sufficient to fund the Chapter 175/185 minimum benefits, the excess APTR is placed in the Firefighters' or Police Officers' Share Programs. If the Plan funding level determined in the most recent valuation report is 100% or greater, all APTR for the year is contributed to the Share Programs without regard to whether those APTR are sufficient to fund the minimum benefits. If the Plan funding level determined in the most recent valuation report is greater than 90% but less than 100%, one-half of the APTR for the year is contributed to the Share Programs without regard to whether those APTR are sufficient to fund the minimum benefits. If the Plan funding level determined in the most recent valuation report is at least 80% but less than 90%, one-quarter of the APTR for the year is contributed to the Share Programs without regard to whether those APTR are sufficient to fund the minimum benefits. If the Plan funding level determined in the most recent valuation report is less than 80%, all of the APTR for the year is used to fund the minimum benefits.

For purposes of the above, Additional Premium Tax Revenues (APTR) shall be defined as premium tax revenues received in excess of \$325,839 and \$432,273 for firefighters and police officers, respectively.

Effective October 1, 2013, the minimum annual required City contribution is 8% of payroll, notwithstanding the funding requirements of Florida Statutes. If the required contribution is less than 8% of payroll, the excess contribution is added to the Fund as an additional contribution to increase the Plan funding level.

## W. Cost of Living Increases

Not Applicable

## X. Deferred Retirement Option Plan

Eligibility: Plan members are eligible for the DROP upon the attainment of the earliest of:

- (1) age 55 with 10 years of Credited Service, or
- (2) 23 years of Credited Service regardless of age (25 years of Credited Service regardless of age if hired on or after October 1, 2013), or
- (3) age 62 regardless of Credited Service.

Members must make a written election to participate in the DROP.

Benefit: The member's Credited Service and AFC are frozen upon entry into the DROP. The monthly retirement benefit as described under Normal Retirement is calculated based upon the frozen Credited Service and AFC.

**Maximum**

DROP Period: 7 years.

**Interest**

Credited: The member's DROP account is credited with interest based upon one of the following options chosen by the member.

- (1) the actual net investment return realized by the Fund, or
- (2) the interest rate earned from a separate investment plan elected by the member from investment funds made available by the Board.

**Normal Form**

of Benefit: Lump Sum; member may also elect installment payments with Board approval.

COLA: None

**Y. Share Plan**

The Plan provides an individual share account for all active firefighters and for firefighters who are DROP members, retirees, and terminated vested members on October 1, 2009. The Plan also provides an individual share account for all active police officers and for police officers employed on September 1, 2011. The Share Plan allocation is derived from any non-dedicated Chapter 175 or 185 revenue that exceeds the base amount. The excess revenue, net of administrative expenses, is allocated annually to individual accounts which earn interest at the rate of investment return realized by the individual share plan account. Effective October 1, 2013, excess annual revenue is allocated to individual accounts only if the funding level determined in the most recent valuation report is at least 80%.

**Z. Other Ancillary Benefits**

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Largo Municipal Police Officers' and Firefighters' Retirement Plan liability if continued beyond the availability of funding by the current funding source.

**AA. Changes from Previous Valuation**

There have been no changes in plan provisions since the previous valuation.