

**CITY OF TALLAHASSEE PENSION PLANS**ACTUARIAL VALUATION REPORT AS OF OCTOBER 1, 2016

ANNUAL EMPLOYER CONTRIBUTION FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2018 AND SEPTEMBER 30, 2019



March 13, 2017

Board of Trustees Pension Plan for the City of Tallahassee Tallahassee, Florida

Re: City of Tallahassee Pension Plans Actuarial Valuation as of October 1, 2016

Dear Trustees:

The results of the October 1, 2016 Annual Actuarial Valuation of the City of Tallahassee Pension Plans are presented in this report. The City of Tallahassee Pension Plans are treated as three separate Plans: General Employees' Pension Plan, the Police Officers' Pension Plan and the Firefighters' Pension Plan.

The computed contribution rates shown on page 1 may be considered 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 Retirement System in excess of those presented in this report be considered.

The contribution rates in this report are determined using the actuarial assumptions and methods disclosed in Section B of this report. This report does not include an assessment of the risks of future experience not meeting the actuarial assumptions, as this was outside the scope of this assignment. We encourage a review and assessment of investment and other significant risks (i.e., the impact of differences between actual future experience and the Plans' assumptions on the Plans' financial condition).

We believe the assumptions and methods used in this report for purposes of developing the contribution rates are reasonable. The investment return assumption, which was set by the City and Plan Administrator, is a prescribed assumption as defined by Actuarial Standard of Practice No. 27 (ASOP 27). This prescribed assumption is at the high end of what we believe constitutes a reasonable range for this assumption as defined by ASOP 27.

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

The purposes of the valuation are to measure the System's funding progress and to determine the employer contribution rates for the fiscal year ending September 30, 2018 and September 30, 2019. 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. As requested, separate employer contribution rates have been prepared for General Employees, Firefighters and Police Officers.

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 Plans' 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 City and Plan Administrator 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 City and Plan Administrator.

In addition, this report was prepared using certain assumptions approved by the Plan Administrator and prescribed by the Florida Statutes as described in the section of this report entitled Actuarial Assumptions and Cost Methods. The prescribed assumptions are the assumed mortality rates detailed in the Actuarial Assumptions and Cost Methods section 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.

Peter N. Strong and James J. Rizzo are members of the American Academy of Actuaries. These actuaries 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 us or under our direct supervision, and we 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 Plans' 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.

Gabriel, Roeder, Smith & Company will be pleased to review this valuation report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

Peter N. Strong, FSA, FCA, MAAA Enrolled Actuary No. 14-6975

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Gabriel Roeder Smith & Company

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# SECTION A DISCUSSION OF VALUATION RESULTS

#### DISCUSSION OF VALUATION RESULTS

## **Comparison of Required Employer Contributions**

The required employer contribution developed in this year's valuation is compared below to the last valuation.

	For FYE 9/30/18 and 9/30/19* Based on 10/1/2016 Valuation	For FYE 9/30/16 and 9/30/17 Based on 10/1/2014 Valuation	Increase/ (Decrease)	
General Employees As % of Contr. Year Payroll	19.68 %	13.07 %	6.61 %	
Police Officers As % of Contr. Year Payroll	31.40 %	25.75 %	5.65 %	
Firefighters As % of Contr. Year Payroll	32.96 %	26.47 %	6.49 %	

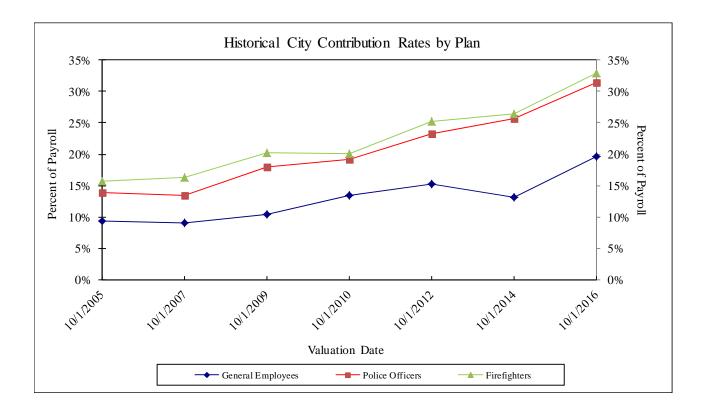
<sup>\*</sup>If an October 1, 2017 Actuarial Valuation Report is not prepared.

#### **Payment of Required Contribution**

The required employer contributions developed in this valuation have been calculated as though the payments are evenly distributed throughout the year.

The actual total employer contributions for the year ending September 30, 2015 were \$26,580,763, an amount which met the minimum required payment for the year.

The actual total employer contributions for the year ending September 30, 2016 were \$25,846,741, an amount which met the minimum required payment for the year.



### **Revisions in Benefits**

There have been the following revisions in benefits for Police Officers only since the previous valuation:

- Police Officers with pension entry dates prior to January 1, 1998 are eligible for the automatic 3%
   Cost of Living Adjustment (COLA) beginning at the later of normal retirement date or age 52.
   Police Officers with pension entry dates on or after January 1, 1998 are eligible for automatic 3.0%
   COLA beginning at age 62 (or after retirement if retirement occurs after attainment of age 55).
- Effective October 1, 2014, the member contribution rate is increased from 10.45% of Compensation to 11.25% of Compensation for Police Officers hired prior to 10/1/2012 (and from 12.89% to 13.69% for Police Officers hired on or after 10/1/2012).
- The Police Officers' Deferred Retirement Option Plan (DROP) maximum period is increased from 3 years (36 months) to 5 years (60 months) for members entering the DROP on or after October 1, 2013.



These revisions in benefits for Police Officers were measured in the revised Actuarial Impact Statement dated June 18, 2015.

#### **Revisions in Actuarial Assumptions and Methods**

The assumed investment return assumption has been reduced by 0.05% from 7.75% to 7.70%. This assumption is intended to be reduced by 0.10% per year each year until a target of 7.50% is reached. The current 7.70% investment return assumption is a prescribed assumption as defined by Actuarial Standard of Practice No. 27 (ASOP 27), as it was set by the Plan Administrator. This prescribed assumption is at the high end of what we believe constitutes a reasonable range for this assumption as defined by ASOP 27.

The mortality tables were changed from the RP-2000 Combined Mortality Tables for males and females with 40%/60% blend of white/blue collar rates for General Employees and 100% blue collar rates for Police Officers and Firefighters, and projected improvements in mortality using scale AA for 15 years from the valuation date, to the mortality rates used by the Florida Retirement System (FRS) for Regular and Special Risk Class members. The current FRS mortality tables for healthy members are the RP-2000 Combined Healthy Participant Mortality Tables (for pre-retirement mortality) and the RP-2000 Mortality Tables 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 50% blue collar adjustment and a 50% white collar adjustment for General Employees, and a 90% blue collar adjustment and a 10% white collar adjustment for Police Officers and Firefighters. 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 valuation reports of FRS effective no later than 2016.

Beginning in 2016, new salary, retirement, employment separation, disability and administrative expense assumptions from the Assumption Study and Experience Investigation for the Seven-Year Period Ending September 30, 2014, dated June 24, 2016, are being phased-in over a three-year period. These assumption changes include:

• Changes in the salary increase rate assumptions from uniform rates (3.5% for General Employees, 5.0% for Police Officers, and 4.0% for Firefighters) to a table of rates that vary by the number of

years of service (varying from 2.95% to 5.0% for General Employees, from 4.5% to 6.4% for Police Officers, and from 4.4% to 5.75% for Firefighters);

- Changes in the assumed rates of retirement reflecting actual experience observed over the sevenyear period ending September 30, 2014;
- Changes in the assumed rates of separation from active membership (withdrawal) reflecting actual experience observed over the seven-year period ending September 30, 2014;
- Changes in the assumed rates of disability from a table of rates that vary by age to a table of rates that vary by age and gender which are based on the FRS' assumed disability rates and actual experience observed over the seven-year period ending September 30, 2014; and,
- A change in the assumed amount of administrative expenses from 0.30% of valuation payroll to the average actual administrative expenses incurred during the two years ending on the valuation date.

The five changes listed above are being phased in at a rate of 33.33% per year and will be fully reflected in the October 1, 2018 actuarial valuation report.

The aggregate impact of the assumption changes was an increase in the employer contribution rates of 5.48% for General Employees, 4.65% for Police Officers, and 5.97% for Firefighters.

The following method changes were effective with the October 1, 2016 valuation:

- The amortization period for amortizing changes in the unfunded actuarial accrued liability (UAAL)
  has been changed from 17 years to 20 years for General Employees and from 30 years to 28 years
  for Police Officers and Firefighters.
- The assumed payroll growth rate for purposes of amortizing unfunded liabilities (before reflecting the actual growth average over the last 10 years in compliance under Florida administrative code) was changed from 4.0% per year to 3.5% per year.

The aggregate impact of the method changes was a decrease in the employer contribution rates of 0.57% for General Employees, and an increase in the employer contribution rates of 0.14% for Police Officers and 1.38% for Firefighters.

If all of the assumption changes had been fully recognized this year, including a full phase-in assumption change with a 7.5% investment return assumption, the employer contribution rates would have



been as follows:

	General	Police	
	<b>Employees</b>	<u>Officers</u>	<b>Firefighters</b>
Contribution Rate:	23.09 %	36.89 %	40.63 %
Funded Ratio:	89.87	81.25	75.38

#### **Actuarial Experience**

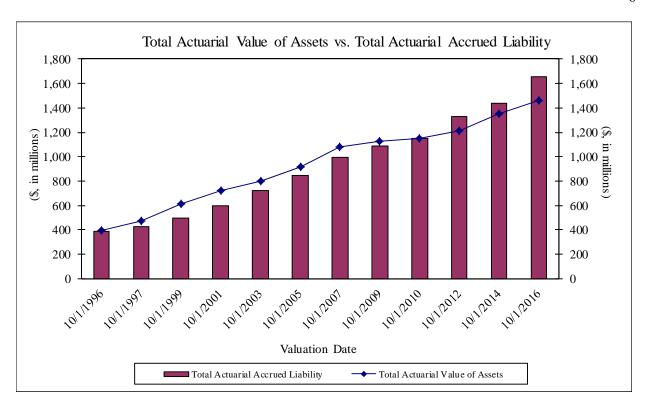
There were net actuarial experience losses during the past 2-year period of \$23,045,000 for General Employees, \$5,884,000 for Police Officers and \$8,381,000 for Firefighters, which means that actual experience was less favorable than expected. The losses were due to the following:

- Unfavorable investment experience (the total investment returns based on the actuarial value of assets were 7.0% for 2015 and 7.5% for 2016 compared to the assumed annual investment returns of 7.75%).
- Actual salary increases were higher than expected. The compound 2-year average salary increases since the prior valuation were 4.6% for General Employees (versus expected increases of 3.5%),
   6.3% for Police Officers (versus expected increases of 5.0%), and 8.8% for Firefighters (versus expected increases of 4.0%).
- Demographic experience (retirement, turnover, and mortality experience); retirement experience was more than expected (139 versus 130 expected for General Employees, 34 versus 26 expected for Police Officers, and 16 versus 15 expected for Firefighters).

#### **Funded Ratio**

This year's combined overall funded ratio for the City of Tallahassee Pension Plans is 88.5% compared to 94.0% last valuation (after reflecting all Actuarial Impact Statements). The funded ratios for each Plan are 92.6% for General Employees, 83.1% for Police Officers, and 78.0% for Firefighters. Before reflecting the assumption changes, the funded ratios for each plan would have been 97.0% for General Employees, 85.7% for Police Officers, and 81.0% for Firefighters. The funded ratio is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability. Below is a historical comparison of the total actuarial value of assets versus the total actuarial accrued liability:





## **Analysis of Employer Contribution**

The components of change in the required contribution as a percent of payroll are as follows:

	General	Police	Einafi alatana
	<b>Employees</b>	<u>Officers</u>	<u>Firefighters</u>
Contribution Rate Last Year	13.07 %	25.75 %	26.47 %
Experience (Gains) or Losses	2.10	1.51	3.11
Revision in Assumptions	5.48	4.65	5.97
Amortization Payment on UAAL	(0.25)	(0.35)	(3.70)
Normal Cost Rate	(0.15)	(0.30)	(0.27)
Administrative Expense	0.00	0.00	0.00
Method Changes	(0.57)	0.14	1.38
Contribution Rate This Year	19.68 %	31.40 %	32.96 %

According to the Florida Administrative Code (Statute 112), the payroll growth assumption used to determine amortization amounts may not exceed the average payroll growth over the last ten years. The long-term payroll growth assumption is 3.5%, but the ten-year average payroll growth rates as of October 1, 2014 and October 1, 2016 were as follows:

10-year average payroll growth rate as of

	<u>10/1/2014</u>	<u>10/1/2016</u>
General Employees	1.99 %	1.71 %
Police Officers	3.24 %	3.43 %
Firefighters	2.90 %	4.18 %

Since the actual 10-year average payroll growth rates as of October 1, 2016 for General Employees and Police Officers are less than 3.5% the ten-year average payroll growth rate shown above is used for the payroll growth assumption. For Firefighters, 3.5% is used as the payroll growth assumption.

#### **Variability of Future Contribution Rates**

The Actuarial Cost Method used to determine the required contribution 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, particularly when actual investment return do not match assumed returns.

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.

The total Actuarial Value of Assets exceeds the total Market Value of Assets by \$13,377,000 as of the valuation date (see Section C). This difference will be gradually recognized in the absence of offsetting gains. In turn, the computed employer contribution rate is expected to gradually increase by approximately 1.01% of covered payroll for General Employees and 1.31% of covered payroll for Firefighters, and gradually decrease by approximately 0.53% of covered payroll for Police Officers.

#### **Relationship to Market Value**

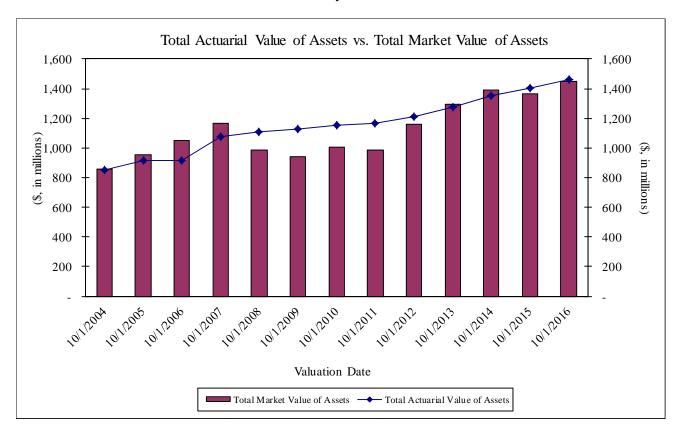
If the Market Value of Assets had been the basis for the valuation, the contribution rate and funded ratio would have been:

	General	Police	
	<b>Employees</b>	<u>Officers</u>	<b>Firefighters</b>
Contribution Rate:	20.69 %	30.87 %	34.27 %
Funded Ratio:	91.42	83.74	76.73

In the absence of other gains and losses and disregarding the effects of any plan or assumption changes, the Employer contribution rates should increase for General Employees and Firefighters and decrease for



Police Officers towards these levels over the next few years.



### Conclusion

The remainder of this Report includes detailed actuarial valuation results, information relating to the pension fund, financial accounting information, miscellaneous employee data and summaries of Plan provisions.

# SECTION B VALUATION RESULTS

	Oc	tober 1, 2016	Oct	ober 1, 201
GENERAL EMPLOYEES	•	,	•	
Active Members		2,016		2,028
Terminated Vested Members		217		199
Retired Members	_	1,540	<u> </u>	1,392
Total Members		3,773		3,619
Covered Annual Payroll (expected)	\$	102,332,000	\$	98,430,000
Retired Member Annual Benefits	\$	51,597,000	\$	44,773,000
Market Value of Assets	\$	983,771,000	\$	948,469,000
Actuarial Value of Assets	\$	995,919,000	\$	922,824,000
Unfunded Actuarial Liability	\$	80,143,000	\$	10,158,000
City Contribution Rate		19.68%		13.079
POLICE OFFICERS				
Active Members		330		319
Terminated Vested Members		37		34
Retired Members	_	262		229
Total Members		629		582
Covered Annual Payroll (expected)	\$	22,969,000	\$	21,461,000
Retired Member Annual Benefits	\$	16,091,000	\$	13,252,000
Market Value of Assets	\$	279,774,000	\$	263,322,000
Actuarial Value of Assets	\$	277,773,000	\$	250,832,000
Unfunded Actuarial Liability	\$	56,317,000	\$	39,764,000
City Contribution Rate		31.40%		25.759
FIREFIGHTERS				
Active Members		246		229
Terminated Vested Members		7		
Retired Members		230		210
Total Members		483		450
Covered Annual Payroll (expected)	\$	14,878,000	\$	12,719,000
Retired Member Annual Benefits	\$	12,759,000	\$	11,310,000
Market Value of Assets	\$	187,102,000	\$	179,828,00
Actuarial Value of Assets	\$	190,332,000	\$	175,745,000
Unfunded Actuarial Liability	\$	53,528,000	\$	36,105,000
City Contribution Rate		32.96%		26.479

<sup>#</sup> Reflects all Actuarial Impact Statements through June 2015.

PARTICIPANT DATA										
		October 1, 2016								tober 1, 2014
		Total	Gen	eral Employees	Po	lice Officers	I	Firefighters		Total
ACTIVE MEMBERS	1								,	
Number		2,592		2,016		330		246		2,576
Covered Annual Payroll (expected)	\$	140,179,000	\$	102,332,000	\$	22,969,000	\$	14,878,000	\$	132,610,000
Average Annual Salary	\$	54.081	\$	50.760	\$	69,603	\$	60,480	\$	51,479
Average Age		44.3		46.0	·	38.5		38.3		44.5
Average Past Service		11.2		11.5		10.2		10.1		11.5
Average Age at Hire		33.1		34.5		28.3		28.2		33.0
RETIREES, BENEFICIARIES & D	ROF	•								
Number		1,980		1,493		258		229		1,786
Annual Benefits	\$	79,068,467	\$	50,399,385	\$	15,942,986	8	12,726,096	\$	68,001,360
Annual Benefit Average Annual Benefit	\$	39,934	\$	33,757	\$	61,795	\$	55,572	\$	38,075
Average Age	Ψ	66.4	J	67.4	Ψ	62.1	Ψ	64.3	Ψ	65.7
DISABILITY RETIREES										
Number		52		47		4		1		51
Annual Benefits	\$	1,378,234	\$	1,197,426	\$	147,711	\$	33.097	\$	1.333.395
Average Annual Benefit	\$	26,505	\$	25,477	\$	36,928	\ \s	33,097	\$	26,145
Average Age	Ψ	61.8		62.7	Ψ	52.0	Ψ	61.0	Ψ	60.1
TERMINATED VESTED MEMBE	RS									
Number		261		217		37		7		238
Annual Benefits	\$	4,244,643	\$	3,649,641	\$	528,876	\$	66,126	\$	3,848,776
Average Annual Benefit	\$	16,263	\$	16,819	\$	14,294	\$	9,447	\$	16,171
Average Age		50.3		51.5		44.6		43.0		50.4

ACTUARIALLY DETERMINED CONTRIBUTION (ADC)								
A. Valuation Date		October 1, 2016			October 1, 2014 <sup>#</sup>			
	General Employees	Police Officers	Firefighters	General Employees	Police Officers	Firefighters		
B. ADC to Be Paid During Fiscal Year Ending	9/30/2018	9/30/2018	9/30/2018	9/30/2016	9/30/2016	9/30/2016		
C. Covered Annual Payroll	\$ 102,332,000	\$ 22,969,000	\$ 14,878,000	\$ 98,430,000	\$ 21,461,000	\$ 12,719,000		
D. Annual Payment to Amortize Unfunded Actuarial Liability As % of Covered Payroll  E. Total Employer Normal Cost As % of Covered Payroll	6,811,000 6.66 % 12,450,000 12.17 %	3,414,000 14.86 % 3,435,000 14.96 %	3,267,000 21.96 % 1,348,000 9.06 %	1,064,000 1.08 % 11,196,000 11.37 %	2,402,000 11.19 % 2,830,000 13.18 %	2,300,000 18.08 % 851,000 6.69 %		
F. Total Contribution Rate Employer Normal Cost Amortization Interest (half-year on Total Normal Cost and Amortization) Total	12.17 % 6.66 0.85 19.68	14.96 % 14.86 ————————————————————————————————————	9.06 % 21.96 	11.37 % 1.08  0.62 13.07	13.18 % 11.19  1.38 25.75	6.69 % 18.08		
H. ADC as % of Covered Payroll	19.68 %	31.40 %	32.96 %	13.07 %	25.75 %	26.47 %		

<sup>#</sup> Reflects all Actuarial Impact Statements through June 2015.

ACTUARIALLY DETERMINED CONTRIBUTION (ADC) - BEFORE CHANGES								
A. Valuation Date	October 1, 2016			October 1, 2014 <sup>#</sup>				
	General Employees	Police Officers	Firefighters	General Employees	Police Officers	Firefighters		
B. ADC to Be Paid During Fiscal Year Ending	9/30/2018	9/30/2018	9/30/2018	9/30/2016	9/30/2016	9/30/2016		
C. Covered Annual Payroll	\$ 102,332,000	\$ 22,969,000	\$ 14,878,000	\$ 98,430,000	\$ 21,461,000	\$ 12,719,000		
<ul> <li>D. Annual Payment to Amortize Unfunded Actuarial Liability As % of Covered Payroll</li> <li>E. Total Employer Normal Cost As % of Covered Payroll</li> </ul>	2,754,000 2.69 % 11,478,000 11.22 %	2,827,000 12.31 % 2,958,000 12.88 %	2,605,000 17.51 % 957,000 6.42 %	1,064,000 1.08 % 11,196,000 11.37 %	2,402,000 11.19 % 2,830,000 13.18 %	2,300,000 18.08 % 851,000 6.69 %		
F. Total Contribution Rate Employer Normal Cost Amortization Interest (half-year on Total Normal Cost and Amortization) Total	11.22 % 2.69 0.67 14.58	12.88 % 12.31  1.42 26.61	6.42 % 17.51 1.68 25.61	11.37 % 1.08  0.62 13.07	13.18 % 11.19  1.38 25.75	6.69 % 18.08 1.70 26.47		
H. ADC as % of Covered Payroll	14.58 %	26.61 %	25.61 %	13.07 %	25.75 %	26.47 %		

<sup>#</sup> Reflects all Actuarial Impact Statements through June 2015.

ACTUARIAL VALUE OF BENEFITS AND ASSETS						
A. Valuation Date		October	r 1, 2016		October 1, 2014 <sup>#</sup>	
	T	General	Police	TI () 1	<b></b>	
B. Actuarial Present Value of All Projected	Total	Employees	Officers	Firefighters	Total	
Benefits for						
1. Active Members						
a. Service Retirement Benefits	\$ 656,404,000	\$ 417,511,000	\$ 137,100,000	\$ 101,793,000	\$ 586,331,000	
b. Vesting Benefits	24,413,000	18,735,000	4,849,000	829,000	24,696,000	
c. Disability Benefits	34,040,000	26,155,000	4,304,000	3,581,000	39,386,000	
d. Preretirement Death Benefits	14,081,000	11,360,000	1,438,000	1,283,000	10,345,000	
e. Return of Member Contributions	2,907,000	840,000	1,025,000	1,042,000	2,021,000	
f. Total	731,845,000	474,601,000	148,716,000	108,528,000	662,779,000	
2. Inactive Members						
a. Service Retirees & Beneficiaries	1,079,051,000	673,515,000	230,146,000	175,390,000	905,375,000	
b. Disability Retirees	17,403,000	14,949,000	2,008,000	446,000	16,438,000	
c. Terminated Vested Members	35,539,000	31,080,000	3,980,000	479,000	30,360,000	
d. Total	1,131,993,000	719,544,000	236,134,000	176,315,000	952,173,000	
3. Total for All Members	1,863,838,000	1,194,145,000	384,850,000	284,843,000	1,614,952,000	
C. Actuarial Accrued (Past Service) Liability	1,654,012,000	1,076,062,000	334,090,000	243,860,000	1,435,593,000	
D. Actuarial Value of Accumulated Plan Benefits per ASC 960 (Formerly FASB No. 35)	1,508,241,000	983,623,000	298,586,000	226,032,000	1,300,455,000	
E. Adjustment for 0.8% Police Officers' Member Contribution						
Increase in 10/1/2014-9/30/2015 Plan Year	0	0	0	0	(165,000)	
F. Plan Assets						
1. Market Value	1,450,647,000	983,771,000	279,774,000	187,102,000	1,391,619,000	
2. Actuarial Value	1,464,024,000	995,919,000	277,773,000	190,332,000	1,349,401,000	
G. Unfunded Actuarial Accrued Liability	189,988,000	80,143,000	56,317,000	53,528,000	86,027,000	
H. Actuarial Present Value of Projected Covered Payroll	1,047,865,000	731,715,000	182,753,000	133,397,000	969,660,000	
I. Actuarial Present Value of Projected Member Contributions	75,654,000	27,439,000	21,736,000	26,479,000	65,419,000	
J. Accumulated Value of Active Member Contributions	97,499,000	56,357,000	21,268,000	19,874,000	86,224,000	

<sup>#</sup> Reflects all Actuarial Impact Statements through June 2015.



ACTUARIAL VALUE OF BENEFITS AND ASSETS - BEFORE CHANGES						
A. Valuation Date		October	r 1, 2016		October 1, 2014 <sup>#</sup>	
		General	Police			
	Total	Employees	Officers	Firefighters	Total	
B. Actuarial Present Value of All Projected						
Benefits for						
Active Members     a. Service Retirement Benefits	\$ 608,684,000	\$ 387,092,000	\$ 127,829,000	\$ 93.763.000	\$ 586,331,000	
b. Vesting Benefits	24,677,000	18,527,000	5,192,000	\$ 93,763,000 958,000	24,696,000	
c. Disability Benefits	40,883,000	32,171,000	4,725,000	3,987,000	39,386,000	
d. Preretirement Death Benefits	10,689,000	8,795,000	965,000	929,000	10,345,000	
e. Return of Member Contributions	3,130,000	942,000	1,120,000	1,068,000	2,021,000	
f. Total	688,063,000	447,527,000	139,831,000	100,705,000	662,779,000	
2. Inactive Members	000,000,000	,527,555	103,001,000	100,700,000	002,773,000	
a. Service Retirees & Beneficiaries	1,038,728,000	646,367,000	222,759,000	169,602,000	905,375,000	
b. Disability Retirees	16,437,000	14,187,000	1,851,000	399,000	16,438,000	
c. Terminated Vested Members	33,967,000	29,605,000	3,889,000	473,000	30,360,000	
d. Total	1,089,132,000	690,159,000	228,499,000	170,474,000	952,173,000	
3. Total for All Members	1,777,195,000	1,137,686,000	368,330,000	271,179,000	1,614,952,000	
C. Actuarial Accrued (Past Service) Liability	1,585,105,000	1,026,230,000	324,019,000	234,856,000	1,435,593,000	
D. Actuarial Value of Accumulated Plan Benefits per ASC 960 (Formerly FASB No. 35)	1,447,044,000	938,891,000	289,801,000	218,352,000	1,300,455,000	
E. Adjustment for 0.8% Police Officers' Member Contribution Increase in 10/1/2014-9/30/2015 Plan Year	0	0	0	0	(165,000)	
F. Plan Assets 1. Market Value 2. Actuarial Value	1,450,647,000 1,464,024,000	983,771,000 995,919,000	279,774,000 277,773,000	187,102,000 190,332,000	1,391,619,000 1,349,401,000	
G. Unfunded Actuarial Accrued Liability	121,081,000	30,311,000	46,246,000	44,524,000	86,027,000	
H. Actuarial Present Value of Projected Covered Payroll	1,035,894,000	732,678,000	172,571,000	130,645,000	969,660,000	
I. Actuarial Present Value of Projected Member Contributions	73,870,000	27,475,000	20,475,000	25,920,000	65,419,000	
J. Accumulated Value of Active Member Contributions	97,499,000	56,357,000	21,268,000	19,874,000	86,224,000	

<sup>#</sup> Reflects all Actuarial Impact Statements through June 2015.



	CALCULATION OF EMPLOYER NORMAL COST											
A. Valuation Date				Oc	tob	er 1, 2016		1			O	ctober 1, 2014 <sup>#</sup>
B. Normal Cost for	Total		General Em	oloyees		Police Off	icers		Firefight	ters		Total
<ol> <li>Service Retirement Benefits</li> <li>Vesting Benefits</li> <li>Disability Benefits</li> <li>Preretirement Death Benefits</li> <li>Return of Member Contributions</li> <li>Total for Future Benefits</li> <li>Assumed Amount for Administrative Expenses</li> <li>Total Normal Cost</li> </ol>	\$ 20,388,000 2,141,000 2,107,000 916,000 562,000 26,114,000 610,000 26,724,000	\$	11,570,000 1,637,000 1,625,000 717,000 308,000 15,857,000 430,000	11.31% 1.60% 1.59% 0.70% 0.30% 15.50% 0.42% 15.92%	\$	5,051,000 423,000 267,000 110,000 175,000 6,026,000 110,000 6,136,000	21.99% 1.85% 1.16% 0.48% 0.76% 26.24% 0.48% 26.72%	\$ 	3,767,000 81,000 215,000 89,000 79,000 4,231,000 70,000 4,301,000	25.32% 0.54% 1.45% 0.60% 0.53% 28.44% 0.47% 28.91%	\$ _	17,417,000 2,128,000 2,436,000 651,000 468,000 23,100,000 397,000 23,497,000
C. Expected Member Contribution  D. Adjustment for Future Member Contribution Increases	9,360,000		3,837,000	3.75% 0.00%		2,701,000	0.00%		2,822,000	18.97% 0.88%		8,392,000 228,000
E. Employer Normal Cost: B8-C-D	17,233,000		12,450,000	12.17%		3,435,000	14.96%		1,348,000	9.06%		14,877,000
F. Employer Normal Cost as a % of Covered Payroll	12.29%		12.17%			14.96%			9.06%			11.22%

<sup>#</sup> Reflects all Actuarial Impact Statements through June 2015.

CAL	CALCULATION OF EMPLOYER NORMAL COST - BEFORE CHANGES									
A. Valuation Date		Oc	tober 1, 2016		October 1, 2014 <sup>#</sup>					
B. Normal Cost for	Total	General Employees	Police Officers	Firefighters	Total					
<ol> <li>Service Retirement Benefits</li> <li>Vesting Benefits</li> <li>Disability Benefits</li> <li>Preretirement Death Benefits</li> <li>Return of Member Contributions</li> <li>Total for Future Benefits</li> <li>Assumed Amount for Administrative Expenses</li> <li>Total Normal Cost</li> </ol>	\$ 18,465,000 2,152,000 2,569,000 679,000 596,000 24,461,000 421,000 24,882,000	\$ 10,521,000 10.28% 1,605,000 1.57% 2,036,000 1.99% 529,000 0.52% 317,000 0.31% 15,008,000 14.67% 307,000 0.30% 15,315,000 14.97%	\$ 4,557,000 19.84% 455,000 1.98% 295,000 1.28% 82,000 0.36% 201,000 0.88% 5,590,000 24.34% 69,000 0.30% 5,659,000 24.64%	\$ 3,387,000 22.77% 92,000 0.62% 238,000 1.60% 68,000 0.46% 78,000 0.52% 3,863,000 25.96% 45,000 0.30% 3,908,000 26.26%	\$ 17,417,000 2,128,000 2,436,000 651,000 468,000 23,100,000 397,000 23,497,000					
C. Expected Member Contribution  D. Adjustment for Future Member	9,360,000	3,837,000 3.75%	2,701,000 11.76%	2,822,000 18.97%	8,392,000					
Contribution Increases	129,000	0 0.00%	0 0.00%	129,000 0.87%	228,000					
E. Employer Normal Cost: B8-C-D	15,393,000	11,478,000 11.22%	2,958,000 12.88%	957,000 6.42%	14,877,000					
F. Employer Normal Cost as a % of Covered Payroll	10.98%	11.22%	12.88%	6.42%	11.22%					

<sup>#</sup> Reflects all Actuarial Impact Statements through June 2015.

# LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

# (Before Changes)

UA	UAAL AMORTIZATION PERIOD AND PAYMENTS - GENERAL EMPLOYEES								
	Original U	Current UAAL							
Type of Amortization Date Amortization Period Established Base (Years) Amount				Years Remaining	Amount	Payment			
10/1/2014 10/1/2016	Combined Bases (Gain)/Loss	13 20	\$ 10,158,000 <u>23,045,000</u> 33,203,000	11 20	\$ 7,266,000 <u>23,045,000</u> 30,311,000	\$ 867,000 1,887,000 2,754,000			

# (After Assumption and Method Changes)

UA	UAAL AMORTIZATION PERIOD AND PAYMENTS - GENERAL EMPLOYEES									
	Original U	Current UAAL								
Date Established	Type of Amortization Base	Amount	Years Remaining	Amount	Payment					
10/1/2014 10/1/2016 10/1/2016	Combined Bases (Gain)/Loss Assumption Change	13 20 20	\$ 10,158,000 23,045,000 49,832,000 83,035,000	11 20 20	\$ 7,266,000 23,045,000 49,832,000 80,143,000	\$ 865,000 1,880,000 4,066,000 6,811,000				

# (Before Changes)

1	UAAL AMORTIZATION PERIOD AND PAYMENTS - POLICE OFFICERS									
	Original U	Current UAAL								
Date Established				Years Remaining	Amount	Payment \$ (717,000) 1,298,000 277,000				
10/1/2007	Fresh Start	30	\$ (8,620,000)	21	\$(10,315,000)	\$ (717,000)				
10/1/2009	(Gain)/Loss	30	13,859,000	23	19,741,000	1,298,000				
10/1/2010	(Gain)/Loss	30	3,815,000	24	4,328,000	277,000				
10/1/2012	(Gain)/Loss	30	14,549,000	26	16,010,000	980,000				
10/1/2012	Plan Change	30	2,995,000	26	3,296,000	202,000				
10/1/2012	Assumption Change	30	7,877,000	26	8,668,000	531,000				
10/1/2013	Plan Change	30	1,654,000	27	1,720,000	103,000				
10/1/2014	(Gain)/Loss	30	(5,579,000)	28	(5,699,000)	(335,000)				
10/1/2014	Plan Change	30	2,558,000	28	2,613,000	154,000				
10/1/2016	(Gain)/Loss	30	<u>5,884,000</u>	30	<u>5,884,000</u>	334,000				
			38,992,000		46,246,000	2,827,000				

# (After Assumption and Method Changes)

١	UAAL AMORTIZATION PERIOD AND PAYMENTS - POLICE OFFICERS									
	Original UAAL				Current UAAL					
Date Amortization Period Established Base (Years) Amount				Years Remaining	Amount					
10/1/2007	Fresh Start	30	\$ (8,620,000)	21	\$(10,315,000)	\$ (714,000)				
10/1/2009	(Gain)/Loss	30	13,859,000	23	19,741,000	1,292,000				
10/1/2010	(Gain)/Loss	30	3,815,000	24	4,328,000	276,000				
10/1/2012	(Gain)/Loss	30	14,549,000	26	16,010,000	975,000				
10/1/2012	Plan Change	30	2,995,000	26	3,296,000	201,000				
10/1/2012	Assumption Change	30	7,877,000	26	8,668,000	528,000				
10/1/2013	Plan Change	30	1,654,000	27	1,720,000	103,000				
10/1/2014	(Gain)/Loss	30	(5,579,000)	28	(5,699,000)	(333,000)				
10/1/2014	Plan Change	30	2,558,000	28	2,613,000	153,000				
10/1/2016	(Gain)/Loss	28	5,884,000	28	5,884,000	344,000				
10/1/2016	Assumption Change	28	10,071,000	28	10,071,000	<u>589,000</u>				
			49,063,000		56,317,000	3,414,000				

# (Before Changes)

	UAAL AMORTIZATION PERIOD AND PAYMENTS - FIREFIGHTERS										
Original UAAL				Current UAAL							
Date Established	Type of Amortization Base	Amortization Period (Years)	Amount	Years Remaining	Amount	Payment					
10/1/2007 10/1/2009 10/1/2010 10/1/2010 10/1/2012 10/1/2012 10/1/2014 10/1/2016	Fresh Start (Gain)/Loss Assumption Change (Gain)/Loss (Gain)/Loss Assumption Change (Gain)/Loss (Gain)/Loss (Gain)/Loss	30 30 30 30 30 30 30 30 30	\$ 1,482,000 3,225,000 (1,151,000) 8,141,000 12,290,000 7,106,000 (126,000) 8,381,000	24 26 26	\$ 3,379,000 4,069,000 (1,277,000) 9,023,000 13,355,000 7,721,000 (127,000) 8,381,000	548,000 772,000 446,000					

# (After Assumption and Method Changes)

	UAAL AMORTIZATION PERIOD AND PAYMENTS - FIREFIGHTERS									
	Original U	Current UAAL								
Date Established						Payment				
10/1/2007 10/1/2009 10/1/2010 10/1/2010 10/1/2012 10/1/2012 10/1/2014 10/1/2016 10/1/2016	Fresh Start (Gain)/Loss Assumption Change (Gain)/Loss (Gain)/Loss Assumption Change (Gain)/Loss (Gain)/Loss (Gain)/Loss Assumption Change	30 30 30 30 30 30 30 28 28	\$ 1,482,000 3,225,000 (1,151,000) 8,141,000 12,290,000 7,106,000 (126,000) 8,381,000 9,004,000	24 26 26	\$ 3,379,000 4,069,000 (1,277,000) 9,023,000 13,355,000 7,721,000 (127,000) 8,381,000 9,004,000	572,000 808,000 467,000				
10/1/2016	Assumption Change	28	<u>9,004,000</u> 48,352,000	28	<u>9,004,000</u> 53,528,000	<u>523,00</u> 3,267,00				

## **Amortization Schedule**

The UAAL is being amortized as a level percent of pay over the number of years remaining in each amortization period. The following schedule illustrates the expected amortization of the UAAL:

	Amortization Schedule									
Year			Exp	ected UAAL						
	General Employees		Police Officers		I	Firefighters				
2016	\$	80,143,000	\$	56,317,000	\$	53,528,000				
2017		78,970,000		56,978,000		54,152,000				
2018		77,590,000		57,562,000		54,679,000				
2019		75,976,000		58,062,000		55,123,000				
2020		74,108,000		58,464,000		55,466,000				
2021		71,964,000		58,759,000		55,699,000				
2026		56,218,000		58,098,000		54,706,000				
2031		34,306,000		52,168,000		48,386,000				
2036		-		37,700,000		33,432,000				
2041		-		9,473,000		9,851,000				
2044		-		-		-				

## 10- Year Growth in Covered Payroll (Annualized: in 000's)

	General E	<u>Employees</u>	Police (	Officers	<b>Firefighters</b>	
	Payroll*	Growth	Payroll*	Growth	Payroll*	Growth
10/1/2006	93,556		18,895		11,651	
10/1/2016	110,854	1.71%	26,466	3.43%	17,554	4.18%

\*Note: Includes payroll for all employees receiving pay (including DROP participants) since no DROP existed at the beginning of the period.



#### **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. The variance is measured by the gain and loss for the period involved. 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. The net actuarial gain (loss) for the past two years is computed as follows:

	General Employees	Police Officers	Firefighters
	2014-2015	2014-2015	2014-2015
1. UAAL at 10/1/2014	\$ 10,158,000	\$ 39,764,000	\$ 36,105,000
2014-15 Employer Normal Cost (MOY)     plus Expected Administrative Expenses	13,663,000	3,514,000	1,727,000
3. 2014-15 Employer Contributions	16,537,000	5,940,000	4,104,000
<ul><li>4. Interest at the Assumed Rate on:</li><li>a. 1 for one year and 2 for half-year</li><li>b. 3 from dates paid</li><li>c. a - b</li></ul>	1,317,000 641,000 676,000	3,218,000 230,000 2,988,000	2,865,000 159,000 2,706,000
5. 10/1/2015 Expected UAAL Prior to Revision: 1 + 2 - 3 + 4c	7,960,000	40,326,000	36,434,000
	2015-2016	2015-2016	2015-2016
6. 10/1/2015 Expected UAAL	7,960,000	40,326,000	36,434,000
7. 2015-16 Employer Normal Cost (MOY) plus Expected Administrative Expenses	13,329,000	3,611,000	1,673,000
8. 2015-16 Employer Contributions	14,591,000	6,585,000	4,671,000
<ul><li>9. Interest at the Assumed Rate on:</li><li>a. 6 for one year and 7 for half-year</li><li>b. 8 from dates paid</li><li>c. a - b</li></ul>	1,133,000 565,000 568,000	3,265,000 255,000 3,010,000	2,888,000 181,000 2,707,000
10. This Year's Expected UAAL Prior to Revision:	7,266,000	40,362,000	36,143,000
11. Change in UAAL Due to Plan Amendments and/or Changes in Actuarial Assumptions	49,832,000	10,071,000	9,004,000
12. This Year's Expected UAAL (after changes):	57,098,000	50,433,000	45,147,000
13. This Year's Actual UAAL (after changes):	80,143,000	56,317,000	53,528,000
14. Net Actuarial Gain/(Loss):	(23,045,000)	(5,884,000)	(8,381,000)
15. Gain/(Loss) Due to Investments:	(10,070,000)	(276,000)	(2,318,000)
16. Gain/(Loss) Due to Other Sources:	(12,975,000)	(5,608,000)	(6,063,000)



The annual experience (gains)/losses in previous years have been as follows:

		Experience (Gain) / Loss							
Year Ending	]	General Employees	Pol	lice Officers	F	Firefighters			
9/30/2009	\$	34,053,000	\$	13,859,000	\$	3,225,000			
9/30/2010 9/30/2012		37,353,000 43,870,000		3,815,000 14,549,000		8,141,000 12,290,000			
9/30/2014 9/30/2016		(36,333,000) 23,045,000		(5,579,000) 5,884,000		(126,000) 8,381,000			

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	Investmen	t Return
Ending	Actual Actuarial Rate of Return	Assumed
9/30/2003	7.2 %	7.75 %
9/30/2004	8.2	7.75
9/30/2005	8.8	7.75
9/30/2006	9.4	7.75
9/30/2007	10.0	7.75
9/30/2008	4.8	7.75
9/30/2009	3.4	7.75
9/30/2010	4.5	7.75
9/30/2011	3.8	7.75
9/30/2012	6.6	7.75
9/30/2013	8.1	7.75
9/30/2014	8.6	7.75
9/30/2015	7.0	7.75
9/30/2016	7.5	7.75
Average	7.0 %	

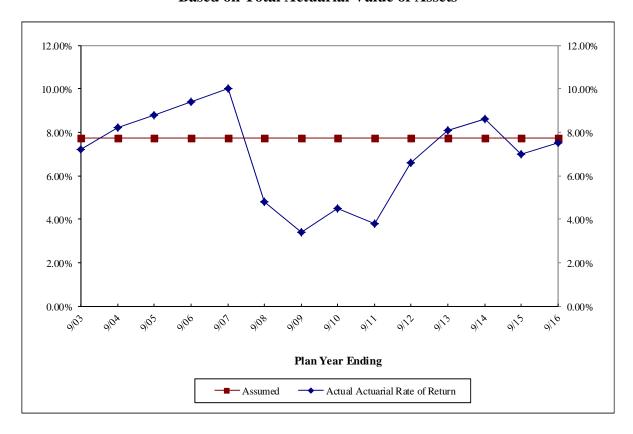
		Salary Increases												
Period	General l	Employees	Police (	Officers	Firefighters									
Ending	Actual*	Assumed*	Actual*	Assumed*	Actual*	Assumed*								
10/1/2001	5.7 %	6.50 %	9.2 %	6.50 %	5.0 %	6.50 %								
10/1/2003	2.7	6.25	4.0	6.25	5.5	6.25								
10/1/2005	0.3	6.00	1.3	6.00	0.5	6.00								
10/1/2007	3.9	6.00	3.4	6.00	5.0	6.00								
10/1/2009	3.3	6.00	6.5	6.00	2.3	6.00								
10/1/2010	(0.7)	5.00	1.1	6.00	0.9	6.00								
10/1/2012	1.7	4.00	2.6	6.00	0.3	5.00								
10/1/2014	2.5	3.50	4.8	5.00	6.8	4.00								
10/1/2016	4.6	3.50	6.3	5.00	8.8	4.00								
Average	2.7 %	5.1 %	4.2 %	5.8 %	4.0 %	5.4 %								

<sup>\*</sup>Actual and assumed rates are based on average compound increases for the period since the prior valuation.

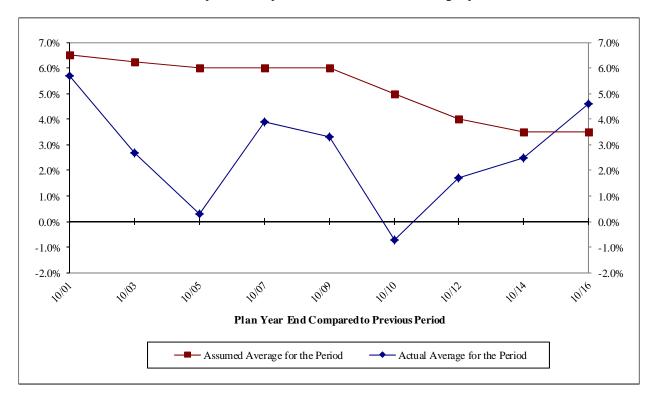
The actual investment return rates shown above are based on the actuarial value of assets. The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuations both at the beginning and end of each period.



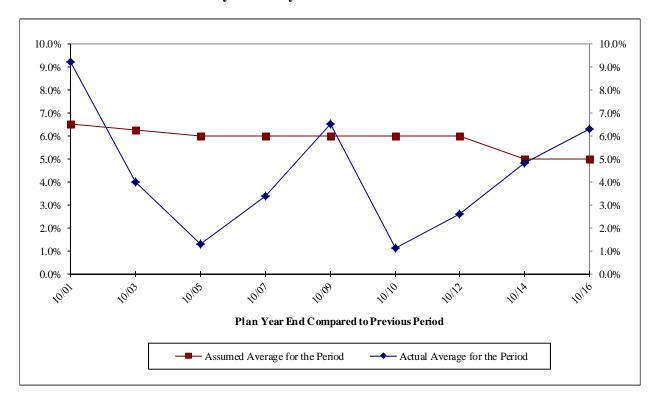
## History of Investment Return Based on Total Actuarial Value of Assets



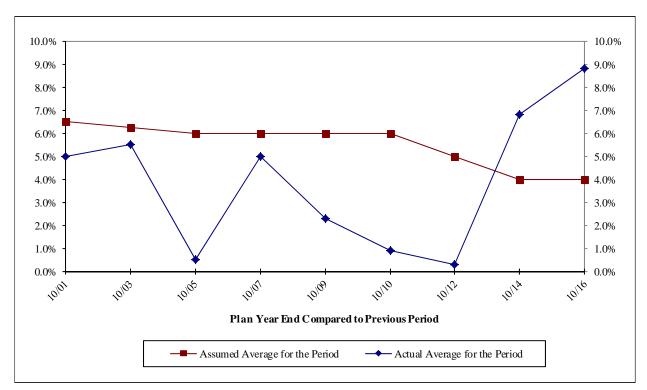
## **History of Salary Increases – General Employees**



# **History of Salary Increases – Police Officers**



# **History of Salary Increases – Firefighters**



## Number Added To and Removed from Active Participation Actual (A) Compared to Expected (E)

# **General Employees**

Two Years Ended	Ad Dui	nber ded ring ear	& D Retir	Service & DROP Retirement   A   E		Disability Died In Retirement Service A E A E		Terminations  Vested Other Totals  A A A E				Active Members End of Year	
9/30/2014 9/30/2016 4-Yr Total	323 290 613	314 302 616	159 139 298	112 130 242	9 3	21 22 43	0 5	6 6 12	26 58 84	120 97 217	146 155 301	148 154 302	2,028 2,016

## **Police Officers**

Two Years Ended	Ad Dui	nber ded ring ear	& D	Service & DROP Retirement   1		Disability Retirement A E		d In vice E	Vested A	tions Tot	als E	Active Members End of Year	
9/30/2014 9/30/2016 4-Yr Total	39 62 101	50 51 101	36 34 70	33 26 59	2 0 2	2 2 4	0 1	1 1 2	2 7 9	10 9	12 16 28	27 28 55	319 330

# Firefighters

Two Years Ended	Ad Dui	nber ded ring ear	& D Retir	Service & DROP Retirement I		OP Disability Retirement		d In vice E	Terminations  Vested Other Totals  A A A				Active Members End of Year
9/30/2014 9/30/2016 4-Yr Total	31 39 70	29 22 51	25 16 41	12 15 27	0 0	1 1 2	0 0	0 0	0 2 2	4 4 8	4 6 10	5 5 10	229 246

	RECENT HISTORY OF VALUATION RESULTS TOTAL													
	Number of Covered Actuarial Actuarial													
Valuation	Active	Inactive	Annual	Accrued	Value of	Funded	Unfunded							
Date	Members	Members	Payroll	Liability (AAL)	Assets	Ratio	AAL (UAAL)							
10/1/2003	2,768	1,068	\$ 113,698	\$ 719,211	\$ 796,597	110.8 %	\$ (77,386)							
10/1/2005	2,783	1,217	118,637	842,124	916,306	108.8	(74,182)							
10/1/2007	2,789	1,454	129,565	994,170	1,076,700	108.3	(82,530)							
10/1/2009	2,587	1,638	129,375	1,088,093	1,127,828	103.7	(39,735)							
10/1/2010	2,544	1,754	126,835	1,150,210	1,150,335	100.0	(125)							
10/1/2012	2,576	1,919	132,903	1,326,608	1,210,969	91.3	115,639							
10/1/2014	2,576	2,075	132,610	1,435,593	1,349,401	94.0	86,027							
10/1/2016	2,592	2,293	140,179	1,654,012	1,464,024	88.5	189,988							

Note: Dollar amounts are in thousands.

	RECENT HISTORY OF VALUATION RESULTS GENERAL EMPLOYEES													
	Number of Covered Actuarial Actuarial													
Valuation	Active	Inactive	Annual	Accrued	Value of	Funded	Unfunded							
Date	Members	Members	Payroll	Liability (AAL)	Assets	Ratio	AAL (UAAL)							
10/1/2003	2,180	842	\$ 85,682	\$ 500,687	\$ 559,896	111.8 %	\$ (59,209)							
10/1/2005	2,190	958	89,409	581,686	640,763	110.2	(59,077)							
10/1/2007	2,196	1,158	97,702	673,821	749,213	111.2	(75,392)							
10/1/2009	2,025	1,293	96,220	729,103	781,265	107.2	(52,162)							
10/1/2010	1,994	1,381	94,107	768,705	794,685	103.4	(25,980)							
10/1/2012	2,019	1,488	98,491	874,076	831,528	95.1	42,548							
10/1/2014	2,028	1,591	98,430	932,982	922,824	98.9	10,158							
10/1/2016	2,016	1,757	102,332	1,076,062	995,919	92.6	80,143							

Note: Dollar amounts are in thousands.

	RECENT HISTORY OF VALUATION RESULTS POLICE OFFICERS													
	Number of Covered Actuarial Actuarial													
Valuation	Active	Inactive	Annual	Accrued	Value of	Funded	Unfunded							
Date	Members	Members	Payroll	Liability (AAL)	Assets	Ratio	AAL (UAAL)							
10/1/2003	340	123	\$ 16,848	\$ 119,819	\$ 132,365	110.5 %	\$ (12,546)							
10/1/2005	350	147	17,911	143,671	155,217	108.0	(11,546)							
10/1/2007	356	158	19,879	177,741	186,361	104.8	(8,620)							
10/1/2009	330	192	20,885	204,687	198,204	96.8	6,483							
10/1/2010	317	204	20,292	215,882	203,836	94.4	12,046							
10/1/2012	330	232	22,224	259,341	219,840	84.8	39,501							
10/1/2014	319	263	21,461	290,761	250,832	86.3	39,764							
10/1/2016	330	299	22,969	334,090	277,773	83.1	56,317							

Note: Dollar amounts are in thousands.

	RECENT HISTORY OF VALUATION RESULTS FIREFIGHTERS														
	Number of Covered Actuarial Actuarial														
Valuation	Active	Inactive	Annual	Accrued	Value of	Funded	Unfunded								
Date	Members	Members	Payroll	Liability (AAL)	Assets	Ratio	AAL (UAAL)								
10/1/2003	248	103	\$ 11,168	\$ 98,705	\$ 104,336	105.7 %	\$ (5,631)								
10/1/2005	243	112	11,317	116,766	120,326	103.0	(3,560)								
10/1/2007	237	138	11,984	142,608	141,126	99.0	1,482								
10/1/2009	232	153	12,270	154,303	148,359	96.1	5,944								
10/1/2010	233	169	12,436	165,623	151,814	91.7	13,809								
10/1/2012	227	199	12,188	193,191	159,601	82.6	33,590								
10/1/2014	229	221	12,719	211,850	175,745	83.0	36,105								
10/1/2016	246	237	14,878	243,860	190,332	78.0	53,528								

Note: Dollar amounts are in thousands.

# RECENT HIS TORY OF REQUIRED AND ACTUAL CONTRIBUTIONS

	End of				Requir	Actual Contributions										
	Year To Which	General F	General Employees  % of		General Employees Police Officer		fficers		Firefig	hters	nters Total					
	Valuation	<b>A</b>				% of	<b>A</b>		% of	A	General Police			_		
Valuation Date	Applies	Amount	Payroll	An	nount	Payroll	Amo	ount	Payroll	Amount	Employees	Officers	Firefighters	Total		
9/30/2005	9/30/2008	\$ 9,609	9.33 %	\$	3,014	13.90 %	\$	2,072	15.65 %	\$ 14,695	\$ 9,609	\$ 3,014	\$ 2,072	\$	14,695	
9/30/2007	9/30/2009	9,547	9.08		3,064	13.48		2,376	16.35	14,987	9,547	3,064	2,376		14,987	
9/30/2007	9/30/2010	8,862	9.08		3,071	13.48		2,447	16.35	14,380	8,862	3,071	2,447		14,380	
10/1/2009	9/30/2011	10,408	10.37		4,228	17.96		3,022	20.30	17,658	10,408	4,228	3,022		17,658	
10/1/2010	9/30/2012	10,523	13.40		4,251	19.22		3,024	20.11	17,798	10,523	4,251	3,024		17,798	
10/1/2010	9/30/2013	14,335	13.40		4,787	19.22		3,154	20.11	22,276	14,335	4,787	3,154		22,276	
10/1/2012	9/30/2014	16,110	15.19		5,779	23.24		3,894	25.21	25,783	16,110	5,779	3,894		25,783	
10/1/2012	9/30/2015	16,537	15.19		5,940	23.24		4,104	25.21	26,581	16,537	5,940	4,104		26,581	
10/1/2014	9/30/2016	14,591	13.07		6,585	25.75		4,671	26.47	25,847	14,591	6,585	4,671		25,847	
10/1/2014	9/30/2017		13.07			25.75			26.47							
10/1/2016	9/30/2018		19.68			31.40			32.96							

Note: Dollar amounts are in thousands.

#### ACTUARIAL ASSUMPTIONS AND COST METHOD

#### Valuation Methods

<u>Actuarial Cost Method</u> - 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 dates of expected 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.

<u>Financing of Unfunded Actuarial Accrued Liabilities</u> - Unfunded Actuarial Accrued Liabilities were amortized as a level (principal & interest combined) percent of payroll over a prescribed period of future years. The actual payroll growth average over the last 10 years was for General Employees: 1.71%; for Police Officers: 3.43%; and for Firefighters: 4.18%. This is compared to the assumed rate of 3.5%. Florida administrative code requires using the lesser of the two rates for purposes of amortizing unfunded liabilities as a level percent of pay, but not less than zero. The assumed payroll growth rate was 4.0% in the previous valuation.

<u>Actuarial Value of Assets</u> - The Actuarial Value of Assets recognizes each year 20% of the difference between the expected actuarial value (based on assumed return) and the market value of assets. The Actuarial Value of Assets is further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the Market Value of plan assets and whose upper limit is 120% of the Market Value of plan assets. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than assumed rate, Actuarial Value of Assets will tend to be greater than Market Value.

#### **Valuation Assumptions**

*The actuarial assumptions used* in the valuation are shown in this Section.

#### **Economic Assumptions**

<u>The investment return rate</u> assumed in the valuation is 7.70% per year, compounded annually (net after investment expenses). *This rate was 7.75% in the previous valuation*. The current 7.70% investment return assumption is a prescribed assumption as defined by the Actuarial Standard of Practice No. 27 (ASOP 27), as it was set by the Plan Administrator. The prescribed assumption is at the high end of what we believe constitutes a reasonable range for this assumption as defined by ASOP 27.

The **Inflation Rate** assumed in this valuation was 2.50% per year. *This rate was 3.00% in the previous valuation.* 

The assumed **real rate of return** over inflation is defined to be the portion of total investment return that is more than the assumed inflation rate. Considering other economic assumptions, the 7.70% investment return rate translates to an assumed real rate of return over inflation of 5.20%.



<u>The rates of salary increase</u> used are in accordance with the following tables below and are a blend of 66.67% of the old table and 33.33% of the new table based on the Experience Study dated June 24, 2016. This assumption is used to project a member's current salary to the salaries upon which benefits will be based. This assumption was 100% of the old table in the previous valuation.

## **Old Assumption Table**

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υ/Δ	Increase	ın	Salary
/ U	Increase	111	Data v

Age	General Employees	Police Officers	Firefighters
ALL	3.50%	5.00%	4.00%

## **New Assumption Table**

% Increase in Salary - General Employees

			- J
Years of	Merit and		Total
Service	Seniority	Inflation	Increase
Under 4	2.50%	2.50%	5.00%
4 - 7	1.30%	2.50%	3.80%
8 - 11	1.10%	2.50%	3.60%
12 - 15	0.80%	2.50%	3.30%
16 - 19	0.60%	2.50%	3.10%
20 & Over	0.45%	2.50%	2.95%

## **%** Increase in Salary - Police Officers

Years of	Merit and	•	Total
Service	Seniority	Inflation	Increase
Under 8	3.90%	2.50%	6.40%
8 - 11	3.60%	2.50%	6.10%
12 - 15	3.40%	2.50%	5.90%
16 - 19	2.70%	2.50%	5.20%
20 & Over	2.00%	2.50%	4.50%

## **%** Increase in Salary - Firefighters

		•	
Years of	Merit and		Total
Service	Seniority	Inflation	Increase
Under 12	3.25%	2.50%	5.75%
12 - 15	2.60%	2.50%	5.10%
16 - 19	2.25%	2.50%	4.75%
20 & Over	1.90%	2.50%	4.40%

## **Demographic Assumptions**

<u>The mortality table</u> is 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. These are the same rates currently in use for members of the Florida Retirement System (FRS), as mandated by Florida House Bill 1309.

<u>For General Employees</u>: For males, the base mortality rates include a 50% blue collar adjustment and a 50% white collar adjustment. For females, the base mortality rates include a 100% white collar adjustment. These are the same rates currently in use for Regular class members of FRS.

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

Sample	<b>Probability of</b>		<b>Future Life</b>	
Attaine d	Dying Nex	<b>Dying Next Year</b>		cy (years)
Ages	Men	Men Women		Women
20	0.09 %	0.03 %	64.69	69.78
30	0.13	0.04	54.24	59.10
40	0.28	0.09	44.14	48.53
50	0.55	0.23	34.55	38.21
55	0.60	0.32	29.92	33.19
60	0.77	0.48	25.25	28.29
65	1.16	0.75	20.73	23.56
70	1.81	1.25	16.49	19.10
75	3.01	2.12	12.64	15.04
80	5.10	3.55	9.33	11.43

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

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

Sample	Probability of		Future Life	
Attaine d	Dying Nex	<b>Dying Next Year</b>		cy (years)
Ages	Men	Men Women		Women
20	0.03 %	0.02 %	67.40	70.49
30	0.05	0.03	56.62	59.76
40	0.11	0.06	45.96	49.08
50	0.21	0.15	35.47	38.56
55	0.36	0.24	30.35	33.42
60	0.62	0.40	25.42	28.40
65	1.10	0.71	20.77	23.58
70	1.81	1.25	16.49	19.10
75	3.01	2.12	12.64	15.04
80	5.10	3.55	9.33	11.43

This assumption is used to measure the probabilities of active members dying prior to retirement (10% of deaths are assumed to be service-connected).



For disabled retirees, the mortality table was the RP-2000 Mortality for Disabled Annuitants with ages set back 4 years for males and set forward 2 years for females. These are the same rates currently in use for Regular class members of FRS.

<u>For Police Officers and Firefighters</u>: 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 FRS.

FRS Healthy Post-Retirement Mortality for Special Risk Class Members

Sample Attaine d	Probability of Dying Next Year		Future Expectane	-
Ages	Men	Men Women		Women
20	0.08 %	0.03 %	64.00	69.78
30	0.15	0.04	53.44	59.10
40	0.30	0.09	43.42	48.53
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

Sample	<b>Probability of</b>		<b>Future Life</b>		
<b>Attaine d</b>	<b>Dying Next Year</b>		Expectan	cy (years)	
Ages	Men	Men Women		Women	
20	0.03 %	0.02 %	66.67	70.49	
30	0.07	0.03	55.85	59.76	
40	0.13	0.06	45.24	49.08	
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 (10% of deaths are assumed to be service-connected).



For disabled retirees, the mortality table was 60% of the RP-2000 Combined Mortality Table for Disabled Annuitants with ages set back 4 years for males and set forward 2 years for females, and 40% of the RP-2000 Annuitant Mortality Table with a white collar adjustment with no age setback, both with no provision being made for future mortality improvements. These are the same rates currently in use for Special Risk class members of FRS.

In the previous valuation, this assumption was the RP-2000 Combined Mortality Table for males and females with 40%/60% blend of white/blue collar rates for General Employees and 100% blue collar rates for Police Officers and Firefighters, with projected improvements in mortality using scale AA for 15 years from the valuation date. For all disabled retirees, the RP-2000 Disabled Mortality Tables for males and females, with no provision being made for future mortality improvements were used.

*The active member population* is assumed to remain constant.

<u>The rates of retirement</u> used to measure the probability of eligible members retiring during the next year are a blend of 66.67% of the old table and 33.33% of the new table based on the Experience Study dated June 24, 2016. This assumption was 100% of the old table in the previous valuation.

### **Old Assumption Table**

### For General Employees:

	Normal	Early
Age	Retirement*	Retirement
54 & Under	10.0%	2.0%
55-61	10.0	5.0
62	25.0	5.0
63	10.0	5.0
64	10.0	5.0
65	100.0	

<sup>\*</sup>An additional 40% are assumed to retire in the year first eligible for unreduced benefits with an immediate COLA.

<u>For Police Officers</u>: 75% will retire when first eligible for unreduced benefit; 30% of the remaining will retire each year thereafter until age 62 when all remaining members are assumed to retire. Also, it is assumed that 5% will retire each year with reduced early retirement benefits.

<u>For Firefighters</u>: 65% will retire when first eligible for unreduced benefits; 23% of the remaining will retire each year thereafter until age 62 when all remaining members are assumed to retire. Also, it is assumed that 2% will retire each year with unreduced early retirement benefits.



## **New Assumption Table**

## For General Employees in Plan B & C:

<u>ement</u> 50%	
50%	
.50	
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0.00	
.00	
5.00	
)	.50 .50 .50 .50 .00 .00

## For General Employees in Plan D:

Age	Years of Service	Normal Retirement		Age	Years of Service	Early Retirement
Under 59	33 & Over	45.00%	Uı	nder 53	28 - 32	4.50%
59 - 64	33 & Over	60.00	5	3 - 57	28 - 32	7.50
65	5 - 19	45.00	5	8 - 62	5	7.50
	20 & Over	60.00			6 - 19	2.50
66 - 67	5 - 19	30.00			20 - 27	7.50
00 01	20 & Over	34.00			28 - 32	10.00
68 - 69	5 - 19	40.00		63	5 - 32	9.00
	20 & Over	70.00		64	5 - 32	15.00
70 & Over	5 & Over	100.00				



## For Police Officers:

	Years of	Normal			Years of	Early
Age	Service	Retirement	_	Age	Service	Retirement
Under 50	25	52.50%		Under 50	20 - 24	2.75%
	26 & Over	55.00		50 - 54	5 - 19	0.75
50 - 54	25	62.50			20 - 24	7.50
	26 & Over	55.00				
55	5 - 24	15.00				
	25	62.50				
	26 & Over	55.00				
56 - 61	5 - 24	25.00				
	25	62.50				
	26 & Over	55.00				
62 & Over	5 & Over	100.00				

## For Firefighters:

Age	Years of Service	Normal Retirement		Age	Years of Service	Early Retirement
Under 50	25	62.50%	-	Under 50	20 - 24	2.50%
	26 & Over	67.50		50 - 54	5 - 19	0.50
50 - 54	25	67.50			20 - 24	4.50
	26 & Over	67.50				
55	5 - 24	20.00				
	25	67.50				
	26 & Over	67.50				
56 - 61	5 - 19	20.00				
	20 - 24	40.00				
	25	67.50				
	26 & Over	67.50				
62 & Over	5 & Over	100.00				

<u>Rates of separation from active membership</u> were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability) and are a blend of 66.67% of the old table and 33.33% of the new table based on the Experience Study dated June 24, 2016. This assumption measures the probabilities of members remaining in employment. *This assumption was 100% of the old table in the previous valuation.* 

Old Assumption Table
% of Active Members Separating Within Next Year

Sample	Years of	General	Police	
Ages	Service	<b>Employees</b>	Officers	Firefighters
ALL	0	15.0%	25.00%	5.0%
	1	10.0	18.75	3.0
	2	7.5	12.50	2.0
	3	5.0	6.25	1.0
20-40	4 & Over	5.0	3.00	1.0
45		3.0	2.50	1.0
50		2.0	2.00	1.0
55		2.0	2.00	1.0

## **New Assumption Table**

% of Active Members Senarating

% of Active Members Separating

70 of Active Members Separating			70 of Active Members Separating							
Wi	thin Next Ye	ar	W	ithin Next Ye	ar					
Years of	General E	<u>Employees</u>		Years of	Police					
Service	Males	<b>Females</b>	Age	Service	Officers					
Under 1	14.00%	15.50%	ALL	0	13.00%					
1	10.40	14.00		1	13.00					
2	7.50	7.50		2	8.00					
3	5.50	7.50		3	4.50					
4	5.50	5.80								
5 - 6	5.50	5.30	Under 35	4 & Over	3.50					
7 -9	3.00	5.30	35 - 39		2.00					
10 - 14	2.70	3.20	40 & Over		1.50					
15 & Over	1.40	2.80								

## % of Active Members Separating Within Next Year Veers of

		rears of	
	Age	Service	Fire fighters
	Under 35	ALL	2.40%
	35 - 39		0.90
4	10 & Over		0.40

<u>Rates of disability</u> among active members are shown below and are a blend of 66.67% of the old table and 33.33% of the new table based on the Experience Study dated June 24, 2016. New table rates are equal to 150% of the current disability rates assumed by FRS. For General Employees 10% of disabilities are assumed to be service-connected, and for Police Officers and Firefighters 50% of disabilities are assumed to be service-connected. This assumption was 100% of the old table in the previous valuation.

Old Assumption Table
% Becoming Disabled Within Next Year

Sample Ages	Male/Female
20	0.064%
25	0.064
30	0.094
35	0.140
40	0.208
45	0.330
50	0.594
55	1.108
60	1.519
64	1.519

**New Assumption Table** 

% Becoming Disabled Within Next Year
General Employees Police Officers and Firefighters

Sample	Non Service	e-Connected	Service (	Connected	Non Service	e-Connected	Service (	Connected
Ages	Male	Female	Male	Female	Male	Female	Male	Female
20	0.000%	0.000%	0.000%	0.000%	0.030%	0.000%	0.015%	0.000%
25	0.015%	0.015%	0.001%	0.001%	0.030%	0.030%	0.015%	0.006%
30	0.015%	0.015%	0.001%	0.001%	0.045%	0.030%	0.015%	0.006%
35	0.030%	0.015%	0.001%	0.001%	0.045%	0.045%	0.015%	0.006%
40	0.030%	0.030%	0.001%	0.001%	0.045%	0.045%	0.030%	0.060%
45	0.120%	0.090%	0.006%	0.001%	0.045%	0.090%	0.090%	0.060%
50	0.240%	0.150%	0.009%	0.009%	0.120%	0.165%	0.210%	0.075%
55	0.375%	0.240%	0.009%	0.009%	0.075%	0.165%	0.150%	0.120%
60	0.450%	0.390%	0.015%	0.019%	0.075%	0.165%	0.210%	0.225%
64	0.150%	0.120%	0.015%	0.015%	0.075%	0.165%	0.450%	0.225%

## **Miscellaneous and Technical Assumptions**

Administrative & Investment Expenses

The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to a blend of 66.67% of 0.30% of covered payroll and 33.33% of the average of the prior two years' expenses. Assumed administrative expenses are added to the Normal Cost. The assumed administrative expenses were 0.30% of covered payroll in the previous valuation.

Benefit Service

Service calculated based on completed months is used to determine the amount of benefit payable.

**Decrement Operation** 

Disability and mortality decrements operate during retirement eligibility.

**Decrement Timing** 

Decrements of all types are assumed to occur at the middle of the year.

Eligibility Testing

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.

**Forfeitures** 

For vested separations from service, it is assumed that members separating will only withdraw their contributions and forfeit an employer financed benefit if the value of their accumulated contributions exceeds the present value of their deferred monthly 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.

Incidence of Contributions

Employer contributions and Member contributions are assumed to be received continuously throughout the year based upon the computed percentages of payroll shown in this report, and the actual payroll payable at the time contributions are made.

Marriage Assumption

85% of males and 85% of females are assumed to be married for purposes of death-in-service benefits. Males are assumed to be three years older than their spouses for active member valuation purposes.

Normal Form of Benefit

A 10-year certain and life annuity is the normal form of benefit for Police and Fire. A 66.67% joint and contingent life annuity is the normal form of benefit for General Employees.

Pay Increase Timing

Middle of fiscal year.

Service Credit Accruals

It is assumed that members accrue one year of service credit per year.

#### **GLOSSARY**

Actuarial Accrued Liability (AAL)

The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.

**Actuarial Assumptions** 

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.

Actuarial Cost Method

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.

Actuarial Equivalent

Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV)

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.

Actuarial Present Value of Future Benefits (APVFB)

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.

**Actuarial Valuation** 

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.

Actuarial Value of Assets

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 determined contribution (ADC).

Amortization Method

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.

Amortization Payment

That portion of the plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Amortization Period

The period used in calculating the Amortization Payment.

Actuarially Determined Contribution (ADC)

The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB. The ADC consists of the Employer Normal Cost and Amortization Payment.

Closed Amortization Period

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.

**Employer Normal Cost** 

The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.

Equivalent Single Amortization Period 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.

Experience Gain/Loss

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.

Funded Ratio

The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.

**GASB** 

Governmental Accounting Standards Board.



Normal Cost The annual cost assigned, under the Actuarial Cost Method, to the current

plan year.

Unfunded Actuarial Accrued

Liability

The difference between the Actuarial Accrued Liability and Actuarial

Value of Assets.

Valuation Date 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 Total Plan Assets at Market Value

		Septen	nber 3	0
Item		2016		2015
A. Cash and Cash Equivalents (Operating Cash)		7,710,839	\$	24,966,604
B. Receivables:				
1. Accounts Receivable	\$	1,011,401	\$	814,438
2. Securities Lending Collateral		-		-
3. Investment Income and Other Receivables		1,827,382		1,847,607
4. Open Security Sales (Pending)				39,656,959
5. Total Receivables	\$	2,838,783	\$	42,319,004
C. Investments	\$	1,440,098,115	\$	1,342,450,555
D. Liabilities				
1. Open Security Purchases (Pending)	\$	-	\$	(42,579,386)
2. Securities Lending Collateral				_
3. Total Liabilities	\$	-	\$	(42,579,386)
E. Total Market Value of Assets	\$	1,450,647,737	\$	1,367,156,777

## Reconciliation of Plan Assets by Plan

	September 30, 2015								
Item	Ger	neral Employees	_P	olice Officers	Firefighters			Total	
A. Market Value of Assets at Beginning of Year	\$	948,469,443	\$	263,321,584	\$	179,828,022	\$1	1,391,619,049	
<ul><li>B. Revenues and Expenditures</li><li>1. Contributions</li></ul>									
a. Member Contributions	\$	4,719,289	\$	3,103,582	\$	2,774,269	\$	10,597,140	
b. Employer Contributions		16,536,744		5,939,800		4,104,219		26,580,763	
c. Miscellaneous		22,827		6,696		4,228		33,751	
d. Total	\$	21,278,860	\$	9,050,078	\$	6,882,716	\$	37,211,654	
<ul><li>2. Investment Income</li><li>a. Interest, Dividends, and Other Income</li></ul>	\$	11,408,430	\$	3,359,260	\$	2,111,650	\$	16,879,340	
	Ф	2,942,511	Ф	3,339,200 868,988	Ф	542,950	Ф	4,354,449	
		(4,710,725)		(1,385,530)		(872,408)		(6,968,663)	
<ul><li>c. Investment Expenses</li><li>d. Net Investment Income</li></ul>	\$	9,640,216	\$	2,842,718	\$	1,782,192	\$	14,265,126	
3. Benefits and Refunds	Ψ	7,040,210	Ψ	2,042,710	Ψ	1,702,172	Ψ	14,203,120	
a. Regular Monthly Benefits	\$	(47,928,723)	\$	(14,683,776)	\$	(12,074,188)	\$	(74,686,687)	
b. Refunds		(240,960)		(63,973)		(5,245)		(310,178)	
c. Total	\$	(48,169,683)	\$	(14,747,749)	\$	(12,079,433)	\$	(74,996,865)	
4. Administrative and Miscellaneous Expenses	\$	(637,147)	\$	(187,144)	\$	(117,896)	\$	(942,187)	
5. Transfers	\$	-	\$	-	\$	-	\$	-	
C. Market Value of Assets at End of Year	\$	930,581,689	\$	260,279,487	\$	176,295,601	\$ 1	1,367,156,777	

## Reconciliation of Plan Assets by Plan

	September 30, 2016							
Item		neral Employees	s Police Officers			Firefighters	Total	
A. Market Value of Assets at Beginning of Year	\$	930,581,689	\$	260,279,487	\$	176,295,601	\$1	1,367,156,777
<ul><li>B. Revenues and Expenditures</li><li>1. Contributions</li></ul>								
a. Member Contributions	\$	4,523,727	\$	3,230,071	\$	3,092,300	\$	10,846,098
b. Employer Contributions		14,591,130		6,584,946		4,670,665		25,846,741
c. Miscellaneous				_				
d. Total	\$	19,114,857	\$	9,815,017	\$	7,762,965	\$	36,692,839
2. Investment Income  a. Interest, Dividends, and Other Income	\$	18,316,353	\$	5,438,247	\$	3,369,039	\$	27,123,639
b. Net Appreciation in Fair Value of Investments		72,654,467		21,798,089		13,472,601		107,925,157
c. Investment Expenses		(4,991,416)		(1,464,238)		(908,599)		(7,364,253)
d. Net Investment Income	\$	85,979,404	\$	25,772,098	\$	15,933,041	\$	127,684,543
3. Benefits and Refunds								
a. Regular Monthly Benefits	\$	(50,887,156)	\$	(15,736,931)	\$	(12,700,411)	\$	(79,324,498)
b. Refunds		(312,463)		(156,211)		(64,474)		(533,148)
c. Total	\$	(51,199,619)	\$	(15,893,142)	\$	(12,764,885)	\$	(79,857,646)
4. Administrative and Miscellaneous Expenses	\$	(705,008)	\$	(199,445)	\$	(124,323)	\$	(1,028,776)
5. Transfers	\$	-	\$	-	\$	-	\$	-
C. Market Value of Assets at End of Year	\$	983,771,323	\$	279,774,015	\$	187,102,399	\$1	1,450,647,737

## Actuarial Value of Assets by Plan

	General	Police		
Valuation Date - September 30, 2015	<b>Employees</b>	Officers	Firefighters	Total
A. Actuarial Value of Assets Beginning of Year	\$ 922,824,000	\$ 250,832,000	\$ 175,745,000	\$ 1,349,401,000
B. Market Value End of Year	930,582,000	260,280,000	176,296,000	1,367,158,000
C. Market Value Beginning of Year	948,469,000	263,322,000	179,828,000	1,391,619,000
D. Non-Investment/Administrative Net Cash Flow	(27,527,000)	(5,885,000)	(5,314,000)	(38,726,000)
E. Investment Income				
E1. Actual Market Total: B-C-D	9,640,000	2,843,000	1,782,000	14,265,000
E2. Assumed Rate of Return	7.75%	7.75%	7.75%	7.75%
E3. Assumed Amount of Return	70,452,000	19,211,000	13,414,000	103,077,000
F. Actuarial Value of Assets End of Year				
F1. Expected Actuarial Value of Assets End of Year:				
A+D+E3	965,749,000	264,158,000	183,845,000	1,413,752,000
F2. Excess: B - F1	(35,167,000)	(3,878,000)	(7,549,000)	(46,594,000)
F3. Adjustment to Market: 20% x F2	(7,033,000)	(776,000)	(1,510,000)	(9,319,000)
F4. Preliminary Actuarial Value of Assets End of Year:				
F1 + F3	958,716,000	263,382,000	182,335,000	1,404,433,000
F5. Upper Corridor Limit: 120%*B	1,116,698,000	312,336,000	211,555,000	1,640,589,000
F6. Lower Corridor Limit: 80%*B	744,466,000	208,224,000	141,037,000	1,093,727,000
F7. Actuarial Value of Assets End of Year	958,716,000	263,382,000	182,335,000	1,404,433,000
G. Difference between Market & Actuarial Value of Assets	(28,134,000)	(3,102,000)	(6,039,000)	(37,275,000)
H. Actuarial Rate of Return	7.0%	7.4%	6.9%	7.0%
I. Market Value Rate of Return	1.0%	1.1%	1.0%	1.0%
J. Ratio of Actuarial Value of Assets to Market Value	103.0%	101.2%	103.4%	102.7%

## Actuarial Value of Assets by Plan

	General	Police		
Valuation Date – September 30, 2016	<b>Employees</b>	Officers	Firefighters	Total
A. Actuarial Value of Assets Beginning of Year	\$ 958,716,000	\$ 263,382,000	\$ 182,335,000	\$ 1,404,433,000
B. Market Value End of Year	983,771,000	279,774,000	187,102,000	1,450,647,000
C. Market Value Beginning of Year	930,582,000	260,280,000	176,296,000	1,367,158,000
D. Non-Investment/Administrative Net Cash Flow	(32,790,000)	(6,278,000)	(5,127,000)	(44,195,000)
E. Investment Income				
E1. Actual Market Total: B-C-D	85,979,000	25,772,000	15,933,000	127,684,000
E2. Assumed Rate of Return	7.75%	7.75%	7.75%	7.75%
E3. Assumed Amount of Return	73,030,000	20,169,000	13,932,000	107,131,000
F. Actuarial Value of Assets End of Year				
F1. Expected Actuarial Value of Assets End of Year:				
A+D+E3	998,956,000	277,273,000	191,140,000	1,467,369,000
F2. Excess: B - F1	(15,185,000)	2,501,000	(4,038,000)	(16,722,000)
F3. Adjustment to Market: 20% x F2	(3,037,000)	500,000	(808,000)	(3,345,000)
F4. Preliminary Actuarial Value of Assets End of Year:				
F1 + F3	995,919,000	277,773,000	190,332,000	1,464,024,000
F5. Upper Corridor Limit: 120%*B	1,180,525,000	335,729,000	224,522,000	1,740,776,000
F6. Lower Corridor Limit: 80%*B	787,017,000	223,819,000	149,682,000	1,160,518,000
F7. Actuarial Value of Assets End of Year	995,919,000	277,773,000	190,332,000	1,464,024,000
G. Difference between Market & Actuarial Value of Assets	(12,148,000)	2,001,000	(3,230,000)	(13,377,000)
H. Actuarial Rate of Return	7.4%	7.9%	7.3%	7.5%
I. Market Value Rate of Return	9.4%	10.0%	9.2%	9.5%
J. Ratio of Actuarial Value of Assets to Market Value	101.2%	99.3%	101.7%	100.9%

**Investment Rate of Return** 

Period Ending	Total Market Value	Total Actuarial Value
9/30/2004	11.0 %	8.2 %
9/30/2005	12.3	8.8
9/30/2006	11.9	9.4
9/30/2007	12.1	10.0
9/30/2008	(14.1)	4.8
9/30/2009	(2.4)	3.4
9/30/2010	9.6	4.5
9/30/2011	0.9	3.8
9/30/2012	21.1	6.6
9/30/2013	14.5	8.1
9/30/2014	10.4	8.6
9/30/2015	1.0	7.0
9/30/2016	9.5	7.5
Average Returns:		
Last 5 Years	11.1 %	7.6 %
Last 10 Years	5.8 %	6.4 %
All Years Shown Above	7.2 %	7.0 %

The above rates are based on the retirement system's 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

	ASC 960 INI	FORMATION			
A. Valuation Date		October	1, 2016		October 1, 2014 <sup>#</sup>
B. Actuarial Present Value of Accumulated Plan Benefits	Total	General Employees	Police Officers	Firefighters	Total
<ol> <li>Vested Benefits         <ul> <li>a. Members Currently Receiving Payments</li> <li>b. Terminated Vested Members</li> <li>c. Other Members</li> <li>d. Total</li> </ul> </li> <li>Non-Vested Benefits</li> </ol>	\$ 1,096,454,000 35,539,000 342,918,000 1,474,911,000 33,330,000	\$ 688,464,000 31,080,000 241,204,000 960,748,000 22,875,000	\$ 232,154,000 3,980,000 55,185,000 291,319,000 7,267,000	\$ 175,836,000 479,000 46,529,000 222,844,000 3,188,000	\$ 921,813,000 30,360,000 318,286,000 1,270,459,000 29,996,000
<ul> <li>3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2</li> <li>4. Accumulated Contributions of Active Members</li> </ul>	1,508,241,000 97,499,000	983,623,000 56,357,000	298,586,000 21,268,000	226,032,000 19,874,000	1,300,455,000 86,224,000
<ul> <li>C. Changes in the Actuarial Present Value of Accumulated Plan Benefits</li> <li>1. Total Value at October 1, 2014</li> <li>2. Increase (Decrease) During the Period Attributable to:</li> </ul>	1,300,455,000	846,730,000	256,509,000	197,216,000	1,198,589,000
<ul> <li>a. Plan Amendments</li> <li>b. Change in Actuarial Assumptions</li> <li>c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period</li> <li>d. Benefits Paid</li> <li>e. Net Increase</li> </ul>	0 61,197,000 301,443,000 (154,854,000) 207,786,000	0 44,732,000 191,530,000 (99,369,000) 136,893,000	0 8,785,000 63,933,000 (30,641,000) 42,077,000	0 7,680,000 45,980,000 (24,844,000) 28,816,000	0 0 233,752,000 (131,886,000) 101,866,000
3. Total Value at October 1, 2016  D. Market Value of Assets	1,508,241,000 1,450,647,000	983,623,000 983,771,000	298,586,000 279,774,000	226,032,000 187,102,000	1,300,455,000 1,391,619,000
E. Funded Ratio Using Market Value     F. Actuarial Assumptions - See page entitled     Actuarial Assumptions and Methods	96.2%	100.0%	93.7%	82.8%	1,391,019,000

<sup>#</sup> Reflects all Actuarial Impact Statements through June 2015.

# SECTION E MISCELLANEOUS INFORMATION

	RECONCILIATION OF TOTAL MEM	IBERSHIP DA	TA
		From 10/1/14 To 10/1/16	From 10/1/12 To 10/1/14
A.	Active Members		
1. 2.	Number Included in Last Valuation New Members Included in Current Valuation	2,576 391	2,576 386
3. 4. 5.	Non-Vested Employment Terminations Vested Employment Terminations DROP Retirement	(110) (67) (107)	(134) (28) (145)
6. 7. 8.	Service Retirements Disability Retirements Deaths	(82) (3) (6)	(75) (11) 0
	Transfer/Rehire Other - Data Corrections Number Included in This Valuation	0 0 2,592	7 0 2,576
В.	Terminated Vested Members	,	,
1. 2. 3. 4. 5. 6. 7. 8.	Number Included in Last Valuation Additions from Active Members Lump Sum Payments/Refund of Contributions Payments Commenced Deaths Rehire Other - Data Corrections Number Included in This Valuation	238 67 (24) (20) (1) 0 1 261	247 28 (17) (13) 0 (7) 0 238
C.	DROP Retirees, Service Retirees, Disability R	Retirees and Be	neficiaries
1. 2. 3. 4. 5. 6.	Number Included in Last Valuation Additions from Active Members Additions from Terminated Vested Members Deaths Additions from New Survivor Benefits End of Certain Period - No Further Payments	1,837 192 20 (72) 58 (3)	1,672 231 13 (75) 0 (4)
7. 8.	Other Number Included in This Valuation	2,032	<u>0</u> 1,837

	RECONCILIATION OF MEMBERSHIP DATA BY PLAN FROM 10/1/14 TO 10/1/16										
		General Employees	Police Officers	Firefighters	Total						
A.	Active Members										
1.	Number Included in Last Valuation	2,028	319	229	2,576						
2.	New Members Included in Current Valuation	290	62	39	391						
3.	Non-Vested Employment Terminations	(97)	(9)	(4)	(110)						
4.	Vested Employment Terminations	(58)	(7)	(2)	(67)						
5.	DROP Retirement	(66)	(26)	(15)	(107)						
6.	Service Retirements	(73)	(8)	(1)	(82)						
7.	Disability Retirements	(3)	0	0	(3)						
8.	Deaths	(5)	(1)	0	(6)						
9.	Transfer/Rehire	0	0	0	0						
10.	Other - Data Corrections	0	0	0	0						
11.	Number Included in This Valuation	2,016	330	246	2,592						
В.	Terminated Vested Members	<u> </u>		<u> </u>							
1.	Number Included in Last Valuation	199	34	5	238						
2.	Additions from Active Members	58	7	2	67						
3.	Lump Sum Payments/Refund of Contributions	(22)	(2)	0	(24)						
4.	Payments Commenced	(18)	(2)	0	(20)						
5.	Deaths	(1)	0	0	(1)						
6.	Rehire	0	0	0	0						
7.	Other - Survivor Deferral	1	0	0	1						
8.	Number Included in This Valuation	217	37	7	261						
C.	DROP Retirees, Service Retirees, Disability	Retirees and Be	neficiaries	<u> </u>							
1.	Number Included in Last Valuation	1,392	229	216	1,837						
2.	Additions from Active Members	142	34	16	192						
3.	Additions from Terminated Vested Members	18	2	0	20						
4.	Deaths	(64)	(4)	(4)	(72)						
5.	Additions from New Survivor Benefits	54	1	3	58						
6.	End of Certain Period - No Further Payments	(2)	0	(1)	(3)						
7.	Other	o o	0	0	o l						
8.	Number Included in This Valuation	1,540	262	230	2,032						

ACTIVE MEMBERS AS OF OCTOBER 1, 2016 GENERAL EMPLOYEES

Age			Years of	Service to	o Valuatio	n Date				Earni	ngs
Group	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Total	Average
< 25	17	22	-	-	-	-	-	-	39	\$ 1,108,852	\$ 28,432
25-29	38	77	11	2	-	-	-	-	128	4,519,309	35,307
30-34	21	84	51	39	1	-	-	-	196	8,475,295	43,241
35-39	19	78	49	72	16	-	-	-	234	10,898,503	46,575
40-44	14	69	49	65	43	24	1	-	265	12,982,301	48,990
45-49	18	64	65	63	52	33	33	-	328	17,865,331	54,467
50-54	12	55	45	76	54	48	73	13	376	20,686,531	55,017
55-59	6	37	34	57	54	54	63	7	312	17,216,439	55,181
60-64	4	9	13	20	21	17	26	3	113	6,871,220	60,807
65-69	2	7	3	3	3	3	1	1	23	1,452,905	63,170
70+		-	-	1	-	1	-	-	2	254,879	127,440
Total	151	502	320	398	244	180	197	24	2,016	102,331,565	50,760

Average Age: 46 Ave

Average Service: 11.5

## ACTIVE MEMBERS AS OF OCTOBER 1, 2016 POLICE OFFICERS

Age			Years of	Service to	o Valuatio	n Date				Earni	ngs
Group	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Total	Average
< 25	18	7	-	-	-	-	-	-	25	\$ 1,086,151	\$ 43,446
25-29	11	20	3	-	-	-	-	-	34	1,791,399	52,688
30-34	9	23	20	12	-	-	-	-	64	3,857,313	60,271
35-39	5	9	8	23	8	-	-	-	53	3,718,837	70,167
40-44	2	2	5	18	32	6	-	-	65	5,257,293	80,881
45-49	-	2	4	14	16	29	2	-	67	5,561,488	83,007
50-54	1	2	3	4	4	1	-	-	15	1,119,641	74,643
55-59	-	1	2	-	1	-	1	-	5	382,846	76,569
60-64	-	1	-	-	1	-	-	-	2	194,494	97,247
65-69	-	-	-	-	-	-	-	-	-	-	-
70+	-	-	-	-	-	-	-	-	-	-	
Total	46	67	45	71	62	36	3	-	330	22,969,462	69,604

Average Age: 38.5 Average Service: 10.2

ACTIVE MEMBERS AS OF OCTOBER 1, 2016 FIREFIGHTERS

Age			Years of	Service t	o Valuatio	n Date				Earni	ngs
Group	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Total	Average
< 25	3	3	-	-	-	-	-	-	6	\$ 247,297	\$ 41,216
25-29	11	26	8	-	-	-	-	-	45	2,006,427	44,587
30-34	5	22	17	7	-	-	-	-	51	2,615,845	51,291
35-39	1	8	20	14	1	-	-	-	44	2,530,030	57,501
40-44	-	2	3	12	16	5	-	-	38	2,738,681	72,071
45-49	-	1	2	7	9	14	1	-	34	2,540,069	74,708
50-54	-	-	-	1	5	13	-	-	19	1,467,353	77,229
55-59	-	1	-	1	5	-	2	-	9	731,979	81,331
60-64	-	-	-	-	-	-	-	-	-	-	-
65-69	-	-	-	-	-	-	-	-	-	-	-
70+	-	-	-	-	-	-	-	-	-	1	-
Total	20	63	50	42	36	32	3	-	246	14,877,681	60,478

Average Age: 38.3 Average Service: 10.1

ACTIVE MEMBERS AS OF OCTOBER 1, 2016 ALL MEMBERS

Age			Years of	f Service t	o Valuatio	n Date				Earni	ngs
Group	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Total	Average
< 25	38	32	-	-	-	-	-	-	70	\$ 2,442,300	\$ 34,890
25-29	60	123	22	2	-	-	-	-	207	8,317,135	40,179
30-34	35	129	88	58	1	-	-	-	311	14,948,454	48,066
35-39	25	95	77	109	25	-	-	-	331	17,147,370	51,805
40-44	16	73	57	95	91	35	1	-	368	20,978,276	57,006
45-49	18	67	71	84	77	76	36	-	429	25,966,888	60,529
50-54	13	57	48	81	63	62	73	13	410	23,273,525	56,765
55-59	6	39	36	58	60	54	66	7	326	18,331,264	56,231
60-64	4	10	13	20	22	17	26	3	115	7,065,715	61,441
65-69	2	7	3	3	3	3	1	1	23	1,452,905	63,170
70+	-	-	-	1	-	1	-	-	2	254,879	127,440
Total	217	632	415	511	342	248	203	24	2,592	140,178,711	54,081

Average Age: 44.3 Average Service: 11.2

## INACTIVE MEMBERS AS OF OCTOBER 1, 2016 GENERAL EMPLOYEES

	<b>Terminated Vested</b>		Disa	bled	Ret	tire d	Survivor B	eneficiaries	<b>Grand Total</b>	
		Total	-	Гotal	,	Total	To	otal	7	Total
<u>Age</u>	<u>Number</u>	<b>Benefits</b>	<u>Number</u>	<b>Benefits</b>	<u>Number</u>	<b>Benefits</b>	<u>Number</u>	<b>Benefits</b>	<u>Number</u>	<b>Benefits</b>
Under 25	0	0	0	0	0	0	14	64,244	14	64,244
25 - 29	0	0	0	0	0	0	1	19,436	1	19,436
30 - 34	6	31,224	0	0	0	0	2	37,510	8	68,734
35 - 39	20	223,436	2	56,591	0	0	2	25,041	24	305,068
40 - 44	19	235,358	0	0	1	30,578	2	8,311	22	274,247
45 - 49	24	340,856	1	40,721	4	152,464	5	58,749	34	592,790
50 - 54	65	1,279,257	6	154,811	43	1,549,218	5	86,619	119	3,069,905
55 - 59	64	1,210,219	5	139,386	125	5,008,521	25	422,865	219	6,780,991
60 - 64	19	329,291	16	374,546	341	12,339,351	28	794,515	404	13,837,703
65 - 69	0	0	8	191,346	364	13,480,048	31	784,360	403	14,455,754
70 - 74	0	0	7	200,044	197	6,916,622	24	480,798	228	7,597,464
75 - 79	0	0	1	20,537	110	3,620,729	25	641,759	136	4,283,025
80 - 84	0	0	0	0	54	1,712,799	21	454,598	75	2,167,397
85 - 89	0	0	0	0	30	852,615	16	420,396	46	1,273,011
90 - 94	0	0	0	0	12	236,358	9	172,075	21	408,433
95 - 99	0	0	1	19,444	0	1	1	21,658	2	41,103
100 & Over	0	0	0	0	0	0	1	7,147	1	7,147
Total	217	3,649,641	47	1,197,426	1,281	45,899,304	212	4,500,081	1,757	55,246,452
Average Age	e:	51.5		62.7		67.6		66.4		65.4

## INACTIVE MEMBERS AS OF OCTOBER 1, 2016 POLICE OFFICERS

	<b>Terminated Vested</b>		Disal	oled	Ret	tire d	Survivor Be	neficiaries	<b>Grand Total</b>		
	-	Гotal	Т	Cotal	,	Total	To	tal	7	Гotal	
<u>Age</u>	Number	<b>Benefits</b>	Number	<b>Benefits</b>	<u>Number</u>	<b>Benefits</b>	<u>Number</u>	<b>Benefits</b>	Number	<b>Benefits</b>	
Under 25	0	0	0	0	0	0	0	0	0	0	
25 - 29	0	0	0	0	0	0	0	0	0	0	
30 - 34	5	56,511	0	0	0	0	0	0	5	56,511	
35 - 39	5	75,197	0	0	0	0	0	0	5	75,197	
40 - 44	9	135,962	0	0	0	0	1	26,936	10	162,898	
45 - 49	8	113,540	2	53,769	13	878,988	0	0	23	1,046,297	
50 - 54	10	147,666	0	0	56	3,913,306	0	0	66	4,060,972	
55 - 59	0	0	2	93,942	58	3,770,921	2	56,136	62	3,920,999	
60 - 64	0	0	0	0	34	2,300,945	3	141,891	37	2,442,836	
65 - 69	0	0	0	0	32	1,839,180	2	126,776	34	1,965,956	
70 - 74	0	0	0	0	27	1,390,000	4	182,059	31	1,572,059	
75 - 79	0	0	0	0	13	747,149	1	63,490	14	810,639	
80 - 84	0	0	0	0	6	298,768	1	23,387	7	322,155	
85 - 89	0	0	0	0	4	130,625	0	0	4	130,625	
90 - 94	0	0	0	0	0	0	1	52,429	1	52,429	
95 - 99	0	0	0	0	0	0	0	0	0	0	
100 & Over	0	0	0	0	0	0	0	0	0	0	
Total	37	528,876	4	147,711	243	15,269,882	15	673,104	299	16,619,573	
Average Age	<b>::</b>	44.6		52.0		61.7		68.4		59.8	

## INACTIVE MEMBERS AS OF OCTOBER 1, 2016 FIREFIGHTERS

	<b>Terminated Vested</b>		Disal	oled	Ret	tire d	Survivor Be	neficiaries	<b>Grand Total</b>	
		Гotal	Т	otal	,	Total	Tot	al	7	Total
<u>Age</u>	Number	<b>Benefits</b>	Number	<b>Benefits</b>	<u>Number</u>	<b>Benefits</b>	<u>Number</u>	<b>Benefits</b>	Number	<b>Benefits</b>
Under 25	0	0	0	0	0	0	0	0	0	0
25 - 29	1	7,583	0	0	0	0	0	0	1	7,583
30 - 34	0	0	0	0	0	0	0	0	0	0
35 - 39	1	6,115	0	0	0	0	0	0	1	6,115
40 - 44	2	15,270	0	0	0	0	0	0	2	15,270
45 - 49	1	24,258	0	0	4	307,365	0	0	5	331,623
50 - 54	2	12,900	0	0	37	2,125,503	1	26,875	40	2,165,278
55 - 59	0	0	0	0	55	3,142,596	0	0	55	3,142,596
60 - 64	0	0	1	33,097	45	2,662,912	0	0	46	2,696,009
65 - 69	0	0	0	0	23	1,331,435	1	23,244	24	1,354,679
70 - 74	0	0	0	0	19	870,777	3	177,595	22	1,048,372
75 - 79	0	0	0	0	13	623,048	4	143,001	17	766,049
80 - 84	0	0	0	0	10	619,043	3	137,053	13	756,096
85 - 89	0	0	0	0	7	390,217	2	66,994	9	457,211
90 - 94	0	0	0	0	0	0	2	78,438	2	78,438
95 - 99	0	0	0	0	0	0	0	0	0	0
100 & Over	0	0	0	0	0	0	0	0	0	0
Total	7	66,126	1	33,097	213	12,072,896	16	653,200	237	12,825,319
Average Age	<b>:</b> :	43.0		61.0		63.2		78.3		63.6

## INACTIVE MEMBERS AS OF OCTOBER 1, 2016 ALL MEMBERS

	Terminated Vested		Disabled		Ret	Retired		eneficiaries	<b>Grand Total</b>	
		Total	-	Гotal	,	Total	To	tal	Total	
<u>Age</u>	Number	<b>Benefits</b>	Number	<b>Benefits</b>	Number	<b>Benefits</b>	Number	<b>Benefits</b>	Number	<b>Benefits</b>
Under 25	0	0	0	0	0	0	14	64,244	14	64,244
25 - 29	1	7,583	0	0	0	0	1	19,436	2	27,019
30 - 34	11	87,735	0	0	0	0	2	37,510	13	125,245
35 - 39	26	304,748	2	56,591	0	0	2	25,041	30	386,380
40 - 44	30	386,590	0	0	1	30,578	3	35,247	34	452,415
45 - 49	33	478,654	3	94,490	21	1,338,817	5	58,749	62	1,970,710
50 - 54	77	1,439,823	6	154,811	136	7,588,027	6	113,494	225	9,296,155
55 - 59	64	1,210,219	7	233,328	238	11,922,038	27	479,001	336	13,844,586
60 - 64	19	329,291	17	407,643	420	17,303,208	31	936,406	487	18,976,548
65 - 69	0	0	8	191,346	419	16,650,663	34	934,380	461	17,776,389
70 - 74	0	0	7	200,044	243	9,177,399	31	840,452	281	10,217,895
75 - 79	0	0	1	20,537	136	4,990,926	30	848,250	167	5,859,713
80 - 84	0	0	0	0	70	2,630,610	25	615,038	95	3,245,648
85 - 89	0	0	0	0	41	1,373,457	18	487,390	59	1,860,847
90 - 94	0	0	0	0	12	236,358	12	302,942	24	539,300
95 - 99	0	0	1	19,444	0	1	1	21,658	2	41,103
100 & Over	0	0	0	0	0	0	1	7,147	1	7,147
Total	261	4,244,643	52	1,378,234	1,737	73,242,082	243	5,826,385	2,293	84,691,344
Average Age	»:	50.3		61.8		66.2		67.3		64.4

# SECTION F SUMMARY OF PLAN PROVISION

## SUMMARY OF PLAN PROVISIONS GENERAL EMPLOYEES

#### A. Ordinances

The Plan was established under the Code of Ordinances for the City of Tallahassee, Florida, Chapter 14, Article II. The Plan is also governed by certain provisions of Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

#### **B.** Effective Date

Not Available.

#### C. Plan Year

October 1 through September 30

### D. Type of Plan

Qualified, governmental defined benefit retirement plan; for GASB purposes it is a multiple employer cost-sharing plan.

### E. Eligibility Requirements

All regular full-time or part-time municipal employees in an approved budgeted position as well as elected officials.

## F. Credited Service

Credited Service is measured as the total number of days (considered as 1/365 of a year, ignoring the impact of a leap year) of full-time service with the City during which time prescribed employee contributions are made. Members may purchase up to 5 years of military service or service with another public employer. No service is credited for any periods of employment for which the member received a refund of their contributions.

## **G.** Compensation

Amounts actually paid to participants, including overtime, standby and call-back pay, tool allowance, worker's compensation salary differential, holiday pay, vacation pay up 240 hours, National Institute of Automotive Service Excellence Certification Supplement, differential pay for 'acting' status, leadworker differential, longevity/merit bonuses, and severance pay paid as a continuation of salary.

## H. Average Final Compensation (AFC)

For Part C participants (hired prior to 4/1/2013): The average of Compensation shall be the higher of:

- (1) The final 3 years of Credited Service;
- (2) Any consecutive 3 years during the period January 1987 through December 2005 escalated by three percent from the end of the 3-year period to December 2005; or
- (3) Any consecutive 3 years during the period January 1987 to the point of retirement.



For Part D participants (hired on or after 4/1/2013): The average of Compensation shall be the highest consecutive five years of Credited Service.

#### I. Normal Retirement

Eligibility:

A member may retire on the first day of the month coincident with or next following the earliest of:

### For Part C participants:

- (1) Age 62 and 5 years of Credited Service; or
- (2) 30 years of Credited Service, regardless of age.

### For Part D participants:

- (1) Age 65 and 5 years of Credited Service; or
- (2) 33 years of Credited Service, regardless of age.

Part C participants who were previously participants in Part B are also eligible for Normal Retirement at age 60 and 7 years of Credited Service.

Benefit:

2.25% of AFC multiplied by years of Credited Service, 3.0% for each year of pension participation as an Elected Official, and 2.0% for each year of purchased Military and out-of-city public service.

Part C participants who were previously participants in Part B may receive the greater of the above benefit or AFC multiplied by the accrual percentage rate of:

- (1) 1.5% for each year of Credited Service through age 34,
- (2) 2.0% for each year of Credited Service from age 35 through age 49, and
- (3) 2.5% for each year of participation for age 50 and beyond.
- (4) Maximum accrual percentage is 75%.

The maximum benefit is 81% of AFC for all General Employees.

#### Normal Form

of Benefit:

66-2/3% Joint and Survivor option; other options are also available.

#### Health Care

Supplement: Monthly benefit of \$5.00 multiplied by years of Credited Service (not in excess of 30) commencing at retirement but not before age 55 (not before age 50 if retiring after completion of 30 or 33 years of service).

COLA:

Each retiree will receive a 3.0% increase in benefits on each October 1<sup>st</sup> starting:

- (1) at the later of normal retirement date, or age 55 (if retiring under age and service eligibility) or age 50 (if retiring under service eligibility) for Part C participants, or
- (2) at the later of normal retirement date or age 65 for Part D participants.

## J. Early Retirement

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility after

attainment of

For Part C participants:

(1) Age 55 and 5 years of Credited Service; or

(2) 25 years of Credited Service, regardless of age.

For Part D participants:

(1) Age 58 and 5 years of Credited Service; or

(2) 28 years of Credited Service, regardless of age.

Benefit: If member is retiring under the age and service eligibility, the Normal Retirement

Benefit is reduced by 4.8% per year for each year by which the Early Retirement date precedes the Normal Retirement date. If member is retiring under the service eligibility, the Normal Retirement Benefit is reduced by 5.0% per year for each year

by which the Early Retirement date precedes the Normal Retirement date.

Part C participants who were previously participants in Part B may have their Normal Retirement benefit reduced by 2.4% per year for each year by which the

Early Retirement date precedes the Part B Normal Retirement date.

Normal Form

of Benefit: 66-2/3% Joint and Survivor option; other options are also available.

Health Care

Supplement: Same as Normal Retirement.

COLA: Same as Normal Retirement.

## 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 as a result of an act

occurring in the performance of service for the City is immediately eligible for a

disability benefit.

Benefit: The greater of:

(1) the member's accrued benefit to date of disability, and

(2) the member's benefit with service projected to normal retirement date not to exceed 50% of AFC in effect on the date of disability.

encode 50% of the enfect of the date of distance

Normal Form

of Benefit: 66-2/3% Joint and Survivor option; other options are also available.

Health Care

Supplement: Monthly benefit of \$5.00 multiplied by years of Credited Service (not in excess of

30)

COLA: Each disabled retiree will receive a 3.0% increase in benefits on October 1<sup>st</sup> of each

year.

# M. Non-Service Connected Disability

Eligibility: Any member with 5 years of Credited Service who becomes totally and

permanently disabled (non-service related) is immediately eligible for a disability

benefit.

Benefit: The greater of:

(1) the member's accrued benefit to date of disability, and

(2) the member's benefit with service projected to normal retirement date not to

exceed 50% of AFC in effect on the date of disability.

Normal Form

of Benefit: 66-2/3% Joint and Survivor option; other options are also available.

Health Care

Supplement: Monthly benefit of \$5.00 multiplied by years of Credited Service (not in excess of

30)

COLA: Each disabled retiree will receive a 3.0% increase in benefits on October 1<sup>st</sup> of each

year.

## N. Service Connected Pre-Retirement Death

Eligibility: Any member whose death is determined to be the result of a service incurred injury

is eligible for survivor benefits regardless of Credited Service.

Benefit: Single lump sum payment of the greater of 50% of the member's base salary in

effect on the date of death, \$50,000, or a refund of accumulated contributions.

In addition to the above, if the member has a legal spouse, the spouse may elect to

receive either:

(1) a monthly annuity of 25% of the member's monthly base salary, and a monthly payment of 10% of the member's monthly base salary to each

dependent child until they reach age 22. The maximum payment to the member's children shall not exceed 50% of monthly base salary, or

(2) a monthly annuity of 50% of the member's monthly base salary.

If the member had attained retirement eligibility at the time of his death, the spouse may elect the above or the member's accrued benefit under the joint and

contingent full option.

Normal Form

of Benefit: Payable for the life of the beneficiary.

Health Care

Supplement: Monthly benefit of \$5.00 multiplied by years of Credited Service (not in excess of

30)

COLA: Each beneficiary will receive a 3.0% increase in benefits on October 1<sup>st</sup> of each

vear.

#### O. Other Pre-Retirement Death

Eligibility: All members whose death is not service related and which occurs on or prior to

Normal or actual retirement date while in service.

Benefit: Single lump sum payment of the greater of 50% of the member's base salary in

effect on the date of death, \$50,000, or a refund of accumulated contributions.

In addition to the above, if the member has 5 years of service with the City and a legal spouse, the spouse will receive a monthly annuity of 25% of the member's monthly base salary, and a monthly payment of 10% of the member's monthly base salary to each dependent child until they reach age 22. The maximum payment to

the member's children shall not exceed 50% of monthly base salary.

If the member had attained retirement eligibility at the time of death, the spouse may elect the above or the member's accrued benefit under the joint and

contingent full option.

Normal Form

of Benefit: Payable for the life of the beneficiary.

Health Care

Supplement: Monthly benefit of \$5.00 multiplied by years of Credited Service (not in excess of

30)

COLA: Each beneficiary will receive a 3.0% increase in benefits on October 1<sup>st</sup> of each

vear.

#### 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 a Life Annuity, 10 Year Certain and Life Annuity, 15 Year Certain and Life Annuity, 20 Year Certain and Life Annuity, and 50%, 75% and 100% Joint and Survivor options.

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

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion

of 5 years of Credited Service.

Benefit: The benefit is the member's accrued Normal Retirement Benefit. The benefit

begins on the date that would have been the member's Normal Retirement date

based on years of Credited Service at the termination date.

For Part C participants: If a member has 10 years of Credited Service and was hired prior to June 1, 2005, the member's accrued Normal Retirement benefit shall be

increased by 3% each year from the date of separation until age 62.

Normal Form

of Benefit: 66-2/3% Joint and Survivor option; other options are also available.

Health Care

Supplement: Same as Normal Retirement.

COLA: Same as Normal Retirement.

#### S. Refunds

Members terminating employment with less than 5 years of Credited Service will receive a refund of the member's contributions with interest at a rate of 6.0% per annum.

#### S. Member Contributions

3.75% of Compensation; picked up by the employer.

# T. Employer Contributions

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

## **U.** Cost of Living Increases

Each retiree and vested/deferred retiree who retires or enters the DROP will receive a 3.0% increase in benefits on each October 1<sup>st</sup> starting:

- (1) at the later of normal retirement date, or age 55 (if retiring under age and service eligibility) or age 50 (if retiring under service eligibility) for Part C participants, or
- (2) at the later of normal retirement date or age 65 for Part D participants.

Each disability retiree and beneficiary will receive a 3.0% increase in benefits on each October 1st of each year.

#### V. Deferred Retirement Option Plan

Eligibility: Same as Normal Retirement.

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: 60 months

Interest

Credited: The actual rate of return earned on the assets in each individual DROP account.

Normal Form

of Benefit: Lump Sum, Direct Rollover, or Partial Lump Sum with a Direct Rollover of the

remaining balance.

COLA: Same as Normal Retirement.

# W. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Tallahassee Pension Plans liability if continued beyond the availability of funding by the current funding source.

# **X.** Changes from Previous Valuation

None.

# SUMMARY OF PLAN PROVISIONS POLICE OFFICERS

## A. Ordinances

The Plan was established under the Code of Ordinances for the City of Tallahassee, Florida, Chapter 14, Article III, The Plan is also governed by certain provisions of Chapter 185, <u>Florida Statutes</u>, Part VII, Chapter 112, <u>Florida Statutes</u> and the Internal Revenue Code.

#### **B.** Effective Date

Not Available.

#### 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

Any police officer employed by the city on a regular full-time basis in an approved budgeted position.

## F. Credited Service

Service is measured as the total number of days (considered as 1/365 of a year, ignoring the impact of a leap year) of full-time service with the City during which time prescribed employee contributions are made. Members may purchase up to 5 years of military service or service with another public employer. No service is credited for any periods of employment for which the member received a refund of their contributions.

# **G.** Compensation

Amounts actually paid to participants, including standby and call-back pay, holiday pay, vacation pay up to six weeks based on the average workweek, police educational incentive supplements, differential pay for 'acting' status, differential pay for staff position, longevity/merit bonuses, and severance pay paid as a continuation of salary.

## H. Average Final Compensation (AFC)

The average of Compensation shall be the

- (1) The final 3 years of Credited Service;
- (2) Any consecutive 3 years during the period January 1987 through December 2005 escalated by three percent from the end of the 3-year period to December 2005; or
- (3) Any consecutive 3 years during the period January 1987 to the point of retirement.

#### I. Normal Retirement

Eligibility: A member may retire on the first day of the month coincident with or next

following the earliest of:

(1) Age 55 and 5 years of Credited Service; or

(2) 25 years of Credited Service regardless of age

AFC multiplied by accrual percentage rate. Accrual rates for each year of service

are:

(1) 2.0% for purchased military and out-of-city public service

(2) 3.0% for the first 20 years of Credited Service

(3) 4.0% after 20 years of Credited Service (up to an additional five years and

three months)

The maximum benefit is 81% of AFC for all Police Officers.

Normal Form

Benefit:

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

Health Care

Supplement: Monthly benefit of \$5.00 multiplied by years of Credited Service (not in excess of

30)

COLA: Each retiree will receive a 3.0% increase in benefits on each October 1<sup>st</sup> starting:

(1) at the later of normal retirement date or age 52 for current active participants with a pension entry date earlier than January 1, 1998; or

(2) at the later of normal retirement date or age 62 for current active participants with a pension entry date on or after January 1, 1998; or

(3) at the normal retirement date for participants retiring on or after reaching age 55.

#### J. Early Retirement

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility after

attainment of age 50 with 5 years of Credited Service, or after completion of 20

years of Credited Service.

Benefit: If member is retiring after attainment of age 50 and 5 years of Credited Service

eligibility, the Normal Retirement Benefit is reduced by 3.0% per year for each year by which the Early Retirement date precedes the Normal Retirement date. If the member is retiring after attainment of 20 years of Credited Service, the Normal Retirement Benefit is reduced by 7.2% per year for each year by which the Early

Retirement date precedes the 25 years of service attainment date.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

Health Care

Supplement: Same as Normal Retirement.

COLA: Same as Normal Retirement.

## 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 as a result of an act

occurring in the performance of service for the City is immediately eligible for a

disability benefit.

Benefit: The greater of:

(1) the member's accrued benefit to the date of disability, or

(2) the member's benefit with service projected to the normal retirement date

not to exceed 50% of AFC in effect on the date of disability.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

Health Care

Supplement: Monthly benefit of \$5.00 multiplied by years of Credited Service projected to

normal retirement date (not in excess of 30).

COLA: Same as Normal Retirement.

# M. Non-Service Connected Disability

Eligibility: Any member with 2 years of Credited Service who becomes totally and

permanently disabled is immediately eligible for a disability benefit.

Benefit: The greater of:

(1) the member's accrued benefit to the date of disability, or

(2) the member's benefit with service projected to the normal retirement date

not to exceed 50% of AFC in effect on the date of disability.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

Health Care

Supplement: Monthly benefit of \$5.00 multiplied by years of Credited Service projected to

normal retirement date (not in excess of 30).

COLA: Same as Normal Retirement.

## N. Death in the Line of Duty

Eligibility: Any member whose death is determined to be the result of a service incurred injury

is eligible for survivor benefits regardless of Credited Service.

Benefit:

Single lump sum payment equal to the member's monthly base salary multiplied by 2.0% multiplied by service projected to age 55 multiplied by 100, maximum \$400,000.

If the member has a legal spouse, the spouse receives an option of electing:

- (1) lump sum death benefit as described above;
- (2) member's benefit calculated as the amount the member would have received had the member remained in service until the earlier of 25 years of Credited Service or age 60, received future salary increases of 3.0% each year and elected the joint and contingent full option; and
- (3) monthly benefit equal to 50% of AFC at the date of death.

If the member had attained retirement eligibility at the time of death, the spouse may elect the member's accrued benefit under the joint and contingent full option.

Normal Form

of Benefit: Payable for the life of the beneficiary.

Health Care

Supplement: Same as Normal Retirement.

COLA: Same as Normal Retirement.

#### O. Other Pre-Retirement Death

Eligibility: All members whose death is not service related and which occurs on or prior to

Normal or actual retirement date while in service.

Benefit: Single lump sum payment equal to the member's monthly base salary multiplied by

2.0% multiplied by service projected to age 55 multiplied by 100, maximum

\$400,000.

If the member had attained retirement eligibility at the time of death, the spouse may elect the member's accrued benefit under the joint and contingent full option.

Normal Form

of Benefit: Lump Sum (or life annuity if member had attained retirement eligibility at the time

of death and spouse elects to receive the member's accrued benefit).

Health Care

Supplement: None.

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 a Life Annuity, 15 Year Certain and Life Annuity, 20 Year Certain and Life Annuity, and 50%, 66 2/3%, 75% and 100% Joint and Survivor options.

## **R.** Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion

of 5 years of Credited Service.

Benefit: The benefit is the member's accrued Normal Retirement Benefit. The benefit

begins on the date that would have been the member's Normal Retirement date

based on years of Credited Service at the termination date.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

Health Care

Supplement: Same as Normal Retirement.

COLA: Same as Normal Retirement.

# S. Refunds

Members terminating employment with less than 5 years of Credited Service will receive a refund of the member's contributions with interest at a rate of 6.0% per annum.

## T. Member Contributions

Effective Date	Contribution Rate
October 1, 2007	5.95% of Compensation
October 1, 2008	6.60
October 1, 2009	7.25
October 1, 2010	7.90
October 1, 2011	8.55
October 1, 2012*	9.20
October 1, 2013*	10.45
October 1, 2014*	11.25

\*Employees hired on or after 10/1/2012 contribute 2.44% of Compensation more than the above rates (11.64% of Compensation effective October 1, 2012, 12.89% of Compensation effective October 1, 2013, and 13.69% of Compensation effective October 1, 2014).

# **U. Employer Contributions**

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

## V. Cost of Living Increases

Each retiree, beneficiary, vested/deferred and disability retiree who retires or enters the DROP will receive a 3.0% increase in benefits on each October 1<sup>st</sup> starting:

- (1) at the later of normal retirement date or age 52 for current active participants with a pension entry date earlier than January 1, 1998; or
- (2) at the later of normal retirement date or age 62 for current active participants with a pension entry date on or after January 1, 1998; or
- (3) at the normal retirement date for participants retiring on or after reaching age 55.

## W. Deferred Retirement Option Plan

Eligibility: Same as Normal Retirement.

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: 36 months for members entering the DROP before October 1, 2013; 60 months for

members entering the DROP on or after October 1, 2013.

Interest

Credited: The actual rate of return earned on the assets in each individual DROP account.

Normal Form

of Benefit: Lump Sum, Direct Rollover, or Partial Lump Sum with a Direct Rollover of the

remaining balance.

COLA: Same as Normal Retirement.

## X. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Tallahassee Pension Plans liability if continued beyond the availability of funding by the current funding source.

## Y. Changes from Previous Valuation

## The following changes were reflected in an Actuarial Impact Statement:

Police officers with pension entry dates prior to January 1, 1998 are eligible for the automatic 3.0% COLA beginning at the later of normal retirement date or age 52. Police officers with pension entry dates on or after January 1, 1998 are eligible for the automatic 3% COLA beginning at the later of normal retirement date or age 62. The advanced COLA at age 52 was applicable to police officers with pension entry dates prior to January 1, 1995 in the prior valuation.

The member contribution rate for Police Officers hired prior to October 1, 2012 is increased from 10.45% of Compensation to 11.25% of Compensation effective October 1, 2014, and for Police Officers hired on or after October 1, 2012 is increased from 12.89% of Compensation to 13.69% of

Compensation effective October 1, 2014.

The Police Officers' Deferred Retirement Option Plan (DROP) maximum period is increased from 3 years (36 months) to 5 years (60 months) for members entering the DROP on or after October 1, 2013.

# SUMMARY OF PLAN PROVISIONS FIREFIGHTERS

## A. Ordinances

The Plan was established under the Code of Ordinances for the City of Tallahassee, Florida, Chapter 50, Article IV. The Plan is also governed by certain provisions of Chapter 175, Florida Statutes, Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

#### **B.** Effective Date

Not Available.

#### 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

Any firefighter employed by the city on a regular full-time basis in an approved budgeted position.

## F. Credited Service

Service is measured as the total number of days (considered as 1/365 of a year, ignoring the impact of a leap year) of full-time service with the City during which time prescribed employee contributions are made. Members may purchase up to 5 years of military service or service with another public employer. No service is credited for any periods of employment for which the member received a refund of their contributions.

## **G.** Compensation

Amounts actually paid to participants, including standby and call-back pay, holiday pay, vacation pay up to six weeks based on the average workweek, differential pay for 'acting' status, differential pay for staff position, longevity/merit bonuses, and severance pay paid as a continuation of salary.

## H. Average Final Compensation (AFC)

The average of Compensation shall be the

- (1) The final 3 years of Credited Service;
- (2) Any consecutive 3 years during the period January 1987 through December 2005 escalated by three percent from the end of the 3-year period to December 2005; or
- (3) Any consecutive 3 years during the period January 1987 to the point of retirement.

#### I. Normal Retirement

Eligibility: A member may retire on the first day of the month coincident with or next

following the earliest of:

(1) Age 55 and 5 years of Credited Service; or

(2) 25 years of Credited Service regardless of age

AFC multiplied by accrual percentage rate. Accrual rates for each year of service

are:

(1) 2.0% for purchased military and out-of-city public service

(2) 3.0% for the first 20 years of Credited Service

(3) 4.0% after 20 years of Credited Service (up to an additional five years and

three months)

The maximum benefit is 81% of AFC for all firefighters.

Normal Form

Benefit:

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

Health Care

Supplement: Monthly benefit of \$5.00 multiplied by years of Credited Service (not in excess of

30)

COLA: Each member will receive a 3.0% increase in benefits on October 1<sup>st</sup> of each year

beginning at age 52 (or after the retirement date if later).

J. Early Retirement

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility after

attainment of age 50 with 5 years of Credited Service, or after completion of 20

years of Credited Service.

Benefit: If member is retiring after attainment of age 50 with 5 years of Credited Service

eligibility, the Normal Retirement Benefit is reduced by 3.0% per year for each year by which the Early Retirement date precedes the Normal Retirement date. If the member is retiring after attainment of 20 years of Credited Service, the Normal Retirement Benefit is reduced by 6.8% per year for each year by which the Early

Retirement date precedes the 25 years of service attainment date.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

Health Care

Supplement: Same as Normal Retirement.

COLA: Same as Normal Retirement.

# 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 as a result of an act

occurring in the performance of service for the City is immediately eligible for a

disability benefit.

Benefit: The greater of:

(1) the member's accrued benefit to the date of disability, or

(2) the member's benefit with service projected to the normal retirement date

not to exceed 50% of AFC on the date of disability.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

Health Care

Supplement: Monthly benefit of \$5.00 multiplied by years of Credited Service projected to

normal retirement date (not in excess of 30).

COLA: Same as Normal Retirement.

## M. Non-Service Connected Disability

Eligibility: Any member with 2 years of Credited Service who becomes totally and

permanently disabled is immediately eligible for a disability benefit.

Benefit: The greater of:

(1) the member's accrued benefit to the date of disability, or

(2) the member's benefit with service projected to the normal retirement date

not to exceed 50% of AFC in effect on the date of disability.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

Health Care

Supplement: Monthly benefit of \$5.00 multiplied by years of Credited Service projected to

normal retirement date (not in excess of 30).

COLA: Same as Normal Retirement.

## N. Death in the Line of Duty

Eligibility: Any member whose death is determined to be the result of a service incurred injury

is eligible for survivor benefits regardless of Credited Service.

Benefit: Single lump sum payment equal to the member's monthly base salary multiplied by

2.0% multiplied by service projected to age 55 multiplied by 100, maximum

\$400,000.

If the member has a legal spouse, the spouse receives an option of electing:

- (1) lump sum death benefit as described above;
- (2) member's benefit calculated as the amount the member would have received had the member remained in service until the earlier of 25 years of Credited Service or age 60, received future salary increases of 3.0% each year and elected the joint and contingent full option; and
- (3) monthly benefit equal to 50% of AFC at the date of death.

If the member had attained retirement eligibility at the time of his death, the spouse may elect the member's accrued benefit under the joint and contingent full option.

Normal Form

of Benefit: Payable for the life of the beneficiary.

Health Care

Supplement: Same as Normal Retirement.

COLA: Same as Normal Retirement.

# O. Other Pre-Retirement Death

Eligibility: All members whose death is not service related and which occurs on or prior to

Normal or actual retirement date while in service.

Benefit: Single lump sum payment equal to the member's monthly base salary multiplied by

2.0% multiplied by service projected to age 55 multiplied by 100, maximum

\$400,000.

If the member had attained retirement eligibility at the time of death, the spouse may elect the member's accrued benefit under the joint and contingent full option.

Normal Form

of Benefit: Lump Sum (or life annuity if member had attained retirement eligibility at the time

of death and spouse elects to receive the member's accrued benefit).

Health Care

Supplement: None.

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 a Life Annuity, 15 Year Certain and Life Annuity, 20 Year Certain and Life Annuity, and 50%, 66-2/3%, 75% and 100% Joint and Survivor options.

## **R.** Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion

of 5 years of Credited Service.

Benefit: The benefit is the member's accrued Normal Retirement Benefit. The benefit

begins on the date that would have been the member's Normal Retirement date

based on years of Credited Service at the termination date.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

Health Care

Supplement: Same as Normal Retirement.

COLA: Same as Normal Retirement.

# S. Refunds

Members terminating employment with less than 5 years of Credited Service will receive a refund of the member's contributions with interest at a rate of 6.0% per annum.

## T. Member Contributions

<u>From</u>	<u>Until</u>	Contribution Rate
October 1, 2007	September 30, 2008	10.08% of Compensation
October 1, 2008	September 30, 2009	10.12
October 1, 2009	September 30, 2010	10.91
October 1, 2010	September 30, 2011	11.95
October 1, 2011	September 30, 2012	12.99
October 1, 2012	September 30, 2013	14.16
October 1, 2013	September 30, 2014	15.33
October 1, 2014	September 30, 2015	16.50
October 1, 2015	September 30, 2016	17.67
October 1, 2016	September 30, 2017	18.84
October 1, 2017	September 30, 2035	Increasing 0.13% per year
October 1, 2036	Thereafter	21.44

# **U. Employer Contributions**

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

# V. Cost of Living Increases

Each retiree, beneficiary, vested/deferred and disability retiree who retires or enters the DROP will receive a 3.0% increase in benefits on October 1<sup>st</sup> of each year beginning at age 52 (or after the retirement date, if later).

# W. Deferred Retirement Option Plan

Eligibility: Same as Normal Retirement.

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: 60 months

Interest

Credited: The actual rate of return earned on the assets in each individual DROP account.

Normal Form

of Benefit: Lump Sum, Direct Rollover, or Partial Lump Sum with a Direct Rollover of the

remaining balance.

COLA: Same as Normal Retirement.

# X. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Tallahassee Pension Plans liability if continued beyond the availability of funding by the current funding source.

# Y. Changes from Previous Valuation

None