

August 23, 2016

Mr. Shawn Boyle Finance and Administrative Services Director City of Winter Springs 1126 East State Road 434 Winter Springs, Florida 32708

Re: City of Winter Springs Defined Benefit Plan Actuarial Valuation

Dear Shawn:

As requested, we are pleased to enclose eleven (11) copies of the October 1, 2015 Actuarial Valuation Report for the City of Winter Springs Defined Benefit Plan.

We appreciate the opportunity to partner with you on this important project.

As you are aware, a copy of the Report should be filed with the State at the following address upon approval.

Mr. Douglas E. Beckendorf, A.S.A. Bureau of Local Retirement Services Division of Retirement Post Office Box 9000 Tallahassee, Florida 32315-9000

If you should have any questions concerning the above, please do not hesitate to contact us.

Sincerest regards,

Lawrence F. Wilson, A.S.A.

Senior Consultant and Actuary

Enclosures



CITY OF WINTER SPRINGS DEFINED BENEFIT PLAN

ACTUARIAL VALUATION AS OF OCTOBER 1, 2015

This Valuation Determines the Annual Contribution for the Plan Year October 1, 2016 through September 30, 2017 to be Paid in Plan Year October 1, 2016 to September 30, 2017

August 23, 2016



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August 23, 2016

Board of Trustees c/o Mr. Shawn Boyle Finance and Administrative Services Director City of Winter Springs Defined Benefit Plan 1126 East State Road 434 Winter Springs, Florida 32708

Dear Board Members:

October 1, 2015 Actuarial Valuation

We are pleased to present our October 1, 2015 Actuarial Valuation for the City of Winter Springs Defined Benefit Plan (Plan). The purpose of this report is to indicate appropriate contribution levels, comment on the actuarial stability of the Plan and to satisfy State requirements. The Board of Trustees has retained Gabriel, Roeder, Smith and Company (GRS) to prepare an annual actuarial valuation under Section 3.02 of the Plan.

This report consists of this commentary, detailed Tables I through XV and the State Required Exhibit on Table XVI. The Tables contain basic Plan cost figures plus significant details on the benefits, liabilities and experience of the Plan. We suggest you thoroughly review the report at your convenience and contact us with any questions that may arise.

Retirement Plan Costs

Our Actuarial Valuation develops the required minimum Plan payment for the plan year beginning October 1, 2016 under the Florida Protection of Public Employee Retirement Benefits Act. The minimum payment consists of payment of annual normal costs including amortization of the components of the unfunded actuarial accrued liability over various periods as prescribed by law. The minimum payment is \$2,174,906 (31.7%). The figure in parentheses is the Plan cost expressed as a percentage of projected covered annual payroll for fiscal year beginning October 1, 2016 (\$6,868,214).

This total cost is to be met by member, County and City contributions. We anticipate member contributions will be \$343,411 (5.0% of projected covered payroll for fiscal year ending September 30, 2017). The resulting minimum required County and City contribution is \$1,831,495 (26.7%).

We recommend the City continue to contribute not less than the dollar amount of minimum required contribution due to the closing of the Plan to future general employees.

Changes in Actuarial Assumptions, Methods and Plan Provisions

The Plan provisions remain unchanged from our October 1, 2014 Actuarial Valuation. The Plan provisions are outlined on Table IX.

The actuarial assumptions and methods also remain unchanged from our October 1, 2014 Actuarial Valuation. The actuarial assumptions and methods are outlined on Table X.

Comparison of October 1, 2014 and October 1, 2015 Valuation Results

Table II of our report provides information of a comparative nature. The left columns of the Table indicate the costs as calculated for October 1, 2014. The right columns indicate the costs as calculated for October 1, 2015.

Comparing the left and right columns of Table II shows the effect of Plan experience during the year. The number of active participants <u>decreased</u> by approximately 6% - covered payroll <u>decreased</u> by approximately 3%. Total normal cost, the unfunded actuarial accrued liability and the net County and City minimum funding requirement <u>decreased</u> both as a dollar amount and as a percentage of covered payroll.

The value of vested accrued benefits exceeds Plan assets, resulting in a Vested Benefit Security Ratio (VBSR) of 79.9% which is a <u>decrease</u> from 83.5% as of the October 1, 2014 Actuarial Valuation. The VBSR is measured on a market value of assets basis.

Plan Experience

The Plan experienced an actuarial gain in the amount of \$336,299 this year. This indicates actual overall Plan experience was more favorable than expected.

Table XV (salary, turnover and investment yield) provides figures on recent Plan experience. Salary experience indicates actual salary increases averaged approximately 3.2% for General and Forensic Employees and 3.8% for Firefighters and Police Officers for the Plan Year ended September 30, 2015 when compared to the assumed salary increase of 4.4% and 4.8%, respectively. The three and five-year average annual salary increases are 2.1% and 1.7% for General and Forensic Employees - 2.1% and 0.6% for Firefighters and Police Officers.

Employees turnover this year was 190% of the assumed turnover for General and Forensic Employees and 140% of the assumed turnover for Firefighters and Police Officers. Employee turnover was generally an additional source of actuarial gain. The three and five-year average annual turnover is 150% and 170% for General and Forensic Employees - 200% and 210% for Firefighters and Police Officers.

The smoothed value investment return of 9.4% was greater than the investment return assumption of 8.0%. Smoothed value investment return was a source of actuarial gain during the year. The three, five and ten-year average annual smoothed value investment returns are 9.5%, 6.5% and 7.8%, respectively. The one, three, five and ten-year average annual market value returns are 0.0%, 9.1%, 9.0% and 6.1%, respectively.

We recommend the Board authorize an Experience Study to assure Plan assumptions are aligned with Plan experience including review of the investment return assumption in light of future expectations.

Member Census and Financial Data

The City submitted the Member census data used for this actuarial valuation to us as of October 1, 2015. This information contains name, Social Security number, date of birth, date of hire, October 1, 2015 rate of pay, actual salary paid and member contributions for the previous year. Dates of termination and retirement are provided where applicable. The City updated information on inactive participants including retirees, beneficiaries and vested terminees.

Financial information concerning Plan assets was provided by the City as of September 30, 2015. We do not audit the Member census data and asset information provided to us. However, we perform certain reasonableness checks and on this basis we believe the information we received is reliable.

Summary

In our opinion the benefits provided for under the current Plan will be sufficiently funded through the payment of the amount as indicated in this and future Actuarial Valuation reports. We will continue to update you on the future payment requirements for the Plan through our actuarial reports. These reports will also continue to monitor the future experience of the Plan.

If all actuarial assumptions are met and if all future minimum required contributions are paid, Plan assets will be sufficient to pay all Plan benefits. Plan minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee Retirement Benefits Act with normal cost determined as a level percent of covered payroll and a level dollar amortization payment using an initial closed amortization period of 30 years.

The Unfunded Actuarial Accrued Liability (UAAL) may not be appropriate for assessing the sufficiency of Plan assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions. The UAAL would be different if it reflected the market value of assets rather than the actuarial value of assets.

The Unfunded Actuarial Present Value of Vested Accrued Benefits and the corresponding Vested Benefit Security Ratio may be appropriate for assessing the sufficiency of Plan assets to meet the estimated cost of settling benefit obligations but may not be appropriate for assessing the need for or the amount of future contributions.

The GASB Net Pension Liability and Plan Fiduciary Net Position as a Percentage of Total Pension Liability may not be appropriate for assessing the sufficiency of Plan assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions.

The Funded Ratio shown in Table II is for informational purposes and may not be appropriate for assessing the sufficiency of Plan assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions.

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 anticipated under 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) and changes in Plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This report should not be relied on for any purpose other than the purpose described in the primary communication. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

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 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.

This report may be provided to parties other than the Board only in its entirety and only with the permission of an approved representative of the Board.

The signing actuaries are independent of the Plan sponsor.

The undersigned are Members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. We are available to respond to any questions with regards to matters covered in this report.

Very truly yours,

Lawrence F. Wilson, A.S.A., E.A. Senior Consultant and Actuary

Jennifer M. Borregard, E.A. Consultant and Actuary

Jennifer Borregard

Summary of Retirement Plan Costs as of October 1, 2015

		Cost <u>Data</u>	% of <u>Payroll</u>
A.	Participant Data Summary (Table III)		
	1. Active Employees	132	N/A
	2. Terminated Vested	146	N/A
	3. Receiving Benefits	93	N/A
	4. Total Annual Payroll of Active Employees	\$ 6,868,214	100.0%
B.	Total Normal Costs		
	1. Age Retirement Benefits	\$ 599,054	8.7%
	2. Termination Benefits	174,457	2.5%
	3. Death Benefits	23,224	0.3%
	4. Disability Benefits	11,546	0.2%
	5. Estimated Expenses	 11,937	0.2%
	6. Total Annual Normal Costs	\$ 820,218	11.9%
C.	Total Actuarial Accrued Liability		
	1. Age Retirement Benefits Active Employees	\$ 19,852,121	289.0%
	2. Termination Benefits Active Employees	199,004	2.9%
	3. Death Benefits Active Employees	505,841	7.4%
	4. Disability Benefits Active Employees	245,526	3.6%
	5. Retired or Terminated Vested Participants		
	Receiving Benefits	22,715,348	330.7%
	6. Terminated Vested Participants Entitled to		
	Future Benefits	5,882,198	85.6%
	7. Deceased Participants Whose Beneficiaries		
	are Receiving Benefits	1,729,098	25.2%
	8. Disabled Participants Receiving Benefits	0	0.0%
	9. Miscellaneous Liability (Refunds in Process)	 35,726	0.5%
	10. Total Actuarial Accrued Liability	\$ 51,164,862	745.0%
D.	Assets (Table V)		
	1. Smoothed Actuarial Value of Assets	\$ 37,570,287	547.0%
	2. Market Value of Assets	\$ 37,362,769	544.0%
E.	Unfunded Actuarial Accrued Liability		
	(C.10 D.1.)	\$ 13,594,575	197.9%

Summary of Retirement Plan Costs as of October 1, 2015

	Cost <u>Data</u>	% of <u>Payroll</u>
F. Minimum Required Contribution		
 Total Normal Cost (including expenses) Amortization of Unfunded Liability Interest Adjustment Total Payment 	\$ 820,218 1,257,178 97,510 2,174,906	11.9% 18.3% 1.4% 31.7%
G. Expected payroll of active employees for FYE 2017 (1.000 x \$6,868,214)	\$ 6,868,214	100.0%
 H. Contribution Sources (percent of expected 2017 payroll) 1. County and City 2. Member 3. Total required contribution 	\$ 1,831,495 343,411 2,174,906	26.7% 5.0% 31.7%
I. Actuarial Gains / (Losses)	\$ 336,299	4.9%
 Actuarial Present Value of Vested Accrued Benefits Retired, Terminated Vested, Beneficiaries and Disabled Receiving Benefits Terminated Vested Participants Entitled to Future Benefits and Miscellaneous Active Participants Entitled to Future Benefits Total Actuarial Present Value of Vested Accrued Benefits 	\$ 24,444,446 5,917,924 16,418,110 46,780,480	355.9% 86.2% 239.0% 681.1%
 K. Unfunded Actuarial Present Value of Vested Accrued Benefits (J.4 D.2., not less than zero) L. Vested Benefit Security Ratio (D.2. ÷ J.4.) 	\$ 9,417,711	137.1% N/A
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City of Winter Springs Defined Benefit Plan

Comparison of Cost Data of October 1, 2014 and October 1, 2015 Valuations

	October 1, 2014			October 1, 2015		
		Cost	% of	Cost	% of	
		Data	Compensation	 Data	Compensation	
A. Participants			_		_	
1. Active Employees		141	N/A	132	N/A	
2. Terminated Vested		142	N/A	146	N/A	
3. Receiving Benefits		85	N/A	93	N/A	
4. Total Annual Payroll of Active Employees	\$	7,093,513	100.0%	\$ 6,868,214	100.0%	
B. Total Normal Costs	\$	993,826	14.0%	\$ 820,218	11.9%	
C. Actuarial Accrued Liability	\$	48,406,105	682.4%	\$ 51,164,862	745.0%	
D. Present Value of Future Benefits	\$	55,265,695	779.1%	\$ 57,773,277	841.2%	
E. Smoothed Actuarial Value of Assets	\$	33,841,977	477.1%	\$ 37,570,287	547.0%	
F. Market Value of Assets	\$	36,821,261	519.1%	\$ 37,362,769	544.0%	
G. Unfunded Actuarial Accrued Liability	\$	14,564,128	205.3%	\$ 13,594,575	197.9%	
H. County and City Minimum Funding Payment	\$	2,067,445	29.1%	\$ 1,831,495	26.7%	
I. Ratios						
1. Vested Benefit Security Ratio		83.5%	N/A	79.9%	N/A	
2. Funded Ratio (F. / C.)		76.1%	N/A	73.0%	N/A	

<u>Characteristics of Participants in</u> <u>Actuarial Valuation as of October 1, 2015</u>

A. Active Plan Participants Summary

			
	1. Active participants fully vested		107
	2. Active participants partially vested		8
	3. Active participants non-vested		17
	4. Total active participants	<u></u>	132
	5. Annual rate of pay of active participants	\$	6,868,214
B.	Retired and Terminated Vested Participant Summary		
	1. Retired or terminated vested participants receiving		
	benefits		80
	2. Terminated vested participants entitled to		
	future benefits		146
	3. Deceased participants whose beneficiaries are		
	receiving benefits		13
	4. Disabled participants receiving benefits		0
C.	Projected Annual Retirement Benefits		
	1. Retired or terminated vested receiving benefits	\$	2,198,498
	2. Terminated vested entitled to future benefits	\$	1,234,255
	3. Beneficiaries of deceased participants	\$	174,603
	4. Disabled participants	\$	0

Statement of Assets as of October 1, 2015

	Assets	Ma	arket Value
A.	Cash and Cash Equivalents	\$	812,220
В.	General Investments		
	 Common Stock Bonds Real Estate 	\$	22,792,386 9,377,843 4,354,470
C.	Receivables		
	 Accrued Interest Employee Contribution Receivable City and County Contributions Receivable Accounts Receivable 	\$	0 2,053 23,797 0
D.	<u>Payables</u>		
	 Accounts Payable Due to Broker 	\$	0 0
E.	$\frac{Plan \ Assets}{(A+B+C-D)}$	\$	37,362,769

Reconciliation of Plan Assets

A. Total Market Value of Assets as of October 1, 2014		\$ 36,821,261
B. Receipts During Period		
1. Contributions		
a. Member	\$ 358,106	
b. City and County	2,392,948	
c. Total	\$ 2,751,054	
2. Investment Income		
a. Interest and dividends	\$ 680,668	
b. Realized / unrealized gains (losses)	(512,984)	
c. Investment expenses	(162,524)	
d. Net investment income	\$ 5,160	
3. Total receipts during period		\$ 2,756,214
C. <u>Disbursements During Period</u>		
1. Pension payments and contribution refunds	\$ 2,202,769	
2. Administrative expenses	11,937	
3. Total disbursements during period	<u> </u>	\$ 2,214,706
D. Total Market Value of Assets as of September 30, 2015		\$ 37,362,769

Development of Smoothed Actuarial Value of Assets as of September 30

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
A. Preliminary total smoothed actuarial value from prior year	\$ 29,908,683	\$ 33,841,977	\$ 37,570,287			
B. Market value beginning of year	32,172,541	36,821,261	37,362,769			
C. Market value end of year	36,821,261	37,362,769				
D. Non-investment net cash flow	763,376	536,348				
E. Investment return						
1. Total market value return: C B D.	3,885,344	5,160				
2. Amount for immediate recognition (8%)	2,604,338	2,967,155				
3. Amount for phased-in recognition: E.1 E.2.	1,281,006	(2,961,995)				
F. Phased-in recognition of investment return:						
1. Current year	256,201	(592,399)				
2. First prior year	438,995	256,201	(592,399)			
3. Second prior year	515,483	438,995	256,201	(592,399)		
4. Third prior year	(393,471)	515,483	438,995	256,201	(592,399)	
5. Fourth prior year	(251,628)	(393,473)	515,483	438,996	256,202	(592,399)
6. Total phased-in recognition of investment return	565,580	224,807	618,280	102,798	(336,197)	(592,399)
G. Total smoothed actuarial value end of year						
 Preliminary total smoothed actuarial value end of year A. + D. + E.2. + F.6. 	33,841,977	37,570,287				
2. Upper corridor limit: 120% of C.	44,185,513	44,835,323				
3. Lower corridor limit: 80% of C.	29,457,009	29,890,215				
4. Total smoothed actuarial value end of year:						
G.1., not more than G.2., nor less than G.3.	33,841,977	37,570,287				
H. Difference between total market value and total smoothed actuarial value	e 2,979,284	(207,518)				
I. Smoothed actuarial value rate of return	10.5%	9.4%				
J. Market value rate of return	11.9%	0.0%				

Actuarial Gain / (Loss) for Plan Year Ended September 30, 2015

A. Derivation of Actuarial Gain / (Loss)

1. City and County net normal cost	\$ 639,150
2. Unfunded actuarial accrued liability	14,564,128
3. City and County contributions previous year	2,392,948
4. Interest on:	
(a) City and County net normal cost	\$ 51,132
(b) Unfunded actuarial accrued liability	1,165,130
(c) City and County contributions	 95,718
(d) Net total: $(a) + (b) - (c)$	\$ 1,120,544
5. Expected unfunded actuarial accrued liability current year:	
(1. + 2 3. + 4.)	\$ 13,930,874
6. Actual unfunded actuarial accrued liability current year	 13,594,575
7. Actuarial gain (loss): (5 6.)	\$ 336,299
B. Approximate Portion of Gain / (Loss) due to Investments	
1. Smoothed actuarial value of assets previous year	\$ 33,841,977
2. Contributions during period	2,751,054
3. Benefits and administrative expenses during period	2,214,706
4. Expected appreciation for period	2,728,812
5. Expected smoothed actuarial value of assets current year:	
(1. + 2 3. + 4.)	\$ 37,107,137
6. Actual smoothed actuarial value of assets current year	\$ 37,570,287
7. Approximate investment gain (loss) due to investments: (6 5.)	\$ 463,150
C. Approximate Portion of Gain / (Loss)	
due to Liabilities: A.7 B.7.	\$ (126,851)

Amortization of Unfunded Actuarial Accrued Liability

A. <u>Unfunded Actuarial Accrued Liability</u>

Date	Unfunded Liability		mortization Payment
October 1, 2015	\$	13,594,575	\$ 1,257,178
October 1, 2016	\$	13,324,389	\$ 1,257,178
October 1, 2017	\$	13,032,588	\$ 1,257,178
October 1, 2018	\$	12,717,443	\$ 1,257,178
October 1, 2019	\$	12,377,086	\$ 1,257,178
•••			
•••			
October 1, 2045	\$	0	\$ 0

B. <u>Covered Payroll History*</u>

Date		Covered Payroll	Annual Increase
October 1, 2015	\$	6,868,214	(3.2%)
October 1, 2014	\$	7,093,513	(4.5%)
October 1, 2013	\$	7,431,031	(9.6%)
October 1, 2012	\$	8,216,342	(7.4%)
October 1, 2011	\$	8,875,836	(13.9%)
October 1, 2010	\$	10,304,054	(4.2%)
October 1, 2009	\$	10,752,720	(0.1%)
October 1, 2008	\$	10,767,596	(3.8%)
October 1, 2007	\$	11,190,013	6.7%
October 1, 2006	\$	10,489,087	8.6%
October 1, 2005	\$	9,659,446	N/A
Ten-Year Average Annual Increase	e		(3.4%)

^{*} Information prior to October 1, 2008 as reported by prior actuary.

Accounting Disclosure Exhibit

	 10/01/2014	 10/01/2015
I. Number of Plan Members		
a. Retirees and beneficiaries receiving benefits	85	93
b. Terminated plan members entitled to but not yet receiving benefits	142	146
c. Active plan members	 141	 132
d. Total	368	371
II Financial Accounting Standards Board Allocation as of October 1, 2015		
A. Statement of Accumulated Plan Benefits		
1. Actuarial present value of accumulated vested plan benefits		
a. Participants currently receiving benefits	\$ 21,967,178	\$ 24,444,446
b. Other participants	 22,149,560	22,336,034
c. Total	\$ 44,116,738	\$ 46,780,480
2. Actuarial present value of accumulated		
non-vested plan benefits	\$ 471,910	\$ 358,593
3. Total actuarial present value of accumulated plan benefits	\$ 44,588,648	\$ 47,139,073
B. Statement of Change in Accumulated Plan Benefits		
1. Actuarial present value of accumulated plan benefits		
as of October 1, 2014		\$ 44,588,648
2. Increase (decrease) during year attributable to:		
a. Plan amendment		\$ 0
b. Change in actuarial assumptions		0
c. Benefits paid including refunds		(2,202,769)
d. Other, including benefits accumulated, increase		
for interest due to decrease in the discount period		4,753,194
e. Net increase		\$ 2,550,425
3. Actuarial present value of accumulated plan benefits		
as of October 1, 2015		\$ 47,139,073
C. Significant Matters Affecting Calculations		
1. Assumed rate of return used in determining actuarial present values		8.0%
2. Change in plan provisions		None.
3. Change in actuarial assumptions		None.

Accounting Disclosure Exhibit

III. Net Pension Liability and Related Ratios (GASB No. 67 & No. 68)

Measurement date	9/30/2014	9/30/2015	Projected 9/30/2016 *
A. Total Pension Liability (TPL)			
Service Cost	\$ 886,819	\$ 834,402	\$ 808,281
Interest	3,666,120	3,851,130	4,055,064
Benefit Changes	0	0	0
Difference Between Actual and Expected Experience	(581,481)	(107,513)	275,994
Assumption Changes	0	8,107	0
Benefit Payments, including Refunds of Member Contributions	(1,974,208)	(2,202,769)	(2,569,681)
Net Change in Total Pension Liability	\$ 1,997,250	\$ 2,383,357	\$ 2,569,658
Total Pension Liability (TPL) - (beginning of year)	46,508,261	48,505,511	50,888,868
Total Pension Liability (TPL) - (end of year)	\$ 48,505,511	\$ 50,888,868	\$ 53,458,526
B. Plan Fiduciary Net Position			
Contributions - County and City	\$ 2,527,508	\$ 2,392,948	\$ 2,067,445
Contributions - Member	369,500	358,106	343,411
Net Investment Income	3,885,344	5,160	2,982,191
Benefit Payments, including Refunds of Member Contributions	(1,974,208)	(2,202,769)	(2,569,681)
Administrative Expenses	(159,424)	(11,937)	(11,937)
Other	0	0	0
Net Change in Plan Fiduciary Net Position	\$ 4,648,720	\$ 541,508	2,811,429
Plan Fiduciary Net Position - (beginning of year)	32,172,541	36,821,261	37,362,769
Plan Fiduciary Net Position - (end of year)	\$ 36,821,261	\$ 37,362,769	\$ 40,174,198
C. Net Pension Liability (NPL) - (end of year): (A) - (B)	\$ 11,684,250	\$ 13,526,099	\$ 13,284,328
D. Plan Fiduciary Net Position as a Percentage of TPL: (B) / (A)	75.91 %	73.42 %	75.15 %
E. Covered Employee Payroll **	\$ 7,369,943	\$ 7,070,355	\$ 6,868,214
F. NPL as a Percentage of Covered Employee Payroll: (C) / (E)	158.54 %	191.31 %	193.42 %
G. Notes to Schedule: Valuation Date Reporting Date (GASB No. 68)	10/01/2013 9/30/2015	10/01/2014 9/30/2016	10/01/2015 9/30/2017

Update procedures were used to roll forward the TPL to the measurement date.

No assumption, method or benefit changes during the year.

^{*} Projected - actual amounts will be available after fiscal year end.

^{**} Reported payroll on which contributions to the Plan are based as provided under GASB No. 82.

Accounting Disclosure Exhibit

IV. Schedule of Employer Contributions (GASB No. 67 & No. 68)

Fiscal Year End 9/30 ¹	Γ	Actuarially Determined ontribution	_ Co	Actual ontribution ²	De	ontribution eficiency / (Excess)	Covered Payroll ³	Actual Contribution as a % of Covered Payroll	
		_							
2006	\$	1,564,228	\$	1,505,020	\$	59,208	\$ 9,659,446	15.58%	
2007		1,807,722		1,843,147		(35,425)	10,489,087	17.57%	
2008		2,005,100		2,009,085		(3,985)	11,190,013	17.95%	
2009		1,781,651		1,781,197		454	10,767,596	16.54%	
2010		2,311,058		2,311,058		0	10,752,720	21.49%	
2011		2,616,924		2,616,924		0	10,304,054	25.40%	
2012		1,965,643		1,913,717		51,926	8,875,836	21.56%	
2013		2,258,769		2,258,798		(29)	8,216,342	27.49%	
2014		2,474,578		2,527,508		(52,930)	7,369,943	34.29%	
2015		2,230,908		2,392,948		(162,040)	7,070,355	33.84%	
2016 4		2,067,445		2,067,445		0	6,868,214	30.10%	

¹ Information prior to 2008 reported by prior actuary

² Per City CAFR prior to September 30, 2014

³ Reported payroll on which contributions to the Plan are based as provided under GASB No. 82 (projected prior to fiscal year ended September 30, 2014)

⁴ Projected - actual amounts will be available after fiscal year end

Accounting Disclosure Exhibit

V. Notes to Schedule of Contributions (GASB No. 67 & No. 68)

Valuation Date: Actuarially determined contributions are calculated as of October 1st -

two year(s) prior the fiscal year end in which contributions are

reported.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method Entry Age Normal Amortization Method Level dollar, closed

Amortization Period 30 years

Asset Valuation Method 5-year smoothed market

Inflation 3.0%

Salary Increases 3.0% - 7.5%

Investment Rate of Return 8.0%

Retirement Age Experience-based table of rates that are specific to the type of

eligibility condition

Mortality For healthy General Employee participants, RP-2000 Combined

Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to

each future payment date with Scale AA.

For healthy Firefighter and Police Officer participants, RP-2000 Combined Healthy Participant Mortality Tables with Blue Collar Adjustment, separate rates for males and females, with fully generational mortality improvements projected to each future payment

date with Scale AA.

For disabled participants, RP-2000 Disabled Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

Other Information:

Benefit Changes

2011: Plan closed to future general employees; pensionable earnings to base pay, overtime - maximum 150 hours and accrued leave balance as of July 1, 2011; vesting schedule updated; unreduced early retirement eligibility updated; final average pay updated to five year average and future service benefit accrual rate reduced for general employees. 2008: Benefit accrual rate increased.

Assumption Changes

2014: Disability rates updated. 2008: Mortality, salary increase, withdrawal, disability and retirement rates updated; administrative expense assumption introduced and actuarial cost method updated.

Accounting Disclosure Exhibit

VI. Discount Rate (GASB No. 67 & No. 68)

A discount rate of 8% was used to measure the TPL. This discount rate was based on the expected rate of return on Plan investments of 8%. The projection of cash flows used to determine this discount rate assumed member contributions will be made at the current member contribution rate and employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member contribution rate. Based on these assumptions, the pension Plan's fiduciary net position was projected to be available to make all projected future expected benefit payments of current Plan members. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the TPL.

VII. Sensitivity of the NPL to the Discount Rate Assumption (GASB No. 67 & No. 68)

Measurement date: September 30, 2015

		Current			
	1% Decrease	Discount Rate	1% Increase		
Discount Rate	7%	8%	9%		
NPL	\$ 19,607,946	\$ 13,526,099	\$ 8,392,231		

Measurement date: September 30, 2016 *

		Current	
	1% Decrease	Discount Rate	1% Increase
Discount Rate	7%	8%	9%
NPL	\$ 19,557,552	\$ 13,284,328	\$ 7,976,394

^{*} Projected - actual amounts will be available after fiscal year end

Accounting Disclosure Exhibit

VIII. <u>Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to</u> Pensions - Reporting Date (GASB No. 68)

Pension Expense for Fiscal Year Ending September 30, 2016

\$ 1,558,879

Summary of Outstanding Deferred Inflows and Outflows of Resources as of September 30, 2016

	Deferred		Deferred		
	Outflows of		Inflows of		
	Resources		Resources		
Differences between actual and expected experience on					
liabilities	(0	411,173		
Changes of assumptions or other inputs	6,222	2	0		
Net difference between projected and actual earnings on					
pension plan investments	1,600,992	2	0		
Total	\$ 1,607,214	4 5	\$ 411,173		

Projected Deferred Outflows for County and City Contributions to Be
Recognized in Pension Expense for Fiscal Year Ending September 30, 2017 \$ 2,067,445

Summary of Deferred Outflows and Inflows of Resources that will be Recognized in Pension Expense in Future Years.

Year Ending 30-Sep	 Amount
2017	\$ 186,671
2018	186,671
2019	237,234
2020	585,465
2021	0
Thereafter	0

Accounting Disclosure Exhibit

The following information is not required to be disclosed but is provided for informational purposes.

IX. Components of Pension Expense (GASB No. 68)

			Projected	
Measurement Date	9/30/2014	9/30/2015	9/30/2016 *	
Service Cost	\$ 886,819	\$ 834,402	\$ 808,281	
Interest on Total Pension Liability	3,666,120	3,851,130	4,055,064	
Current-Period Benefit Changes	0	0	0	
Contributions - Member	(369,500)	(358,106)	(343,411)	
Projected Earnings on Plan Investments	(2,604,338)	(2,967,155)	(2,982,191)	
Administrative Expenses	159,424	11,937	11,937	
Other Changes in Plan Fiduciary Net Position	0	0	0	
Recognition of Beginning Deferred Outflows / (Inflows) due to Liabilities	(126,409)	(149,527)	(78,759)	
Recognition of Beginning Deferred Outflows /				
(Inflows) due to Assets	(256,201)	336,198	336,198	
Total Pension Expense	\$ 1,355,915	\$ 1,558,879	\$ 1,807,119	

^{*} Projected - actual amounts will be available after measurement date

Accounting Disclosure Exhibit

The following information is not required to be disclosed but is provided for informational purposes.

X. Recognition of Deferred Outflows and (Inflows) Due to Liabilities - Measurement Date (GASB No. 68)

Recognition of Deferred Outflows due to Differences Between Actual and Expected Experience on Liabilities

					Remaining				
				Initial	Recognition	Recog	nition		
				Recognition	Period as of	Amou	nt for	Balance as of	
_	Established	Initial	Balance	Period	9/30/2015	2014 /	2015	9/30/2015	
	2013 / 2014	\$	0	4.6	2.6	\$	0	\$	0
	2014 / 2015	\$	0	4.3	3.3	\$	0	\$	0
					TOTAL	\$	0	\$	0

Recognition of Deferred (Inflows) due to Differences Between Actual and Expected Experience on Liabilities

				Remaining					
			Initial	Recognition	Re	ecognition			
			Recognition	Period as of	A	mount for		Balance as of	
Established	Init	ial Balance	Period	9/30/2015	20	2014 / 2015		9/30/2015	
2013 / 2014	\$	(581,481)	4.6	2.6	\$	(126,409)	\$	(328,663)	
2014 / 2015	\$	(107,513)	4.3	3.3	\$	(25,003)	\$	(82,510)	
				TOTAL	\$	(151,412)	\$	(411,173)	

Recognition of Deferred Outflows due to Changes of Assumptions or Other Inputs

				Remaining					
			Initial	Recognition	Rec	ognition			
			Recognition	Period as of	Am	ount for		Balance as of	
Established	Initia	al Balance	Period	9/30/2015	201	2014 / 2015		9/30/2015	
2013 / 2014	\$	0	4.6	2.6	\$	0	\$	0	
2014 / 2015	\$	8,107	4.3	3.3	\$	1,885	\$	6,222	
				TOTAL	\$	1,885	\$	6,222	

Recognition of Deferred (Inflows) due to Changes of Assumptions or Other Inputs

				Remaining				
			Initial	Recognition	Recog	gnition		
			Recognition	Period as of	Amou	ınt for	Balance as of	
 Established	Initia	l Balance	Period	9/30/2015	2014	/ 2015	9/30/2015	
2013 / 2014	\$	0	4.6	2.6	\$	0	\$	0
2014 / 2015	\$	0	4.3	3.3	\$	0	\$	0
				TOTAL	\$	0	\$	0

Accounting Disclosure Exhibit

The following information is not required to be disclosed but is provided for informational purposes.

XI. Recognition of Deferred Outflows and (Inflows) Due to Assets - Measurement Date (GASB No. 68)

Recognition of Deferred Outflows / (Inflows) due to Difference Between Projected and Actual Earnings on Pension Plan Investments

			Remaining					
		Initial	Recognition	Re	ecognition			
		Recognition	Period as of	A	mount for	E	Balance as of	
Established	Initial Balance	Period	9/30/2015	20	2014 / 2015		9/30/2015	
2013 / 2014	\$ (1,281,006)	5	3	\$	(256,201)	\$	(768,604)	
2014 / 2015	\$ 2,961,995	5	4	\$	592,399	\$	2,369,596	
			TOTAL	\$	336,198	\$	1,600,992	

Outline of Principal Provisions of the Retirement Plan

A. Effective Date

Plan adopted as a Money Purchase Floor Offset plan on October 1, 1997. Plan amended and restated as a Defined Benefit Plan effective October 1, 2000. Plan most recently amended by Resolution 2011-57 adopted December 12, 2011.

B. Eligibility Requirements

General Employees hired prior to October 1, 2011, Police Officers and Forensic Professionals working 30 or more hours per week are eligible to join the Plan on the first day of the month following completion of six (6) months of service. Electing transferring Firefighters as of October 2, 2008 under the Agreement with the County.

C. Accrual Service

Years of Accrual Service are any Plan Years during which an Employee completes at least 1,000 hours of service, including years of service completed prior to participation in the Plan.

D. Compensation

Wages, salaries and other amounts received (whether or not paid in cash) for personal services actually rendered in the course of employment. Effective October 10, 2011 Compensation shall exclude commissions, bonuses, overtime pay in excess of one hundred fifty (150) hours per Plan year and payments for accrued leave in excess of the dollar amount of an Employee's accrued leave balance on July 1, 2011.

E. Final Average Compensation

Average earnings during the best five (5) consecutive years out of the last ten (10) years preceding termination or retirement, but not less than the three (3) highest consecutive compensation periods during employment with the City as of September 30, 2011.

F. Normal Retirement

1. Eligibility:

- (a) Attainment of age 65; or
- (b) Completion of 30 years of service and determined to be disabled under the City's long term disability insurance policy.

Outline of Principal Provisions of the Retirement Plan

2. Benefit:

For Firefighters, Police Officers and Forensic Professionals, 3.00% times Final Average Compensation multiplied by Accrual Service, up to a maximum of 30 years.

For General Employees, 3.00% times Accrual Service earned through September 30, 2011 times Final Average Compensation plus 2.50% times Accrual Service earned after September 30, 2011 times Final Average Compensation, up to a maximum of 30 years of Accrual Service.

G. Early Retirement

1. Eligibility:

- (a) Attainment of age 55 and completion of 15 years of service; or
- (b) Completion of 25 years of service.

2. Benefit:

Benefit accrued to date of early retirement, actuarially reduced for each year early retirement benefit commencement precedes age 55.

H. Late Retirement

1. Eligibility:

Continued employment beyond Normal Retirement Date.

2. Benefit:

Greater of (a) and (b):

- (a) Accrued benefit calculated as for Normal Retirement based upon service and pay at Late Retirement Date.
- (b) Actuarially increased benefit as of Late Retirement Date.

I. Disability Retirement

1. Eligibility:

Completion of 30 years of service and determined to be disabled under the City's long term disability insurance policy.

2. Benefit:

Accrued benefit calculated as for Normal Retirement based upon service and pay at Disability Retirement Date.

Outline of Principal Provisions of the Retirement Plan

J. Death Benefit

Beneficiary entitled to a monthly benefit supported by the present value of the non-forfeitable accrued benefit at the time of the participant's death. If death occurs after actual retirement, the beneficiary receives whatever is payable under the form of benefit option elected.

K. Participant Contributions

Five percent (5%) of compensation for all employees.

L. Vested Benefit Upon Termination

100% vested in required participant contributions. Participant contributions made after October 1, 2000 are included in the deferred vested benefit payable at normal or early retirement date.

Upon termination of service prior to normal or early retirement date a participant shall be entitled to a benefit payable at normal or early retirement date calculated as for normal retirement. Based on pay and service at date of termination multiplied by a percentage from the following table.

Years of Service	<u>Vested Percentage</u>
Less Than 7	0%
7 or More	100%

M. Normal Form of Payment of Retirement Income

Monthly benefit payable for life.

Other Options

Actuarially equivalent joint and survivor at 50%, 75%, 100%; or ten (10) years certain and life.

N. Changes Since Previous Valuation

None.

A. Mortality

For healthy General Employee participants, RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

For healthy Firefighter and Police Officer participants, RP-2000 Combined Healthy Participant Mortality Tables with Blue Collar Adjustment, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

For disabled participants, RP-2000 Disabled Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

B. Investment Return

8.0%, compounded annually, net of investment expenses.

C. Allowances for Expenses or Contingencies

Prior year's actual administrative expenses are included in normal cost.

D. Salary Increase Factors

Current salary is assumed to increase at a rate based on the table below per year until retirement.

<u>Service</u>	General Employees	Firefighters and Police Officers
Less than 5 years 5 - 9 years 10 - 14 years 15+ years	6.5% 5.5% 4.5% 3.0%	7.5% 5.5% 5.5% 3.5%

Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation

E. Employee Withdrawal Rates

1. Withdrawal rates for male General Employees were used in accordance with the following illustrative example:

	Withdrawal Rates per 100 Employees										
	Service										
<u>Age</u>	0	1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	7	<u>8</u>	9	<u>10+</u>
20	32.8	25.4	22.7	18.4	15.8	11.7	11.1	11.1	11.0	10.0	9.8
25	27.2	18.5	17.2	14.6	12.7	9.7	8.5	8.4	7.7	6.3	6.2
30	25.8	15.4	14.0	13.2	11.8	8.8	7.8	7.1	6.4	5.5	4.7
35	25.8	14.3	12.8	12.6	10.9	8.5	7.5	6.8	6.2	5.3	4.2
40	24.4	12.6	12.0	10.7	9.0	7.4	6.7	6.2	5.8	5.3	3.0
45	24.4	12.5	11.6	10.3	8.8	6.8	6.5	6.0	5.1	5.1	2.7
50	23.4	12.2	10.7	9.4	7.9	6.0	5.5	5.3	4.6	4.6	3.0
55	27.4	12.2	10.7	9.3	7.8	6.8	5.4	5.2	4.4	4.3	4.5
60	27.4	12.2	10.7	9.3	7.8	6.8	5.4	5.1	4.3	4.2	5.3
65	27.4	12.2	10.7	9.3	7.8	6.8	5.4	5.1	4.3	4.2	3.7

2. Withdrawal rates for female General Employees were used in accordance with the following illustrative example:

	Withdrawal Rates per 100 Employees Service										
Age	<u>0</u>	1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	8	9	<u>10+</u>
<u>5-</u>	<u>~</u>	=	=	<u>~</u>	<u> </u>	<u>~</u>	=	<u>-</u>	<u>~</u>	_	<u> </u>
20	30.3	25.8	22.1	17.4	15.4	13.5	11.4	11.3	10.5	10.2	11.6
25	26.6	19.8	17.1	13.0	12.9	10.7	9.7	9.2	7.8	7.1	5.3
30	25.4	16.9	14.5	11.6	11.3	9.4	8.7	8.1	7.1	6.5	5.4
35	25.4	15.9	13.5	11.2	10.9	9.0	8.0	7.8	6.8	6.2	4.6
40	24.4	14.0	12.1	10.0	9.1	7.0	6.5	6.3	6.1	5.0	3.3
45	24.4	13.9	11.9	9.8	8.8	6.7	6.5	6.1	5.8	4.7	3.0
50	23.2	13.4	11.0	8.8	8.4	6.2	5.9	5.5	5.5	4.6	3.0
55	23.2	13.4	11.0	8.7	8.3	6.1	5.8	5.4	5.4	4.5	3.0
60	23.2	13.4	11.0	8.7	8.3	6.1	5.8	5.4	5.4	4.5	3.0
65	23.2	13.4	11.0	8.7	8.3	6.1	5.8	5.4	5.4	4.5	3.0

The withdrawal assumptions are the withdrawal assumptions used in the July 1, 2015 Florida Retirement System (FRS) Actuarial Valuation.

<u>Actuarial Assumptions and Actuarial Cost Methods</u> <u>Used in the Valuation</u>

E. Employee Withdrawal Rates (continued)

3. Withdrawal rates for male Firefighters and Police Officers were used in accordance with the following illustrative example:

				Wit	hdrawal R	lates per 1	00 Employ	<u>yees</u>			
						Service					
<u>Age</u>	0	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	7	<u>8</u>	<u>9</u>	<u>10+</u>
20	21.4	10.3	8.6	8.4	7.5	5.3	5.2	3.1	2.9	2.6	2.3
25	20.6	9.8	8.1	7.9	7.0	5.3	5.2	3.1	2.9	2.6	2.3
30	20.6	9.5	7.7	7.5	6.7	5.3	5.2	3.1	2.9	2.6	2.1
35	20.6	8.8	7.4	7.2	6.5	5.3	5.1	3.1	2.9	2.6	2.0
40	20.6	8.0	6.8	6.7	6.0	4.8	4.6	3.1	2.9	2.6	1.9
45	20.6	7.3	6.0	6.0	5.5	4.3	4.1	3.1	2.9	2.6	1.8
50	20.6	6.5	5.3	5.3	5.0	3.8	3.6	3.1	2.9	2.6	1.8
55	20.6	5.8	4.7	4.7	4.6	3.3	3.2	3.1	2.9	2.6	1.8
60	20.6	5.3	4.7	4.7	4.6	3.3	3.2	3.1	2.9	2.6	1.8
65	20.6	5.3	4.7	4.7	4.6	3.3	3.2	3.1	2.9	2.6	1.8

4. Withdrawal rates for female Firefighters and Police Officers were used in accordance with the following illustrative example:

							00.7				
		Withdrawal Rates per 100 Employees									
						Service					
<u>Age</u>	0	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10+</u>
20	21.3	15.5	12.3	10.3	9.7	6.1	5.9	5.0	4.2	4.2	1.9
25	21.3	14.2	11.6	9.8	9.2	6.1	5.9	5.0	4.2	4.2	1.9
30	21.3	13.2	10.6	9.3	8.7	6.1	5.9	5.0	4.2	4.2	1.7
35	21.3	12.2	9.6	8.8	8.4	6.1	5.9	5.0	4.2	4.1	1.5
40	21.3	11.2	8.6	8.3	7.6	6.1	5.9	5.0	4.1	4.1	2.5
45	21.3	10.2	7.6	7.6	7.0	6.1	5.9	5.0	4.1	4.1	2.5
50	21.3	9.2	6.6	6.6	6.4	6.1	5.9	5.0	4.1	4.0	1.6
55	21.3	8.4	5.8	5.6	5.4	5.3	5.1	5.0	4.1	4.0	4.0
60	21.3	8.4	5.8	5.6	5.4	5.3	5.1	5.0	4.1	4.0	4.0
65	21.3	8.4	5.8	5.6	5.4	5.3	5.1	5.0	4.1	4.0	4.0

The withdrawal assumptions are the withdrawal assumptions used in the July 1, 2015 FRS Actuarial Valuation.

F. Disability Rates

1. Line-of-duty disability rates for General Employees were used in accordance with the following illustrative example.

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	0.000%	0.000%
25	0.001%	0.001%
30	0.001%	0.001%
35	0.001%	0.001%
40	0.001%	0.001%
45	0.004%	0.001%
50	0.006%	0.006%
55	0.006%	0.006%
60	0.010%	0.013%
65	0.010%	0.010%

2. Non-duty disability rates for General Employees were used in accordance with the following illustrative example.

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	0.000%	0.000%
25	0.010%	0.010%
30	0.010%	0.010%
35	0.020%	0.010%
40	0.020%	0.020%
45	0.080%	0.060%
50	0.160%	0.100%
55	0.250%	0.160%
60	0.300%	0.260%
65	0.100%	0.080%

The disability assumptions are the disability assumptions used in the July 1, 2015 FRS Actuarial Valuation.

F. Disability Rates (continued)

3. Line-of-duty disability rates for Firefighters and Police Officers were used in accordance with the following illustrative example.

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	0.010%	0.000%
25	0.010%	0.004%
30	0.010%	0.004%
35	0.010%	0.004%
40	0.020%	0.040%
45	0.060%	0.040%
50	0.140%	0.050%
55	0.100%	0.080%
60	0.140%	0.150%
65	0.260%	0.150%

4. Non-duty disability rates for Firefighters and Police Officers were used in accordance with the following illustrative example.

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	0.020%	0.000%
25	0.020%	0.020%
30	0.030%	0.020%
35	0.030%	0.030%
40	0.030%	0.030%
45	0.030%	0.060%
50	0.080%	0.110%
55	0.050%	0.110%
60	0.050%	0.110%
65	0.050%	0.110%

The disability assumptions are the disability assumptions used in the July 1, 2015 FRS Actuarial Valuation.

<u>Actuarial Assumptions and Actuarial Cost Methods</u> <u>Used in the Valuation</u>

G. Assumed Retirement Age

Retirement rates were used in accordance with the following tables.

1. For Police Officers and Firefighters:

	Years of Service							
<u>Age</u>	<u>0 - 10</u>	<u>10 - 15</u>	<u>15 - 25</u>	<u>25 - 30</u>	30 or more			
Under 55	0%	0%	0%	4%	5%			
55	0%	10%	15%	40%	50%			
56 - 64	0%	10%	15%	15%	20%			
65 and above	100%	100%	100%	100%	100%			

2. For General Employees:

	Years of Service						
<u>Age</u>	<u>0 - 10</u>	<u> 10 - 15</u>	<u> 15 - 25</u>	<u>25 - 30</u>	<u>30 or more</u>		
Under 55	0%	0%	0%	2%	2%		
55	0%	5%	10%	20%	25%		
56 - 64	0%	5%	10%	4%	5%		
65 and above	100%	100%	100%	100%	100%		

H. Marital Assumptions

- 1. 100% of active members are assumed to be married.
- 2. Females are assumed to be three (3) years younger than their male spouses.

I. Interest on Future Participant Contributions

3.75%, compounded annually.

Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation

J. Asset Valuation Method

The method used for determining the smoothed actuarial value of assets phases in the deviation between the expected and actual return on assets at the rate of 20% per year. The smoothed actuarial value of assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the fair market value of plan assets and whose upper limit is 120% of the fair market value of plan assets - adjusted for equation of balance October 1, 2010.

K. Cost Method

Normal Retirement, Termination, Disability, and Death Benefits: Entry Age Normal Cost Method

Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his entry age to his assumed retirement age to fund his estimated benefits, assuming the Fund had always been in effect. The normal cost for the Fund is the sum of such amounts for all employees. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the Fund is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over the assets of the Fund.

L. Changes Since Previous Valuation

None.

<u>Distribution by Attained Age Groups</u> and Service Groups as of October 1, 2015

Firefighters

Attained	COMPLETED YEARS OF SERVICE							
Age Group	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	30 & Over	<u>Total</u>
Under 25	-	-	-	-	-	-	-	0
25-29	-	-	-	-	-	-	-	0
30-34	-	-	-	-	-	-	-	0
35-39	-	-	-	-	-	-	-	0
40-44	-	-	-	-	-	-	-	0
45-49	-	-	-	-	1	-	-	1
50-54	-	-	-	-	2	3	2	7
55-59	-	-	-	1	-	1	-	2
60-64	-	-	-	-	-	-	-	0
65 & Over					-			0
TOTAL	0	0	0	1	3	4	2	10
	Average Atta Average Hiro Average Pay Percent Fema	e Age		10/01/2014 51.92 years 27.72 years \$ 67,234 0.0%		10/01/2015 52.92 years 27.72 years \$ 71,946 0.0%		

<u>Distribution by Attained Age Groups</u> and Service Groups as of October 1, 2015

General Employees

Attained			CON	IPLETED YEA	RS OF SEI	RVICE		
Age Group	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	30 & Over	<u>Total</u>
Under 25	-	-	-	-	-	-	-	0
25-29	1	-	-	-	-	-	-	1
30-34	1	4	-	-	-	-	-	5
35-39	-	4	4	3	-	-	-	11
40-44	-	3	2	2	3	-	-	10
45-49	-	2	-	-	-	-	-	2
50-54	-	1	5	2	1	3	-	12
55-59	-	2	5	1	3	3	-	14
60-64	-	1	1	2	-	-	-	4
65 & Over				2	-			2
TOTAL	2	17	17	12	7	6	0	61
	Average Att Average Hir Average Pay Percent Fem	e Age		10/01/2014 47.50 years 34.97 years \$ 45,858 34.3%		10/01/2015 48.34 years 34.57 years \$ 47,929 34.4%		

<u>Distribution by Attained Age Groups</u> and Service Groups as of October 1, 2015

Police Officers

Attained			COM	IPLETED YEA	RS OF SEI	RVICE		
Age Group	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	30 & Over	<u>Total</u>
Under 25	-	-	-	-	-	-	-	0
25-29	5	5	-	-	-	-	-	10
30-34	5	1	4	-	-	-	-	10
35-39	2	1	5	2	-	-	-	10
40-44	1	2	-	3	3	-	-	9
45-49	-	-	1	5	2	3	-	11
50-54	2	-	1	3	-	-	1	7
55-59	-	1	-	-	-	-	-	1
60-64	-	-	1	-	-	-	-	1
65 & Over					-			0
TOTAL	15	10	12	13	5	3	1	59
	Average Att Average Hir Average Pay Percent Fem	e Age		10/01/2014 40.11 years 28.42 years \$ 52,973 13.6%		10/01/2015 40.51 years 29.07 years \$ 53,189 15.3%		

<u>Distribution by Attained Age Groups</u> and Service Groups as of October 1, 2015

Forensic Professionals

<u>Attained</u>	COMPLETED YEARS OF SERVICE							
Age Group	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	30 & Over	<u>Total</u>
Under 25	-	-	-	-	-	-	-	0
25-29	-	-	-	-	-	-	-	0
30-34	-	-	1	-	-	-	-	1
35-39	-	-	-	1	-	-	-	1
40-44	-	-	-	-	-	-	-	0
45-49	-	-	-	-	-	-	-	0
50-54	-	-	-	-	-	-	-	0
55-59	-	-	-	-	-	-	-	0
60-64	-	-	-	-	-	-	-	0
65 & Over					-			0
TOTAL	0	0	1	1	0	0	0	2
	Average Atta Average Hir Average Pay Percent Fem	e Age		10/01/2014 33.48 years 19.48 years \$ 42,849 100.0%		10/01/2015 34.48 years 19.48 years \$ 43,463 100.0%		

<u>Distribution by Attained Age Groups</u> and Service Groups as of October 1, 2015

All Members

Attained			CON	IPLETED YEA	RS OF SEI	RVICE		
Age Group	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	30 & Over	<u>Total</u>
Under 25	-	-	-	-	-	-	-	0
25-29	6	5	-	-	-	-	-	11
30-34	6	5	5	-	-	-	-	16
35-39	2	5	9	6	-	-	-	22
40-44	1	5	2	5	6	-	-	19
45-49	-	2	1	5	3	3	-	14
50-54	2	1	6	5	3	6	3	26
55-59	-	3	5	2	3	4	-	17
60-64	-	1	2	2	-	-	-	5
65 & Over				2	-			2
TOTAL	17	27	30	27	15	13	3	132
	Average Atta Average Hir Average Pay Percent Fem	e Age		10/01/2014 44.52 years 31.49 years \$ 50,309 24.1%		10/01/2015 44.98 years 31.37 years \$ 52,032 24.2%		

<u>Statistics for Participants Entitled to Deferred Benefits</u> and Participants Receiving Benefits

A. Entitled to Deferred Benefits

Current Age <u>Group</u> <u>Count</u>		Anı	Total nual Benefit	Average <u>Annual Benefit</u>		
Less than 40	34	\$	213,714	\$	6,286	
40-44	30		291,978		9,733	
45-49	28		313,810		11,208	
50-54	28		289,930		10,355	
55-59	14		83,533		5,967	
60-64	6		26,795		4,466	
65 & Over	6		14,495		2,416	
TOTAL	146	\$	1,234,255	\$	8,454	

B. Receiving Benefits

Current Age <u>Group</u>	Count	Total <u>Count</u> <u>Annual Benefit</u>			verage ual Benefit
Less than 50	3	\$	24,124	\$	8,041
50-54	1		7,526		7,526
55-59	22		901,738		40,988
60-64	17		531,404		31,259
65-69	27		536,695		19,878
70-74	13		240,554		18,504
75 & Over	10		131,060		13,106
TOTAL	93	\$	2,373,101	\$	25,517

Reconciliation of Employee Data

A. Active Participants

	1. Active participants previous year	141
	2. Retired during year	(5)
	3. Died during year	0
	4. Disabled during year	0
	5. Terminated non-vested during year	(3)
	6. Terminated vested during year	(6)
	7. New active participants	5
	8. Out on military leave	0
	9. Rehired during year	0
	10. Transferred to DC Plan	0
	11. Active participants current year	132
B.	Participants Receiving Benefits	
	1. Participants receiving benefits previous year	85
	2. New retired participants	5
	3. New DRO recipient	1
	4. New terminated vested receiving benefits	2
	5. New beneficiaries receiving benefits	0
	6. Died or ceased payment during year	0
	7. Retired or terminated vested receiving benefits current year	93
C.	Terminated Vested Participants Entitled to Future Benefits	
	1. Terminated vested entitled previous year	142
	2. Died during year	0
	3. Commenced receiving benefits during year	(2)
	4. New terminated vested	6
	5. Terminated vested paid lump sum	0
	6. Rehired	0
	7. Terminated vested entitled current year	146

Projected Retirement Benefits

Fiscal Year	Projected <u>Annual P</u>		
2016	\$	2,569,681	
2017	\$	2,750,729	
2018	\$	2,910,674	
2019	\$	3,212,300	
2020	\$	3,390,812	
2021	\$	3,588,578	
2022	\$	3,958,501	
2023	\$	4,220,789	
2024	\$	4,426,650	
2025	\$	4,699,486	

The above projected payout of Plan benefits during the next ten years is based on assumptions involving all decrements. Actual payouts may differ from the above estimates depending upon the death, salary and retirement experience of the Plan. However, since the projected payment is recomputed each valuation date, there is an automatic correction to the extent that actual experience varies from expected experience.

Summary of Transaction Information¹

Ending Paid ² Expenses Contributions Contributions Val	
09/30/2015 \$ 2,202,769 \$ 11,937 \$ 358,106 \$ 2,392,948 \$ 37,5	570,287
09/30/2014 1,974,208 159,424 369,500 2,527,508 33,8	341,977
09/30/2013 1,732,845 177,541 396,374 2,258,798 29,9	008,683
09/30/2012 1,606,752 309,874 418,635 1,824,431 26,8	352,721
09/30/2011 1,165,350 196,423 287,090 2,616,924 25,9	932,292
09/30/2010 886,521 178,530 284,866 2,311,058 23,8	887,446
09/30/2009 617,274 116,982 306,420 1,781,197 20,7	88,655
09/30/2008 384,482 70,423 365,288 1,663,951 18,7	46,975
09/30/2007 233,953 123,197 N/A 1,843,147 15,5	526,572
09/30/2006 171,697 84,340 N/A 1,505,020 11,9	951,383
09/30/2005 N/A N/A N/A 1,260,627 9,7	16,089
09/30/2004 140,509 62,225 N/A 1,013,379 8,1	34,588
09/30/2003 138,353 47,477 N/A 903,748 7,2	279,048

 $^{^{1}\,}$ Information prior to September 30, 2008 as reported by prior actuary.

² Includes refunds.

³ Values prior to September 30, 2008 include Employee Contributions.

Recent Compensation, Termination and Investment Return Experience

	General d	& Forensic		& Fire	General & Forensic	Police & Fire	Investment Return		1
Valuation Date	Actual	Compe. % Increase / Assumed		Assumed	Terminat Ratio of Acto Expect	ctual	Net Market Value Yield*		
10/01/2015	3.2%	4.4%	3.8%	4.8%	1.9	1.4	0.0%	9.4%	8.0%
10/01/2014	2.5%	4.7%	1.8%	4.9%	1.2	2.3	11.9%	10.5%	8.0%
10/01/2013	0.7%	4.7%	0.7%	4.9%	1.4	2.4	16.0%	8.5%	8.0%
10/01/2012	(2.4%)	4.8%	(6.5%)	5.0%	2.4	2.4	19.5%	2.3%	8.0%
10/01/2011	4.9%	4.8%	3.5%	5.2%	1.9	2.4	(1.0%)	2.0%	8.0%
10/01/2010	0.9%	5.0%	2.8%	5.3%	1.2	1.7	12.0%	7.3%	8.0%
10/01/2009	6.4%	5.1%	11.6%	5.3%	1.1	1.1	2.1%	3.5%	8.0%
10/01/2008	3.9%	3.0%	5.6%	3.0%	1.2	3.1	(16.8%)	10.1%	8.0%
10/01/2007	N/A	N/A	N/A	N/A	N/A	N/A	13.8%	15.4%	8.0%
10/01/2006	N/A	N/A	N/A	N/A	N/A	N/A	8.6%	9.5%	8.0%
Last 3 Years	2.1%	4.6%	2.1%	4.9%	1.5	2.0	9.1%	9.5%	8.0%
Last 5 Years	1.7%	4.7%	0.6%	5.0%	1.7	2.1	9.0%	6.5%	8.0%
Last 10 Years	N/A	N/A	N/A	N/A	N/A	N/A	6.1%	7.8%	8.0%

^{*} Information prior to October 1, 2008 as reported by prior actuary.

Actuarial Valuation as of October 1, 2015

State Required Exhibit

	1	10/01/2014	10/01/2015	
A. Participant Data				
1. Active participants		141		132
2. Retired participants and beneficiaries				
receiving benefits		85		93
3. Disabled participants receiving benefits		0		0
4. Terminated vested participants		142		146
5. Annual payroll of active participants	\$	7,093,513	\$	6,868,214
6. Annual benefits payable to those currently				
receiving benefits	\$	2,109,420	\$	2,373,101
B. Value of Assets				
1. Smoothed Actuarial Value	\$	33,841,977	\$	37,570,287
2. Market Value	\$	36,821,261	\$	37,362,769
C. <u>Liabilities</u>				
1. Actuarial present value of future expected				
benefit payments for active members				
a. Retirement benefits	\$	25,068,833	\$	24,859,315
b. Vesting benefits		1,627,069		1,526,040
c. Death benefits		692,269		683,494
d. Disability benefits		345,513		342,058
e. Total	\$	27,733,684	\$	27,410,907
2. Actuarial present value of future expected benefit				
payments for terminated vested members	\$	5,544,795	\$	5,882,198
3. Actuarial present value of future expected benefit				
payments for members currently receiving benefits				
a. Service retired	\$	20,292,178	\$	22,715,348
b. Disability retired		0		0
c. Beneficiaries		1,675,000		1,729,098
d. Miscellaneous (Refunds in Process)		20,038		35,726
e. Total	\$	21,987,216	\$	24,480,172

Actuarial Valuation as of October 1, 2015

State Required Exhibit

	10/01/2014		10/01/2015	
4. Total actuarial present value of future				
expected benefit payments	\$	55,265,695	\$	57,773,277
5. Actuarial accrued liabilities	\$	48,406,105	\$	51,164,862
6. Unfunded actuarial accrued liabilities	\$	14,564,128	\$	13,594,575
D. Statement of Accumulated Plan Benefits				
1. Actuarial present value of accumulated vested				
benefits				
a. Participants currently receiving benefits	\$	21,967,178	\$	24,444,446
b. Other participants		22,149,560		22,336,034
c. Total	\$	44,116,738	\$	46,780,480
2. Actuarial present value of accumulated non-				
vested plan benefits		471,910		358,593
3. Total actuarial present value of accumulated				
plan benefits	\$	44,588,648	\$	47,139,073
E. Pension Cost				
1. Total normal cost	\$	993,826	\$	820,218
2. Payment required to amortize unfunded liability		1,319,444		1,257,178
3. Interest adjustment		108,851		97,510
4. Total required contribution	\$	2,422,121	\$	2,174,906
5. Item 4 as a percentage of base payroll		34.1%		31.7%
6. Estimated employee contributions	\$	354,676	\$	343,411
7. Item 6 as a percentage of base payroll		5.0%		5.0%
8. Net amount payable by County and City	\$	2,067,445	\$	1,831,495
9. Item 8 as a percentage of base payroll		29.1%		26.7%

Actuarial Valuation as of October 1, 2015

State Required Exhibit

	10/01/2014		10/01/2015	
F. Past Contributions			 	
1. Total contribution required (previous valuation)	\$	2,589,014	\$ 2,422,121	
2. Actual contributions made:				
a. Members	\$	358,106	N/A	
b. City and County		2,392,948	N/A	
c. Total	\$	2,751,054	N/A	
G. <u>Disclosure of Following Items:</u>				
1. Actuarial present value of future salaries				
- attained age	\$	60,911,852	\$ 58,653,374	
2. Actuarial present value of future employee				
contributions - attained age	\$	3,045,593	\$ 2,932,669	
3. Actuarial present value of future contributions				
from other sources		N/A	N/A	
4. Amount of active members' accumulated				
contributions	\$	2,688,930	\$ 2,850,777	
5. Actuarial present value of future salaries and				
future benefits at entry age		N/A	N/A	
6. Actuarial present value of future employee				
contributions at entry age		N/A	N/A	

State Required Exhibit

Amortization balances are written down in proportion to amortization payments.

	Unfunded Actuarial Accrued Liabilities	Current Unfunded Liabilities	mortization Payment	Remaining Funding <u>Period</u>
10/01/2000	Initial	\$ 1,817,448	\$ 196,603	15 years
10/01/2002	Assumption Change	(23,856)	(2,422)	17 years
10/01/2003	Plan Amendment	152,251	15,042	18 years
10/01/2004	Plan Amendment	232,644	22,430	19 years
10/01/2005	Plan Amendment	485,389	45,776	20 years
10/01/2006	Plan Amendment	561,747	51,926	21 years
10/01/2007	Plan Amendment	577,999	52,465	22 years
10/01/2008	Plan Amendment and Assumption Change	2,607,342	232,783	23 years
10/01/2008	Method Change	5,827,796	520,304	23 years
10/01/2009	Actuarial Loss / (Gain)	2,502,693	220,093	24 years
10/01/2010	Actuarial Loss / (Gain)	(464,479)	(40,289)	25 years
10/01/2010	Plan Amendment	(2,692,935)	(233,584)	25 years
10/01/2011	Actuarial Loss / (Gain)	2,955,724	253,172	26 years
10/01/2012	Actuarial Loss / (Gain)	1,001,111	84,768	27 years
10/01/2013	Actuarial Loss / (Gain)	(782,407)	(65,555)	28 years
10/01/2014	Actuarial Loss / (Gain)	(835,440)	(69,325)	29 years
10/01/2014	Assumption Change	7,847	651	29 years
10/01/2015	Actuarial Loss / (Gain)	 (336,299)	 (27,660)	30 years
	TOTAL	\$ 13,594,575	\$ 1,257,178	

This actuarial valuation and/or cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or other wise provided for in the valuation. All known events or trends which may require material increase in plan costs or required contribution rates have been taken into account in the valuation.

Enrollment Number: 14-02802 Dated: August 23, 2016

Lawrence F Wilson A S A