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City of Rockledge

Police Employees Retirement Plan

Actuarial Valuation as of October 1, 2016

February 14, 2017

REPORT TO DETERMINE MINIMUM FUNDING REQUIREMENTS
FOR THE PLAN AND FISCAL YEAR
BEGINNING OCTOBER 1, 2016 AND 2017

February 14, 2017

Board of Trustees
City of Rockledge Police Employees Retirement Plan
Rockledge, Florida

RE: Actuarial Valuation as of October 1, 2016

Dear Board Members:

We are pleased to present the actuarial valuation as of October 1, 2016 for the City of Rockledge Police Employees Retirement Plan (the Plan). This report provides a review of the current funded status of the Plan, establishes the minimum funding requirements for the fiscal year ending September 30, 2017 and 2018, and provides an analysis of experience since the last valuation. In addition to providing the summary and derivation of actuarial findings, this report describes the data, assumptions, and methods used to create these results.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

Statement by Enrolled Actuary:

"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 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."

Please let us know when we may present these results to you in person and answer any questions you may have.

Sincerely,

Chad M. Little, ASA, EA
Partner, Consulting Actuary
Enrollment Number 14-6619

Paula C. Freiman, ASA, EA
Partner, Consulting Actuary
Enrollment Number 14-5796

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Section 1 Board Summary

A summary of the key valuation findings are compared with the results of the prior valuation below.

Summary of Principal Valuation Results

Fiscal Year Ending September 30,	**2016**	**2017**	**2018**
Minimum Funding Requirements			
Minimum Funding Requirement			
Minimum Required City Contribution	$229,299	$214,047	$259,625
Estimated State Contribution	175,977	191,152	191,152
Total Minimum Funding Requirement (City plus State)	$405,276	$405,199	$450,777
Minimum Required City Contribution	10.23%	9.36%	11.62%
Estimated State Contribution	7.86%	8.36%	8.56%
Total Minimum Funding Requirement (City plus State)	18.09%	17.72%	20.18%

Note: $405,199 is the minimum funding requirement for fiscal 2017 including both contributions from the City and those from the State of Florida. We have estimated the City portion as $214,047 where we solved for the remaining employer contribution which must be deposited on March 1, 2017 as $47,162.40. The annual contribution paid by the City should take into account the actual amount of premium tax revenues received from the State of Florida so that total minimum funding deposited to the Plan for fiscal 2017 is $405,199.
$450,777 is the minimum funding requirement for fiscal 2018 including both contributions from the City and those from the State of Florida. We have estimated the City portion as $259,625 which must be deposited on December 15, 2017. The annual contribution paid by the City should take into account the actual amount of premium tax revenues received from the State of Florida so that total minimum funding deposited to the Plan for fiscal 2017 is $450,777.

Funded Status

Valuation as of October 1,	**2015**	**2016**	**2016**
Accrued Liability (AL)	$11,854,959	$12,902,368	$12,902,368
Actuarial Value of Assets	(11,164,802)	(12,127,770)	(12,127,770)
Unfunded Accrued Liability (UAL)	$690,157	$774,598	$774,598
Funded Percentage	94.18%	94.00%	94.00%

Key Assumptions

Valuation as of October 1,	**2015**	**2016**	**2016**
Assumed Investment Return, Net of Expenses	8.00%	8.00%	8.00%
Salary Increase Assumption	6.00%	6.00%	6.00%

Summary of Significant Events

Determination of the funded status of the Plan and minimum funding requirements are based on funding policy, participant data, asset information, Plan provisions, actuarial methods and assumptions, as well as contributions made to the Plan by the State of Florida. Any significant events associated with these items are discussed in the following.

In preparing our report we relied, without audit, on information (some oral and some written) supplied by the Plan Administrator and the City. This information includes, but is not limited to, statutory provisions, employee census, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

City Policy Contribution

We understand that the City policy had been to contribute 8.0% of pensionable pay at the same time member contributions were deposited to the fund on a bi-weekly basis. However, a contribution on this basis does not result in funding the minimum required contribution and have noted there is a $ 208,390 contribution receivable for fiscal 2016, of which $17,238 were City contributions. After discussions with the City, we received confirmation that the employer contribution receivable for fiscal 2016 has been deposited, with interest, on February 2, 2017.

At the request of the City we have determined the remaining employer contribution payable to the Plan for fiscal 2017 on March 1, 2017 based on actual employer contributions deposited so far this fiscal year and the results of this actuarial valuation. The amount which must be deposited to the Plan on March 1, 2017 is $47,162.40, as shown in the following information which is the basis for the results for fiscal 2017 shown on page 1:

Contribution From	**Deposit Date**	**Deposit**	**Time to 10/01/17**	**Interest**	**Total**
Employees (Expected)	04/01/17	$159,993.00	0.5000	$6,399.72	$166,392.72
State (Expected)	10/01/17	191,152.00	0.0000	0.00	191,152.00
City	10/14/16	7,578.68	0.9644	584.71	8,163.39
City	10/28/16	7,501.47	0.9260	555.71	8,057.18
City	11/11/16	7,417.72	0.8893	527.73	7,945.45
City	11/25/16	7,302.58	0.8509	497.10	7,799.68
City	12/09/16	7,396.14	0.8114	480.10	7,876.24
City	12/23/16	7,381.79	0.7731	456.55	7,838.34
City	02/08/17	122,306.34	0.6475	6,335.47	128,641.81
City	03/01/17	47,162.40	0.5833	2,200.79	49,363.19
Total		$565,192.12		$18,037.88	$583,230.00
Total City Contributions		$214,047.12			

Note that the State contribution is estimated as $191,152. If the actual amount received for fiscal 2017 is less than this figure, the City must contribute the difference. If the State contribution is more than expected the City may choose to treat a portion of fiscal 2017 contributions as prepaid contributions for fiscal 2018.

Note that the table in Section 2 of this report called “Minimum Funding Requirements” derives the minimum required contribution payable by the City as $218,130 for fiscal 2017. This is the amount computed prior to the above method change which is payable on a quarterly basis during fiscal 2017. There is a time-value-of-money savings for contributing required funding faster than on a quarterly basis. Contributing faster than expected saved $4,083 for fiscal 2017.

It is common for public pension funds to project contributions to the next fiscal year when determining the minimum required funding for a plan. “Projected contributions” means that the October 1, 2016 actuarial valuation is the basis for determination of funding required for fiscal 2018, then the October 1, 2017 actuarial valuation will be the basis for determination of the funding required for fiscal 2019, and so on. Performing actuarial valuations with projected contributions gives the City the opportunity to have more notice to plan for how much will be required to fund a plan. We have been asked to determine minimum required funding for fiscal 2018 on a projected basis from this October 1, 2016 valuation payable in a single sum on December 15, 2017, as shown on page 1.

Participant Data

During the year active membership changed from 45 to 46 members due to 6 new hires, 1 retirement, 3 vested terminations and 1 non-vested termination. The following provides a summary comparing the actual and expected pay increases for the 12 month periods ending on the date specified.

Year Ended	**Individual**		**Total Payroll**
September 30,	**Actual**	**Expected**	**Increase**
2016	5.2%	6.0%	2.0%
2015	4.1%	6.0%	(3.3%)
2014	5.3%	6.0%	10.1%
2013	6.0%	6.0%	(7.5%)
2012	(6.7%)	6.0%	(5.7%)
2011	5.3%	6.0%	4.5%
2010	0.3%	6.0%	1.4%
2009	2.4%	6.0%	5.8%
2008	2.0%	6.0%	4.3%
2007	7.1%	6.0%	7.5%
Average:	3.0%	6.0%	1.8%

Pay increases were less than expected with the actual average pay increase amongst continuing actives at 5.2% in comparison to the 6.0% salary increase assumption. In addition, total payroll increased 1.8% on average over the last 10 years in comparison to the 1.5% payroll growth assumption used to amortize unfunded accrued liability as a level percentage of pay.

Overall, there was a demographic gain. Should a pattern of consistent gains or losses develop, assumptions will be adjusted as needed. We recommend a review of actuarial experience be conducted.

Assets

The investment return on the Market Value of Assets was 9.68% and the return on the Actuarial Value of Assets was 7.51%, each in comparison to the 8.0% rate of return assumed for the fiscal year ending September 30, 2016.

Because the return on the Actuarial Value of Assets was less than the assumed rate of net investment return, there was an actuarial investment loss for the year ending September 30, 2016.

Note only a portion of actual investment gains or losses are recognized in the current year Actuarial Value of Assets with the remainder recognized over the next four years. Even if all assumptions are realized in the next several years, the Plan will experience changes in the required contribution rate until prior gains and losses are fully recognized.

The table below provides a comparison of the investment return on the Market Value of Assets and the Actuarial Value of Assets in comparison to the investment return assumed in the valuation of the Plan.

12-Month Period Ended September 30,	% Market Return	% Actuarial Return	% Assumed Return
2016	9.68 %	7.51 %	8.0 %
2015	0.11 %	4.77 %	8.0 %
2014	9.65 %	7.59 %	8.0 %
2013	8.84 %	5.84 %	8.0 %
2012	12.43 %	0.96 %	8.0 %
2011	(2.80) %	0.57 %	8.0 %
2010	7.44 %	2.13 %	8.0 %
2009	0.78 %	2.10 %	8.0 %
2008	(13.54)%	(13.79)%	8.0 %
2007	9.97 %	10.23 %	8.0 %
Average	3.96 %	2.58 %	8.0 %

Investment returns less than the assumed rate of return result in increased annual minimum required contributions in the future.

Plan Provisions

Ordinance 1687-2016 was adopted May 4, 2016 to eliminate the option of annuity payments from DROP distributions. An impact statement dated March 4, 2016 indicated this ordinance is not anticipated to have a material impact on the liability of the Plan.

Methods

As described under the paragraph entitled "City Policy Contribution", the employer contribution payable for fiscal 2017 has been determined based on the results of this October 1, 2016 actuarial valuation, actual employer funding deposited to the fund so far this fiscal year, and an amount which must be deposited on March 1, 2017 to complete employer funding for fiscal 2017.

This October 1, 2016 actuarial valuation is also the basis for determination of the employer contribution required for fiscal 2018. The required employer funding figure determined must be deposited on December 15, 2017.

Assumptions

The Board of Trustees has sole authority to determine the actuarial assumptions used for the valuation.

The mortality table was the RP-2000 Combined Mortality Table where Scale AA was applied to reflect mortality improvements to the valuation year. The mortality table has been revised to the mortality assumption used for special risk employees in the valuation of the Florida Retirement System (FRS) as of July 1, 2015, as required by state statute. The mortality rates are as follows:

Healthy mortality:	Males: 10% RP-00 Annuitant White Collar + 90% RP-00 Annuitant Blue Collar Females: 100% RP-00 Annuitant White Collar Both male and female rates fully generational using Scale BB
Disabled mortality:	Males: 60% RP-00 Disabled Retiree Set Back 4 Years + 40% RP-00 Annuitant White Collar Females: 60% RP-00 Disabled Retiree Set Forward 2 Yrs + 40% RP-00 Annuitant White Collar No mortality improvement is assumed for disabled lives.

State Contributions

There have been significant changes in state law related to the use of premium tax revenues. Florida Statutes Section 185.35(1) states changes become effective upon entering into a Collective Bargaining Agreement (CBA) on or after July 1, 2015.

We understand that members of this Plan are covered by one of the following two unions:

- The Coastal Florida Police Benevolent Association (PBA) CBA was ratified by the bargaining unit members August 17, 2015 and authorized by the City council on September 9, 2015. The agreement expires September 30, 2018.

- The Fraternal Order of Police representing Lieutenants CBA covers the period from October 1, 2014 through September 30, 2017.

We were provided with a memorandum of understanding (MOU) pertaining to premium tax use from the PBA which states, "…the CFPBA and the City hereby agree that the accumulated balance of Chapter 185 Premium Tax Funds, in the amount of $359,515 is available and will be used as additional funding for said retirement plan in its entirety." The MOU is not clear and we ask the Board of Trustees to confirm their understanding regarding premium tax use. The Plan attorney has indicated the valuation should be performed assuming all premium tax contributions should be used toward the actuarially required contributions.

The Estimated Minimum Required City Contribution shown on page 1 assumes that the premium tax money received from the State will be in the same amount received in the prior year. Should the amount received in the fiscal year ending September 30, 2017 or 2018 be less than expected, the City will need to contribute any potential shortfall to the Plan.

Section 2 Results Derivation

In this section, the assets and liabilities of the Plan are shown in detail. Assets and liabilities are then compared to determine the funded status and minimum funding requirements.

While asset information is based on the fair market value of assets, along with any techniques used to smooth out market fluctuations, liabilities are determined through a combination of the benefit provisions, participant census data which contains information for the members who will receive those benefits, and the methods and assumptions used with regard to how benefits will be paid to members. A summary of participant data, an outline of the benefit provisions, and a description of the methods and assumptions used in this valuation are described in Section 4.

Financial Information

Over the life of the Plan, the majority of assets are typically generated from investment return. In this section, we describe how the assets of the Plan are invested, show how the actuarial value of assets is derived, and review the investment results since the prior valuation.

Investment Allocation

Valuation Date	**October 1, 2015**		**October 1, 2016**	
Stocks	$7,051,757	66%	$8,399,981	71%
Fixed Income Securities	3,292,337	31%	2,484,600	21%
Cash and Cash Equivalents	120,763	1%	129,278	1%
Real Estate	0	0%	626,486	5%
Net Receivables	233,847	2%	220,244	2%
Fair Market Value of Assets	$10,698,704	100%	$11,860,589	100%

Reconciliation of Market Value of Assets

Year Ending September 30,	2015	2016
1. Market Value of Assets at Beginning of Year		
a. Prior Year Ending Balance	$10,799,501	$10,698,704
b. Adjustment to Beginning Value	(125,000)	0
c. Market Value of Assets Beginning of Year	$10,674,501	$10,698,704
2. Contributions		
a. Employer	$218,903	$214,124
b. State	175,977	191,152
c. Plan Members	158,642	162,989
d. Total Contributions	$553,522	$568,265
3. Investment Income		
a. Realized Appreciation (Depreciation)	$(20,122)	$20,417
b. Unrealized Appreciation (Depreciation)	(244,209)	795,735
c. Interest plus Dividends	297,789	276,195
d. Investment Expense	(22,000)	(50,562)
e. Net Investment Income	$11,458	$1,041,785
4. Deductions		
a. Benefits	$(314,961)	$(357,372)
b. Refund of Contributions	(56,004)	(37,934)
c. DROP Balance Disbursement	(99,377)	0
d. Administrative Expense	(70,435)	(52,859)
e. Total Deductions	$(540,777)	$(448,165)
5. Net Increase	$24,203	$1,161,885
6. Market Value of Assets at End of Year	$10,698,704	$11,860,589
7. Return on Market Value of Assets = 2I / (A + B – I)	0.11%	9.68%

Development of Actuarial Value of Assets

The Market Value of Assets is adjusted to recognize investment earnings greater than (or less than) the assumed net investment return over a five-year period. The Actuarial Value of Assets is no more than 120% and no less than 80% of the Market Value of Assets.

1.	Market Value of Assets as of October 1, 2016				$11,860,589
2.	Phase-In Gains (Losses) Over Five Year Period				
		Year Ending	Original Gain (Loss)	Percent Unrecognized	Unrecognized Gain (Loss)
	a.	September 30, 2016	$188,731	80%	$150,985
	b.	September 30, 2015	(835,973)	60%	(501,584)
	c.	September 30, 2014	168,086	40%	67,234
	d.	September 30, 2013	80,921	20%	16,184
	e.	Total			$(267,181)
3.	Preliminary Actuarial Value of Assets				$12,127,770
4.	Corridor Around Market Value				
	a.	Minimum = 80% of Market Value of Assets			$9,488,471
	b.	Maximum = 120% of Market Value of Assets			$14,232,707
	c.	Corridor Adjustment to Preliminary Actuarial Value			$0
5.	Actuarial Value of Assets as of October 1, 2016				$12,127,770

Development of Historical Gain or Loss on Market Value of Assets

Fiscal Year End		2016	2015
1.	Market Value of Assets - Beginning of Year	$10,698,704	$10,674,501
2.	Expected Interest on Assets	855,896	853,960
3.	Contributions	568,265	553,522
4.	Benefit Payments + Administrative Expenses	(448,165)	(540,777)
5.	Interest on items (3) and (4)	(2,842)	(6,529)
6.	Expected Value of Assets at End of Year	$11,671,858	$11,534,677
7.	Market Value of Assets - End of Year	$11,860,589	$10,698,704
8.	Gain (Loss) for Plan Year = (7) - (6)	$188,731	$(835,973)

Fiscal Year End		2014	2013
1.	Market Value of Assets - Beginning of Year	$9,694,311	$8,762,060
2.	Expected Interest on Assets	775,545	700,965
3.	Contributions	509,115	543,751
4.	Benefit Payments + Administrative Expenses	(347,005)	(392,604)
5.	Interest on items (3) and (4)	(551)	(782)
6.	Expected Value of Assets at End of Year	$10,631,415	$9,613,390
7.	Market Value of Assets - End of Year	$10,799,501	$9,694,311
8.	Gain (Loss) for Plan Year = (7) - (6)	$168,086	$80,921

Historical Asset Values

Year Ending September 30,	Actuarial Value of Assets	Market Value of Assets	% Market Return	% Actuarial Return	% Assumed Return
2016	$12,127,770	$11,860,589	9.68 %	7.51 %	8.00 %
2015	11,164,802	10,698,704	0.11 %	4.77 %	8.00 %
2014	10,643,865	10,799,501	9.65 %	7.59 %	8.00 %
2013	9,402,198	9,694,311	8.84 %	5.84 %	8.00 %
2012	8,736,203	8,762,060	12.43 %	0.96 %	8.00 %
2011	8,414,417	7,566,604	(2.80)%	0.57 %	8.00 %
2010	8,262,345	7,614,445	7.44 %	2.13 %	8.00 %
2009	8,021,574	6,963,511	0.78 %	2.10 %	8.00 %
2008	7,682,097	6,671,261	(13.54)%	(13.79)%	8.00 %
2007	7,339,570	7,449,379	9.97 %	10.23 %	8.00 %

Historical Contribution Amounts

Year Ending September 30,	Employer	State	Members	Total
2016	$214,124	$191,152	$162,989	$568,265
2015	218,903	175,977	158,642	553,522
2014	175,170	175,891	158,054	509,115
2013	170,374	170,685	202,692	543,751
2012	176,060	174,478	162,601	513,139
2011	167,856	166,718	167,856	502,430
2010	159,519	162,716	159,519	481,754
2009	161,204	167,324	161,204	489,732
2008	157,357	166,345	157,357	481,059
2007	139,993	169,433	139,993	449,419

Historical Deductions from Fund

Year Ending September 30,	Benefits	Refunds	Administrative Expense	Total
2016	$357,372	$37,934	$52,859	$448,165
2015	414,338	56,004	70,435	540,777
2014	241,507	35,759	69,739	347,005
2013	241,507	93,581	57,516	392,604
2012	242,060	2,045	28,833	272,938
2011	247,648	38,828	48,140	334,616
2010	247,648	61,665	44,177	353,490
2009	211,230	8,015	30,998	250,243
2008	180,589	17,654	35,844	234,087
2007	137,855	88,084	56,866	282,805

Historical State Contributions

Year Ending September 30	State Contributions
2016	$191,152
2015	175,977
2014	175,891
2013	170,685
2012	174,478
2011	166,718
2010	162,716
2009	167,324
2008	166,345
2007	169,433
2006	164,202
2005	155,180
2004	144,978
2003	110,868
2002	101,126
2001	85,770
2000	78,865
1999	79,929
1998	80,871

Present Value of Benefits

Valuation as of October 1,			2015	2016
1.	**Active Members**			
	a.	Retirement Benefits	$9,451,898	$9,163,308
	b.	Deferred Benefits	502,804	512,617
	c.	Survivor Benefits	157,217	407,624
	d.	Disability Retirement	322,675	319,384
	e.	Total for Active Members	$10,434,594	$10,402,933
2.	**Inactive Members**			
	a.	Retired Members	$4,280,484	$4,827,614
	b.	Terminated members	651,883	1,336,864
	c.	Beneficiaries	0	0
	d.	Disability Retirement	130,457	137,712
	e.	Total for Inactive Members	$5,062,824	$6,302,190
3.	**Present Value of Benefits**		$15,497,418	$16,705,123

Accrued Liability

Valuation as of October 1,			2015	2016
1.	**Active Members**			
	a.	Retirement Benefits	$6,550,701	$6,260,958
	b.	Deferred Benefits	21,178	31,217
	c.	Survivor Benefits	72,859	171,669
	d.	Disability Retirement	147,397	136,334
	e.	Total for Active Members	$6,792,135	$6,600,178
2.	**Inactive Members**			
	a.	Retired Members	$4,280,484	$4,827,614
	b.	Terminated members	651,883	1,336,864
	c.	Beneficiaries	0	0
	d.	Disability Retirement	130,457	137,712
	e.	Total for Inactive Members	$5,062,824	$6,302,190
3.	**Accrued Liability**		$11,854,959	$12,902,368

Normal Cost

Valuation as of October 1,			2015	2016
1.	**Preliminary Normal Cost**			
	a.	Retirement Benefits	$328,235	$327,422
	b.	Deferred Benefits	53,327	52,761
	c.	Survivor Benefits	9,374	26,520
	d.	Disability Retirement	20,154	21,004
	e.	Total	$411,090	$427,707
2.	**Total Normal Cost**			
	a.	Preliminary Normal Cost	$411,090	$427,707
	b.	Estimated Administrative Expense	70,435	52,859
	c.	Total Normal Cost	$481,525	$480,566
	d.	Total Normal Cost as a Percent of Pay	21.5%	21.0%
3.	**Employer Normal Cost**			
	a.	Preliminary Normal Cost	$411,090	
	b.	Actual Administrative Expense	52,859	
	c.	Actual Employee Contributions	(162,989)	
	d.	Employer Normal Cost	$300,960	
4.	**Valuation Payroll**		$2,239,986	$2,285,615

Unfunded Accrued Liability

Derivation of Unfunded Accrued Liability (UAL)

Unfunded Accrued Liability

1.	Accrued Liability	$12,902,368
2.	Actuarial Value of Assets	(12,127,770)
3.	Unfunded Accrued Liability	$774,598

Determination of Expected Unfunded Accrued Liability

1.	Unfunded Accrued Liability as of Prior Year	$690,157
2.	Interest for a full year on (1)	55,213
3.	Employer Normal Cost (Including Administrative Expenses) as of Prior Year	300,960
4.	Interest for a full year on (3)	24,077
5.	City Plus State Contribution	(405,276)
6.	Interest on Contribution for Time on Deposit	(8,565)
7.	Change in Plan, Methods or Assumptions	226,678
8.	Expected Unfunded Accrued Liability	$883,244

Calculation of (Gain) or Loss

1.	Actual Unfunded Accrued Liability	$774,598
2.	Expected Unfunded Accrued Liability	883,244
3.	Total (Gain) or Loss	$(108,646)

Reconciliation of Unfunded Accrued Liability

1.	Unfunded Accrued Liability as of Prior Year	$690,157
2.	Total Change in Unfunded Accrued Liability	
a.	Expected Change in Unfunded Accrued Liability	$(33,591)
b.	Change in Plan, Methods or Assumptions	226,678
c.	Change Due to (Gain) or Loss	
i.	Portion of (Gain) / Loss Due to Investments	$47,474
ii.	Portion of (Gain) / Loss Due to Demographic Experience	(156,120)
iii.	Total (Gain) or Loss	$(108,646)
d.	Total Change in Unfunded Accrued Liability	$84,441
3.	Unfunded Accrued Liability	$774,598

Amortization of Unfunded Liability

The Unfunded Actuarial Accrued Liability is being amortized as a level percentage of payroll based on the interest and payroll growth assumptions. Changes in the Unfunded Actuarial Accrued Liability due to plan changes, assumption changes, method changes, or gains and losses are all amortized over a 25 year period.

Amortization Bases

	Effective 10/1	Source	Original Balance	Remaining Balance	Adjusted Remaining Balance	Years Remain	1.5% Amortization Payment
1.	2005	Method Change	$(129,220)	$(70,439)	$(67,119)	19	$(5,833)
2.	2006	Actuarial Gain	(154,247)	(83,921)	(79,967)	20	(6,769)
3.	2007	Actuarial Gain	(538,306)	(291,627)	(277,886)	21	(22,960)
4.	2008	Actuarial Loss	1,693,799	904,837	862,201	21	71,238
5.	2008	Method Change	7,606	4,094	3,901	22	315
6.	2008	Method Change	(1,183,820)	(637,241)	(607,214)	22	(49,069)
7.	2009	Actuarial Loss	449,531	239,975	228,667	23	18,105
8.	2010	Actuarial Loss	46,391	24,517	23,362	24	1,815
9.	2011	Actuarial Loss	489,026	255,451	243,414	25	18,588
10.	2012	Actuarial Gain	(278,260)	(143,462)	(136,702)	26	(10,273)
11.	2012	Asmp/Method Chg	363,487	187,403	178,573	26	13,419
12.	2013	Actuarial Loss	22,767	11,570	11,025	27	816
13.	2013	Update Mortality	10,161	5,162	4,919	27	364
14.	2014	Actuarial Loss	42,565	42,501	40,498	28	2,958
15.	2014	Update Mortality	11,211	11,194	10,667	28	779
16.	2015	Actuarial Loss	217,978	217,439	207,193	24	16,099
17.	2015	Update Mortality	11,608	11,580	11,034	24	857
18.	2016	Actuarial Gain	(108,646)	(108,646)	(108,646)	25	(8,297)
19.	2016	Change Mortality	226,678	226,678	226,678	25	17,310
Scheduled Amortization Payment							$59,462
Outstanding Bases				$807,065	$774,598		
Unfunded Accrued Liability				774,598			

Projected Unfunded Accrued Liability and Amortization Payments

Plan Year Beginning October 1	Total Outstanding Bases	Total Amortization Payment
2016	$774,598	$59,462
2017	772,347	60,360
2018	768,946	61,263
2019	764,297	62,181
2020	758,286	63,115
2021	750,784	64,062
2022	741,660	65,023
2023	730,768	65,997
2024	717,953	66,987
2025	703,043	67,990
2026	685,857	69,011
2027	666,194	70,045
2028	643,841	71,096
2029	618,565	72,163
2030	590,114	73,244
2031	558,219	74,340
2032	522,590	75,458
2033	482,902	76,591
2034	438,816	77,738
2035	389,964	86,644
2036	327,586	97,062
2037	248,966	32,517
2038	233,765	100,657
2039	143,757	76,667
2040	72,457	50,982
2041	23,193	11,698
2042	12,414	7,242
2043	5,586	5,586
2044	0	0

Actions Taken to Reduce Unfunded Actuarial Accrued Liability

The required contributions calculated each year include a payment for the amortization of the unfunded actuarial accrued liability. This payment is designed to reduce the unfunded actuarial accrued liability in an orderly fashion over the next 25 years.

Minimum Funding Requirements

Determination of Required Contribution

Valuation as of October 1, Funding for Year Ending September 30,	2015 2016	2016 2017	2016 2018
1. Minimum Required Contribution			
a. Total Normal Cost	$481,525	$480,566	$480,566
b. Amortization of Unfunded Accrued Liability	52,163	59,462	59,462
c. Beginning of Year Contribution	$533,688	$540,028	$540,028
d. Interest	28,387	29,247	67,095
e. Minimum Required Contribution	$562,075	$569,275	$607,123
f. Percent of Pay	25.09 %	24.91 %	27.18 %
2. Expected Member Contributions			
a. Expected Member Contributions	$156,799	$159,993	$156,346
b. Percent of Pay	7.00 %	7.00 %	7.00 %
3. Expected Contributions from State			
a. Expected State Contribution	$175,977	$191,152	$191,152
b. Percent of Pay	7.86 %	8.36 %	8.56 %
4. City Policy Contribution			
a. City Policy Contribution	$229,299	$218,130	$259,625
b. Percent of Valuation Payroll	10.23 %	9.55 %	11.62 %
5. Valuation Payroll	$2,239,986	$2,285,615	$2,233,509

Note: The actual premium tax distributions for the fiscal years ending September 30, 2017 and 2018 are not yet known. If state contributions are less than expected the City contributions must be increased to make up the difference. The $218,130 City minimum funding requirement shown above for fiscal 2017 is payable on quarterly basis. This is the same method as used for determination of the minimum funding requirement for fiscal 2016. However, the employer will actually contribute $214,047.12 as the minimum funding requirement for fiscal 2017 by solving for the remaining employer contribution which <u>must</u> be deposited March 1, 2017 as $47,162.40. The $259,625 minimum funding requirement for fiscal 2018 <u>must</u> be deposited on December 15, 2017. See Section 1 for details.

Reconciliations

Reconciliation of Funded Status

	Unfunded Actuarial Accrued Liability	Funded Percentage	Change in Unfunded Actuarial Accrued Liability	Change in Funded Percentage
As of Prior Valuation	**$690,157**	**94.18 %**		
Changes in due to:				
Normal Operation of Plan	656,566	94.88 %	$(33,591)	0.70 %
Investment Experience	704,040	94.51 %	47,474	(0.37)%
Demographic Experience	547,920	95.68 %	(156,120)	1.17 %
Required Mortality Change	774,598	94.00 %	226,678	(1.68)%
Total Changes			$84,441	(0.18)%
As of Current Valuation	**$774,598**	**94.00 %**		

Reconciliation of City Minimum Funding Requirement

	Dollar Amount	% of Pay
City Required Contribution for Fiscal 2016	**$229,299**	**10.23 %**
Changes in Contribution due to:		
Normal Operation of Plan	$6,049	0.12 %
Change in State $	(14,568)	(0.64)%
Change in Expenses	(18,279)	(0.81)%
Investment Experience	3,770	0.17 %
Demographic Experience	(18,882)	(0.87)%
Required Mortality Change	30,741	1.35 %
Total Changes	$(11,169)	(0.68)%
City Required Contribution for Fiscal 2017*	**$218,130**	**9.55 %**
Change to Project Contribution Payable for Fiscal 2018	$48,577	2.39 %
City Contribution Payable on 12/15/17 for Fiscal 2018	(7,082)	(0.32)%
Total Changes	$41,495	2.07 %
City Required Contribution for Fiscal 2018	**$259,625**	**11.62 %**

*See Section 1. The employer will actually contribute $214,047.12 as the minimum funding requirement for fiscal 2017 by solving for the remaining employer contribution which must be deposited March 1, 2017 as $47,162.40.

Section 3 Accounting Information

Information Required by GASB 67/68

A supplemental report provides information under the Governmental Accounting Standards Board No. 67/68.

Statement of Accumulated Plan Benefits

The present value of accrued benefits is an estimate of the liability for all benefits accrued to date.

Valuation as of October 1,	2015	2016
1. Actuarial present value of accumulated benefits		
a. Participants currently receiving benefits	$4,410,941	$4,965,326
b. Other participants	5,481,125	5,946,846
c. Vested participants	$9,892,066	$10,912,172
d. Nonvested participants	584,434	705,654
e. Total	$10,476,500	$11,617,826
2. Change in actuarial present value of accumulated benefits		
a. Actuarial present value of accumulated benefits beginning of year		$10,476,500
b. Increase (decrease) during year attributable to:		
i. Plan amendment		$0
ii. Change in assumptions or methods		233,964
iii. Increase for interest and probability of payment due to decrease in discount period and benefits accrued		1,302,668
iv. Benefits paid		(395,306)
v. Other		0
vi. Net increase (decrease)		$1,141,326
c. Actuarial present value of accumulated benefits end of year		$11,617,826

Other Disclosures Required by the State of Florida

Valuation as of October 1,	2015	2016
Present value of active member:		
Future salaries (attained age)	$20,666,795	$21,215,703
Future contributions (attained age)	$1,446,676	$1,485,099
Balance of contributions with interest for actives	$2,038,484	$1,951,782

Required Disclosure Under F.S. 112.664(1)

As required under F.S. Section 112.664(1) we have produced the following information:

(a) Total pension liability calculated based on mortality used in one of the last two Florida Retirement System (FRS) valuations. This actuarial valuation assumes healthy mortality as follows: Male: 10% RP-2000 Annuitant White Collar + 90% RP-2000 Annuitant Blue Collar / Female:100% RP-2000 Annuitant White Collar, where both the male and female rates are fully generational from 2000 using Scale BB. Disabled mortality is as follows: Male: 60% RP-2000 Disabled Retiree Set Back 4 years + 40% RP-2000 Annuitant White Collar / Female: 60% RP-2000 Disabled Retiree Set Forward 2 Years + 40% RP-2000 Annuitant White Collar, where no mortality improvement is assumed for disabled lives.

(b) Total pension liability calculated using an assumed interest rate that is 200 basis points lower than that assumed in the valuation of the Plan.

(c) Determination of the number of months or years for which the current market value of assets is adequate to sustain the payment of expected retirement benefits.

(d) Recommended contribution to the Plan using the most recent valuation and the contributions necessary prepared pursuant to (a) and (b) stated as a dollar amount and % of payroll.

	2% Decrease (6.00%)	Current Discount Rate (8.00%)	2% Increase (10.00%)
Total pension liability	$16,391,782	$12,902,368	$10,450,207
Plan fiduciary net position	(11,860,589)	(11,860,589)	(11,860,589)
Net pension liability	$4,531,193	$1,041,779	$(1,410,382)
Plan fiduciary net position as a percentage of the total pension liability	72.36%	91.93%	113.50%
Years of benefit payments:			
Expected for current members:	99	99	99
Paid for with current assets:	16.41	20.59	31.23
City Plus State Contribution Requirement, Plus Expected Employee Contributions			
Dollar Amount	$1,020,681	$569,275	$367,168
Percent of Payroll	44.66%	24.91%	16.06%

Required Disclosure Under F.S. 112.664(2)(b)2.

F.S. Section 112.664(2)(b)2. - For the previous five years, beginning with 2013, a side-by-side comparison of the plan's assumed rate of return compared to the actual rate of return, as well as the percentages of cash, equity, bond and alternative investments in the plan portfolio.

Year Ending September 30,	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**
Assumed rate of return	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Actual rate of return	9.7%	0.1%	9.6%	8.8%	12.4%	(2.8%)
Percentages of assets in:						
Cash	1%	1%	2%	0%	4%	4%
Equity	71%	66%	66%	57%	57%	55%
Bond	21%	31%	29%	40%	35%	39%
Alternative	7%	2%	3%	3%	4%	2%
Total	100%	100%	100%	100%	100%	100%

Section 4 Supplementary Information

Summary of Participant Data

Member Statistics

Valuation as of October 1,	2015	2016
Active Participants		
Number	45	46
Average Age	40.5	39.3
Average Credited Service	11.3	10.2
Percent Male	80.0	78.3
Average Valuation Salary	$49,777	$49,687
Total Valuation Salary	$2,239,986	$2,285,615
Payroll Covered in Valuation	$2,239,986	$2,285,615
Terminated With Rights to Deferred Benefits		
Number	2	5
Average Age	46.9	45.4
Percent Male	100.0	80.0
Average Monthly Benefit	$2,645	$2,454
Retirements (DROP and Service Retirees)		
Number	10	11
Average Age	61.2	61.5
Percent Male	100.0	100.0
Average Monthly Benefit	$3,162	$3,142
Total of DROP Account Balances September 30	$3,080	$64,740
Beneficiaries		
Number	0	0
Average Age	0.0	0.0
Percent Male	0.0	0.0
Average Monthly Benefit	$0	$0
Disability Retirements		
Number	1	1
Average Age	54.1	55.1
Percent Male	100.0	100.0
Average Monthly Benefit	$1,239	$1,239

Number of Active Members by Age and Service as of October 1, 2016

Age	< 1	< 5	< 10	< 15	< 20	< 25	< 30	< 35	Total
< 20									
< 25	3								3
< 30	2	5	1						8
< 35		2	2	2					6
< 40		1	2	1					4
< 45		1	4	1	2				8
< 50	1	1	1	2		3			8
< 55		1			1	3	3		8
< 60					1				1
< 65									
Total	6	11	10	6	4	6	3		46

Active Valuation Pay by Age and Service as of October 1, 2016

Age	< 1	< 5	< 10	< 15	< 20	< 25	< 30	< 35	Total
< 20									
< 25	36,000								36,000
< 30	36,480	39,200	54,225						40,398
< 35		40,656	48,100	55,957					48,238
< 40		37,778	42,526	46,553					42,346
< 45		40,129	44,073	48,727	55,013				46,897
< 50	36,960	39,871	42,979	49,532		66,522			52,305
< 55		92,342			55,442	64,278	68,369		68,216
< 60					56,279				56,279
< 65									
Total	36,320	44,312	45,475	51,043	55,437	65,400	68,369		49,687

Reconciliation of Plan Participants

	Active	Retired	DROP	Deferred Vested	Disabled	Survivor	Total
October 1, 2015	**45**	**9**	**1**	**2**	**1**	**0**	**58**
Active							
To DROP	(1)		1				0
To Deferred Vested	(3)			3			0
To Refund of Contribs	(1)						(1)
Additions	6	0	0	0	0	0	6
October 1, 2016	**46**	**9**	**2**	**5**	**1**	**0**	**63**

Outline of Plan Provisions

Plan Type: Single-employer Defined Benefit Pension Plan

Effective Date: November 1, 1969. Amended and restated effective October 1, 1999 and subsequently amended by Ordinance No. 1222-2000, 1262-2001, 1336-2004, 1366-2005, 1492-2008, 1509-2008, 1520-2009, 1545-2010, 1546-2010, 1570-2010, 1588-2011, 1589-2011, 1630-2013, 1645-2014, 1662-2014,1672-2015, and 1687-2016.

Plan Administrator: The Board of Trustees

Board Composition: Two members are elected from among the police employees of the City, who are members of the plan, two city residents appointed by the Commission and one person is chosen by a majority of the previous four members.

Funding Requirements: Employer contributions are actuarially determined and subject to State statute. Employee contributions are as described below and may be amended by ordinance.

Plan Year: The 12-month period from October 1st to the next September 30th.

Member: Full-time police officers participate in the Plan immediately upon hire.

Credited Service: Employee service computed in years and completed calendar months. Military service purchases up to five years are allowed.

Vesting: Members become 100% vested after earning 10 years of Credited Service.

Basic Compensation: Total compensation actually paid in a Plan Year by the City including tax deferred compensation, as well as educational incentive monies, and excluding overtime in excess of 300 hours, commissions, bonuses, expense allowances and payment for accrued annual leave, accrued sick leave, and accrued compensatory leave.

Employee Contributions: 7.0% of Basic Compensation credited with 5% interest compounded annually. Members receive benefits under the Plan no less than the value of their accumulated Employee Contributions with interest.

Members who terminate non-vested are entitled to the return of Employee Contributions accumulated with interest at 5% to the first day of the month in which termination occurs.

Average Monthly Compensation: The sum of the highest five successive Plan Years of Basic Compensation in the last ten Plan Years of employment divided by 60.

Normal Retirement Date: The first day of the month coincident with or next following attainment of age 52 and 10 years of Credited Service.

Accrued Benefit: For Members hired before January 2, 2013, the amount of monthly retirement income payable at the Normal Retirement Date is determined according to the following formula:

3% x Average Monthly Compensation x Credited Service up to 25 years

Plus

1.5% x Average Monthly Compensation x Credited Service between 25 and 35 years

For Members hired on or after January 2, 2013, the amount of monthly retirement income payable at the Normal Retirement Date is determined according to the following formula:

3% x Average Monthly Compensation x Credited Service up to 25 years

The Accrued Benefit is payable in the form of a 10-year certain and continuous annuity. However, any member with a spouse shall receive an actuarially equivalent 50% joint and survivor annuity unless the member chooses another Optional Form of Retirement Income with spousal consent.

Members who terminate employment 100% vested prior the Normal Retirement Date are eligible to receive their Accrued Benefit once the age requirements for the Normal Retirement Date are met, provided Employee Contributions remain in the Plan.

Late Retirement Benefit: The amount of monthly retirement income payable to a Member who retires after the Normal Retirement Date is the greater of (i) the monthly retirement income which can be provided by the single-sum value of the Accrued Benefit payable if he had retired at the Normal Retirement Date, accumulated with interest from the Normal Retirement Date to the date the monthly retirement income payments are to commence, and (ii) the monthly retirement income computed as described for the Accrued Benefit using Credited Service and Average Monthly Compensation determined at the Member's actual retirement date.

Early Retirement Date: The first day of the month coincident with or next following the date an employee retires prior to the Normal Retirement Date after the earlier of attainment of age 44 and 25 years of Credited Service or age 50 and 10 years of Credited Service.

Early Retirement Benefit: The Accrued Benefit is reduced for commencement earlier than the Normal Retirement Date at a rate of 3/12% per month. However, the minimum monthly retirement income for a Member who retires before the Normal Retirement Date with 25 years Credited Service is 50% x Average Monthly Compensation.

Members who terminate employment 100% vested prior to reaching the Early Retirement Date age requirements may elect to receive an Early Retirement Benefit once the age requirements are met, provided Employee Contributions remain in the Plan.

Members who terminate employment 100% vested prior the Normal Retirement Date but on or after their Early Retirement Date but do not commence receipt of an Early Retirement Benefit at that time will receive a monthly retirement income not less than the monthly retirement income which can be provided by the single-sum value of the monthly early retirement income which would have been payable if he had retired immediately upon termination, accumulated with interest from termination to the date the monthly retirement income payments are to commence.

Members who recover from Disability Retirement and who were eligible for an Early Retirement Benefit at the date of disability may elect to receive this benefit upon recovery from disability.

Disability Retirement: This benefit is payable from the first day of the month coincident with or next following the date the Retirement Committee approves the Member's Disability Retirement. The benefit is payable in the form of a 10 year certain and continuous annuity. The last payment is that due next preceding the earlier of (1) the date of recovery prior to the Normal Retirement Date and (2) the later of the date of death or the 120th payment. The amount of monthly retirement income is determined as follows:

(a) Non-Line of Duty: Members with less than 10 years of Credited Service upon disability receive a monthly retirement income which can be provided by the greater of (i) the single-sum value of the Accrued Benefit and (ii) 2 x Basic Compensation paid in the Plan Year immediately preceding disability. The monthly retirement income which can be provided by (ii) is limited to 60% x Anticipated Monthly Retirement Income at the Normal Retirement Date. In no event shall the benefit payable be less than the benefit required under section 185.18 of the Florida Statutes.

(b) Non-Line of Duty: Members with 10 years of Credited Service or more upon disability receive a monthly retirement income which is the greater of (i) the monthly retirement income which can be provided by the single-sum value of the Accrued Benefit and (ii) 30% x Basic Compensation paid in the Plan Year immediately preceding disability where the single-sum value of this monthly amount does not exceed 100 x the Anticipated Monthly Retirement Income at the Normal Retirement Date. in no event shall the benefit payable be less than the benefit required under section 185.18 of the Florida Statutes.

(c) Line of Duty: Members receive a monthly retirement income which is 50% x Basic Compensation paid in the Plan Year immediately preceding disability where the single-sum value of this monthly amount does not exceed 100 x the Anticipated Monthly Retirement Income at the Normal Retirement Date. In no event shall the benefit payable be less than the benefit required under section 185.18 of the Florida Statutes.

Members who recover from disability and re-enter the service of the City within 30 days of recovery will be deemed to have continuous service except that the period beginning with the first month for which Disability Retirement income was received and ending with the date of service re-entry is not considered as Credited Service.

Anticipated Monthly Retirement Income at the Normal Retirement Date: Determined as described for the Accrued Benefit, but instead using Anticipated Credited Service and Anticipated Average Monthly Compensation. Anticipated Credited Service is employee service computed in years and completed calendar months as if the member remains employed to the Normal Retirement Date. Anticipated Average Monthly Compensation is computed assuming that the last complete Plan Year of Basic Compensation is paid in each Plan Year, without change, to the Normal Retirement Date.

Survivor Benefit at Death of Disabled Member Prior to Disability Retirement: The designated beneficiary of a disabled Member who dies prior to receipt of Disability Retirement benefits is eligible to receive a monthly retirement income payable in the form of a 10 year certain and continuous annuity payable commencing on the first of the month coincident with or next following the date of the disabled Member's death. The designated beneficiary will receive a monthly retirement income which can be provided by the greater of (i) the single-sum value of the Accrued Benefit and (ii) 2 x Basic Compensation paid in the Plan Year immediately preceding disability not more than 100 x Anticipated Monthly Retirement Income at the Normal Retirement Date.

Survivor Benefit at Death of Vested Terminated Members: The designated beneficiary of vested Member who dies prior to retirement is eligible to receive a monthly retirement income payable in the form of a 10 year certain and continuous annuity payable commencing on the first of the month coincident with or next following the Member's death, which can be provided by the single-sum value of the Member's Accrued Benefit or Early Retirement Benefit.

Survivor Benefit at Death of Active Employee Prior to Normal Retirement Date: The designated beneficiary of a Member who dies while in active service prior to the Normal Retirement Date is eligible to receive, commencing on the first of the month coincident with or next following the Member's death, a monthly retirement income (payable in the form of a 10 year certain and continuous annuity) which can be provided by the greater of (i) the single-sum value of the Accrued Benefit as of the date of death, not less than the single-sum value of the Early Retirement Benefit which would have been payable if the Member had retired early on the date of death, and (ii) 2 x Basic Compensation paid in the Plan Year immediately preceding death not more than 100 x Anticipated Monthly Retirement Income at the Normal Retirement Date.

Survivor Benefit at Death of Active Employee After Normal Retirement Date: The designated beneficiary of a Member who dies while in active service after the Normal Retirement Date is eligible to receive, commencing on the first of the month coincident with or next following the Member's death, a monthly retirement income (payable in the form of a 10 year certain and continuous annuity) which can be provided by the single-sum value of the Late Retirement Benefit.

Optional Forms of Retirement Income: In addition to the 10 year certain and continuous form of annuity, also available under the terms of the Plan are the life only annuity and the joint and 50%, 66 2/3%, 75%, or 100% survivor annuity. With the joint and survivor options, the member may also elect the pop-up feature. The Plan also allows for other amounts and forms of retirement income that will meet the circumstances of the Participant, in the opinion of the Retirement Committee, and will not substantially affect the actuarial soundness of the Plan.

Deferred Retirement Option Program (DROP): Members are eligible to enter the DROP at the Normal Retirement Date. The Accrued Benefit is frozen and no further Employee Contributions are payable at DROP entry. The Accrued Benefit accumulates with interest in the DROP account and is payable as a single-lump sum (or as an actuarially equivalent annuity) upon DROP exit. The DROP account earns interest at a rate equal to the funds net rate of investment return minus 1% in administration fees, unless the DROP participant, as a one-time irrevocable option, elects a self-directed DROP as approved by the board of trustees. The maximum DROP participation duration is 5 years and participation will end if the employee resigns, dies or is terminated with cause prior to completion of the 5 years.

Description of Assumptions and Methods

Assumed Rate of Investment Return: 8.0% per year net of investment expenses

Inflation: 2.5% per year

Salary Increase – Individual: 6.0% per year (It is assumed that overtime hours are not increased at the end of the member's career.)

Salary Increase – Total Payroll: Based on individual salary increase assumptions and other decrements assumed in the valuation of Plan liabilities.

The payroll growth assumption used to amortize unfunded accrued liability as a level percent of payroll is 1.5%.

Mortality: In the prior valuation, the mortality table was the RP-2000 Combined Mortality Table projected to the valuation year using Scale AA, with the disabled table used for disability retirees.

The mortality table has been revised to the mortality assumption used for special risk employees in the valuation of the Florida Retirement System (FRS) as of July 1, 2015, as required by state statute. The mortality rates are as follows:

Healthy mortality:	Males: 10% RP-00 Annuitant White Collar + 90% RP-00 Annuitant Blue Collar Females: 100% RP-00 Annuitant White Collar Both male and female rates fully generational using Scale BB
Disabled mortality:	Males: 60% RP-00 Disabled Retiree Set Back 4 Years + 40% RP-00 Annuitant White Collar Females: 60% RP-00 Disabled Retiree Set Forward 2 Yrs + 40% RP-00 Annuitant White Collar No mortality improvement is assumed for disabled lives.

Retirement: Unisex rates based on the experience of the Rockledge police officers from 1999 through 2005 (and expectations of the future), as follows:

Age	Rate	Age	Rate
52	0.250	57	0.350
53	0.300	58	0.400
54	0.300	59	0.500
55	0.300	60	1.000
56	0.300		

Termination: Unisex rates based on the experience of the Rockledge police officers from 1999 through 2005, as follows:

Service	Rate	Service	Rate	Service	Rate	Service	Rate
0	0.0600	7	0.0425	14	0.0250	21	0.0150
1	0.0575	8	0.0400	15	0.0200	22	0.0150
2	0.0550	9	0.0375	16	0.0175	23	0.0150
3	0.0525	10	0.0350	17	0.0150	24	0.0150
4	0.0500	11	0.0325	18	0.0150	>=25	0.0000
5	0.0475	12	0.0300	19	0.0150		
6	0.0450	13	0.0275	20	0.0150		

Disability: Sex distinct rates as used for special risk employees in the Florida Retirement System actuarial valuation report as of July 1, 2005. Linear interpolation has been used between the rates shown in five year age increments, as follows:

	Line-of-Duty			Not Line-of-Duty	
Age	Male	Female	Age	Male	Female
20	0.012%	0.008%	20	0.037%	0.036%
25	0.012%	0.008%	25	0.037%	0.036%
30	0.017%	0.016%	30	0.043%	0.046%
35	0.029%	0.037%	35	0.055%	0.075%
40	0.051%	0.068%	40	0.087%	0.118%
45	0.087%	0.106%	45	0.140%	0.259%
50	0.138%	0.153%	50	0.292%	0.318%
55	0.215%	0.230%	55	0.446%	0.492%
60	0.301%	0.285%	60	0.628%	0.597%
65+	0.231%	0.143%	65+	0.698%	0.380%

Funding Method: Entry Age Normal (level percent of salary)

Glossary of Actuarial Terms

Present Value of Benefits (PVB): The present value, as of the valuation date, of all benefits that will become payable by the Plan for the current group of members in the census.

Normal Cost (NC): The value of the portion of the total benefit for active members which accrues in the year following the valuation date. Under the Entry Age Normal (Level Percent of Salary) funding method, the NC is a constant fraction of salary from the member's date of entry into the Plan to the member's assumed date of termination, retirement, disability or death.

Accrued Liability (AL): This is the portion of the PVB attributable to the past at the valuation date. For active members, AL is the annual NC accumulated from date of entry to the valuation date for each member. For retired and terminated members, the PVB and the AL are equal. The AL is the estimated liability owed by the pension fund at the valuation date.

Unfunded Accrued Liability (UAL): Any excess of the Accrued Liability over the fund assets. A negative UAL indicates fund assets are greater than the Accrued Liability, otherwise known as a surplus.

Actuarial Value of Assets: The value of assets used in the actuarial valuation of the Plan which is compared to the AL to determine the UAL and minimum funding requirements. A method may be used to smooth out short term volatility in the fair market value of assets.