

WEST PALM BEACH POLICE PENSION FUND ACTUARIAL VALUATION REPORT SEPTEMBER 30, 2014

### **OUTLINE OF CONTENTS REPORT OF SEPTEMBER 30, 2014 ACTUARIAL VALUATION**

Section	Page	_
		Cover Letter
		Valuation Results, Comments, Conclusion, Recommendations and Statement by Enrolled Actuary, Actuarial Experience and Accrued Liabilities
Α	1-3 4-5 6-7 8 9 10 11 12 13	Funding Objective and Contribution Rates Funding Progress Indicators Comments and Conclusion Experience Gain (Loss) Sources and Financing of UAAL Unfunded Actuarial Accrued Liability Historical Contributions Schedule Notes to Historical Contributions Schedule Actuarial Balance Sheet
		Summary of Benefit Provisions and Valuation Data Submitted by the Pension Fund
В	1-3 4-5 6 7 8-10 11-14 15-18	Benefit Provisions Accounting & Asset Information Reconciliation of DROP and Share Plan Accounts Determination of Fixed Interest Crediting Rate for DROP and Share Plan Accounts Supplemental Pension Distribution Retired Member and Beneficiary Data Active Member and Vested Terminated Data
		Actuarial Cost Method, Actuarial Assumptions and Definitions of Technical Terms
С	1 2 3-11 12-13	Actuarial Cost Method Amortization of UAAL Actuarial Assumptions Definitions
		Disclosures Required by Governmental Accounting Standards Board Statement No. 67
D	1 2 3 4 5	Schedule of Changes in the Employer's Net Pension Liability and Related Ratios Schedule the Employer's Net Pension Liability Schedule of Contributions Notes to Schedule of Contributions Single Discount Rate and Sensitivity Analysis
		Summary of Valuation Results in State Format

- Е 1-3
- Valuation Summary Reconciliation of Membership 4

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West Palm Beach Police Pension Fund

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March 12, 2015

The Board of Trustees West Palm Beach Police Pension Fund West Palm Beach, Florida

The results of the September 30, 2014 Annual Actuarial Valuation of the West Palm Beach Police Pension Fund are presented in this report.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board.

The purpose of the valuation is to measure the System's funding progress, to determine the employer contribution rate for the fiscal year ending September 30, 2016, and to determine the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 25 and No. 27.

This report should not be relied on for any purpose other than the purpose described above.

The findings in this report are based on data or other information through September 30, 2014. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

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

This report was prepared using certain assumptions prescribed by the Board as described in Section C.

The undersigned actuaries are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

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

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. In my opinion, the techniques and assumptions used are reasonable, meet the requirements and intent of Part VII, Chapter 112, Florida Statutes, and are based on generally accepted actuarial principles and practices. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

/Jeffrey Amrose, MAAA Enrolled Actuary No. 14-6599

Trisha Amrose, MAAA Enrolled Actuary No. 14-8010

# **SECTION A**

VALUATION RESULTS, COMMENTS, CONCLUSION, RECOMMENDATIONS, ACTUARIAL EXPERIENCE AND ACCRUED LIABILITIES The funding objective for the defined benefit provisions of the Pension Fund is to establish and receive contributions, expressed as percents of active member payroll, which will remain approximately level from year to year and will not have to be increased for future generations of citizens in the absence of benefit changes. This objective is stated in the Pension Fund special act and meets the requirements of Part VII, Chapter 112, Florida Statutes and Chapter 185 Florida Statutes.

### **CONTRIBUTION RATES**

The defined benefit provisions of the Pension Fund are supported by member contributions, City contributions, Chapter 185 revenue (for fiscal years beginning October 1, 2011, October 1, 2012, and October 1, 2014), and investment income from Pension Fund assets.

The Share Accounts are supported by Chapter 185 receipts and investment income. No Share Plan allocations were made for fiscal years ending September 30, 2011 and September 30, 2012, and there will be no Share Plan allocation for fiscal year ending September 30, 2014. Individual Share and DROP Accounts may accept accumulated leave paid out at termination up to the amount permitted by law.

Contributions which satisfy the funding objective are determined by the annual actuarial valuation and are sufficient to:

- cover the actuarial costs allocated to the current year (normal cost) by the actuarial cost methods described in Section C; and
- (2) finance over a period of future years the actuarial costs not covered by present assets and anticipated future normal costs (unfunded actuarial accrued liability).

*Contribution requirements* for the plan year beginning October 1, 2015 are shown on page A-2. It is anticipated that the contribution will be paid to the Fund during the Plan and Fiscal year beginning October 1, 2015.

# Contributions Needed to Finance Defined Benefits of the Pension Fund

Defined Benefit Contributions for	as	utions Expressed Percents of OPed Payroll(1)	Contributions Expressed as Percents of Payroll Including DROP			
For Fiscal Year Beginning	October 1, 2	015	_	October 1	, 2015	
	After Changes	Before Changes	October 1, 2014	After Changes	Before Changes	October 1, 2014
Normal Cost:						
Service pensions	16.33 %	16.00 %	15.86 %	12.61 %	12.35 %	12.15 %
Disability pensions	1.61	1.59	1.58	1.24	1.22	1.21
Survivor pensions						
Pre-retirement	0.26	0.31	0.31	0.20	0.24	0.24
Post-retirement	0.88	1.00	1.01	0.68	0.77	0.77
Termination benefits:						
Deferred service pensions	1.00	0.98	0.97	0.77	0.76	0.74
Refunds of member contributions	0.78	0.78	0.79	0.60	0.60	0.61
Total Normal Cost	20.86	20.66	20.52	16.10	15.94	15.72
Unfunded Actuarial Accrued Liability (UAAL):						
Retired members and beneficiaries	0.00	0.00	0.00	0.00	0.00	0.00
Active and vested terminated members	33.91	33.32	35.20	26.18	25.72	26.96
Total UAAL	33.91	33.32	35.20	26.18	25.72	26.96
Administrative Expenses						
(net of charges to Share and DROP accounts)	1.29	1.29	1.16	1.00	1.00	0.89
Total Calculated Contribution Requirement	56.06 %	55.27 %	56.88 %	43.28 %	42.66 %	43.57 %
Adjustments to Calculated Contribution Requirement:						
Temporary full funding credit	0.00	0.00	0.00	0.00	0.00	0.00
FS112.64(5) compliance	9.13	8.75	10.25	7.06	6.77	7.86
Total adjustments	9.13	8.75	10.25	7.06	6.77	7.86
Total Adjusted Contribution Requirement:	65.19 %	64.02 %	67.13 %	50.34 %	49.43 %	51.43 %
Member portion	11.00 %	11.00 %	11.00 %	8.49 %	8.49 %	8.42 %
Chapter 185 portion	0.00 %	0.00 %	5.94 %	0.00 %	0.00 %	4.55 %
City portion	54.19 %(2)	53.02 %	50.19 %	41.85 %	40.94 %	38.46 %
Expected Covered Payroll for Contribution Year	18,652,936	18,652,936	17,967,196	24,162,214	24,162,214	23,461,041
City Contribution Requirement Paid Quarterly	10,108,028	9,889,789	9,017,738	10,108,028	9,889,789	9,017,738
City Contribution Requirement Paid at	- /					
Beginning of Fiscal Year	9,726,454	9,516,454	8,677,322	9,726,454	9,516,454	8,677,322

Unfunded actuarial accrued liability is financed as a level percent of member payroll. If negative, this is shown as a temporary full funding credit. Please refer to page A-9 for a schedule of financing periods.

FS 112.64 requires City contributions to be deposited not less frequently than quarterly. Member contributions, which are in addition to City contributions, must be deposited immediately after each pay period. Chapter 185 monies must be deposited within 5 days of receipt from the State.

Procedures for determining dollar contribution amounts are shown on page A-3.

Comparative contribution amounts for prior fiscal years are shown on page A-11.

(1) Please refer to page A-3 for an explanation.

(2) This amount is reduced to 52.14% of covered UnDROPed payroll if the contribution is made on October 1, 2015.

For any period of time, the percent-of-payroll contribution rate needs to be converted to dollar amounts. We recommend the following procedure.

Contribute \$10,108,028. This amount is derived from the City portion of the contribution rate on page A-2. The unDROPed payroll was increased by a factor of 1.068254 ( $1.045^{1.5}$ ) to reflect projected payroll growth to the beginning of the fiscal year during which the contribution will be made.

The above contribution amount was calculated on the basis of contributions being made in a manner which is financially equivalent to making one-quarter of the contribution at the mid-point of each calendar quarter. If contributions are made on a later schedule, interest should be added at the rate of 0.64% (.0064) for each month of delay. If 100% of the City's contribution is made on an earlier schedule, the City's contribution requirement may be reduced. For an October 1, 2015 contribution date, the City's contribution requirement is \$9,726,454.

There is no single all-encompassing measure of a pension fund's funding progress and current funded status.

A traditional measure has been the relationship of the funding value of assets to unfunded actuarial accrued liability -- a measure that is influenced by the choice of actuarial cost method. This relationship is shown on page A-10.

*We believe a better understanding* of funding progress and status can be achieved using the following measures which are less dependent on the actuarial cost method.

*Indicator (1) Gains or losses realized in the operation of the pension fund*. Gains and losses are expected to cancel each other over a period of years but sizable year to year fluctuations are common. Further details on the derivation of the gain (loss) are shown on page A-8.

*Indicator (2)* The ratio of valuation assets to the accrued liability. The ratio is expected to increase but the trend may be interrupted by actuarial losses and benefit improvements.

*Indicator (3)* The ratio of the unfunded accrued liability to member payroll. The ratio is expected to decrease but the trend may be interrupted by actuarial losses and benefit improvements.

# FUNDING PROGRESS INDICATORS - HISTORICAL SCHEDULE (\$ AMOUNTS IN THOUSANDS)

	Indicator 1	Indicator 2				Indicator 3	
Valuation Date	Gain	Funding Value of		Funded	Unfunded	Member	Ratio to
September 30	(Loss)	Assets	AAL	Ratio	AAL	Payroll#	Payroll
1995 (a)	7,969	65,446	68,466	95.6 %	3,020	8,942	33.8
1996	3,801	75,829	75,233	100.8	(596)	8,813	(6.8)
1997	11,915	97,029	84,212	115.2	(12,817)	9,255	(138.5)
1998 (a)	(2,055)	106,055	95,292	111.3	(10,763)	10,974	(98.1)
1999	1,317	117,800	106,614	110.5	(11,186)	11,753	(95.2)
2000	1,307	127,732	116,825	109.3	(10,907)	12,645	(86.3)
2001	(1,194)	130,913	121,161	108.0	(9,752)	14,174	(68.8)
2002	(20,340)	121,789	132,426	92.0	10,637	15,589	68.2
2003 (a)	(6,970)	126,420	145,824	86.7	19,403	17,355	111.8
2004 (a)	(8,290)	128,623	153,354	83.9	24,731	17,834	138.7
2005	(1,394)	139,646	165,387	84.4	25,740	17,853	144.2
2006	(1,345)	154,408	182,231	84.7	27,823	18,391	151.3
2007	18,832	187,332	200,536	93.4	13,204	19,543	67.6
2008	(8,914)	191,001	209,842	91.0	18,841	21,394	88.1
2009	(11,643)	193,614	224,471	86.3	30,858	21,264	145.1
2010	(6,545)	197,179	235,148	83.9	37,969	19,830	191.5
2011 (a)	(14,464)	193,879	254,617	76.1	60,737	19,142	317.3
2012 (a)	(3,649)	206,006	272,724	75.5	66,718	16,575	402.5
2013 (a)	3,186	225,469	289,949	77.8	64,479	16,819	383.4
2014 (b)	3,621	245,070	303,354	80.8	58,283	17,461	333.8
<b>2014</b> (a)	3,621	245,070	305,376	80.3	60,306	17,461	345.4

(a) After changes in benefit provisions and/or actuarial assumptions and/or actuarial cost methods.

(b) Before changes in benefit provisions and/or actuarial assumptions and/or actuarial cost methods.

# Excludes DROP participants.

AAL represents actuarial accrued liability

### **COMMENT A**

This valuation reflects the following change in actuarial assumptions since the last valuation:

 Starting with the September 30, 2011 Actuarial Valuation Report, the mortality table was updated from the 1983 Group Annuity Mortality Table to the RP-2000 Combined Healthy Participant Mortality Table using Scale AA after 2000 to reflect future mortality improvements. The change in the mortality rates is being phased-in over five years, this being the fourth year.

### COMMENT B

The full amount of the Pension Fund's allocation of 2013 monies (received in August of 2014) under Chapter 185, Florida Statutes will be used to offset the required contribution for the fiscal year beginning October 1, 2014. Future Chapter 185 monies will be allocated to the Share Plan accounts.

The full amount of the Pension Fund's allocation of future monies under Chapter 185, Florida Statutes, will be directed to member Share Plan Accounts.

### COMMENT C

The activities of the Pension Fund and its members generated an experience gain of \$3,620,537 during the plan year ended September 30, 2014. The principal source of the gain was recognized investment return of 10.9% vs. 8.0% expected. The net investment return on market value was 9.4% for the total fund and 10.0% for the defined benefit program. Please refer to pages B-5, B-11, B-12, B-17, C-4, C-5, and C-6 for additional experience information.

Currently the actuarial value of assets, which is used to determine the contribution requirements and funded ratios for the Fund, is less than the market value by 5%, or \$13.0 million (see page B-5). This means that there are gains from prior periods as well as the current fiscal year that will be recognized in the 2015-2017 reports. These gains will put downward pressure on the contribution requirements and upward pressure on the funded ratios in those reports. If these gains were immediately recognized, the City contribution would decrease to 47.97% of covered payroll (\$8,947,813 if made quarterly or \$8,610,037 if made on October 1, 2015) and the funded ratio would increase from 80.3% to 84.5%.

### COMMENT D

Another potential area of variability has to do with the annual payment on the unfunded accrued liability (UAL). This payment is computed as a level percent of covered payroll under the assumption that covered payroll will rise by 4.5% per year. According to the Florida Statutes, this payroll growth assumption may not exceed the average growth over the last ten years which is below 0%. Therefore, the UAL is being amortized as a level dollar amount this year. Amortizing the UAL as a level dollar amount instead of as a level percent of payroll using a 4.5% payroll growth assumption caused the required contribution to increase by \$1.6 million. If the ten-year average increases above 0% next year, the amortization payments in the following year will decrease.

The final phase-in of the new mortality rates over the next year will raise the annual required contribution by about 1.2% of payroll, assuming the payroll growth assumption remains at 0%.

### COMMENT E

The Board should consider further reduction in the assumed investment rate of return. Please note that if the investment return assumption is lowered, the benefit multiplier would also be lowered such that there is no change in the cost to the City. The benefit multiplier for future service may not be reduced below 2.5%. We also recommend that the salary increase assumption be reviewed based on the most recent Collective Bargaining Agreement.

### CONCLUSION

It is the actuary's opinion that the required contribution rate determined by the most recent actuarial valuation is sufficient to meet the Fund's funding objective, presuming continued timely receipt of required contributions.

## Experience Gain (Loss) for Year Ended September 30, 2014 (Defined Benefit)

(1) UAAL at start of year	\$ 64,479,144
(2) Normal cost for year (ER normal cost	
and expenses x unDROPed pay)	1,849,432
(3) Actual City and State Contribution	8,941,538
(4) Interest accrual	
[(1) + 1/2 x (2) - (3)] x .08	4,516,986
(5) Expected UAAL before changes	
(1) + (2) - (3) + (4)	61,904,024
(6) Effect of assumption/method changes	2,022,515
(7) Effect of benefit changes	0
(8) Addition to supplemental pension distribution reserve	0
(9) Expected UAAL after changes	
(5) + (6) + (7) + (8)	63,926,539
(10) Actual UAAL at end of year	60,306,002
(11) Gain/(Loss) (9) - (10)	\$ 3,620,537

UAAL represents unfunded actuarial accrued liability.

# Sources and Financing of Unfunded Actuarial Accrued Liability

			Remaining		
Source of Unfunded	Initial	Current	Financing	Amortization	% of Payroll
Act. Accrued Liab.	Amount	Amount	Period	Payment	Contribution
Combined unfunded actuar	ial accrued liability a	at October 1, 2011			
9/30/2011	60,737,449	57,926,282	11.7062 yrs.	7,507,631	42.06%
Changes from experience d	eviations (20 year ir	nitial financing period)			
9/30/2012	3,649,317	3,499,045	18	359,173	2.01%
9/30/2013	(3,185,651)	(3,115,885)	19	(312,125)	(1.75)%
9/30/2014	(3,620,537)	(3,620,537)	20	(354,752)	(1.99)%
Changes from actuarial assu	umption revisions (3	0 year initial financing	period)		
9/30/2012	1,753,834	1,730,396	28	150,634	0.84%
9/30/2013	1,880,736	1,864,186	29	160,719	0.90%
9/30/2014	2,022,515	2,022,515	30	172,830	0.97%
		<u>\$ 60,306,002</u>		<u>\$                                    </u>	<u>43.04%</u>

	9/30	)/2014	9/30/2013
	After Changes	<b>Before Changes</b>	
<ul> <li>A. Actuarial present value of future benefits including Share Account balances of \$42,828,154 and \$41,518,746 and DROP Account balances of \$43,289,658 and \$39,060,060</li> </ul>	\$ 336,609,267	\$ 334,262,206	\$ 320,048,458
B. Actuarial present value of future normal costs	<u>31,232,796</u>	<u>30,908,250</u>	<u>30,099,859</u>
C. Actuarial accrued liability	305,376,471	303,353,956	289,948,599
D. Funding value of assets	<u>245,070,469</u>	<u>245,070,469</u>	<u>225,469,455</u>
E. Unfunded actuarial accrued liability	<u>\$ 60,306,002</u>	<u>\$ 58,283,487</u>	<u>\$ 64,479,144</u>

## **Recommended and Actual Contributions for Defined Benefits** Historical Schedule

		City Dollar Co	ontributions	Recommended City
Fiscal Year	Valuation Date 9/30	Recommended	Actual *	Percent of Payroll Contribution Rates
82/83	1981	\$ 777,053	\$ 818,769	23.93 %
83/84 (a)	1982	865,930	944,636	22.86
84/85	1983	913,867	990,862	21.50
85/86 (a)	1984	961,431	1,113,735	21.52
86/87	1985	986,683	1,190,205	20.53
87/88 (a)	1986	1,210,379	1,585,161 (1)	20.74 #
88/89 (a)	1987	1,423,887	1,627,024	22.01 #
89/90	1988	1,723,519	1,937,986	23.28
90/91	1989	1,929,004	2,264,201	24.01
91/92	1990	2,127,589	1,658,885 @	24.80
92/93	1991	2,219,809	2,117,441 @	24.11
93/94	1992	2,257,412	2,235,881 @	23.42
94/95 (a)	1993	2,238,679	2,213,297 @	23.81
95/96 (a)	1994	2,446,700	2,446,256 @	25.91
96/97 (a)	1995	2,332,069	2,332,069	24.24
97/98	1996	2,230,247	1,747,540 @	23.52
98/99	1997	1,764,510	1,764,510	17.72
99/00 (a)	1998	1,462,965	1,483,807	12.39
00/01	1999	1,474,445	1,487,320	11.66
01/02	2000	1,699,292	1,699,815	12.49
02/03	2001	1,974,891	1,975,410	12.95
03/04	2002	3,498,786	3,498,068	20.86
04/05 (a)	2003	4,197,731	4,197,731	22.48
05/06 (a)	2004	3,799,257	3,799,257	19.80
06/07	2005	3,812,530	3,812,530	20.65
07/08	2006	4,056,590	4,056,590	21.49
08/09	2007	3,433,646	3,433,646	16.99
09/10	2008	4,057,571	4,057,571	17.63
10/11	2009	5,028,968	5,028,968	21.98
11/12 (a)	2010	4,796,575	4,796,576	22.30
12/13 (a)	2011	6,506,923	6,506,923	31.82
13/14 (a)	2012	8,941,538	8,941,538	50.50
14/15 (a)	2013	8,677,322		48.30
15/16 (b)	2014	9,516,605		51.02
15/16 (a)	2014	9,726,454		52.14

(b) Before changes in benefit provisions and/or actuarial assumptions and/or actuarial cost methods.

(a) After changes described in (b).

# Recomputed to reflect 1988 Amendments to the Special Act.

(1) Including compliance issue City contribution receivable of \$267,441 from 87/88 fiscal year.

<sup>(a)</sup> *Excluding the difference between recommended and actual which was transferred from the reserve for prepaid contributions.* 

\* The actual contributions were made throughout the fiscal year prior to October 1, 2006. Since then, the actual contributions are made at the beginning of the fiscal year, resulting in the adjustment from the corresponding recommended contributions.

<u>9/30/1998 Valuation</u>: Effective October 1, 1999, increase from 2.5% to 3.0% multiplier for service after March 31, 1987, increase from 6.45% to 7.0% member contributions, and increase the minimum from 7.0% to 8.25% investment return for the  $13^{th}$  check threshold.

<u>9/30/2001 Valuation</u>: First report to use a 4 year smoothed market value asset valuation method.

<u>9/30/2002 Valuation</u>: Removed Share Accounts from smoothed market value.

<u>9/30/2003 Valuation</u>: First report to include minimum 66 2/3% of pay for Duty Death in service. Investment expenses removed from Contribution requirement. Removed DROP Accounts from smoothed market value.

<u>9/30/2004 Valuation</u>: The member contribution rate for pensions will increase to 9% of salary effective January 1, 2005, to 10.0% of salary effective January 1, 2006, and to 11.0% of salary effective January 1, 2007. Overtime includable in Final Average Salary was prospectively limited to 400 hours per year.

<u>9/30/2010 Valuation</u>: The Chapter 185 revenue of \$996,459 received during calendar year 2011 will be used to offset the required contribution for the fiscal year beginning October 1, 2011.

<u>9/30/2011 Valuation</u>: The Chapter 185 revenue received during calendar year 2012 will be used to offset the required contribution for the fiscal year beginning October 1, 2012. The benefit multiplier for service accrued after September 30, 2011 was lowered from 3.00% to 2.68%. Effective January 1, 2013, the limit on the amount of overtime that is included in pensionable compensation is lowered from 400 hours to 300 hours. The investment return assumption was lowered from 8.25% to 8.00%, along with additional changes in actuarial assumptions as a result of the Ten Year Experience Study Report covering the period October 1, 2000 through September 30, 2010.

<u>9/30/2012 Valuation</u>: This valuation reflects the second year of phasing in the recognition of the mortality table change from the 1983 Group Annuity Mortality Table to the RP-2000 Combined Healthy Participant Mortality Table using Scale AA after 2000 to reflect future mortality improvements.

<u>9/30/2013 Valuation</u>: This valuation reflects the third year of phasing in the recognition of the mortality table change detailed above.

<u>9/30/2014 Valuation</u>: This valuation reflects the fourth year of phasing in the recognition of the mortality table change detailed above.

	After Changes	Before Changes
A. Funding Value of Plan Assets		
Funding Value of Assets	\$ 158,952,657	\$ 158,952,657
Share Accounts	42,828,154	42,828,154
DROP Accounts	43,289,658	43,289,658
Total Assets	245,070,469	245,070,469
B. Actuarial Present Value of Expected		
Future Employer Contributions:		
1. For Normal Costs	14,656,875	14,344,618
2. For UAAL	60,306,002	58,283,487
3. Total	74,962,877	72,628,105
C. Actuarial Present Value of Expected		
Future Member Contributions	16,575,920	16,563,632
D. Total Present and Expected Future Resources	\$ 336,609,267	\$ 334,262,206

### **Present Resources And Expected Future Resources**

### Actuarial Present Value of Expected Future Benefit Payments and Reserves

	After Changes	<b>Before Changes</b>
A. To retirees and beneficiaries	\$ 149,797,631	\$ 148,329,549
B. To vested terminated members	3,254,231	3,232,390
<ul><li>C. To present active members:</li><li>1. Allocated to service rendered</li></ul>		
prior to valuation date 2. Allocated to service likely to be	66,206,797	65,674,205
rendered after valuation date	31,232,796	30,908,250
3. Total	97,439,593	96,582,455
D. Total actuarial present value of expected future benefit payments	250,491,455	248,144,394
E. Reserve for Chapter 185 Share Accounts	42,828,154	42,828,154
F. Reserve for Supplemental Pension Distribution	0	0
G. Reserve for DROP balances	43,289,658	43,289,658
H. Reserve for Fixed Interest	0	0
I. Total actuarial present value of expected		
future payments and reserves	\$ 336,609,267	\$ 334,262,206

# **SECTION B**

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA SUBMITTED BY THE PENSION FUND

#### Normal Retirement:

*Eligibility* - 25 or more years of continuous service; or, 55 years of age with 10 or more years of service; or, 50 years of age with 20 or more years of service.

*Amount of Pension* - 2.5% of final average salary times credited service earned through March 31, 1987; plus 3.0% of final average salary times credited service earned after March 31, 1987 through September 30, 2011; plus 2.68% of final average salary times credited service earned after September 30, 2011 for service up to 26 years; plus 1% of final average salary times credited service in excess of 26 years.

*Type of Final Average Salary* - Average of salary for 3 best years. Salary excludes lump sum payments for accumulated leave and contractual overtime. Other overtime is limited to 400 hours per year effective January 1, 2005. This limit is reduced to 300 hours starting January 1, 2013.

**Post-Retirement Cost-of-Living Adjustments** - Each January I following attainment of age 65, benefits will be adjusted by 3% of the base amount providing the cost of living, as measured by the Consumer Price Index, has increased at least 3%.

#### Early Retirement:

Eligibility - 50 years of age with 10 or more years of service.

Amount of Pension - Computed as normal retirement reduced 3% for each year retirement precedes normal retirement age.

#### Deferred Retirement:

*Eligibility* - 10 or more years of credited service.

*Amount of Pension* - Computed as normal or early retirement, based upon FAS and service credit at date of termination. Payment begins upon application on or after age 50.

#### Duty Disability Retirement:

*Eligibility* - Permanent disability preventing useful and efficient service as a police officer, which was acquired as a consequence of performing the duties of a police officer.

*Amount of Pension* - The amount of accrued normal retirement pension subject to the applicable following provisions. To the later of age 55 or 5 years after disability, minimum benefit is 2/3 of FAS. After expiration of the minimum benefit, computed as regular retirement but with additional service credit granted to the later of age 55 or 5 years after disability.

#### Non-Duty Disability:

*Eligibility* - Requires total and permanent disability and 5 or more years of service.

*Amount of Pension* - If disability retirement occurs after normal retirement eligibility, the amount of pension is the accrued normal retirement pension. Otherwise, the amount of pension is computed as for normal retirement with a minimum benefit of 25% of FAS if credited service is 10 or more years; otherwise, the minimum is 20% of FAS.

#### Duty Death:

*Eligibility* - Death which is the result of performance of duty.

Amount of Pension -2/3 of the member's highest 12 consecutive months salary or the current top step police officer pay, whichever is greater.

#### Non-Duty Death:

Eligibility - Death after 5 or more years of credited service.

*Amount of Pension* - 2/3 of pension member would have received had he retired the day before death, to the widow for life. Minimum benefit is 1/7 of FAS. If no widow, unmarried children under 18 receive equal shares of above amount.

#### Death After Retirement:

*Amount of Pension* - 2/3 of deceased retired member's annual pension to widow for life. If no widow, unmarried children under 18 receive equal shares of above amount.

If retired member is unmarried, there is no eligible child (or parent), and death occurs within 10 years of retirement, the pension is continued to the designated beneficiary for the balance of the 10 year period following retirement.

Optional forms of payment are available on an "equivalent actuarial value" basis to the 10 year certain and life form of payment.

*Member Contributions*: 7% of salary. Member contributions will increase to 9% of salary effective January 1, 2005, to 10% of salary effective January 1, 2006 and to 11% of salary effective January 1, 2007. Effective October 1, 2011, the member contribution rate is increased to 18%, and Chapter 185 revenue received in calendar years 2011 and 2012 is used to reduce member contributions to 11%. If the Chapter 185 revenue is not sufficient to reduce the member contributions to 11%, then the City makes up the difference. Effective October 1, 2013, the member contributions to 11%. If the Chapter 185 revenue is not sufficient to reduce the member contributions to 11%. If the Chapter 185 revenue is not sufficient to reduce the member contributions to 11%. If the Chapter 185 revenue is not sufficient to reduce the member contributions to 11%. If the Chapter 185 revenue is not sufficient to reduce the member contributions to 11%. If the Chapter 185 revenue is not sufficient to reduce the member contributions to 11%. If the Chapter 185 revenue is not sufficient to reduce the member contributions to 11%. If the Chapter 185 revenue is not sufficient to reduce the member contributions to 11%. If the Chapter 185 revenue is not sufficient to reduce the member contributions to 11%. If the Chapter 185 revenue is not sufficient to reduce the member contributions to 11%. If the Chapter 185 revenue is not sufficient to reduce the member contributions to 11%. Interest is not credited to member contributions.

*Premium Tax Monies*: Casualty insurance premium tax monies collected by the State and distributed pursuant to Chapter 185, Florida Statutes.

*Chapter 185 Share Accounts*: Effective October 1, 1988, separate accounts were established for each member of the Pension Fund. The accounts are funded by premium tax monies and are credited with net investment earnings after deduction of expenses. The accounts may also be funded by accumulated leave paid out at termination up to the amount permitted by law.

Share accounts will not receive any allocation of Chapter 185 revenue during fiscal years ending September 30, 2011 and September 30, 2012. For the fiscal year ending September 30, 2013, Chapter 185 revenue will again be allocated to the Share Plan accounts. Share accounts will not receive any allocation of Chapter 185 revenue during fiscal year ending September 30, 2014. Effective with the fiscal year ending September 30, 2015, Chapter 185 revenue will again be allocated to the Share Plan accounts.

*City Contributions*: Actuarially determined amounts which together with member contributions are sufficient to cover the requirements of the funding objective stated on page A-1.

#### Deferred Retirement Option Plan (DROP):

*Eligibility* - Any member who is eligible to receive a normal retirement pension may participate in the DROP. Participation shall cease after the earlier of 5 years in the DROP or 30 years of service.

**Amount of Pension** - Calculated as if the member had elected to retire on the date of election to participate in the DROP, using credited service and final average salary at the date of election. The payments will be accumulated in an account and be credited with investment earnings. Disbursements from the account are deferred until termination of employment.

*Member Contributions* - Cease following election to participate in the DROP. Accumulated leave paid out at termination may be contributed up to the amount permitted by law.

**Post-Retirement Supplemental Pension Distribution:** The Board of Trustees may make a supplemental distribution each April 1 from net accumulated experience from all sources, if any, to the extent of investment earnings in excess of 7% (to a 2% excess) for hires before April 1, 1987 and in excess of 8% (to a 1% excess) for hires after March 31, 1987 plus one-half of investment earnings in excess of 9%, if any, for all hires, applied to the actuarial present value of pensions being paid to retired members and beneficiaries.

	Year Ended	Year Ended
	9/30/14	9/30/13
REVENUES:		
a. Member contributions	\$ 1,919,146	\$ 1,872,315
b. Buyback contributions	8,472	113,516
c. City contributions	8,941,538	6,506,923
d. Chapter 185 revenue	1,100,113	2,060,309
e. Prepaid contribution	(1,100,113)	0
f. Transfers to Share and DROP accounts	370,252	224,777
g. Investment income		
1. Interest, dividends and other income	6,654,023	6,988,002
2. Net appreciation	16,898,121	22,671,528
3. Investment expenses	(1,162,955)	(1,133,419)
4. Net investment income	22,389,189	28,526,111
h. Total revenues	\$ 33,628,597	\$ 39,303,951
EXPENDITURES:		
a. Refunds of member contributions	168,503	43,887
b. Benefits paid	8,673,118	7,963,538
c. Lump-Sum share account distributions	1,512,091	1,157,182
d. DROP account distributions	3,372,787	2,220,758
e. Supplemental pension distribution	0	0
f. Administrative expenses	337,907	292,681
g. Total expenditures	14,064,406	11,678,046
RESERVE INCREASE:		
Total revenues minus total expenditures	\$ 19,564,191	\$ 27,625,905

### **R**EVENUES AND **E**XPENDITURES

### **SUMMARY OF ASSETS**

		Market	Market Value	
		9/30/14	9/30/13	
Cash & ca	sh equivalents	\$ 6,575,807	\$ 9,160,604	
Prepaid co	ntribution	(1,100,113)	0	
Payables		(1,284,003)	(527,930)	
Receivable	S	4,181,141	65,368	
Prepaid ex	penses	906,857	12,567	
Bonds	- government	47,052,980	28,598,126	
	- corporate	5,039,115	22,695,063	
Stocks	- domestic	140,307,134	135,835,005	
	- international	10,568,433	9,935,319	
Mutual Fu	nds - domestic	0	0	
	- international	20,297,883	19,100,802	
Real Estate		24,168,838	12,422,599	
Mortgage b	backed securities	0	0	
Participant	Loans	929,032	640,194	
Accrued in	vestment income	423,777	564,973	
Total Asse	ts	\$ 258,066,881	\$ 238,502,690	

### DERIVATION OF FUNDING VALUE OF ASSETS MARKET VALUE WITH 25% RECOGNITION OF EXCESS INVESTMENT INCOME

	2011	2012	2013	2014
Beginning of Year Values				
(1) Market Value	\$183,197,006	\$180,659,259	\$210,876,785	\$238,502,690
Market Value net of Share/DROP Accounts	118,744,803	113,135,328	138,375,027	157,923,884
(2) Funding Value	197,178,523	193,879,157	206,005,598	225,469,455
Funding Value net of Share/DROP Accounts	132,726,320	126,355,226	133,503,840	144,890,649
End of Year				
(3) Market Value net of Share/DROP Accounts	113,135,328	138,375,027	157,923,884	171,949,069
(4) Net Addition to Assets				
Excluding Investment Income,	(1,511,820)	(657,066)	(2,847,194)	(1,669,858)
Chapter 185 and DROP Cash Flows				
(5) Total Net Investment Income = $(3)$ - $(1)$ - $(4)$	(4,097,655)	25,896,765	22,396,051	15,695,043
(6) Projected Net Rate of Return	8.25%	8.00%	8.00%	8.00%
(7) Projected Investment Income=(6) x [ (2)+0.5 x (4) ]	10,887,559	10,082,135	10,566,419	11,524,458
(8) Investment Income in Excess of Projected	(14,985,214)	15,814,630	11,829,632	4,170,585
Excess Investment Income Recognized				
(9a) From Current Year = $.25 \times (8)$	(3,746,304)	3,953,658	2,957,408	1,042,646
(9b) From One Year Prior	502,822	(3,746,304)	3,953,658	2,957,408
(9c) From Two Years Prior	(2,986,631)	502,822	(3,746,304)	3,953,658
(9d) From Three Years Prior	(9,516,720)	(2,986,631)	502,822	(3,746,304)
(9e) Total Cap. Val. Change Recogn.	(15,746,833)	(2,276,455)	3,667,584	4,207,408
= (9a)+(9b)+(9c)+(9d)				
(10) Increase(Decr.) in Funding Value = $(4) + (7) + (9e)$	(6,371,094)	7,148,614	11,386,809	14,062,008
End of Year				
(11) Market Value	\$180,659,259	\$210,876,785	\$238,502,690	\$258,066,881
Market Value net of Share/DROP Accounts	113,135,328	138,375,027	157,923,884	171,949,069
(12) Funding Value	193,879,157	206,005,598	225,469,455	245,070,469
Funding Value net of Share/DROP Accounts	126,355,226	133,503,840	144,890,649	158,952,657
(13) Rate of Return on Funding Value	(3.7)%	6.2%	10.8%	10.9%
(14) Rate of Return on Market Value	(3.5)%	23.0%	16.4%	10.0%
(15) Ratio of Funding Value to Market Value	107%	98%	95%	95%

	Share	DROP	Total
A. Beginning of Year Reserve	\$ 41,518,746	\$39,060,060	\$80,578,806
B. Disbursements	(2,322,952)	(3,647,718)	(5,970,670)
C. Net Additions	223,972	4,591,558	4,815,530
D. Investment Earnings/Adjustments	3,408,388	3,285,758	6,694,146
E. End of Year Reserve $(A + B + C + D)$	\$42,828,154	\$43,289,658	\$86,117,812

### **RECONCILIATION OF THE RESERVE ACCOUNT BALANCES**

(a)	Gross rate of market investment return for fiscal year ending 9/30/12 9/30/13 9/30/14	18.2% 14.1% 10.0%	*
(b)	Cumulative return from fiscal year ending 9/30/12 through 9/30/14	48.4%	
(c)	Return needed from fiscal year ending 9/30/12 to maintain 8% fixed interest crediting rate	26.0%	
(d)	Shortfall of actual return since fiscal year ending 9/30/12 to return based on 8% per year: (c) - (b), not less than 0%	0.0%	
(e)	Actual fixed interest crediting rate for DROP/Share Plan accounts for 10/1/14 through 9/30/15	8.0%	**
(f)	Minimum gross rate of market investment return 10/1/14 through 9/30/15 to provide 8.00% fixed interest crediting rate for 10/1/15 through 9/30/16	(8.3)%	
	ual rate needs to be determined by the Investment Consultant. embers in the DROP as of October 1, 2012 will continue to earn 8.25% per year.		

### CALCULATION OF SUPPLEMENTAL PENSION DISTRIBUTION AMOUNT - SEC. 17(12) AS OF SEPTEMBER 30, 2014

Factor (i):	Actu	arial present value of future payments to		
	pens	ion recipients on 9/30/14		
	using	g 8.00% interest set by Special Act	\$101,208,097	##
Factor (ii):	(a)	Rate of market investment return 10/1/13 through		
		9/30/14 calculated by actuary	10.0%	*
	(b)	Lesser of (a) and 8.00%	8.00%	
Preliminary	, Distr	ibution Amount (prior to experience gain limitation):		
	Fact	or (i) x [Factor (ii) - 7.0%)]	1,012,081	
Amount Ava	ailable	e for Distribution:		
	(a)	Unamortized Balances of Accumulated net experience gains (page B-10)	(37,263,884)	)
	(b)	Unamortized Balances of Accumulated distributions @ (page B-10)	5,103,868	
	(c)	Accumulated net gains less accumulated distributions $[(a) - (b)] < 0$	0	
	(d)	Amount available for distribution#	0	

- @ This amount does **not** include the supplemental pension distribution, if any, for the current year.
- *# The lesser of the preliminary distribution amount and accumulated net gains less accumulated distributions, not less than \$0. ## Excludes members hired after March 31, 1987.*
- \* Return of the total pension fund before investment expenses.

### CALCULATION OF SUPPLEMENTAL PENSION DISTRIBUTION AMOUNT - SEC. 17(12) AS OF SEPTEMBER 30, 2014

Factor (i):	pens	arial present value of future payments to ion recipients on 9/30/14 5 7.0% interest set by Special Act	\$165,865,735	##
Factor (ii):	(a)	Rate of market investment return 10/1/13 through 9/30/14 calculated by actuary	10.0%	*
		<i>y</i> /50/14 calculated by actually	10.070	
	(b)	Excess of (a) over 9%, if positive,		
		otherwise zero.	1.0%	
	(c)	1/2 of (b)	0.50%	
Factor (iii):	(a)	Net rate of market investment return 10/1/13 through		
		9/30/14 calculated by actuary	10.0%	
	(b)	Lesser of (a) and 9%	9.0%	
Preliminary	Distr	ibution Amount (prior to experience gain limitation):		
	Facto	or (i) x [Factor (ii) + ((Factor (iii) - 8.00%)]	2,487,986	
Amount Ava	ailable	e for Distribution:		
	(a)	Unamortized Balances of Accumulated net experience gains (page B-10)	(37,263,884)	
	(b)	Unamortized Balances of Accumulated distributions @ (page B-10)	5,103,868	
	(c)	Accumulated net gains less accumulated distributions $[(a) - (b)] < 0$	0	
	(d)	Amount available for distribution#	0	

@ This amount does **not** include the supplemental pension distribution, if any, for the current year.

# The lesser of the preliminary distribution amount and accumulated net gains less accumulated distributions, including any supplemental pension distributions for the current year determined on page B-6 of this report.
 ## Includes members hired after March 31, 1987.

\* Return of the total pension fund before investment expenses.

# SUPPLEMENTAL PENSION DISTRIBUTION ACCUMULATED GAIN (LOSS) LIMITATION

			Addition to Suppl	emental Pension			
	Experience	e Gain/(Loss)*		Distribution Reserve			
Year Ended		Unamort.		Unamort.	Net Unamort.		
September 30	For Year	Balance	For Year	Balance	Balance		
1992	\$ 2,690,102	\$ 2,690,102	\$ 237,777	\$ 237,777	\$ 2,452,325		
1993	2,897,258	5,658,917	374,365	614,282	5,044,635		
1994	(2,192,085)	3,597,634	0	617,542	2,980,092		
1995	7,969,009	11,641,571	508,437	1,127,456	10,514,115		
1996	3,801,172	15,703,104	625,973	1,756,172	13,946,932		
1997	11,915,022	27,958,649	671,448	2,430,738	25,527,911		
1998	(2,054,604)	26,513,470	795,633	3,227,980	23,285,490		
1999	1,317,262	27,209,332	1,210,681	4,453,115	23,303,374		
2000	1,306,848	28,753,737	1,005,600	5,475,473	23,278,264		
2001	(1,194,305)	27,729,286	0	5,487,451	22,241,835		
2002	(20,340,405)	7,449,284	0	5,478,365	1,970,919		
2003	(6,969,923)	204,562	0	5,445,433	(5,240,871)		
2004	(8,289,567)	(8,507,096)	0	5,385,592	(13,892,688)		
2005	(1,393,874)	(10,472,274)	0	5,295,375	(15,767,649)		
2006	(1,344,886)	(12,442,674)	0	5,171,008	(17,613,682)		
2007	18,831,566	6,588,529	1,580,142	6,588,529	0		
2008	(8,914,445)	(2,080,609)	0	6,400,898	(8,481,507)		
2009	(11,642,886)	(15,238,314)	0	6,161,238	(21,399,552)		
2010	(6,544,967)	(22,737,844)	0	5,863,350	(28,601,194)		
2011	(14,463,674)	(38,291,884)	0	5,500,590	(43,792,474)		
2012	(3,649,317)	(42,618,248)	0	5,394,429	(48,012,677)		
2013	3,185,651	(40,099,567)	0	5,262,805	(45,362,372)		
2014	3,620,537	(37,263,884)	0	5,103,868 @	(42,367,752)		
Projected	. /				(29,371,340)		

\* All sources.

<sup>(a)</sup> This amount is composed of \$5,103,868 for unamortized balances of prior supplemental pension distributions and \$0 for the current year supplemental pension distribution.

Year				Removed	Ne	t Increase	E	nd of Year	_ E	xpected
Ended	No.	Annual	No.	Annual	No.	Annual	No.	Annual		emovals
9/30		Pensions*		Pensions		Pensions		Pensions	No.	Pensions
1984	5	\$ 15,987	6	\$ 12,820	(1)	\$ 3,167	103	\$ 600,555	1.7	\$ 6,213
1985	3	46,203	3	11,350	-	34,853	103	635,408	1.6	6,407
1986	3	57,118			3	57,118	106	692,526	1.8	7,349
1987	3	37,126	3	14,502	0	22,624	106	715,510	1.9	8,424
1988	3	28,178	6	50,224	(3)	(22,046)	103	693,464	2.0	9,426
1989	5	108,163	4	10,332	1	97,831	104	791,295	2.1	10,040
1990	4	49,971	3	8,976	1	40,995	105	832,290	2.2	11,295
1991	5	93,726	6	35,074	(1)	58,652	104	890,942	2.3	12,654
1992	2	39,272	3	6,773	(1)	32,499	103	923,441	2.4	13,907
1993	16	513,043	4	18,717	12	494,326	115	1,417,767	2.6	15,420
1994	11	298,663	4	12,759	7	285,904	122	1,703,671	2.8	18,591
1995	9	264,141	5	55,228	4	208,913	126	1,912,584	2.8	21,260
1996	12	482,529	6	14,747	6	467,782	132	2,380,366	2.9	23,984
1997	8	197,647	3	13,518	5	184,129	137	2,564,495	3.0	27,927
1998	8	263,201	2	9,095	6	254,106	143	2,818,601	3.1	31,663
1999	7	286,450	3	54,175	4	232,275	147	3,050,876	3.3	35,789
2000	6	191,800	2	41,346	4	150,454	151	3,201,330	3.6	39,350
2001	6	243,777	5	51,864	1	191,914	152	3,393,244	4.0	45,310
2002	12	480,665	8	40,751	4	439,914	156	3,833,158	4.0	51,109
2003	6	264,238	2	9,639	4	254,599	160	4,087,757	4.3	56,601
2004	12	659,689	1	33,827	11	625,862	171	4,713,619	4.6	62,612
2005	11	732,835	3	24,905	8	707,930	179	5,421,549	5.1	72,092
2006	18	995,773	14	151,332	4	844,441	183	6,265,990	5.4	81,448
2007	8	305,058	4	53,820	4	251,238	187	6,517,228	4.3	80,933
2008	13	867,583	11	334,928	2	532,655	189	7,049,883	4.7	89,879
2009	9	612,750	1	57,801	8	554,949	197	7,604,832	4.7	96,573
2010	14	1,127,901	5	48,659	9	1,079,242	206	8,684,074	5.0	101,805
2011	8	597,899	1	39,256	7	558,643	213	9,242,717	4.9	113,701
2012	32	2,368,255	4	71,819	28	2,296,436	241	11,539,153	5.0	118,327
2013	б	435,878	3	21,900	3	413,978	244	11,953,131	5.0	125,264
2014 Expected for	6	460,328	2	60,570	4	399,758	248	12,352,889	4.9	127,573
2015									5.0	\$126,769

\* Includes cost-of-living increases.

	A	All Age and So	ervice Retired M	New Age and Service Retired           Year Ended September 30				
			Averages				Averages	
Valuation Year	No.	Attained Age	Retirement Age	Current Annual Pension	No.	Retirement Age	Service	Annual Pension
1994	85	62.5	49.4 yrs.	\$ 17,752	9	49.5 yrs.	23.9 yrs.	\$ 31,584
1995	91	62.0	49.5	19,361	8	48.4	25.2	31,243
1996	102	61.2	49.4	21,952	12	48.1	24.8	37,238
1997	105	61.7	49.6	22,413	4	53.0	18.8	26,221
1998	110	62.2	49.6	23,349	5	50.0	19.0	36,871
1999	111	62.8	49.6	24,889	4	47.9	24.9	38,657
2000	113	63.1	49.5	25,399	4	49.5	21.1	33,995
2001	114	63.2	49.4	26,526	4	50.8	23.8	42,495
2002	121	62.9	49.4	28,086	9	50.3	22.7	43,685
2003	123	63.2	49.5	29,632	4	49.3	24.0	60,932
2004	131	63.2	49.4	31,906	9	48.9	24.9	61,375
2005	141	63.1	49.4	34,722	10	49.1	24.8	69,081
2006	147	61.9	49.4	39,112	13	49.6	24.1	71,199
2007	150	62.7	49.4	39,812	3	48.9	25.0	67,647
2008	151	62.6	49.4	42,312	7	49.4	23.0	72,970
2009	157	62.4	49.3	43,988	8	50.2	23.1	71,539
2010	167	62.2	49.3	47,480	13	49.3	24.7	79,582
2011	171	62.3	49.5	49,271	7	51.0	23.5	75,700
2012	196	60.9	49.6	54,045	30	50.1	24.0	73,908
2013	198	61.4	49.5	55,020	4	48.2	25.0	72,950
2014	199	61.8	49.5	56,096	5	48.2	22.7	72,945

### AGE AND SERVICE RETIRED MEMBERS

**Retired Members and Beneficiaries Historical Comparison** 

Valuation Date September 30	% Incr. in Annual Pensions	No. of Active Per Retired	Annual Pension as % of Active Payroll#	Average Pension
1994	20.2 %	1.7	19.4 %	\$ 13,965
1995	12.3	1.7	21.4	15,179
1996	24.5	1.6	27.0	18,033
1997	7.7	1.5	27.7	18,719
1998	9.9	1.6	25.7	19,710
1999	8.2	1.5	26.0	20,754
2000	4.9	1.6	25.3	21,201
2001	6.0	1.7	23.9	22,324
2002	13.0	1.6	24.6	24,572
2003	6.6	1.6	23.6	25,548
2004	15.3	1.5	26.4	27,565
2005	15.0	1.4	30.4	30,288
2006	15.6	1.4	34.1	34,240
2007	4.0	1.5	33.3	34,851
2008	8.2	1.5	33.0	37,301
2009	7.9	1.3	35.8	37,097
2010	14.2	1.2	43.8	40,391
2011	6.4	1.2	48.3	42,012
2012	24.8	0.9	69.6	47,880
2013	3.6	0.9	71.1	48,988
2014	3.3	0.9	70.7	49,810

# Excluding DROP participants.

# RETIRED MEMBER AND BENEFICIARY DATA AS OF SEPTEMBER 30, 2014 By Type of Pension

		Annual		Actuarial Present Value of
Type of Pension Being Paid	No.	Pensions	Average	Pensions
Age and Service Pensions				
Life only	43	\$ 2,312,969	\$ 53,790	\$ 26,615,991
Automatic survivor pension	101	4,838,158	47,903	59,227,668
100% joint & survivor	9	525,561	58,396	7,022,040
DROP - auto survivor pension	46	3,486,501	75,794	44,136,725
Surviving beneficiaries	25	344,685	13,787	2,986,971
Totals	224	11,507,874	51,374	139,989,395
Disability Pensions				
Automatic survivor pension				
Duty	13	599,015	46,078	6,973,995
Non-Duty	2	65,701	32,851	850,955
Surviving beneficiaries				
Duty	2	33,688	16,844	393,229
Non-Duty	1	29,289	29,289	353,927
Totals				
Duty	15	632,703	42,180	7,367,224
Non-Duty	3	94,990	31,663	1,204,882
Total	18	727,693	40,427	8,572,106
Death-In-Service Pensions				
Surviving beneficiaries	6	117,322	19,554	1,236,130
Total Pension Benefits	248	\$12,352,889	\$ 49,810	\$149,797,631

# **RETIRED MEMBER AND BENEFICIARY DATA AS OF SEPTEMBER 30, 2014 BY ATTAINED AGES**

	Age and Service			ility Retired		Surviving		Totals		
Attained	Reti	red Members	M	embers	Be	neficiaries		1		
Ages		Annual		Annual		Annual		Annual		
	No.	Pensions	No.	Pensions	No.	Pensions	No.	Pensions		
Under 20					1	\$ 13,253	1	\$ 13,253		
35 - 39										
40 - 44			4	\$ 210,660			4	210,660		
45 - 49	13	\$ 1,012,511	2	105,549	1	8,609	16	1,126,669		
50 - 54	44	3,335,538	4	183,713	2	74,507	50	3,593,758		
55 - 59	44	3,057,235	2	72,417	4	85,015	50	3,214,667		
60 - 64	31	1,491,152	1	36,931	2	45,185	34	1,573,268		
65 - 69	30	1,239,301	1	27,123	5	91,370	36	1,357,794		
70	3	105,039					3	105,039		
71	3	99,418			1	11,280	4	110,698		
72	5	143,517					5	143,517		
73	3	116,748			1	23,663	4	140,411		
74	3	126,677					3	126,677		
75	2	69,421	1	28,323	1	9,816	4	107,560		
76	1	35,771					1	35,771		
77					2	20,756	2	20,756		
78	5	99,686					5	99,686		
79					2	20,136	2	20,136		
80	1	37,677			1	10,537	2	48,214		
81	1	15,950					1	15,950		
82	2	35,389					2	35,389		
83										
84	1	23,040			2	37,098	3	60,138		
85	1	13,712					1	13,712		
86	3	70,155					3	70,155		
87	2	21,686			1	3,475	3	25,161		
88					3	35,156	3	35,156		
89					1	8,593	1	8,593		
90					2	7,868	2	7,868		
91					_		_			
92	1	13,566			2	18,667	3	32,233		
Totals	199	\$11,163,189	15	\$ 664,716	34	\$ 524,984	248	\$12,352,889		

Average Age: 62.7

# VESTED TERMINATED MEMBERS AS OF SEPTEMBER 30, 2014 By Attained Ages

Attained Ages	No.	Estimated Annual Benefits
37	1	\$17,513
39	1	14,281
41	3	87,745
44	1	28,590
46	2	83,107
49	1	39,950
50	1	6,375
52	2	57,607
54	1	9,448
Totals	13	\$344,616

Averages

Age: 46.0 years.

ACTIVE AND VESTED TERMINATED MEMBERS INCLUDED IN VALUATION
(EXCLUDES DROP MEMBERS)

Valuation	By D	Active Me ate of Entry			Vested				
Date	Prior to	10/1/1955	After	-	Term.	Valuation		Average	
Sept. 30	10/1/1955	9/30/1961	9/30/1962	Total	Member	Payroll	Age	Service	Pay
1984	1	4	159	164	-	\$ 4,122,845	34.5 yrs.	9.6 yrs. \$	25,139
1985	0	3	166	169	1	4,435,169	34.6	9.6	26,244
1986	0	1	180	181	2	5,385,600	34.6	9.4	29,755
1987	0	1	188	189	2	5,970,944	34.6	9.5	31,592
1988	0	1	207	208	2	6,851,925	34.4	9.1	32,942
1989	0	0	217	217	4	7,414,168	34.4	9.2	34,167
1990	0	0	217	217	4	7,916,940	35.6	10.0	36,484
1991	0	0	220	220	3	8,496,494	36.3	10.6	38,620
1992	0	0	226	226	3	8,894,988	36.7	10.9	39,358
1993	0	0	215	215	3	8,738,735	36.5	10.8	40,645
1994	0	0	207	207	3	8,776,660	36.8	11.2	42,399
1995	0	0	211	211	4	8,941,796	36.5	10.8	42,378
1996	0	0	206	206	3	8,813,161	36.5	10.6	42,782
1997	0	0	212	212	4	9,254,997	36.3	10.5	43,530
1998	0	0	223	223	5	10,974,344	36.3	10.2	49,212
1999	0	0	225	225	7	11,752,926	36.7	10.5	52,235
2000	0	0	247	247	6	12,645,081	36.6	10.2	51,195
2001	0	0	254	254	6	14,173,898	36.8	10.4	55,803
2002	0	0	251	251	5	15,589,028	37.0	10.6	62,108
2003	0	0	255	255	6	17,355,385	37.4	11.0	68,060
2004	0	0	259	259	6	17,834,031	37.9	11.5	68,857
2005	0	0	256	256	5	17,853,487	37.7	11.1	69,740
2006	0	0	252	252	4	18,390,781	37.7	10.8	72,979
2007	0	0	280	280	5	19,543,036	37.2	10.2	69,797
2008	0	0	275	275	5	21,394,235	37.5	10.5	77,797
2009	0	0	263	263	9	21,263,885	38.0	11.0	80,851
2010	0	0	254	254	10	19,829,764	38.0	10.8	78,070
2011	0	0	249	249	11	19,142,183	38.4	11.4	76,876
2012	0	0	214	214	11	16,575,084	38.1	10.9	77,454
2013	0	0	215	215	13	16,819,221	38.5	11.1	78,229
2014	0	0	221	221	13	17,461,147	* 38.3	11.0	79,010

\* In addition, there are 46 members in DROP with a payroll of \$5,157,274.

	Nun Ad					Termin	ations	During	Year				Active
Year		ring	Norma	al/Early	Dis	ability		ed-in		Withdray	vals		Members
Ended	Ye	ear		ement		rement	Se	rvice	Vested			otal	End of
9/30	Α	Ε	Α	Ε	Α	Ε	Α	Ε	Α	A	Α	Ε	Year
1994	3	11	9	1.1	0	0.8	0	0.3	0	2	2	5.9	207
1995	18	14	8	1.2	0	0.7	0	0.2	1	5	6	5.3	211
1996	13	18	11	3.3	0	0.6	0	0.2	0	7	7	6.1	206
1997	22	16	3	1.0	3	0.7	0	0.2	2	8	10	6.1	212
1998	20	9	5	2.5	0	0.6	2	0.2	1	1	2	10.0	223
1999	14	12	4	2.6	0	0.7	0	0.2	2	6	8	10.7	225
2000	28	6	3	1.7	0	0.7	0	0.2	0	3	3	6.9	247
2001	20	13	4	1.3	1	0.7	0	0.2	0	8	8	8.4	254
2002	11	14	8	2.7	2	0.8	0	0.2	0	4	4	8.3	251
2003	12	8	4	1.3	0	0.8	0	0.2	1	3	4	7.6	255
2004	16	12	9	5.6	0	0.8	1	0.3	0	2	2	7.0	259
2005	15	18	10	8.3	0	0.8	0	0.3	0	8	8	6.7	256
2006	24	28	13	6.2	0	0.8	0	0.3	0	15	15	6.5	252
2007	38	10	3	4.3	1	0.9	0	0.3	1	5	6	7.1	280
2008	18	23	7	5.9	2	0.8	0	0.3	0	14	14	9.4	275
2009	11	23	8	6.1	0	0.8	0	0.3	5	10	15	8.4	263
2010	13	22	13	6.0	1	0.8	0	0.3	2	6	8	6.7	254
2011	8	13	7	4.7	1	0.8	0	0.3	1	4	5	6.3	249
2012	2	37	30	12.1	2	0.6	0	0.2	0	5	5	5.5	214
2013	12	11	4	2.4	2	0.6	0	0.2	2	3	5	4.3	215
2014	18	12	4	3.2	1	0.6	0	0.1	1	6	7	4.5	221
5-Year Totals													
2010 - 2014	53	95	58	28.4	7	3.4	0	1.1	6	24	30	27.3	
Expected for													
2015				2.5		0.7		0.1				5.3	

A represents actual number.

*E* represents expected number.

#### ACTIVE MEMBERS NOT PARTICIPATING IN THE DROP AS OF SEPTEMBER 30, 2014 BY NEAR AGE AND YEARS OF SERVICE

		Yea	rs of Se	rvice to `	Valuation	Date		Totals		
Near Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll	
20-24 25-29	5 15	6						5 21	\$ 226,620 1,215,147	
30-34 35-39	17 4	27 15	1 20	6				45 45	2,921,088 3,605,379	
40-44 45-49	1	10 4	21 4	25 20	2 10	1		58 40	5,271,616 3,614,233	
50-54 55-59		1		3	3			7 0	607,064 0	
Totals	42	63	46	54	15	1		221	\$ 17,461,147	

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age:	38.3	years.
Service:	11.0	years.
Annual F	Pay:	\$79,010

# **SECTION C**

ACTUARIAL COST METHOD, ACTUARIAL ASSUMPTIONS AND DEFINITIONS OF TECHNICAL TERMS The actuarial cost method is a procedure for allocating the actuarial present value of benefits and expenses to time periods. The method used for your valuation is known as the individual entry-age actuarial cost method, and has the following characteristics:

- (i) The annual normal costs for each individual active member is sufficient to accumulate the value of the member's pension at time of retirement or DROP.
- (ii) Each annual normal cost is a constant percentage of the member's year by year projected pensionable compensation.

The entry-age actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's pensionable compensation between the entry age of the member and the assumed active status exit ages. This is based on our understanding of the approach preferred by the Florida Division of Retirement. The portion of the actuarial present value allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called the actuarial accrued liability. Deducting accrued assets from the actuarial accrued liability determines the unfunded actuarial accrued liability. The unfunded actuarial accrued liability was financed as a level percent of member payroll. Please refer to page A-9 for a schedule of financing periods.

The characteristics of this method of financing the unfunded actuarial accrued liability are shown on page C-2.

The sum of active & DROP member payroll was assumed to increase 4.50% a year for the purpose of determining the level percent contributions. According to FS 112.64(5) this assumption may not exceed the average payroll growth over the last ten years which was negative. This assumption is consistent with the base rate of increase in salaries used to calculate actuarial present values. Expressing contributions, as on page A-2, as a percent of active member payroll excluding DROP members may cause fluctuations due to the level of participation in the DROP.

#### LEVEL PERCENT OF ACTIVE MEMBER PAYROLL AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES\* (AMORTIZATION SCHEDULE \$ AMOUNTS IN THOUSANDS)

	UnDRC	Ped Pay	U	nfu	nded	Contribu	ıtion
	Inflated	Constant	Inflated		Constant	Inflated	Constant
Year	Dollars	Dollars	Dollars		Dollars	Dollars	Dollars
2014	\$17,461	\$17,461	\$60,306		\$60,306	\$7,684	\$7,684
2015	17,461	17,461	58,100		58,100	7,684	7,684
2016	17,461	17,461	54,760		54,760	7,684	7,684
2017	17,461	17,461	51,153		51,153	7,684	7,684
2018	17,461	17,461	47,258		47,258	7,684	7,684
2023	17,461	17,461	22,578		22,578	7,684	7,684
2028	17,461	17,461	2,548		2,548	176	176
2029	17,461	17,461	2,568		2,568	176	176
	* \$	2,022,515	over 30 years	\$	0	over 15 years	1
		1,864,186	over 29 years		0	over 14 years	
		1,730,396	over 28 years		0	over 13 years	
		0	over 27 years		57,926,282	over 12 years	
		0	over 26 years		0	over 11 years	
		0	over 25 years		0	over 10 years	
		0	over 24 years		0	over 9 years	
		0	over 23 years		0	over 8 years	
		0	over 22 years		0	over 7 years	
		0	over 21 years		0	over 6 years	
		(3,620,537)	over 20 years		0	over 5 years	
		(3,115,885)	over 19 years		0	over 4 years	
		3,499,045	over 18 years		0	over 3 years	
		0	over 17 years		0	over 2 years	
		0	over 16 years	-	0	over 1 years	
					\$ 60,306,002	TOTAL	

Level percent-of-payroll financing of unfunded actuarial accrued liabilities treats each generation of taxpayers equally during the financing period. The alternative, level-dollar financing, produces declining percent-of-payroll contributions and places a greater relative burden on current taxpayers.

The annual rate of increase in member payroll used to compute the level percent-of-payroll contribution is the same rate of payroll growth used to compute actuarial liabilities and costs. It reflects across-the-board salary increases not group size increases.

If future payroll growth is less than the assumed rate due to smaller than projected salary increases, the percent-of-payroll contribution rate for unfunded actuarial accrued liabilities will tend to decline.

If future payroll growth is less than the assumed rate due to decreases in the number of members, the percent-of-payroll contribution rate for unfunded actuarial accrued liabilities will tend to increase but dollar contributions will be less than indicated in the preceding schedule.

Funding objective contribution requirements and actuarial present values are calculated by applying estimates of future Fund activities (actuarial assumptions) to the benefit provisions and people information of the Pension Fund, using the actuarial cost method described on page C-1.

The principal areas of risk which require estimates of future Fund activities are:

- (i) rates of inflation impacting assets of the Pension Fund
- (ii) long-term rates of investment return to be generated by the assets of the Pension Fund
- (iii) rates of salary increases to active members
- (iv) rates of mortality among members, retired members and beneficiaries
- (v) rates of withdrawal of active members
- (vi) rates of disability among active members
- (vii) rates of retirements due to age and service

In making a valuation, the monetary effect of each activity is calculated for as long as a present covered person survives - - - a period of time which can be as long as a century.

Actual activities of the Pension Fund will not coincide exactly with estimated activities due to their nature. Each valuation provides a complete recalculation of estimated future activities and takes into account the effect of differences between estimated and actual activities to date. The result is a continual series of adjustments (usually small) to the computed contribution rate. From time to time one or more of the estimates are modified to reflect experience trends (but not random or temporary year to year fluctuations).

The actuarial assumptions include an INFLATION rate, SALARY INCREASE rates and a REAL INVESTMENT RETURN rate. These assumptions are used, in combination with the other assumptions, to (i) determine the present value of amounts expected to be paid in the future and (ii) establish rates of contribution which are expected to remain relatively level as a percent of total member payroll.

The interest rate used in making this valuation was 8.00% a year, compounded yearly. It is composed of inflation and real investment return.

**RATES OF INFLATION**. 3.00% per annum, compounded annually. This is the rate at which growth in the supply of money and credit is estimated to exceed growth in the supply of goods and services. It may be thought of as the rate of depreciation of the purchasing power of the dollar. There are a number of indices for measuring the inflation rate. The recent inflation rate, as measured by the Consumer Price Index, has been:

		Year Ended September 30									
	2014	2013	2012	2011	2010	Average					
Actual	1.7 %	1.2 %	2.0 %	3.9 %	1.1 %	2.0 %					
Assumed	3.0	3.6									

**RATES OF REAL INVESTMENT RETURN**. 5.00% per annum, compounded annually. This is the rate of return estimated to be produced by investing a pool of assets in an inflation-free environment. Recent real investment return on the funding value of assets (internal rate of return) has been:

		Year En	ded Septem	ber 30		5-Year
	2014	2013	2012	2011	2010	Average
Expected Rate of Return	8.00 %	8.00 %	8.00 %	8.25 %	8.25 %	8.10 %
Rate of Return (Pension Assets)	10.9	10.8	6.2	(3.7)	(0.7)	4.70
less inflation	<u>1.7</u>	<u>1.2</u>	<u>2.0</u>	<u>3.9</u>	<u>1.1</u>	<u>1.98</u>
Real Rate of Return	9.2	9.6	4.2	(7.6)	(1.8)	2.72
Assumed Real Rate of Return	5.00	5.00	5.00	3.75	3.75	4.50

The total investment return rate was computed using the approximate formula i = I divided by 1/2 (A + B - I), where I is actual ordinary investment income plus market value adjustments, A is the beginning of year funding value, and B is the end of year funding value.

The preceding investment return rates reflect the particular characteristics of this pension fund and should not be used to measure an investment advisor's performance or for comparison with other pension funds. Such use will usually mislead. **RATES OF SALARY INCREASES**. Employee salaries are assumed to increase between the date of hire and date of retirement. Salary increases occur in recognition of (i) individual merit and seniority, (ii) inflation related depreciation of the purchasing power of salaries, and (iii) competition from other employers for personnel. A schedule of assumed rates of increases in individual salaries for sample ages follows:

Attributable to:	Annual Rates of Salary Increase for Sample Ages									
	20	30	40	50	60					
Merit & Seniority	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %					
General Increase in										
Wage Level Due to:										
Inflation	3.0	3.0	3.0	3.0	3.0					
Other factors	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>					
Total	5.0	5.0	5.0	5.0	5.0					

The valuation is based on a constant group size and total payroll increasing at the rate of the general increase in wage levels due to inflation and other causes, which in this case is 5.0% a year.

A schedule of recent salary change experience, as measured by average reported pay, follows:

		Year En	ded Septen		Average			
	2014	2013	2012	2011	2010	3-Year	5-Year	10-Year
% Change: Actual (1)	5.0 %	3.3 %	3.4 %	0.2 %	(0.4) %	3.9 %	2.3 %	5.1 %
Assumed (1)	5.0	5.0	5.0	5.8	5.9	5.0	5.3	5.6
% Change in Total Payroll (2)	3.0	0.7	(0.8)	(4.0)	(7.6)	1.0	(1.7)	1.6

(1) Excluding termination and new members.

(2) Including pays of members electing DROP participation but still working.

In order to achieve the financial objective of a contribution rate which remains level as a percent of payroll, the rate of investment return (net of investment expenses) must exceed the rate of average increase in salaries by an amount equal to the estimated real investment return rate. The following schedule illustrates the recent history of the relationship between total investment return and average pay changes.

		Year En	ded Septemb	er 30		Average		
	2014	2013	2012	2011	2010	3-Year	5-Year	
Net Rate of Investment Return (Pension Assets)	10.9 %	10.8 %	6.2 %	(3.7) %	(0.7) %	9.3 %	4.7 %	
Rate of Change in Average Pay	<u>5.0</u>	<u>3.3</u>	<u>3.4</u>	<u>0.2</u>	<u>(0.4)</u>	<u>3.9</u>	<u>2.3</u>	
Difference: Actual Target	5.9 3.0	7.5 3.0	2.8 3.0	(3.9) 2.2	(0.3) 2.4	5.4 3.0	2.4 2.7	

**RATES OF MORTALITY**. The RP-2000 Combined Healthy Participant Mortality Tables for males and females. The provision for future mortality improvements is being made by using Scale AA after 2000. Sample values follow:

Sample	Probabil	ity of	Future Life		
Attained	Dying Nex	xt Year	Expectance	ey (years)	
Ages (in 2014)	Men	Women	Men	Women	
50	0.17 %	0.13 %	34.26	35.63	
55	0.28	0.24	29.14	30.66	
60	0.54	0.47	24.21	25.89	
65	1.05	0.90	19.60	21.40	
70	1.80	1.56	15.41	17.28	
75	3.11	2.51	11.63	13.56	
80	5.59	4.16	8.41	10.25	

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement. 50% of deaths before retirement were assumed to be duty related.

This valuation reflects four-fifths of the effect of changing the mortality assumption from the 1983 Group Annuity Mortality Table for males, set back 0 years for men and 6 years for women. The change in the mortality assumption is being phased-in over five years beginning October 1, 2011.

**RATES OF WITHDRAWAL from active membership**. The rates do not apply to members eligible to retire and do not include separation on account of death or disability. This assumption measures the probabilities of members remaining in employment.

Sample	Years of	% of Active Members
Ages	Service	Separating within Next Year
ALL	0	12.00 %
	1	9.00
	2	7.00
	3	5.00
	4	4.50
	5	3.50
	6	2.50
	7	1.50
	8	1.00
	9	0.50
25	10 & Over	1.00
30		1.00
35		1.00
40		1.00
45		1.00
50		1.00
55		1.00
60		1.00

**VESTED MEMBERS** who terminate with a benefit worth less than 100% of their own accumulated contributions were presumed to elect a refund of accumulated contributions and forfeit the vested benefit.

Sample Ages	Percent Becoming Disabled within Next Year				
Ages	Men	Women			
20	0.15 %	0.06 %			
25	0.18	0.10			
30	0.20	0.15			
35	0.29	0.27			
40	0.42	0.39			
45	0.65	0.57			
50	1.05	0.91			
55	1.84	1.54			
60	3.06	2.21			

RATES OF DISABILITY. These rates represent the probabilities of active members becoming disabled.

The mortality table was set forward five years from the age at disability for projecting disability costs. 50% of disability retirements were projected to receive a pension not less than the minimum duty disability pension.

**RATES OF RETIREMENT**. These rates are used to measure the probabilities of eligible members retiring during the next year.

Number of Years After First Eligibility for Normal Retirement	Probability of Normal Retirement
0	45 %
1	35
2	35
3	35
4	100

The rate of retirement is 5% for each year of eligibility for early retirement.

**ASSET VALUATION.** Assets were included in the valuation using a 4 year smoothed market value effective September 30, 2001.

**ADMINISTRATIVE EXPENSES**. Administrative expenses were included in the calculated contribution requirement.

**INVESTMENT EXPENSES**. Investment expenses are offset against gross investment income.

**ACTIVE MEMBER GROUP SIZE**. The valuation was based on a constant active member group size. This is unchanged from previous valuations.

**MARRIAGE PROPORTION**. 90% of active members were assumed to be married. In each case the male was assumed to be 3 years older than the female.

**COST-OF-LIVING ADJUSTMENTS**. The post-retirement cost-of-living benefit is projected to occur at the maximum rate of 3% a year, following attainment of age 65.

**SALARY**. The actuarial valuation includes all amounts included in final average salary for benefit purposes.

**Pensions in an Inflationary Environment** 

#### Value of \$1,000/month Retirement Benefit to an Individual who Retires at Age 50 in an Environment of 3% Inflation and a 3% simple annual COLA starting at age 65

Age	Value
50	\$1,000
51	971
52	943
53	915
54	888
55	863
60	744
65	661
70	653
75	635
80	610
85	579

The life expectancy of a 50 year old male retiree is age 84. The life expectancy for a 50 year old female retiree is age 85. Half of the people will outlive their life expectancy. The effects of even moderate amounts of inflation can be significant for those who live to an advanced age.

Pay Increase Timing:	Beginning of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
Decrement Timing:	Decrements of all types are assumed to occur mid-year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.
Decrement Relativity:	Decrement rates are used without adjustment for multiple decrement table effects.
Normal Form of Benefit:	The assumed normal form of benefit is the 66 2/3% joint and survivor form for married members and the 10 year certain and life for unmarried members.
Loads:	No loads were used.
Incidence of Contributions:	Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits.

**Accrued Service**. Service credited under the fund which was rendered before the date of the actuarial valuation.

Actuarial Accrued Liability. The difference between the actuarial present value of future benefit payments and the actuarial present value of future normal costs. Also referred to as "accrued liability" or "past service liability."

Actuarial Assumptions. Estimates of expected future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement estimates (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic estimates (salary increases and investment income) consist of the underlying rates in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future benefit payments" between future normal costs and actuarial accrued liabilities. Sometimes referred to as the "actuarial valuation cost method."

Actuarial Equivalent. A single amount or series of amounts of equal actuarial present value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.

Actuarial Present Value. The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment. Also referred to as "present value."

**Amortization**. Paying off an interest-discounted amount with periodic payments of interest and principal -- as opposed to paying off with a lump sum payment.

**Experience Gain (Loss)**. The difference between actual actuarial costs and assumed actuarial costs -- during the period between two valuation dates.

**Funding Value of Assets.** Also referred to as actuarial value of assets, smoothed market value of assets, or valuation assets.

Valuation assets recognize assumed investment return fully each year. Differences between actual and assumed investment return are phased in over a closed 4 year period. During periods when investment performance exceeds the assumed rate, valuation assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, valuation assets will tend to be greater than market value. If assumed rates are exactly realized for 3 consecutive years, valuation assets will become equal to market value.

**Normal Cost**. The actuarial cost allocated to the current year by the actuarial cost method. Sometimes referred to as "current service cost."

**Pension Benefit Obligation.** A standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date. The PBO is independent of the actuarial funding method used to determine contributions.

**Unfunded Actuarial Accrued Liability**. The difference between actuarial accrued liability and the funding value of assets. Sometimes referred to as "unfunded past service liability," "unfunded accrued liability" or "unfunded supplemental present value."

Most pension funds have unfunded actuarial accrued liability. It increases each time new benefits are added and each time an experience loss is realized.

The existence of unfunded actuarial accrued liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liability does not represent a debt that is payable today. What is important is the ability to control the amount of unfunded actuarial accrued liability and the trend in its amount (after due allowance for devaluation of the dollar).

## **SECTION D**

#### DISCLOSURES REQUIRED BY GOVERNMENTAL ACCOUNTING STANDARDS BOARD STATEMENT NO. 67

This information is presented in draft form for review by the System's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the System's financial statements.

#### STATEMENT OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS (GASB STATEMENT NO. 67)

Fiscal year ending September 30,	 2015*	2014
Total pension liability		
Service Cost	\$ 3,720,389	\$ 3,553,404
Interest	23,835,496	22,792,357
Benefit Changes	-	-
Difference between actual & expected experience	439,779	294,048
Assumption Changes	2,184,316	-
Benefit Payments	(13,557,996)	(13,557,996)
Refunds	(168,503)	(168,503)
Other (DROP and Share Plan Adjustments)	 -	84,844
Net Change in Total Pension Liability	16,453,481	12,998,154
Total Pension Liability - Beginning	302,946,753	289,948,599
Total Pension Liability - Ending (a)	\$ 319,400,234	\$ 302,946,753
Plan Fiduciary Net Position		
Contributions - Employer	\$ 8,644,805	\$ 8,941,538
Contributions - Non-Employer Contributing Entity	1,100,113	-
Contributions - Member	1,963,467	1,927,618
Net Investment Income	20,940,906	22,389,189
Benefit Payments	(13,557,996)	(13,557,996)
Refunds	(168,503)	(168,503)
Administrative Expense	(337,907)	(337,907)
Other	 -	370,252
Net Change in Plan Fiduciary Net Position	 18,584,885	19,564,191
Plan Fiduciary Net Position - Beginning	 258,066,881	238,502,690
Plan Fiduciary Net Position - Ending (b)	\$ 276,651,766	\$ 258,066,881
Net Pension Liability - Ending (a) - (b)	 42,748,468	44,879,872
Plan Fiduciary Net Position as a Percentage		
of Total Pension Liability	86.62 %	85.19 %
Covered Employee Payroll	\$ 17,849,700	\$ 17,446,782 *
Net Pension Liability as a Percentage		
of Covered Employee Payroll	239.49 %	257.24 %

\* These figures are estimates only. Actual figures will be provided after the end of the fiscal year. \*\* Actual total covered payroll for the fiscal year ending September 30, 2014.

#### Schedule of the Employer's Net Pension Liability (GASB Statement No. 67)

FY Ending September 30,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
2015*	\$319,400,234	\$276,651,766	\$ 42,748,468	86.62%	\$17,849,700	239.49%
2014	302,946,753	258,066,881	44,879,872	85.19%	17,446,782	257.24%

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

#### Schedule of Contributions (GASB Statement No. 67)

	Actuarially		Contribution		Actual Contribution
FY Ending	Determined	Actual	Deficiency	Covered	as a % of
September 30,	Contribution	Contribution	(Excess)	Payroll	Covered Payroll
2015*	\$ 9,744,918	\$ 9,744,918	\$ -	\$ 17,849,700	54.59%
2014	8,941,538	8,941,538	-	17,446,782	51.25%

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

#### NOTES TO SCHEDULE OF CONTRIBUTIONS (GASB STATEMENT NO. 67)

Valuation Date: Notes	September 30, 2013 Actuarially determined contribution rates are calculated as of October 1, which is two year(s) prior to the end of the fiscal year in which contributions are reported.
Methods and Assumptions Use	ed to Determine Contribution Rates:
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Dollar, Closed
Remaining Amortization Period	30 years
Asset Valuation Method	4-year smoothed market
Inflation	3.0%
Salary Increases	5.0%, including inflation
Investment Rate of Return	8.0%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition
Mortality	60% recognition of the RP-2000 Combined Healthy Participant Mortality
	Table for males and females with mortality improvement projected using
	Scale AA after 2000 and 40% recognition of the 1983 Group Annuity
	Mortality Table for males and females with no future mortality
	improvements
Other Information:	
Notes	See Section A in the September 30, 2013 Actuarial Valuation Report

A single discount rate of 8.00% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 8.00%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between the total actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments (8.00%) was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 8.00%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

Current Single Discount					
1% DecreaseRate Assumption1% Increase					
 7.00%		8.00%		9.00%	
\$ 72,963,033	\$	44,879,872	\$	21,751,793	

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

## **SECTION E** SUMMARY OF VALUATION RESULTS IN STATE FORMAT

#### SUMMARY OF VALUATION RESULTS IN STATE FORMAT (\$ AMOUNTS IN THOUSANDS)

		Septen	nber 30, 2014	September 30, 2013
		After Changes	Before Changes	
(a)	Participant Data			
	(i) Active participants - number	221	221	215
	- annual payroll (excl. DROP participants)	\$ 17,461	\$ 17,461	\$ 16,819
	(ii) Retired members & beneficiaries (excl. disability)			
	- number	230	230	226
	- annualized benefit payroll	11,625	11,625	11,280
	(iii) Disabled members & beneficiaries	1.2		
	- number	18	18	18
	- annualized benefit payroll	728	728	673
	(iv) Terminated vested members			
	- number	13	13	13
	- annualized benefit payroll	345	345	361
(b)	Assets			
	(i) Actuarial value of funding	245,070	245,070	225,469
	(ii) Market value	258,067	258,067	238,503
	(iii) Contribution receivable	0	0	0
(c)	Actuarial Liabilities			
	(i) Actuarial present value of active member benefits:			
	service retirement	82,572	81,120	76,886
	termination benefits - pensions	3,659	3,625	3,565
	disability retirement	5,131	5,064	4,971
	survivor benefits (pre-retirement)	991	1,162	1,138
	survivor benefits (post-retirement)	4,822	5,343	5,136
	termination benefits - refunds	265	269	265
	share accounts	42,828	42,828	41,519
	Total	140,268	139,411	133,479
	(ii) Prepaid City contributions	0	0	0
	(iii) Actuarial present value of terminated vested member benefits	3,254	3,232	3,387
	(iv) Actuarial present value of retired member & beneficiary:			
	total service retirement & survivors	141,226	139,903	136,342
	disability retirement	8,572	8,427	7,779
	distribution reserve	0	0	0
	DROP Reserve	43,290	43,290	39,060
	Total	193,087	191,619	183,182
	(v) Total actuarial present value of future benefit payments and reserves	336,609	334,262	320,048
	(vi) Payables	none	none	none
	(vii) Actuarial accrued liability (including Share Accounts			
	and DROP Reserve)	\$ 305,376	\$ 303,354	\$ 289,949
	(viii) Unfunded actuarial accrued liability(1)	\$ 60,306	\$ 58,283	\$ 64,479

(1) Please refer to page A-9 for requested detail.

### SUMMARY OF VALUATION RESULTS IN STATE FORMAT (\$ AMOUNTS IN THOUSANDS)

		Septem	ber 30, 2014	September 30, 2013
	—	After Changes	Before Changes	
(d) Actu	arial Present Value of Accrued Benefits (calculated in accordance with FASB	2	5	
State	ment No. 35)			
(i)	Vested accrued benefits			
	Retired members and beneficiaries - pensions	\$ 193,087	\$ 191,619	\$ 183,182
	- distribution reserves	0	0	0
	Terminated members	3,254	3,232	3,387
	Active members (includes non-forfeitable accum. member contributions			
	of \$15,629 and \$14,641)	42,902	42,603	40,233
	Active member share accounts	42,828	42,828	41,519
	Distributable reserves	0	0	0
	Total	\$282,072	\$280,283	\$268,321
(ii)	Non-vested accrued benefits	2,682	2,661	2,388
(iii)	Prepaid City contributions	0	0	0
(iv)	Total actuarial p.v. of accrued benefits	\$284,754	\$282,944	\$270,709
(v)	Actuarial p.v. of accrued benefits at begin. of year	\$270,709	\$270,709	\$254,356
(vi)	Changes attributable to:			
	Amendments	\$ 0	\$ 0	\$ 0
	Assumption change	1,810	0	1,679
	Operation of decrements	20,423	20,423	17,982
	Benefit payments	(13,726)	(13,726)	(11,385)
	Other (Changes in Reserves)	5,539	5,539	8,077
(vii)	Net change	14,045	12,235	16,353
	Actuarial p.v. of Accr. benefits at end of year	\$284,754	\$282,944	\$270,709
	costs for fiscal years beginning October 1, 2014 and October 1, 2013 (EANC)	. ,	. ,	
(i)	Normal costs			
~ ~ ~	Service pensions (incl. post-ret. surv. pensions)	17.21	17.00 %	16.87 %
	Disability pensions (incl. post-ret. surv. pensions)	1.61	1.59	1.58
	Survivor pensions (pre-retirement)	0.26	0.31	0.31
	Deferred service pensions	1.00	0.98	0.97
	Refunds of member contributions	0.78	0.78	0.79
	Total normal cost	20.86	20.66	20.52
(ii)	Payment to amortize unf'd act. accr. liab.	33.91	33.32	35.20
(iii)	Administrative expenses	1.29	1.29	1.16
(iv)	FS112.64(5) Requirement	9.13	8.75	10.25
(v)	Amount to be paid by participants	11.00	11.00	11.00
(vi)	Expected state contribution	0.00	0.00	5.94
(vii)	Expected plan sponsor contribution	5.00	0.00	0.71
()	% of payroll	54.19 %	53.02 %	50.19 %
	dollars	\$ 10,108	\$ 9,890	\$ 9,018

#### SUMMARY OF VALUATION RESULTS IN STATE FORMAT (\$ AMOUNTS IN THOUSANDS)

			September 30, 2014			September 30, 2013			
			Afte	r Changes	Befor	e Changes			
(f)	Past Contributions (fiscal y	vear ending 9/30/14 and 13)							
	(i) Required minimum:	Plan sponsor	\$	8,942	\$	8,942	\$	6,507	
		Members		1,919		1,919		1,872	
		Total		10,861		10,861		8,379	
	(ii) Actual:	Plan sponsor		8,942		8,942		6,507	
		Members		1,919		1,919		1,872	
		Total		10,861		10,861		8,379	
(g)	Net Experience Gain (Loss	)	\$	3,621	\$	3,621	\$	3,186	
(h)	Other Disclosures								
	(i) Present value of active member future salaries								
	from attained age		\$	150,690	\$	150,578	\$	147,606	
	from entry age	not applicable to individual EANC method							
	(ii) Present value of active	e member future contribs.							
	from attained age		\$	16,576	\$	16,564	\$	16,237	
	from entry age			not applicable to individual EANC method					

#### **Reconciliation of Membership for the Plan Year Ended September 30, 2014**

		Vested		Pension	Recipients		
	Active	Terminated	Active	Service	Disability	All	
	Members	Members	DROP	Retired	Retired	Beneficiaries	
No. at Start of Year	215	13	52	146	15	31	
Increase (Decrease) From							
Service Retirement		(1)	(10)	11			
DROP Retirement	(4)		4				
Disability Retirement	(1)				1		
Deaths				(4)	(1)	3	
Other Pension Terminations							
Vested Terminations	(1)	1					
Non-Vested Terminations	(6)						
New Entrants/Rehires	18						
No. at End of Year	221	13	46	153	15	34	