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**CITY OF HOLLYWOOD POLICE OFFICERS'  
RETIREMENT SYSTEM**

**ACTUARIAL VALUATION REPORT  
AS OF  
OCTOBER 1, 2013**





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# Cavanaugh Macdonald

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April 22, 2014

Board of Trustees of the  
City of Hollywood Police Officers' Retirement System  
4205 Hollywood Blvd., Suite 4  
Hollywood, Florida 33021

Dear Members of the Board:

This report presents the results of the actuarial valuation of the City of Hollywood Police Officers' Retirement System for the plan year beginning October 1, 2013. The purpose of this report is to provide a summary of the funded status of the plan as of October 1, 2013 and to determine the minimum required contribution amount for the 2014/2015 fiscal year. In addition, this report provides a record of any plan amendments or other plan changes affecting the financial status of the fund. Our calculations were prepared based on member data and financial information provided by the Retirement System.

## **Summary of Valuation Results**

Currently, the Retirement System receives contributions from the City of Hollywood, the State of Florida and from active members. The total required annual contribution for the 2014/2015 fiscal year from all sources is \$15,060,790. The amount of the City contributions varies year to year. The member contributions are equal to 8.00% of payroll. Taking into account expected member contributions of \$1,207,367 and expected State contributions of \$1,250,143; the total required contribution from the City is \$12,603,280. In comparison, the required City contribution for the 2013/2014 fiscal year was \$11,720,746 before any offset for State contributions. The City's contribution requirement for the 2013/2014 fiscal year assumes the City will be able to use the State distribution expected in August 2014 to offset its contribution. During fiscal year 2014 a calculation will have to be prepared to determine whether the System still meets the State requirements to use the State distribution.

In determining the City's contribution requirement we have included interest to reflect our understanding that the City makes bi-weekly contributions throughout the fiscal year. In the table below we present the City's contribution requirements whether the City elects to pay the full amount on October 1, 2013 or in bi-weekly installments throughout the 2014/2015 fiscal year.

City contribution payable October 1, 2014	\$12,059,783
Interest for bi-weekly payments during 2014/2015 fiscal year	\$543,497
City contribution payable in bi-weekly installments	\$12,603,280

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The plan's unfunded liability was projected to be \$139,619,392 as of October 1, 2013, taking into account City/State contributions from all sources of \$10,824,075 for the year ended September 30, 2012. The actual unfunded liability is \$146,996,010. The increase of \$7,376,618 in the unfunded liability is primarily due to the supplemental distribution of \$3,178,555 paid in the 2013 plan year, decremental experience and less than expected return on actuarial assets. The total increase in City contribution to amortize the unfunded liability is \$880,305. Of this increase, \$353,091 is attributable to the 3.5% increase in the amortization payment under the current method and \$198,365 is attributable to the supplemental distribution. The reasons for the increase in the City unfunded liability contributions are explained in Table II. A summary of the amortization payments is presented in Table Va.

Due to the passage of Ordinance No. O-2013-18, the September 30, 2011 frozen benefit calculation has changed for vested employees. The frozen accrued benefit for vested employees is now based on a 3.3% multiplier instead of 3% as previously calculated by the Plan Administrator. We have estimated the frozen accrued benefit for vested participants based on the new provision.

The valuation is based on a series of actuarial assumptions, including an interest (actuarial asset return) rate of 8% per year. Actuarial gains and losses result when the actual experience of the plan (such as asset return, pay increases, turnover, deaths, etc.) is different from that expected by the actuarial assumptions.

The estimated future cost of the Planned Retirement Benefit is very sensitive to the assumed rates of retirement. The actual cost of the Planned Retirement Benefit will be different from the costs we have estimated and will not be known for many years. The actual cost will depend on many factors, including when members actually terminate from service, how long members will work and how many years of Planned Retirement Benefit members will elect. Generally, assuming members will work longer before retiring will reduce the annual cost of the benefit because the full cost will be spread over a longer period. If in the future, members do not work as long as anticipated by the assumptions the cost to the City of the adopted changes will be higher than estimated. We will monitor the future actual experience under the Planned Retirement Benefit and recommend changes in the retirement rates if necessary.

A summary of the results of the valuation and the contribution requirements is presented in Table I. Disclosure information required by GASB statements 25 and 27 can be found in Tables III and IV. The disclosure information required by Chapter 112, Florida Statutes, is presented in Table V. Tables VII and X provide information about the fund's assets and historical contributions. Table VIIb provides an asset reconciliation between October 1, 2012 and October 1, 2013. Table VI provides a breakdown of the fund assets by investment type and the calculation of the actuarial value of assets. Tables VII, VIIa, VIII provide a historical record of the growth, expenses, revenues, annual returns and contributions of the fund. Tables IX and IXa through IXd provide a variety of useful information concerning the participant population. The assumptions and methods used in the valuation are outlined in Table XI. Provisions of the plan are set forth in Table XII.



This actuarial valuation 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.

Future actuarial results may differ significantly from the current results 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 decreased 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. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Jose I. Fernandez', with a long horizontal flourish extending to the right.

Jose I. Fernandez, ASA, EA, FCA, MAAA  
Principal and Consulting Actuary  
Enrolled Actuary No. 14-4461

A handwritten signature in blue ink, appearing to read 'Todd B. Green', with a long horizontal flourish extending to the right.

Todd B. Green, ASA, FCA, MAAA  
Principal and Consulting Actuary

JIF/TBG:jnw

**SUMMARY OF VALUATION RESULTS****TABLE I**

	<u>As of October 1, 2012</u>	<u>As of October 1, 2013</u>
<b>1. Number of Members</b>		
a. Active Members	214	210
b. Deferred Vested Members	7	10
c. Retired Members:		
i. Members in DROP	43	32
ii. Non-disabled	254	268
iii. Disabled	27	27
iv. Beneficiaries	37	38
v. Sub-total	<u>361</u>	<u>365</u>
d. Total Members	<u>582</u>	<u>585</u>
<b>2. Total Annual Compensation</b>	<b>\$13,707,806</b>	<b>\$14,581,728</b>
<b>3. Total Projected Payroll</b>	<b>\$14,187,579</b>	<b>\$15,092,088</b>
<b>4. Total Retired Member Benefits</b>	<b>\$20,376,661</b>	<b>\$20,868,562</b>
<b>5. Derivation of Normal Cost</b>		
a. Present Value of Future Benefits	\$331,781,856	\$341,791,633
b. Present Value of Future Normal Cost	(\$28,131,130)	(\$29,022,294)
<i>City Portion</i>	(\$15,592,690)	(\$15,999,826)
<i>Member Portion</i>	(\$12,538,440)	(\$13,022,468)
c. Actuarial Accrued Liability (AAL)	\$303,650,726	\$312,769,339
d. Actuarial Value of Assets	(\$166,024,436)	(\$165,773,329)
e. Unfunded Accrued Liability (c. + d.)	<u>\$137,626,290</u>	<u>\$146,996,010</u>
f. Normal Cost with Interest	\$2,975,043	\$3,148,678
g. Payment to Amortize Unfunded Liability	\$10,088,310	\$10,968,615
h. Administrative Expenses	\$400,000	\$400,000
i. Bi-weekly Interest Adjustment	\$504,039	\$543,497
j. Total (f. + g. + h. + i.)	<u>\$13,967,392</u>	<u>\$15,060,790</u>
<b>6. Expected Contributions Fiscal Year</b>	<b><u>2013/2014</u></b>	<b><u>2014/2015</u></b>
a. Expected Member Contributions	\$1,135,006	\$1,207,367
b. Expected Chapter 185 Monies	\$1,111,640	\$1,250,143
c. Expected City Contribution	\$11,720,746	\$12,603,280
d. Total ( a. + b. + c.)	<u>\$13,967,392</u>	<u>\$15,060,790</u>

There is a prepaid City contribution of \$2,250,144 as of October 1, 2013 which the City can use to reduce its cash contribution for fiscal year 2015.

**GAIN AND LOSS ANALYSIS****TABLE II**

<b>1. Actual Unfunded Accrued Liability as of October 1, 2012</b>	\$137,626,290
<b>2. Plan sponsor normal cost for this plan year</b>	\$2,074,108
<b>3. Interest on 1.and 2.</b>	\$11,176,032
<b>4. Plan sponsor contribution for this plan year (including amounts expected to be paid)</b>	(\$10,824,075)
<b>5. Interest on 4.</b>	(\$432,963)
<b>6. Changes due to:</b>	
a. assumptions	\$0
b. plan amendments	\$0
c. funding method	\$0
d. actuarial (gain)/loss	\$7,376,618
	<hr/>
	\$7,376,618
<b>7. Total Current Unfunded Actuarial Accrued Liability as of October 1, 2013 (1. + 2. + 3. + 4. + 5. + 6.)</b>	\$146,996,010
<b>8. Items Affecting Calculation of Accrued Liability</b>	
a. Plan provisions reflected in the unfunded accrued liability (see Table XII)	
b. Plan amendments reflected in item 6.b. above (see Table XIIa)	
c. Actuarial assumptions and methods used to determine actuarial accrued liability and normal cost (see Table XI)	
d. Changes in actuarial assumptions and methods reflected in items 6.a. and 6.c. above (see Table XIa)	



(CONTINUED)

<b>9. Actual Unfunded Accrued Liability (UAL) Payment as of October 1, 2012 Valuation:</b>		\$10,088,310
<b>10. Changes in UAL Payment Due to Actuarial (Gains)/Losses During the 2012/2013 Plan Year:</b>		
a. Due to Salary	46,630	
b. Due to Investment Performance	21,870	
c. Due to Turnover/Mortality	63,442	
d. Due to New Retirements	100,063	
e. Due to Data/Service Adjustments	(1,338)	
f. Due to Timing of DROP Retiree COLAs	43,231	
h. Due to Timing of Employer Contributions	66,858	
i. Due to Expected Payroll Growth	353,091	
j. Due to New Members	(11,907)	
k. Due to Supplemental Distribution	198,365	
l. Total		\$880,305
<b>11. Other Changes in UAL Payment During the 2012/2013 Plan Year:</b>		
a. Assumption changes	0	
b. Method changes	0	
c. Plan changes	0	
d. Total change		\$0
<b>12. Unfunded Accrued Liability Payment as of October 1, 2013 Valuation:</b>		<u>\$10,968,615</u>
<b>13. Comments on Change in Unfunded Accrued Liability Contribution Payment:</b>		
<b>Salary/Service:</b> Average salary increases of 8.43% compared to expected increases of 5.49%.		
<b>Investment Performance:</b> 7.78% actual vs. 8.0% expected return on the actuarial value of assets.		
<b>Turnover:</b> Net effect on the valuation liabilities of actual deaths, terminations of employment and disabilities different from what was anticipated in the aggregate by the assumptions related to those events.		
<b>New retirements:</b> Net effect of differences in expected vs. actual numbers of, and benefits for, new retirements and refund of employee contributions.		
<b>Data/Service Adjustments:</b> Effect of service adjustments for service purchases and other data adjustments.		
<b>Timing of DROP Retiree COLAs:</b> Effect of COLA beginning earlier than 8-year deferral period for members leaving DROP and timing of COLAs.		
<b>Payroll Growth:</b> 3.5% annual increase in amortization payment according to amortization method.		
<b>Employer Contributions:</b> Employer contributions lower than expected		
<b>Assumption Changes:</b> None		
<b>Method Changes:</b> None		
<b>Plan Changes:</b> None		



	<b>For the Plan Year 2012/2013</b>	<b>For the Plan Year 2013/2014</b>
<b>A. Number of Plan Members as of October 1:</b>		
a. Retirees and beneficiaries receiving benefits	361	365
b. Terminated plan participants entitled to but not yet receiving benefits	7	10
c. Active plan participants	214	210
d. Total	582	585
<b>B. Development of Annual Required Contribution (ARC):</b>		
	<b>2013</b>	<b>2014</b>
a. Employer normal cost:		
i. Normal cost plus Admin. Expenses	\$3,265,967	\$3,375,043
ii. Interest Adjustment	144,576	150,951
iii. Expected employee contribution	(1,458,161)	(1,135,006)
iv. <b>Employer normal cost</b>	<b>\$1,952,382</b>	<b>\$2,390,988</b>
b. <b>Amortization of UAAL</b>	<b>9,120,334</b>	<b>10,088,310</b>
c. <b>ARC</b>	<b>\$11,072,716</b>	<b>\$12,479,298</b>
<b>C. Annual Pension Cost and Net Pension Obligation (NPO):</b>		
a. ARC	\$11,072,716	\$12,479,298
b. Interest on NPO	0	0
c. Adjustment to ARC	0	0
d. <b>Annual Pension Cost</b>	<b>\$11,072,716</b>	<b>\$12,479,298</b>
e. City and State Contributions made	11,072,716	
f. Increase(decrease) in NPO	\$0	
g. NPO (beginning of year)	0	
h. <b>NPO (end of year)</b>	<b>\$0</b>	



(CONTINUED)

**D. Schedule of Employer Contributions**

Year Ended September 30	Annual Required Contribution	Contribution Made	Percentage Contributed
2010	\$12,471,751	\$12,471,751	100.0%
2011	\$12,970,210	\$12,970,210	100.0%
2012	\$9,931,274	\$9,931,274	100.0%
2013	\$11,072,716	\$11,072,716	100.0%

**E. Schedule of Funding Progress**

Actuarial Valuation Date	Actuarial Value of Assets (1)	Actuarial Accrued Liability (AAL) (2)	Unfunded AAL (UAAL) (2) - (1)	Funded Ratio (1)/(2)	Annual Covered Payroll (3)	UAAL as % of Covered Payroll [(2) - (1)]/(3)
10/1/2008	\$165,750,474	\$284,619,717	\$118,869,243	58.2%	\$18,459,663	643.9%
10/1/2009	\$161,780,132	\$302,546,669	\$140,766,537	53.5%	\$18,445,452	763.2%
10/1/2010	\$172,261,712	\$283,729,153	\$111,467,441	60.7%	\$15,289,445	729.0%
10/1/2011	\$163,376,325	\$289,627,228	\$126,250,903	56.4%	\$15,230,825	828.9%
10/1/2012	\$166,024,436	\$303,650,726	\$137,626,290	54.7%	\$13,707,806	1004.0%
10/1/2013	\$165,773,329	\$312,769,339	\$146,996,010	53.0%	\$14,581,728	1008.1%

**Additional Information**

Valuation date :	October 1, 2012	October 1, 2013
Actuarial cost method:	Entry Age Normal	Entry Age Normal
Amortization method:	Level Percent Closed	Level Percent Closed
Remaining amortization period:	20 to 30 years	19 to 30 years
Asset valuation method:	5 - Year Smoothed Market	5 - Year Smoothed Market
Actuarial assumptions:		
Investment rate of return	8.00%	8.00%
Projected salary increases	5.03% to 10.67%	5.03% to 10.67%
Includes inflation at	3.50%	3.50%
Cost of living adjustments	2.00% for Benefits Accrued Prior to October 1, 2011	2.00% for Benefits Accrued Prior to October 1, 2011



**PRESENT VALUE OF ACCRUED BENEFITS (SB 1128)**

**TABLE IVa**

Shown below is the development of the Total Present Value of Accrued Benefit for the Plan. The calculations were performed in accordance with Chapter 2011-216 Laws of Florida (SB 1128) which requires the calculation of the present value of accrued benefits be calculated using the Florida Retirement System’s assumed rate of return of 7.75% in order to promote comparability of actuarial data between local plans.

**1. Actuarial Present Value of Accrued Benefits**

	<u>As of October 1, 2012</u>	<u>As of October 1, 2013</u>
a. Vested Accrued Benefits:		
i. Inactive members and beneficiaries	\$264,370,765	\$268,713,828
ii. Active members	\$31,094,886	\$35,340,231
iii. Sub-total	<u>\$295,465,651</u>	<u>\$304,054,059</u>
b. Non-vested Accrued Benefits	<u>\$3,289,503</u>	<u>\$3,118,944</u>
c. Total Benefits	<b>\$298,755,154</b>	<b>\$307,173,003</b>
d. Market Value of Assets	\$169,520,688	\$174,955,960
c. Percentage Funded	56.7%	57.0%

**2. Statement of Changes in Total Actuarial Present Value of All Accrued Benefits**

a. Actuarial Present Value as of October 1, 2012 (7.75% Interest):	<b>\$298,755,154</b>
b. Increase (Decrease) During 2012/2013 Plan Year Attributable to:	
i. Interest	\$22,340,374
ii. Benefits accumulated/experience	\$7,062,002
iii. Benefits paid	(\$20,984,527)
iv. Plan amendments	\$0
v. Changes in actuarial assumptions or methods	<u>\$0</u>
vi. Net increase (decrease)	<b>\$8,417,849</b>
c. Actuarial Present Value as of October 1, 2013 (7.75% Interest):	<b>\$307,173,003</b>

**3. Items Affecting Calculation of Actuarial Present Value of Accrued Benefits**

- a. Plan provisions reflected in the accrued benefits (see Table XII)
- b. Plan amendments reflected in item 2.b.iv. above (see Table XIIa)
- c. Actuarial assumptions and methods used to determine present values (see Table XI)
- d. Changes in actuarial assumptions and methods reflected in item 2.b.v. above (see Table XIa)



**PRESENT VALUE OF ACCRUED BENEFITS (PLAN ASSUMPTIONS)      TABLE IVb**

Shown below is the development of the Total Present Value of Accrued Benefit for the Plan. The calculations were performed using the Plan’s discount rate of 8.0%.

**1. Actuarial Present Value of Accrued Benefits**

	<u>As of October 1, 2012</u>	<u>As of October 1, 2013</u>
a. Vested Accrued Benefits:		
i. Inactive members and beneficiaries	\$257,905,924	\$262,228,440
ii. Active members	<u>\$29,695,652</u>	<u>\$33,800,207</u>
iii. Sub-total	\$287,601,576	\$296,028,647
b. Non-vested Accrued Benefits	<u>\$3,309,103</u>	<u>\$3,195,231</u>
c. Total Benefits	<b><u>\$290,910,679</u></b>	<b><u>\$299,223,878</u></b>
d. Market Value of Assets	\$169,520,688	\$174,955,960
c. Percentage Funded	58.3%	58.5%

**2. Statement of Changes in Total Actuarial Present Value of All Accrued Benefits**

a. Actuarial Present Value as of October 1, 2012 (8.0% Interest):	<b>\$290,910,679</b>
b. Increase (Decrease) During 2012/2013 Plan Year Attributable to:	
i. Interest	\$22,433,473
ii. Benefits accumulated/experience	\$6,864,253
iii. Benefits paid	(\$20,984,527)
iv. Plan amendments	\$0
v. Changes in actuarial assumptions or methods	<u>\$0</u>
vi. Net increase (decrease)	<b><u>\$8,313,199</u></b>
c. Actuarial Present Value as of October 1, 2013 (8.0% Interest):	<b><u><u>\$299,223,878</u></u></b>

**3. Items Affecting Calculation of Actuarial Present Value of Accrued Benefits**

- a. Plan provisions reflected in the accrued benefits (see Table XII)
- b. Plan amendments reflected in item 2.b.iv. above (see Table XIIIa)
- c. Actuarial assumptions and methods used to determine present values (see Table XI)
- d. Changes in actuarial assumptions and methods reflected in item 2.b.v. above (see Table XIa)



	<u>October 1, 2012</u>	<u>October 1, 2013</u>
<b>1. Participant Data:</b>		
a. Active members:		
i. Number	214	210
ii. Total annual payroll	\$13,707,806	\$14,581,728
iii. Projected annual payroll	\$14,187,579	\$15,092,088
b. Retirees, members in DROP, and beneficiaries:		
i. Number	334	338
ii. Total annualized benefit	\$19,610,845	\$20,093,302
c. Disabled members receiving benefits:		
i. Number	27	27
ii. Total annualized benefit	\$765,816	\$775,260
d. Terminated vested members:		
i. Number	7	10
ii. Total annualized benefit	\$205,801	\$342,422
<b>2. Assets:</b>		
a. Actuarial value of assets	\$166,024,436	\$165,773,329
b. Market value of assets	\$169,520,688	\$174,955,960
<b>3. Liabilities:</b>		
a. Present value of all future expected benefit payments:		
i. Active members:		
Retirement benefits	\$61,791,898	\$67,348,605
Vesting benefits	\$1,366,903	\$1,262,008
Disability benefits	\$3,317,070	\$3,268,495
Death benefits	\$7,121,234	\$7,434,599
Sub-total	\$73,597,105	\$79,313,707
ii. Terminated vested members	\$1,855,591	\$3,163,731
iii. Retired members and beneficiaries:		
Retirees, members in DROP, and beneficiaries	\$247,729,555	\$250,794,799
Disabled members	\$8,320,778	\$8,269,909
Sub-total	\$256,050,333	\$259,064,708
iv. Member contributions (annuities & refunds)	\$278,827	\$249,487
v. Total present value of all future expected ben. pmts.	\$331,781,856	\$341,791,633



(CONTINUED)

	<u>October 1, 2012</u>	<u>October 1, 2013</u>
<b>3. Liabilities (cont.):</b>		
b. Liabilities due and unpaid	\$0	\$0
c. Active actuarial accrued liability	\$45,744,802	\$50,540,900
d. Inactive actuarial accrued liability	\$257,905,924	\$262,228,439
e. Total actuarial accrued liability	\$303,650,726	\$312,769,339
f. Unfunded actuarial accrued liability (please reference Table Va for details concerning the unfunded liability bases and amortization periods)	\$137,626,290	\$146,996,010
<b>4. Actuarial Present Value of Accrued Benefits:</b> (please reference Table IV for details concerning the present value of accrued benefits)	\$298,755,154	\$307,173,003
<b>5. Pension Cost (as a % of projected payroll):</b>		
a. Normal cost plus projected administrative expenses	23.79%	23.51%
Dollar amount	\$3,375,043	\$3,548,678
b. Payment to amortize unfunded liability	71.11%	72.68%
Dollar amount	\$10,088,310	\$10,968,615
c. Interest adjustment	3.55%	3.60%
Dollar amount	\$504,039	\$543,497
d. Amount to be contributed by members	8.00%	8.00%
Dollar amount	\$1,135,006	\$1,207,367
e. Expected Chapter 185 monies	7.84%	8.28%
Dollar amount	\$1,111,640	\$1,250,143
f. Expected City Contributions	82.61%	83.51%
Dollar amount	\$11,720,746	\$12,603,280



	<u>October 1, 2012</u>	<u>October 1, 2013</u>
<b>6. Past Contributions:</b>		
a. Required City & State contribution	\$9,931,274	\$11,072,716
b. Actual contribution made by:		
i. City	\$8,819,634	\$9,573,932
ii. State	\$1,111,640	\$1,250,143
iii. Members	\$1,376,722	\$1,324,022
<b>7. Net actuarial (gain) / loss:</b>	\$2,523,579	\$7,376,618
<b>8. Other disclosures:</b>		
a. Present value of active members':		
i. Future salaries:		
at attained age	\$156,730,498	\$162,780,852
at entry age	N/A	N/A
ii. Future contributions:		
at attained age	\$12,538,440	\$13,022,468
at entry age	N/A	N/A
b. Present value of future normal contributions from City	\$15,592,690	\$15,999,826
c. Present value of future expected benefit payments for active members at entry age	N/A	N/A
d. Amount of active members' accumulated contributions	\$13,229,284	\$13,963,001



**UNFUNDED LIABILITY BASIS**

**TABLE Va**

<u>Description</u>	<u>Original Amount</u>	<u>Outstanding Balance as of October 1, 2012</u>	<u>2012/2013 Amortization Payment</u>	<u>Outstanding Balance as of October 1, 2013</u>	<u>2013/2014 Amortization Payment</u>	<u>Years Remaining October 1, 2013</u>
2002 Early Retirement Window	\$11,314,357	\$12,851,573	\$1,009,120	\$12,870,578	\$1,044,439	19 years
2002 Experience Loss	\$26,376,767	\$29,960,422	\$2,352,525	\$30,004,730	\$2,434,864	19 years
2004 Experience Loss	\$36,560,843	\$40,937,170	\$3,030,245	\$41,181,898	\$3,136,303	21 years
2005 Experience Loss	\$15,940,669	\$17,669,782	\$1,273,722	\$17,809,643	\$1,318,303	22 years
2006 Experience Loss	\$9,046,327	\$9,910,143	\$696,893	\$10,006,061	\$721,285	23 years
2007 Experience Loss	\$914,479	\$988,531	\$67,922	\$999,691	\$70,299	24 years
2008 Experience Loss	\$10,116,472	\$10,775,470	\$724,480	\$10,913,028	\$749,837	25 years
2009 Experience Loss	\$20,405,785	\$21,432,372	\$1,411,921	\$21,735,041	\$1,461,338	26 years
2010 Experience (Gain)	(\$2,327,568)	(\$2,407,656)	(\$155,603)	(\$2,444,665)	(\$161,050)	27 years
2011 Experience Loss	\$13,843,275	\$14,086,814	\$894,160	\$14,319,599	\$925,456	28 years
2012 Experience Loss	\$3,123,194	\$3,123,194	\$194,910	\$3,178,140	\$201,732	29 years
2013 Experience Loss*	\$8,447,927			\$8,447,927	\$527,213	30 years
2004 Plan Amendment	\$703,020	\$787,171	\$58,268	\$791,877	\$60,307	21 years
2006 Plan Amendment	\$8,475,357	\$9,284,651	\$652,908	\$9,374,515	\$675,760	23 years
2009 Plan Amendment	\$3,279	\$3,444	\$227	\$3,493	\$235	26 years
2010 Plan Amendment	(\$28,657,120)	(\$29,643,165)	(\$1,915,796)	(\$30,098,822)	(\$1,982,849)	27 years
2012 Plan Amendment	\$7,272,455	\$7,272,455	\$453,855	\$7,400,396	\$469,740	29 years
2006 Assumption Change	(\$840,518)	(\$920,777)	(\$64,750)	(\$929,689)	(\$67,016)	23 years
2006 Asset Method Change	(\$7,745,683)	(\$8,485,304)	(\$596,697)	(\$8,567,431)	(\$617,581)	23 years
<b>Total</b>		<b>\$137,626,290</b>	<b>\$10,088,310</b>	<b>\$146,996,010</b>	<b>\$10,968,615</b>	

<u>Date</u>	<u>Projected Unfunded Liability</u>
October 1, 2013	\$146,996,010
October 1, 2014	\$147,787,074
October 1, 2015	\$148,257,524
October 1, 2016	\$148,368,273
October 1, 2043	\$0

\* The total experience loss/(gain) for the 2012/2013 plan year of \$7,376,618 is adjusted by contribution timing differences adjusted for interest equal to \$1,071,309



**ASSETS**

**TABLE VI**

	<u>As of October 1, 2012</u>	<u>As of October 1, 2013</u>
<b>1. Market Value of Assets</b>		
a. Cash and short term investments (2.11%)	\$6,534,757	\$3,692,603
b. U.S. government obligations (9.98%)	\$19,865,061	\$17,455,150
c. Common stock (63.32%)	\$102,814,530	\$110,782,700
d. Corporate bonds and notes(42.97%)	\$82,380,930	\$75,176,180
e. State of Israel bonds (0.71%)	\$1,250,001	\$1,250,001
f. Domestic equity funds (10.99%)	\$16,395,863	\$19,220,565
g. Accrued income receivable (1.29%)	\$2,642,850	\$2,260,452
h. Real estate (6.74%)	N/A	\$11,791,523
i. Prepaid expenses (0.01%)	N/A	\$25,728
j. Accounts payable (-0.12%)	(\$134,041)	(\$215,507)
k. Benefits payable (-1.02%)	(\$1,350,018)	(\$1,777,279)
l. Deferred Retirement Option Plan Payable (-33.58%)	(\$53,765,888)	(\$58,754,098)
m. Share plan investments (-2.03%)	(\$3,866,030)	(\$3,548,927)
n. Payable for securities purchased (-0.09%)	(\$439,687)	(\$152,987)
o. Prepaid City contributions (-1.29%)	(\$2,807,640)	(\$2,250,144)
p. Market value of assets (100%)	<b>\$169,520,688</b>	<b>\$174,955,960</b>
<b>2. Actuarial Value of Assets</b>		
a. Market Value of Assets	\$169,520,688	\$174,955,960
b. State contribution reserve	\$0	\$0
c. Supplemental benefit payable	\$0	\$0
d. Market value of assets available for funding	\$169,520,688	\$174,955,960
e. 5-year phase-in of (gain)/loss on Actuarial Value of Assets:		
i. 2008/2009	\$13,253,085	x 20% = \$2,650,617
ii. 2009/2010	(\$176,799)	x 40% = (\$70,720) x 20% = (\$35,360)
iii. 2010/2011	\$14,881,572	x 60% = \$8,928,943 x 40% = \$5,952,629
iv. 2011/2012	(\$18,756,365)	x 80% = (\$15,005,092) x 60% = (\$11,253,819)
v. 2012/2013	(\$4,807,601)	x 80% = (\$3,846,081)
vi. Total unrecognized losses/(gains)	(\$3,496,252)	(\$9,182,631)
f. Preliminary Actuarial Value of Assets (Item d. plus item e.vi.)	<b>\$166,024,436</b>	<b>\$165,773,329</b>
g. Corridor around Actuarial Value of Assets		
i. 90% of Market Value (item d.)	<b>\$152,568,619</b>	<b>\$157,460,364</b>
ii. 110% of Market Value (item d.)	<b>\$186,472,757</b>	<b>\$192,451,556</b>
h. Actuarial Value of Assets (Item f., but within items g.i. and g.ii.)	<b>\$166,024,436</b>	<b>\$165,773,329</b>



**DEVELOPMENT OF ASSET (GAINS) & LOSSES**

**TABLE VIa**

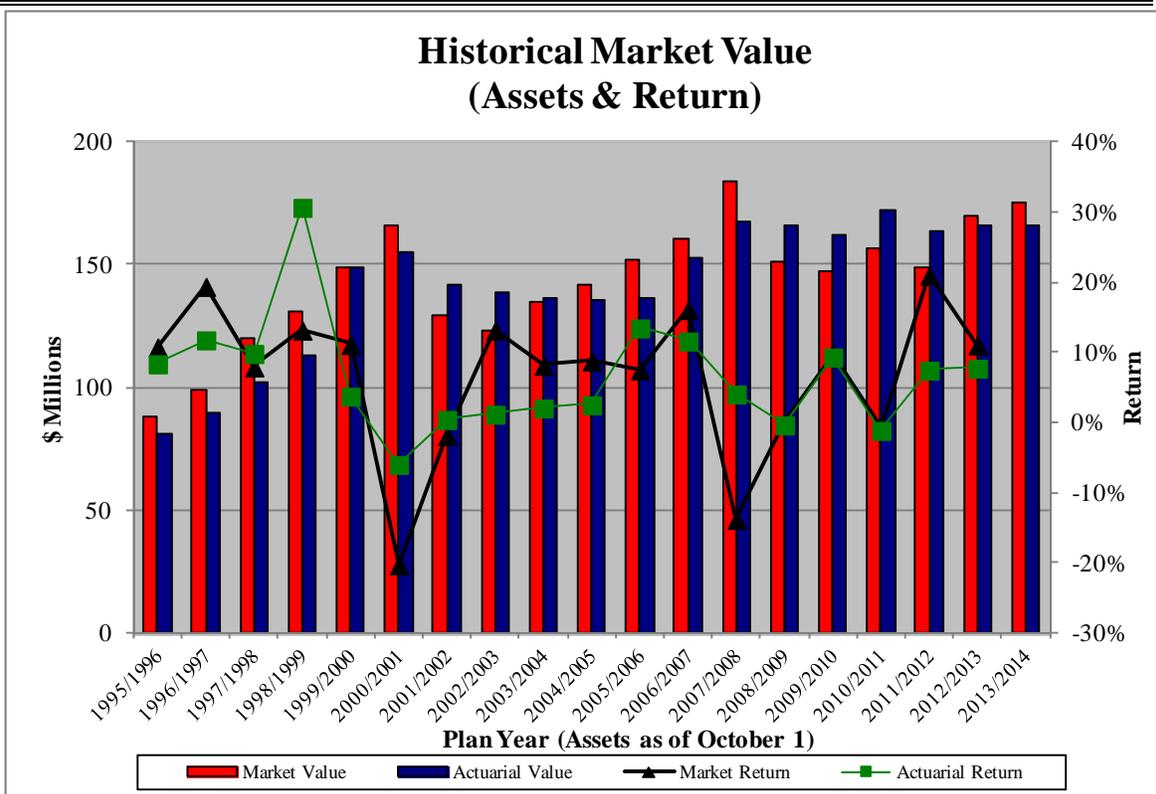
	<b>Market Value As of October 1, 2013</b>
<b>1. Beginning of Year</b>	\$169,520,688
<b>2. Increases Due to:</b>	
a. Contributions:	
i. City	\$9,573,932
ii. State	\$1,250,143
iii. Members	\$1,324,022
iv. Total	<u>\$12,148,097</u>
<b>3. Decreases Due to:</b>	
a. Benefit payments	\$23,921,323
b. Refund of member contributions	\$241,759
c. Administrative expenses	\$660,615
d. Miscellaneous	<u>\$0</u>
e. Total decreases	<u>\$24,823,697</u>
<b>4. Expected Investment Income</b>	\$13,054,631
<b>5. Actual Investment Income</b>	\$17,862,232
<b>6. (Gain) / Loss</b>	(\$4,807,601)

**ASSET RECONCILIATION****TABLE VIIb**

	<u>As of October 1, 2012</u>	<u>As of October 1, 2013</u>
<b>1. Beginning of Year Market Value:</b>	<b>\$148,523,932</b>	<b>\$169,520,688</b>
<b>2. Audit Adjustment</b>		\$248,640
<b>3. Increases Due to:</b>		
a. Contributions:		
i. City*	\$8,819,634	\$9,573,932
ii. State	\$1,111,640	\$1,250,143
iii. Members**	\$1,376,722	\$1,324,022
iv. Total	<u>\$11,307,996</u>	<u>\$12,148,097</u>
b. Investment income	\$30,267,452	\$17,862,232
c. Total increases	<u>\$41,575,448</u>	<u>\$30,010,329</u>
<b>4. Decreases Due to:</b>		
a. Benefit payments	\$19,792,556	\$23,921,323
b. Refund of member contributions	\$212,915	\$241,759
c. Administrative expenses	\$573,221	\$660,615
d. Miscellaneous	\$0	\$0
e. Total decreases	<u>\$20,578,692</u>	<u>\$24,823,697</u>
<b>5. End of Year Market Value:</b>	<b>\$169,520,688</b>	<b>\$174,955,960</b>

\* Excluding City contributions \$1,807,640 as of October 1, 2012 as pre-paid City contributions for fiscal year ending September 30, 2012.

\*\* Including Buybacks



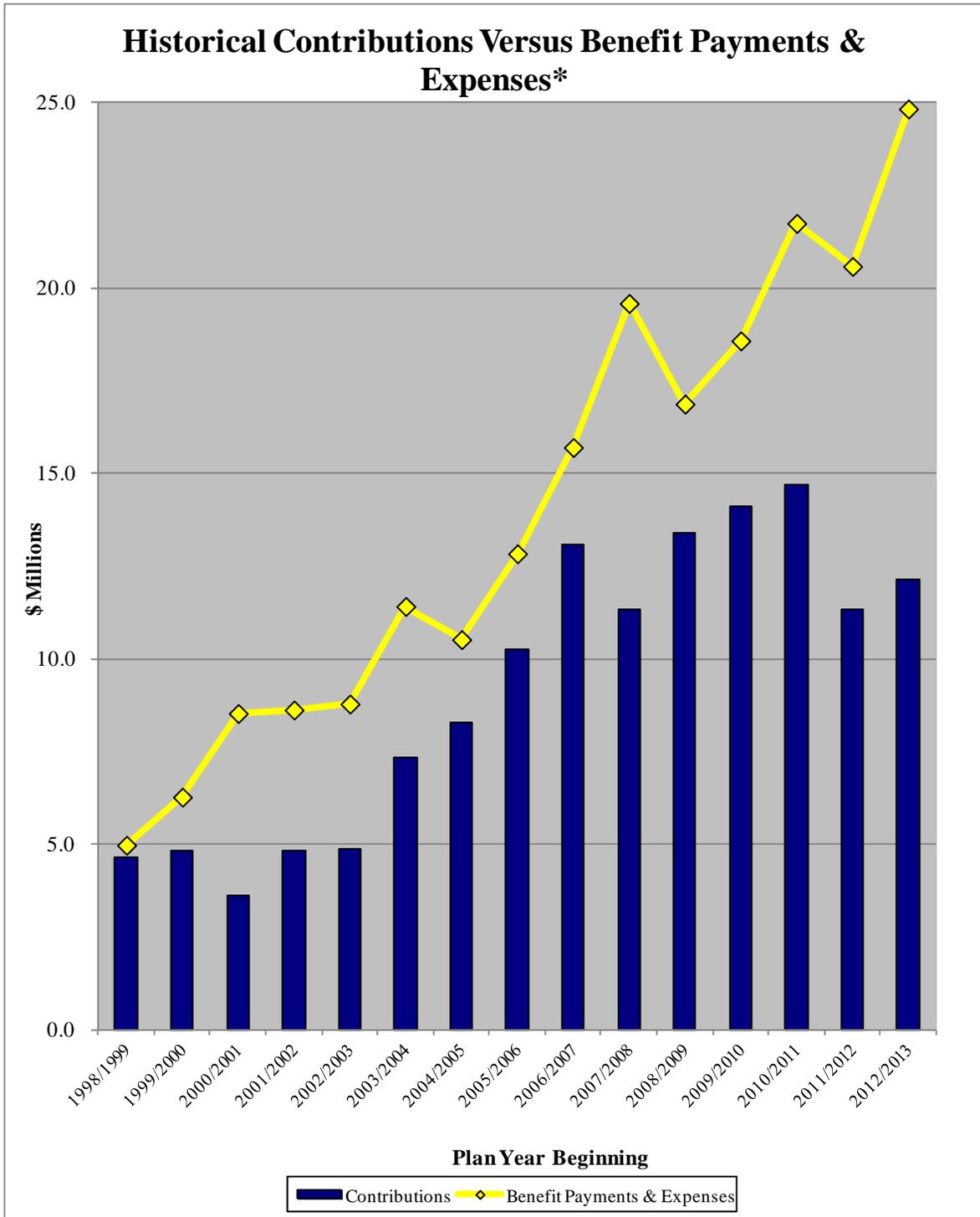
Plan Year	Market Value as of October 1	Actuarial Value as of October 1	Benefit Payments	Administrative Expenses	City, State, and Member Contributions	Market Value Return	Actuarial Value Return
1995/1996	\$87,877,980	\$81,160,353	\$2,672,370	\$188,241	\$4,460,157	10.79%	8.41%
1996/1997	\$99,046,902	\$89,651,428	\$2,978,160	\$201,976	\$4,531,018	19.42%	11.82%
1997/1998	\$119,763,625	\$101,677,988	\$3,098,859	\$204,977	\$4,654,229	7.96%	9.88%
1998/1999	\$130,700,897	\$113,138,759	\$3,416,351	\$207,480	\$4,654,382	13.19%	30.68%
1999/2000	\$149,041,366	\$149,041,366	\$4,429,296	\$282,266	\$4,804,272	11.17%	3.79%
2000/2001	\$165,783,962	\$154,778,060	\$7,126,609	\$303,284	\$3,596,842	(20.18)%	(5.92)%
2001/2002	\$128,875,555	\$141,902,415	\$8,237,745	\$370,081	\$4,822,459	(1.80)%	0.48%
2002/2003	\$122,800,575	\$138,795,086	\$8,451,107	\$334,053	\$4,874,030	13.20%	1.23%
2003/2004	\$134,838,492	\$136,571,369	\$11,152,686	\$261,382	\$7,342,352	8.19%	2.12%
2004/2005	\$141,639,648	\$135,356,309	\$10,166,609	\$353,750	\$8,281,526	8.79%	2.58%
2005/2006	\$151,753,020	\$136,577,718	\$12,532,418	\$302,994	\$10,269,928	7.53%	13.52%
2006/2007	\$160,524,818	\$152,299,396	\$15,215,538	\$482,895	\$13,058,502	16.14%	11.66%
2007/2008	\$183,577,473	\$167,269,474	\$19,148,054	\$433,359	\$11,336,306	(13.74)%	4.12%
2008/2009	\$150,682,249	\$165,750,474	\$16,464,584	\$403,324	\$13,388,069	(0.09)%	(0.30)%
2009/2010	\$147,072,847	\$161,780,132	\$18,195,346	\$377,636	\$14,105,064	9.66%	9.37%
2010/2011	\$156,601,556	\$172,261,712	\$21,268,874	\$470,677	\$14,676,753	(0.66)%	(1.08)%
2011/2012	\$148,523,932	\$163,376,325	\$20,005,471	\$573,221	\$11,307,996	21.04%	7.51%
2012/2013	\$169,520,688	\$166,024,436	\$24,163,082	\$660,615	\$12,148,097	11.10%	7.78%
2013/2014	\$174,955,960	\$165,773,329					

**REVENUES BY SOURCE AND EXPENSES BY TYPE****TABLE VIIa**

<b>REVENUES</b>						
<b>Fiscal Year</b>	<b>City Contributions</b>	<b>State Contributions</b>	<b>Member Contributions</b>	<b>Sub-Total</b>	<b>Net Investment Income</b>	<b>Total</b>
1998/1999	\$2,627,147	\$778,850	\$1,248,232	<b>\$4,654,229</b>	\$18,791,933	<b>\$23,446,162</b>
1999/2000	\$2,817,940	\$752,306	\$1,234,026	<b>\$4,804,272</b>	\$9,627,263	<b>\$14,431,535</b>
2000/2001	\$1,450,312	\$860,226	\$1,286,304	<b>\$3,596,842</b>	\$16,972,405	<b>\$20,569,247</b>
2001/2002	\$2,911,978	\$67,447	\$1,843,034	<b>\$4,822,459</b>	(\$20,303,040)	<b>(\$15,480,581)</b>
2002/2003	\$3,036,862	\$67,447	\$1,769,721	<b>\$4,874,030</b>	(\$2,300,904)	<b>\$2,573,126</b>
2003/2004	\$5,587,558	\$67,447	\$1,687,347	<b>\$7,342,352</b>	\$15,949,047	<b>\$23,291,399</b>
2004/2005	\$6,327,050	\$67,447	\$1,887,029	<b>\$8,281,526</b>	\$10,872,872	<b>\$19,154,398</b>
2005/2006	\$8,281,269	\$67,447	\$1,921,212	<b>\$10,269,928</b>	\$12,352,205	<b>\$22,622,133</b>
2006/2007	\$10,269,819	\$1,177,441	\$1,611,242	<b>\$13,058,502</b>	\$11,337,282	<b>\$24,395,784</b>
2007/2008	\$8,493,509	\$1,139,756	\$1,703,041	<b>\$11,336,306</b>	\$25,692,586	<b>\$37,028,892</b>
2008/2009	\$10,119,188	\$1,212,981	\$2,055,900	<b>\$13,388,069</b>	(\$24,650,117)	<b>(\$11,262,048)</b>
2009/2010	\$11,369,800	\$1,101,980	\$1,633,284	<b>\$14,105,064</b>	(\$129,563)	<b>\$13,975,501</b>
2010/2011	\$11,917,325	\$1,052,885	\$1,706,543	<b>\$14,676,753</b>	(\$1,014,826)	<b>\$13,661,927</b>
2011/2012	\$8,819,634	\$1,111,640	\$1,376,722	<b>\$11,307,996</b>	\$30,267,452	<b>\$41,575,448</b>
2012/2013	\$9,573,932	\$1,250,143	\$1,324,022	<b>\$12,148,097</b>	\$17,862,232	<b>\$30,010,329</b>

<b>EXPENSES</b>				
<b>Fiscal Year</b>	<b>Benefits Paid</b>	<b>Member Refunds</b>	<b>Administrative Expenses*</b>	<b>Total</b>
1998/1999	\$4,728,072	\$42,166	\$207,480	\$4,977,718
1999/2000	\$5,895,050	\$97,123	\$282,266	\$6,274,439
2000/2001	\$8,210,531	\$15,923	\$303,284	\$8,529,738
2001/2002	\$8,237,745	\$15,923	\$370,081	\$8,623,749
2002/2003	\$8,442,820	\$8,287	\$334,053	\$8,785,160
2003/2004	\$11,123,971	\$28,715	\$261,382	\$11,414,068
2004/2005	\$10,062,707	\$103,902	\$353,750	\$10,520,359
2005/2006	\$12,530,819	\$1,599	\$302,994	\$12,835,412
2006/2007	\$14,931,178	\$284,360	\$482,895	\$15,698,433
2007/2008	\$19,101,924	\$46,130	\$433,359	\$19,581,413
2008/2009	\$16,377,621	\$86,963	\$403,324	\$16,867,908
2009/2010	\$18,023,923	\$171,423	\$377,636	\$18,572,982
2010/2011	\$21,248,965	\$19,909	\$470,677	\$21,739,551
2011/2012	\$19,792,556	\$212,915	\$573,221	\$20,578,692
2012/2013	\$23,921,323	\$241,759	\$660,615	\$24,823,697

\* Does not include investment expenses



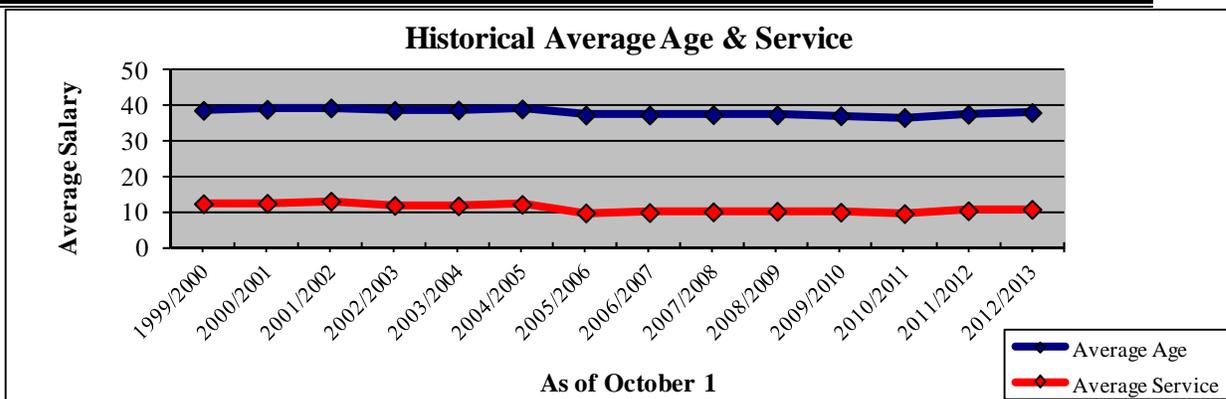
\* Please reference Table VIIa for the historical benefit payments, expenses, and contributions.



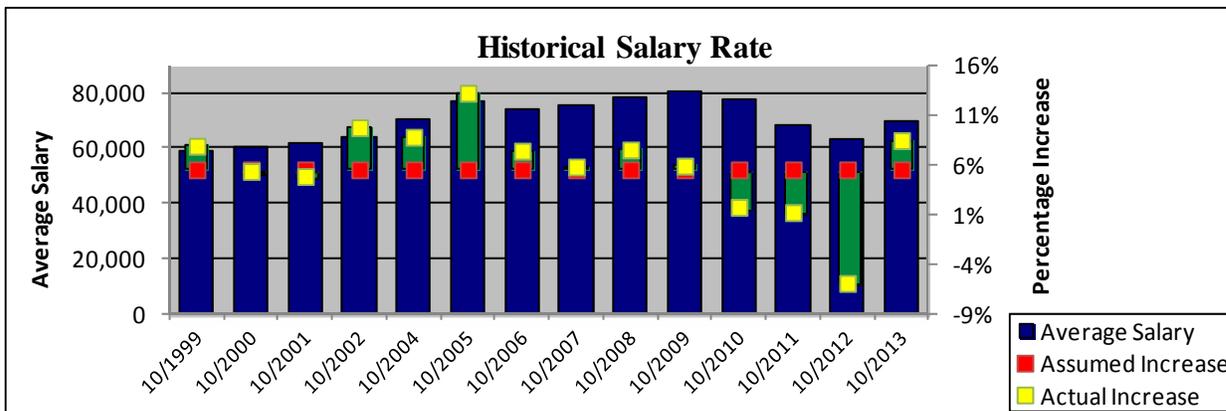
**SUMMARY OF MEMBER DATA**

**TABLE IX**

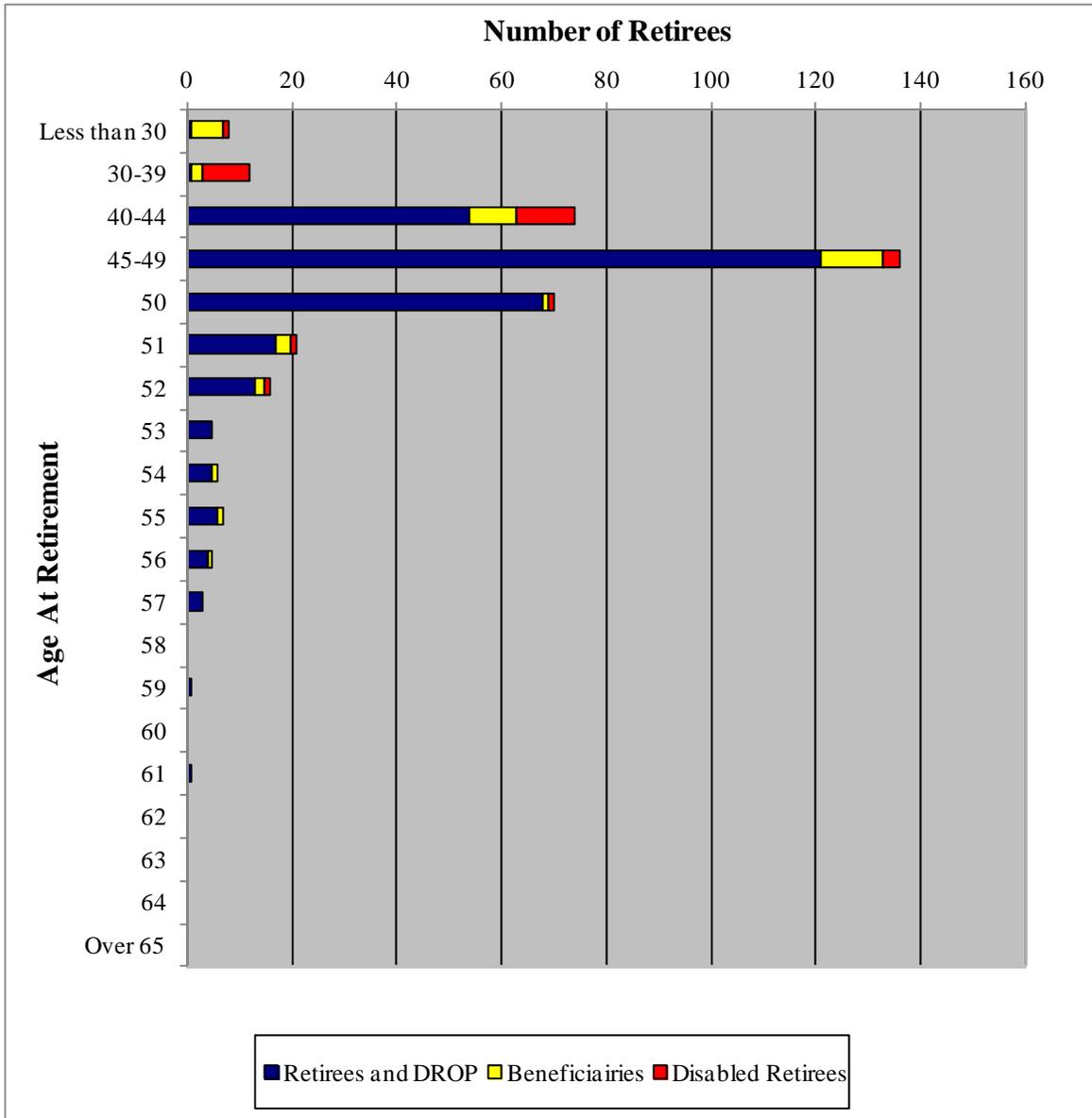
	<u>As of October 1, 2012</u>	<u>As of October 1, 2013</u>
<b>1. Active Members</b>		
a. Vested	95	97
b. Non-vested	119	113
c. Sub-total	<u>214</u>	<u>210</u>
<b>2. Non-active, Non-retired Members</b>		
a. Fully or partially vested	7	10
<b>3. Retired Members</b>		
a. Members in DROP	43	32
b. Retirees	254	268
c. Disabled	27	27
d. Beneficiaries	37	38
e. Sub-total	<u>361</u>	<u>365</u>
<b>4. Total Members</b>	<u>582</u>	<u>585</u>



Date	Average Service Earned	Average Attained Age	Date	Average Service Earned	Average Attained Age
1999/2000	12.5	38.8	2006/2007	10.0	37.5
2000/2001	12.6	39.1	2007/2008	10.2	37.6
2001/2002	13.2	39.5	2008/2009	10.4	37.5
2002/2003	12.0	38.8	2009/2010	10.1	37.3
2003/2004	11.9	38.9	2010/2011	9.7	36.8
2004/2005	12.3	39.2	2011/2012	10.5	37.7
2005/2006	9.9	37.5	2012/2013	10.9	38.2



Date	Average Salary	Actual Salary Increase	Date	Average Salary	Actual Salary Increase
10/1999	\$58,639	7.87%	10/2007	\$75,515	5.79%
10/2000	\$60,075	5.34%	10/2008	\$78,552	7.50%
10/2001	\$61,765	4.83%	10/2009	\$80,198	5.88%
10/2002	\$63,999	9.73%	10/2010	\$77,873	1.75%
10/2004	\$70,312	8.77%	10/2011	\$67,995	1.22%
10/2005	\$76,885	13.18%	10/2012	\$63,421	-5.88%
10/2006	\$74,271	7.38%	10/2013	\$69,437	8.43%



Average benefit being paid to non-disabled retirees is \$5,423 per month.

Average benefit being paid to disabled retirees is \$2,393 per month.

Average benefit being paid to beneficiaries is \$1,247 per month.



**DATA RECONCILIATION**

**TABLE IXc**

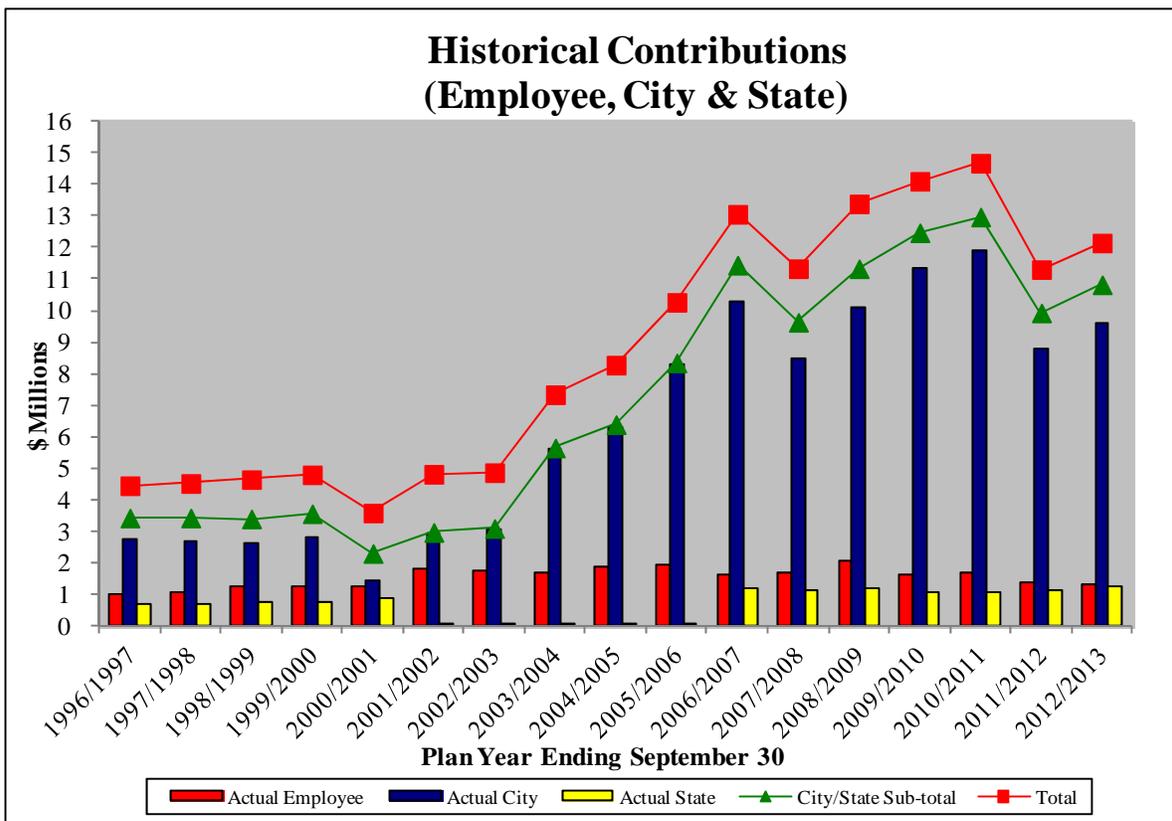
	<u>Active</u>	<u>Non-Active, Non-Retired</u>	<u>Retired</u>	<u>Total</u>
<b>1. Number of members as of October 1, 2012</b>	<b>214</b>	<b>7</b>	<b>361</b>	<b>582</b>
<b>2. Change in Status during the plan year:</b>				
a. Actives who became inactive	(14)	4		(10)
b. Actives who retired	(3)		3	
c. Inactives who became active				
d. Inactives who retired				
e. Retirees who became active				
<b>3. No longer members due to:</b>				
a. Death	(1)			(1)
b. Permanent break-in-service				
c. Forfeiture of benefits		(1)		(1)
d. Expiration of certain period				
e. Included in error last year				
<b>4. New members due to:</b>				
a. Initial membership	14			14
b. Death of another member			1	1
c. Omitted in error last year				
d. Correction				
<b>5. Number of members as of October 1, 2013</b>	<b>210</b>	<b>10</b>	<b>365</b>	<b>585</b>



**AGE-SERVICE-SALARY TABLE**

**TABLE IXd**

Attained Age	Completed Years of Service										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
<b>Under 25</b>	3	0	0	0	0	0	0	0	0	0	<b>3</b>
Avg. Pay	55,656	0	0	0	0	0	0	0	0	0	55,656
<b>25 to 29</b>	8	22	3	0	0	0	0	0	0	0	<b>33</b>
Avg. Pay	54,376	50,065	56,079	0	0	0	0	0	0	0	51,656
<b>30 to 34</b>	1	8	23	10	0	0	0	0	0	0	<b>42</b>
Avg. Pay	57,935	51,970	59,786	69,970	0	0	0	0	0	0	60,678
<b>35 to 39</b>	1	2	12	17	8	0	0	0	0	0	<b>40</b>
Avg. Pay	63,555	55,178	66,222	73,231	81,232	0	0	0	0	0	71,584
<b>40 to 44</b>	0	0	9	14	19	7	0	0	0	0	<b>49</b>
Avg. Pay	0	0	61,968	76,594	81,699	80,879	0	0	0	0	76,499
<b>45 to 49</b>	1	1	2	10	6	15	0	0	0	0	<b>35</b>
Avg. Pay	138,198	56,712	65,651	72,351	88,008	88,573	0	0	0	0	83,039
<b>50 to 54</b>	0	0	1	0	3	3	0	0	0	0	<b>7</b>
Avg. Pay	0	0	66,138	0	86,077	78,504	0	0	0	0	79,983
<b>55 to 59</b>	0	0	0	0	0	1	0	0	0	0	<b>1</b>
Avg. Pay	0	0	0	0	0	83,576	0	0	0	0	83,576
<b>60 to 64</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Avg. Pay	0	0	0	0	0	0	0	0	0	0	0
<b>65 to 79</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Avg. Pay	0	0	0	0	0	0	0	0	0	0	0
<b>70 &amp; Up</b>	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Avg. Pay	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>14</b>	<b>33</b>	<b>50</b>	<b>51</b>	<b>36</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>210</b>
Avg. Pay	61,547	51,038	61,863	73,342	83,011	85,147	0	0	0	0	69,437



Plan Year	Actual Employee	Actual City	Actual State	City/State Sub-Total	Total
1996/1997	\$1,025,860	\$2,762,858	\$671,439	\$3,434,297	\$4,460,157
1997/1998	\$1,094,803	\$2,713,521	\$722,694	\$3,436,215	\$4,531,018
1998/1999	\$1,248,232	\$2,627,147	\$778,850	\$3,405,997	\$4,654,229
1999/2000	\$1,234,026	\$2,817,940	\$752,306	\$3,570,246	\$4,804,272
2000/2001	\$1,286,304	\$1,450,312	\$860,226	\$2,310,538	\$3,596,842
2001/2002	\$1,843,034	\$2,911,978	\$67,447	\$2,979,425	\$4,822,459
2002/2003	\$1,769,721	\$3,036,862	\$67,447	\$3,104,309	\$4,874,030
2003/2004	\$1,687,347	\$5,587,558	\$67,447	\$5,655,005	\$7,342,352
2004/2005	\$1,887,029	\$6,327,050	\$67,447	\$6,394,497	\$8,281,526
2005/2006	\$1,921,212	\$8,281,269	\$67,447	\$8,348,716	\$10,269,928
2006/2007	\$1,611,242	\$10,269,819	\$1,177,441	\$11,447,260	\$13,058,502
2007/2008	\$1,703,041	\$8,493,509	\$1,139,756	\$9,633,265	\$11,336,306
2008/2009	\$2,055,900	\$10,119,188	\$1,212,981	\$11,332,169	\$13,388,069
2009/2010	\$1,633,284	\$11,369,800	\$1,101,980	\$12,471,780	\$14,105,064
2010/2011	\$1,706,543	\$11,917,325	\$1,052,885	\$12,970,210	\$14,676,753
2011/2012	\$1,376,722	\$8,819,634	\$1,111,640	\$9,931,274	\$11,307,996
2012/2013	\$1,324,022	\$9,573,932	\$1,250,143	\$10,824,075	\$12,148,097



1. Actuarial Cost Method

- Entry Age Normal Cost Method

2. Decrements

- **Pre-Retirement Mortality**

Representative values of the assumed annual rates of pre-retirement mortality among members in active service are as follows:

Age	Ordinary Mortality Rate	Service Mortality Rate	Age	Ordinary Mortality Rate	Service Mortality Rate
20	.0017	.0002	40	.0043	.0005
25	.0018	.0004	45	.0055	.0006
30	.0020	.0005	50	.0077	.0009
35	.0030	.0005	54	.0103	.0003

- **Post-Retirement Healthy Mortality**

1983 Group Annuity Mortality Table

- **Post-Retirement Disabled Mortality**

1983 Group Annuity Mortality Table

- **Disability**

Representative values of the assumed annual rates of disability among members in active service are as follows:

Age	Ordinary Disability Rate	Service Disability Rate	Age	Ordinary Disability Rate	Service Disability Rate
20	.0004	.0003	40	.0018	.0014
25	.0006	.0005	45	.0032	.0026
30	.0009	.0007	49	.0050	.0040
35	.0012	.0010			



• Retirement

- For members who are eligible to retire as of September 30, 2011:
  - 100% of members are assumed to retire at the earlier of age 55 or the completion of 22 years of service
- For members who are not eligible to retire as of September 30, 2011:
  - For a member with 10 or more years of creditable service as of September 30, 2011, the assumed annual rates of retirement from active service are as follows:

Age	Years of Service						
	10	11 – 15	16 – 17	18 – 21	22	23 – 29	30
45	0.000	0.000	0.000	0.000	0.050	0.025	1.000
46	0.000	0.000	0.000	0.000	0.050	0.025	1.000
47	0.000	0.000	0.000	0.000	0.050	0.025	1.000
48	0.000	0.000	0.000	0.000	0.050	0.025	1.000
49	0.000	0.000	0.000	0.000	0.050	0.025	1.000
50	0.050	0.050	0.050	0.050	0.050	0.025	1.000
51	0.050	0.025	0.025	0.025	0.025	0.025	1.000
52	0.050	0.025	0.025	0.025	0.025	0.025	1.000
53	0.050	0.025	0.025	0.025	0.025	0.025	1.000
54	0.050	0.025	0.025	0.025	0.025	0.025	1.000
55	0.100	0.025	0.025	0.025	0.025	0.025	1.000
56	0.100	0.025	0.025	0.025	0.025	0.025	1.000
57	0.100	0.025	0.025	0.025	0.025	0.025	1.000
58	0.100	0.050	0.075	0.100	0.100	0.100	1.000
59	0.100	0.050	0.075	0.100	0.100	0.100	1.000
60	1.000	1.000	1.000	1.000	1.000	1.000	1.000

- For a member with less than 10 years of creditable service as of September 30, 2011, the assumed annual rates of retirement from active service are as follows:

Age	Years of Service					
	10	11 – 19	20 - 24	25	26 - 29	30
52	0.000	0.000	0.000	0.100	0.025	1.000
53	0.000	0.000	0.000	0.100	0.025	1.000
54	0.000	0.000	0.000	0.100	0.025	1.000
55	0.100	0.100	0.100	0.100	0.025	1.000
56	0.100	0.025	0.030	0.030	0.025	1.000
57	0.100	0.025	0.030	0.030	0.025	1.000
58	0.100	0.025	0.030	0.030	0.025	1.000
59	0.100	0.100	0.100	0.100	0.100	1.000
60	1.000	1.000	1.000	1.000	1.000	1.000



• **Withdrawal from Active Status**

Representative values of the assumed annual rates of withdrawal among Members in active service are as follows:

Age	Rate	Age	Rate
20	.1030	35	.0182
25	.0730	40	.0099
30	.0415	45	.0048

**3. Interest Rates**

- Used for Calculating All Liabilities (including GASB 25/27 liabilities)
  - 8.00% per annum
  - 7.75% per annum in calculation of present value of accrued benefits in accordance with Florida Statutes, Chapter 2011-216.

**4. Salary Increases**

• **Individual Compensation**

Representative values of the assumed annual rates of future salary increase are as follows:

Age	Rate	Age	Rate
20	.1067	35	.0530
25	.0880	40	.0510
30	.0625	45	.0503

\* Average assumed annual rate of 5.49%

• **Aggregate Compensation**

The aggregate compensation used to compute the accrued liability contribution rate was assumed to increase at a rate of 3½% per year.

**5. Marriage Assumptions**

- **Percent Married:** 75% of members are assumed married.
- **Age Difference Between Spouses:** Male spouses are assumed to be three years older than female spouses.



**6. Expenses**

The normal contribution rate is increased by anticipated non-investment expenses. The anticipated expenses for the 2013/2014 plan year are \$400,000.

**7. Assets**

The Actuarial Value of Assets is equal to the Market Value of Assets adjusted to reflect a five year phase-in of the difference between the expected return on market value of assets and the actual investment return on market value of assets. The actuarial value of assets cannot be less than 90% of market value nor greater than 110% of the market value.



The following assumptions have been changed during the last few plan years:

1. Effective October 1, 1997:  
The post-retirement mortality table was changed to the 1983 Group Annuity Mortality Table.
2. Effective October 1, 1999:
  - a) The actuarial value of assets reflects a "fresh start" at market value, beginning a new five-year phase-in of gains and losses.
  - b) The actuarial cost method was changed from frozen entry age to entry age.
3. Effective October 1, 2006:
  - a) The retirement decrement was changed to the earlier of age 55 or attainment of 22 years of service. This assumption has been changed to better reflect anticipated retirement behavior as a result of the change in plan provisions effective October 1, 2006.
  - b) The percentage of active members assumed married was changed from 95% to 75%. This assumption was changed after a review of the marital status of recent retirees and current active members.
  - c) On October 1, 2006, the Actuarial Value of Assets was changed to be equal to the Market Value of Assets, adjusted to reflect a five-year phase-in of the difference between the expected return on Actuarial Value of Assets and the actual investment return. The new method was applied retroactively so that five years of excess returns are smoothed in 2006. The prior Actuarial Value of Assets was equal to the Market Value of Assets adjusted to reflect a five-year phase-in of the net investment gain or loss.
  - d) It is assumed that members who enter the DROP on or after October 1, 2006 will participate in the DROP for eight years. Therefore, the COLA payment to these members will be deferred eight years.
4. Effective October 1, 2010:
  - a) Age and service based retirement rates were added for members with less than ten years of service as of September 30, 2011.
5. Effective October 1, 2012:
  - a) Age and service based retirement rates were updated to reflect the passage of Ordinance No. O-2013-18.

\* **Note: Assumption and Method changes that have first been reflected in this valuation are shown in bold print.**



**1. Monthly Accrued Benefit**

For members who are eligible to retire as of September 30, 2011:

- 3% of average monthly earnings multiplied by service to 20 years plus 4% multiplied by service over 20 years with a maximum of 80% of average monthly earnings. The full 80% is earned at 22 years of service (resulting in a 12% of earnings increase in benefit at the moment the member attains 22 years of service).

For members who are not eligible to retire as of September 30, 2011:

- Active members who are vested as of September 30, 2011, the sum of the following, not to exceed 80% of average monthly earnings:
  - 3.3% of average monthly earnings multiplied by service earned up to September 30, 2011.
  - 3.0% of average monthly earnings multiplied by service earned on or after October 1, 2011.
- Active members who are not vested as of September 30, 2011, the sum of the following, not to exceed 80% of average monthly earnings:
  - 3.0% of average monthly earnings multiplied by service earned up to September 30, 2011.
  - 3.0% of average monthly earnings multiplied by service earned on or after October 1, 2011.

**2. Average Monthly Earnings**

For benefits accrued prior to October 1, 2011:

- The average of the highest three consecutive years of compensation prior to retirement or termination. Earnings include basic annual wages including regular longevity raises and overtime up to 400 hours per year, but not including amounts for unused sick time or unused vacation time paid at retirement or termination.

For benefits accrued on or after October 1, 2011:

- The average of the highest five consecutive years of compensation prior to retirement or termination. Earnings shall include basic annual wages, longevity pay, and assignment pay, but not including overtime pay, payments for accrued holiday time, payments for accrued blood time, annual “cash-out” payments for accrued vacation time, payments for accrued compensatory time, and payments for unused sick time or for unused vacation time which is paid upon retirement or termination.



**3. Normal Retirement Age and Benefit**

• **Eligibility:**

- For a member with 10 or more years of creditable service as of September 30, 2011:
  - Age 50, or
  - Any age upon attainment of 22 years of service
- For a member with less than 10 years of creditable service as of September 30, 2011:
  - Age 55 with 10 years of service, or
  - Age 52 with 25 years of service

• **Amount:** Monthly Accrued Benefit

• **Form of Payment:** Life annuity with ten years certain, with a 50% survivor annuity payable to the spouse until death or remarriage

**4. Disability Retirement Age and Benefit**

• **Condition**

For a service connected disability benefit, the member must become totally and permanently disabled in the line of duty and must have applied for Social Security disability benefits as well as worker's compensation benefits, if applicable;

For a non-service connected disability benefit, the member must become totally and permanently disabled, must have at least five years of service, and must have applied for Social Security disability benefits as well as worker's compensation benefits, if applicable.

• **Amount**

For a service connected disability benefit:

Greater of monthly accrued benefit or 50% of earnings at the time of determination of disability.

For a non-service connected disability benefit:

- For members who become disabled prior to October 1, 2011:
  - 2½% of average monthly earnings multiplied by service, with a minimum benefit of 25% of earnings at the time of determination of disability. The benefit will be offset by any worker's compensation, Social Security, pension, or similar benefit payable to the member or to his dependents. Upon attainment of age 65, the Social Security offset will cease and, upon attainment of age 50, the benefit will be recomputed as a normal retirement benefit with consideration of service granted for the period of time that the member was receiving a disability retirement benefit.



- For members who become disabled on or after to October 1, 2011:
  - 3% of average monthly earnings multiplied by service, with a minimum benefit of 25% of earnings at the time of determination of disability. The benefit will be offset by any worker's compensation, Social Security, pension, or similar benefit payable to the member or to his dependents. Upon attainment of age 65, the Social Security offset will cease and, upon attainment of age 55, the benefit will be recomputed as a normal retirement benefit with consideration of service granted for the period of time that the member was receiving a disability retirement benefit.

- **Form of Payment**

Ten year certain and Life annuity, with a 50% survivor annuity payable to the spouse until death or remarriage. In the case of a member who dies prior to age 50 (or 55) while receiving a non-service connected disability, a 100% survivor annuity is payable to the spouse until death or remarriage.

#### 5. **Withdrawal Retirement Age and Benefit**

- **Age:** Any age with at least ten years of service
- **Amount:** Monthly Accrued Benefit. If participant was has at least ten years of service prior to October 1, 2011, benefit is payable at age 50. Otherwise, benefit accrued as of September 30, 2011 is payable at age 50 and benefit accrued after that date is payable at age 55.
- **Form of Payment:** Life annuity with ten years certain, with a 50% survivor annuity payable to the spouse until death or remarriage if the member dies after payment has begun. A member may elect to receive his contributions in lieu of a withdrawal retirement benefit.

#### 6. **Death Benefits**

- **Service connected death benefit:** 50% of earnings at the date of death payable as a monthly life and ten years certain benefit to the spouse until death or remarriage or to surviving children until the youngest child reaches age 18.
- **Non-service connected death benefit:** 25% of earnings at the date of death payable as a monthly life and ten years certain benefit to the spouse until death or remarriage or to surviving children until the youngest child reaches age 18.

#### 7. **Employee Contributions**

8.00% of compensation effective the first full pay period on or after May 1, 2013.

#### 8. **Refund of Employee Contributions**

If a member's service is terminated prior to his becoming eligible for a withdrawal retirement benefit, then his contributions are returned to him. If contributions are refunded to the member or to his beneficiaries, then interest is credited at the rate of 3% per year.



**9. Police Officers' Deferred Retirement Option Plan (DROP)**

Prior to October 1, 2011, a participant may enter the DROP upon attainment of normal retirement age. When a member enters the DROP, his Monthly Accrued Benefit is frozen based on his average monthly earnings and service at that time and his Monthly Accrued Benefit is paid into his DROP account. Upon termination of employment, but not more than eight years after entry into the DROP, the balance in the member's DROP account, including interest, is payable to him and he also begins to receive his frozen Monthly Accrued Benefit.

A member hired on or before September 30, 2009 who elects to enter the DROP plan has the option to receive a rate of return on his or her DROP account that is equal to the assumed rate of investment return on fund assets. For members hired on or after October 1, 2009, his or her DROP account shall earn interest at the rate of six percent (6%) per year. In the event the Plan earnings exceed six percent (6%) per year, the earnings in excess of six percent (6%) up to and including twelve percent (12%) per year shall offset the City's cost of maintaining the DROP program. Earnings in excess of twelve percent (12%) per year shall be equally divided between the DROP participant and the City.

A participant who does not enter the DROP prior to October 1, 2011 shall not be eligible to participate in the DROP, unless the member was eligible to retire as of September 30, 2011.

**10. Planned Retirement Benefit**

In order to participate in the Planned Retirement Benefit a member must submit in writing declaring their intent to participate in the Planned Retirement Benefit at any time on or after reaching the member's normal retirement date, but not later than the later of September 15, 2013 and sixty (60) days after reaching the member's retirement date.

Members who elect to participate in the Planned Retirement Benefit shall not exceed 30 years of service, including service while participating in the Planned Retirement Benefit.

A member who elects to participate in the Planned Retirement Benefit will receive the normal retirement benefit they would have been eligible to receive during the Planned Retirement Period had the member actually retired at a point during the look-back period that begins on the entry date into the Planned Retirement Benefit and ends on the date of termination. If the member chooses a normal retirement benefit based on age and service during the look back period, they will receive a lump sum with interest based on the normal retirement benefit payable during the look-back period.

The maximum look-back period is 8 years from the date of termination for members vested as of September 30, 2011. For non-vested members as of September 30, 2011, the maximum look-back period is 5 years. Non-vested members as of September 30, 2011 who reach his/her normal retirement date upon completion of 25 years of service, but not more than 30 years of service may, upon termination of employment elect to receive benefits under the Planned Retirement Benefit for a period of not more than 5 years. A limited exception to the 30 years of service maximum is available to non-vested members who do not reach their normal retirement date until after 30 years of service. A member under this scenario may participate in the Planned Retirement Benefit for a period of not more than 5 years.



The crediting rate applicable to any lump sum payment shall be calculated in arrears equal to 100% of the first 4% of plan earnings plus 50% of plan earnings in excess of 6%, unless the System is 90% funded. If the System is at least 90% funded, the crediting rate will be based on the 100% of the first 4% of plan earning plus 100% of plan earning in excess of 6%. The member will not share in asset losses in those years where plan returns are negative.

**11. Cost-of-Living Adjustment**

For benefits accrued prior to October 1, 2011:

- Any retiree's whose benefit commences on or after April 1, 1987 and any beneficiary of such retiree will receive a 2% annual increase in benefit payments commencing three years after the retiree's benefit payments have begun.
- For participants who enter the DROP on or after June 7, 2006, cost-of-living adjustments do not occur while the member participates in the DROP. Adjustments commence the later of the date the participant leaves the DROP and three years after entry into the DROP.

For benefits accrued on or after October 1, 2011, there shall be no annual increase in retirement benefits.

**12. Supplemental Pension Check**

For retirees, surviving spouses, and other beneficiaries who reached their normal retirement date or entered the DROP on or before September 30, 2011:

- If the actual asset return of the trust exceeds the assumed actuarial return for any fiscal year, the excess return (up to 2%) will be allocated to retirees and beneficiaries based on service at retirement.

For retirees, surviving spouses, and other beneficiaries who reached their normal retirement date or entered the DROP after September 30, 2011, no supplemental pension check will be paid.



The following plan amendments have been adopted within the past few years:

1. Effective January 1, 1991:

- a) The Police Officers' Deferred Retirement Option Plan (DROP) was established;
- b) The benefit formula was changed from 2½% of average monthly earnings multiplied by service up to 30 years to 3% of average monthly earnings multiplied by service up to 27 years; and
- c) The normal retirement age was changed from age 50 to the earlier of age 50 or the attainment of 25 years of service.

2. Effective January 2000:

The excess (up to 2%) of the actual asset return over the assumed actuarial return each September 30 would be allocated the following January to retirees and beneficiaries based on service at retirement.

3. Approved April 2001:

- a) Monies received as a result of Chapter 185, Florida Statutes, will no longer be allocated to this System but to a separate shares plan (effective in the fiscal year beginning October 1, 2001).
- b) The benefit formula was changed from 3% of average monthly earnings multiplied by all service up to 27 years to a 3% rate for service up to 20 years and 4% rate for service over 20 years, with a maximum of 88% of average monthly earnings.
- c) Member contribution rate was changed from 7% to 8% of earnings.
- d) A minimum service-incurred disability benefit equal to the monthly accrued benefit was added. In addition, this benefit will no longer be offset by worker's compensation, Social Security or other similar benefits.

4. Approved February 2002:

Police officers at least age 41 and with between 21 and 25 years of service by September 30, 2002 were permitted to retire and granted service up to 4 years to be credited up to a minimum of 25 years and a maximum of 27 years, provided they paid an amount representing their own estimated contributions for the grant of service.

5. Effective October 1, 2004:

Normal form of benefit was changed to life annuity with ten years certain, 50% joint and survivor, in compliance with Chapter 99-1 Florida Statutes.



6. Effective October 1, 2006:

- a) The maximum pension benefit was reduced from 88% to 80% of final average salary. The maximum is accrued upon attainment of 22 years of service.
- b) Members with 22 years of service are permitted to enter the DROP with a retirement benefit of 80% of final average salary.
- c) Maximum DROP participation is eight years for members who enter the DROP with 22 years of service on or after October 1, 2006. However, the maximum City service (including service while in the DROP) is limited to 30 years.
- d) Overtime hours were capped at 400 hours per year.
- e) Member contributions were increased from 8.0% to 8.5% of pay.
- f) For participants entering the DROP on or after October 1, 2006, Cost-of-living adjustments do not occur while the member participates in the DROP. Adjustments commence the later of the date the participant leaves the DROP and three years after entry into the DROP.
- g) The life and 10-year certain benefit as the normal form of payment is retroactive to October 1, 2000.
- h) State tax premium distributions (185 Monies) after October 1, 2006 will be used as an offset to the City contribution requirements, not to exceed the annual cost of the benefit improvements. Any future State contributions in excess of the annual cost of the benefit improvements will be accumulated and used for future benefit improvements. Also, the accumulated State excess contribution of \$81,376 as of September 30, 2006 will be used to offset the cost of the proposed benefit improvements.

7. Effective October 1, 2009:

- a) Member contributions were increased from 8.5% to 9% of pay.
- b) For members hired on or after October 1, 2009, his or her DROP account shall earn interest at the rate of six percent (6%) per year. In the event the Plan earnings exceed six percent (6%) per year, the earnings in excess of six percent (6%) up to and including twelve percent (12%) per year shall offset the City's cost of maintaining the DROP program. Earnings in excess of twelve percent (12%) per year shall be equally divided between the DROP participant and the City.



8. Effective October 1, 2010:

- a) Member contributions will be increased from 9% to 9.25% of pay.

9. Effective October 1, 2011:

- a) The benefit structure in effect on September 30, 2011 is frozen at midnight. All members will be vested in benefits accrued to date and payable under the terms and conditions of plan provisions then in effect. Except for members eligible to retire on September 30, 2011, effective October 1, 2011, all members are subject to a new benefit structure applicable to future service. None of the benefit changes will apply to members eligible to retire on September 30, 2011.
  - i. Under the benefit structure effective October 1, 2011 Average Final Compensation means the arithmetic average of earnings for the 60 highest consecutive months of the last 120 months of credited service prior to retirement, termination or death.
  - ii. Under the benefit structure effective October 1, 2011 earnings shall be the sum of the following amounts actually paid to a member: Salary, longevity pay and assignment pay. Earnings shall not include overtime pay, payments for accrued holiday time, payments for accrued blood time, annual cash-out payments for accrued vacation time, payments for accrued compensatory time, and payments for unused sick time or for unused vacation time which is paid upon retirement or termination.
  - iii. A member hired prior to October 1, 2011 with less than ten years of credited service as of September 30, 2011 and a member hired on or after October 1, 2011 may retire on the day he or she attains age 55 and completes ten years of creditable service or on the day he or she attains age 52 and competes 25 years of creditable service. A member with 10 or more years of creditable service as of September 30, 2011 shall retain his or her current normal retirement date.
  - iv. The monthly retirement benefit shall equal 2.0% of average monthly earnings times years of service earned on or after October 1, 2011. If the member retires before attaining age 62, an additional benefit equal to 0.5% of average monthly earnings times continuous service on and after October 1, 2011 shall be paid to age 62.
  - v. A member who does not enter the DROP prior to October 1, 2011 shall not be eligible to enter the DROP, unless the member was eligible to retire as of September 30, 2011.
  - vi. Members of the System shall contribute 9.25% of their earnings.



- vii. There shall be no annual increase (COLA) in retirement benefits under the benefit structure effective October 1, 2011.
- viii. The supplemental pension distribution shall be payable only to retirees (and surviving spouses and other beneficiaries thereof) who reach their normal retirement or enter the DROP on or before September 30, 2011.

10. Effective October 1, 2012:

- a) The multiplier increased to 3.3% for service up to September 30, 2011 for vested members on September 30, 2011 and 3% for all members for service after September 30, 2011.
- b) The Planned Retirement Benefit was added retroactive to October 1, 2011.
- c) Employee contributions were reduced from 9.25% to 8% of pay effective the first full pay period on or after May 1, 2013.

**\* Note: Plan changes that have first been reflected in this valuation are shown in bold print.**