

CITY OF HIALEAH  
EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION  
AS OF OCTOBER 1, 2014

CONTRIBUTIONS APPLICABLE TO  
THE FISCAL YEAR ENDED SEPTEMBER 30, 2016



May 18, 2015

Board of Trustees  
City of Hialeah  
Employees' Retirement System  
501 Palm Ave.  
Hialeah, FL 33010

Re: City of Hialeah Employees' Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Hialeah Employees' Retirement System. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Chapters 112, 175 and 185, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in this valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience.

In conducting the valuation, we have relied on personnel, plan design, and asset information supplied by the Board of Trustees and the City of Hialeah, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The undersigned is familiar with the immediate and long-term aspects of pension valuations, and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Hialeah, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the City of Hialeah Employees' Retirement System. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact me at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.

By:

  
\_\_\_\_\_  
Bradley R. Heinrichs  
Enrolled Actuary #14-6901

BRH/lke

Enclosures

## TABLE OF CONTENTS

Section	Title	Page
I	<u>Introduction</u>	
	a. Summary of Report	5
	b. Changes Since Prior Report	8
	c. Requirements of Chapter 112, Part VII, Florida Statutes	9
II	<u>Valuation Information</u>	
	a. Reconciliation of the Unfunded Actuarial Accrued Liabilities	18
	b. Detailed Actuarial (Gain)/Loss Analysis	19
III	Trust Fund	20
IV	<u>Member Statistics</u>	
	a. Age-Service-Salary Distributions	23
	b. Member Reconciliations	28
V	Actuarial Assumptions and Methods	31
VI	Summary of Plan Provisions	36
VII	Governmental Accounting Standards Board Disclosure Information	42

## SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Hialeah Employees' Retirement System, performed as of October 1, 2014, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the fiscal year ending September 30, 2016. The contributions have been developed assuming that the City will make their contribution on December 31, 2015.

The contribution requirements, compared with those developed in the February 23, 2015 Actuarial Impact Statement, determined as of October 1, 2013, are as follows:

Valuation Date	10/1/2014	10/1/2013
Applicable Fiscal Year End	<u>9/30/2016</u>	<u>9/30/2015</u>
<b>Total Required Contribution</b>	<b>\$28,666,866</b>	<b>\$28,342,329</b>
% of Projected Annual Payroll	46.42%	46.33%
<b>Less Member Contributions<sup>2</sup></b>	<b>2,189,403</b>	<b>2,229,590</b>
% of Projected Annual Payroll	3.55%	3.64%
<b>Equals Required City &amp; State</b>	<b>26,477,463</b>	<b>26,112,739</b>
% of Projected Annual Payroll	42.87%	42.69%
<b>State Contribution<sup>1</sup></b>	<b>461,877</b>	<b>461,877</b>
% of Projected Annual Payroll	0.75%	0.76%
<b>Balance from City<sup>2</sup></b>	<b>26,015,586</b>	<b>25,650,862</b>
% of Projected Annual Payroll	42.12%	41.93%

<sup>1</sup> Represents the amount transferred from the Share Plan each year.

<sup>2</sup> The Member Contributions displayed above represent the expected Member Contributions to the Pension portion of the Retirement System during the respective plan years based upon the varying effective dates for each group. The City will be able to deduct the actual Member Contributions made to the Pension portion of the Retirement System (excluding buy backs) when determining their bottom line requirement.

### Summary

As can be seen, the Total Required Contribution has increased slightly when expressed as a percentage of Projected Annual Payroll. There are two primary reasons for this increase. First of all, each year there is an assumed improvement in the mortality rates. This assumption change increased the funding requirements by 0.10% of payroll. The second reason for the increase in the funding requirements when expressed as a percentage of payroll is that the amortization of the Unfunded Actuarial Accrued Liability is set to increase at 3.5% per year (the Payroll Growth assumption). Pensionable payroll only increased by 0.9% this year, so this amortization payment now represents a larger percentage of projected payroll. This payroll growth assumption of 3.5% was approved by the Division of Retirement a couple of years

ago. However, now that the Plan is closed to new General Employees, we recommend this assumption be addressed for future valuations. Partially offsetting these two causes of increasing funding requirements was the net favorable actuarial experience during past year, as compared to the assumptions. The primary components of favorable experience included the impact of a 10.9% return on the Actuarial Value of Assets exceeding the assumed rate and average increases in Pensionable Compensation being less than expected. These gains were partially offset by the impact of losses related to retirements being earlier than anticipated, lower than expected non-retirement turnover, lower than expected mortality and the fact that Members' Annuity Savings accounts were credited with 9.49% and the assumed rate is 8.0%. For more detail on the actuarial gains and losses over the past year, please see page 19. These actuarial gains reduced the funding requirements by 0.84% of payroll.

#### **Contributions as a % of Projected Payroll including DROP Members**

As requested by the Board, we have calculated the required contribution from the City as a percentage of payroll including projected pay for members in the Deferred Retirement Option Program ("DROP"). While DROP members are employed by the City, they are considered retired members for purposes of the actuarial valuation since they are no longer contributing to the Retirement System and their benefits (which are no longer accruing) are being paid into DROP accounts for distribution after their employment ceases with the City. The required contributions from the City as a percent of payrolls inclusive of compensation to DROP members are 40.52% and 40.75% for fiscal years 2015 and 2016, respectively. Please note that these amounts are for informational purposes only.

#### **Accumulated Annuity Savings Member Contributions**

A portion of the Member contributions received by the Retirement System are used to fund the annuity portion of each Member's retirement allowance. Each such annuity may be taken as a lump sum at retirement and equals the actuarial equivalent of the member's accumulated contributions made to the Annuity Saving Fund (ASF). The actuarial accrued liability for this benefit for active members is set equal to their accumulated member contributions to the ASF. As of October 1, 2014, accumulated contributions to the ASF for all Members totaled \$105,494,233. Of this amount, accumulated active member contributions totaled \$65,899,813 and accumulated retiree contributions (including accumulated contributions for non-active, non-retired members) totaled \$39,594,420. The arithmetic average of the annual yields on the market value of assets for the period October 1, 2009 through September 30, 2014 is 10.65%. Therefore, accumulated member contribution and DROP accounts should be credited with interest at the rate of 10.65% for the 2014/2015 plan year.

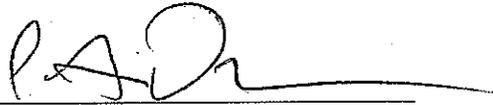
The balance of this Report presents additional details of the actuarial valuation and the general operation of the Fund. The undersigned would be pleased to meet with the Board of Trustees in order to discuss the Report and answer any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.



By: \_\_\_\_\_  
Bradley R. Heinrichs, FSA, EA, MAAA



By: \_\_\_\_\_  
Patrick T. Donlan, ASA, EA, MAAA

### PLAN CHANGES SINCE PRIOR VALUATION

Since the prior valuation, the following change was made:

- 1.) Provide that for a non-Police Officer or Firefighter Member who is reemployed by the City within a period of 10 years from and after the date of the Member's last separation from service, the Credited Service forfeited by the Member at the time of the Member's last separation from service shall be restored to the Member's credit upon such conditions as the Board of Trustees may require, such as restoration of the Member's annuity account with interest, if the Member withdrew his/her annuity account at the time of separation. *For the purpose of the Actuarial Impact Statement, it is assumed that this provision will only affect Vicente Rodriguez.*

The impact of this change on the funding requirements to the Plan can be found in our Actuarial Impact Statement dated February 23, 2015.

### ACTUARIAL ASSUMPTION/METHOD CHANGES SINCE PRIOR VALUATION

A portion of the assets in the Trust Fund are reserved for the Annuity Savings Benefits that are due to Members who had previously terminated employment and left their Annuity Savings in the Fund to be withdrawn at a future date (Annuity Savings Reserve). In the prior report, the assets shown were the full assets in the Trust Fund and the Annuity Savings Reserve was added to the liabilities. This year, in order for the valuation report to match the audited financial statements; this Annuity Savings Reserve was subtracted from the assets of the Plan, and therefore not included as a liability. This change of categorization has no impact on the funding requirements.

Additionally, the mortality assumption was amended because each year it is assumed that mortality improves. The impact of this change can be seen on Page 19.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS  
Total Plan

	<u>10/1/2014</u>	<u>10/1/2013</u>
<b>A. Participant Data</b>		
Number Included		
Actives	1,091	1,113
Service Retirees	1,118	1,091
DROP Retirees	42	43
Beneficiaries	48	35
Terminated Vested	103	97
Disability Retirees	193	196
Total	<u>2,595</u>	<u>2,575</u>
Total Annual Payroll	\$62,282,474	\$61,461,027
Payroll Under Assumed Ret. Age	61,751,067	61,172,102
Annual Rate of Payments to:		
Service Retirees	42,505,067	40,964,013
DROP Retirees	2,913,962	3,010,947
Beneficiaries	920,329	850,525
Terminated Vested	1,125,662	1,012,002
Disability Retirees	5,463,944	5,443,558
<b>B. Assets</b>		
Actuarial Value <sup>1 3</sup>	563,602,386	575,386,251
Market Value <sup>1 3</sup>	598,399,504	608,537,493
<b>C. Liabilities</b>		
Present Value of Benefits		
Active Members		
Retirement Benefits	238,990,639	228,724,594
Disability Benefits	13,520,600	13,435,804
Death Benefits	2,546,338	2,543,912
Vested Benefits	17,115,152	17,059,997
Refund of Contributions	140,129	76,270
Service Retirees	434,960,608	424,051,244
DROP Retirees <sup>1</sup>	40,489,868	46,624,008
Beneficiaries	5,742,077	5,855,535
Terminated Vested	6,724,949	6,200,977
Disability Retirees	42,011,501	42,470,495
Annuity Savings <sup>3</sup>	65,975,171	99,658,059
Total	<u>868,217,032</u>	<u>886,700,895</u>

## Total Plan

C. Liabilities - (Continued)	<u>10/1/2014</u>	<u>10/1/2013</u>
Present Value of Future Salaries	455,464,730	459,829,768
Normal Cost (Entry Age Normal)		
Retirement Benefits	7,224,262	7,153,104
Disability Benefits	821,217	814,080
Death Benefits	100,452	101,128
Vested Benefits	950,196	905,911
Refund of Contributions	8,037	8,556
Total Normal Cost	<u>9,104,164</u>	<u>8,982,779</u>
Present Value of Future Normal Costs	71,169,522	71,780,476
Actuarial Accrued Liability		
Retirement Benefits	182,738,761	171,756,346
Disability Benefits	7,211,144	7,038,533
Death Benefits	1,769,836	1,742,486
Vested Benefits	9,347,500	9,496,899
Refund of Contributions	76,095	25,837
Inactives <sup>1</sup>	529,929,003	525,202,259
Annuity Savings	65,975,171	99,658,059
Total Actuarial Accrued Liability	<u>797,047,510</u>	<u>814,920,419</u>
Unfunded Actuarial Accrued Liability	233,445,124	239,534,168
 D. Actuarial Present Value of Accrued Benefits		
Vested Accrued Benefits		
Inactives <sup>1</sup>	529,929,003	525,202,259
Actives	101,052,156	89,589,333
Member Contributions *	65,975,171	99,658,059
Total	<u>696,956,330</u>	<u>714,449,651</u>
Non-vested Accrued Benefits	<u>45,025,346</u>	<u>45,478,494</u>
Total Present Value Accrued Benefits	741,981,676	759,928,145
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	932,798	
New Accrued Benefits	25,752,386	
Benefits Paid	(63,299,504)	
Interest	58,262,271	
Other	(39,594,420) *	
Total:	<u>(17,946,469)</u>	

\* 10/1/14 Excludes Annuity Savings Reserve to match Audit.

## Total Plan

Valuation Date	10/1/2014	10/1/2013
Applicable to Fiscal Year Ending	<u>9/30/2016</u>	<u>9/30/2015</u>

## E. Pension Cost

Normal Cost <sup>2</sup>	\$10,023,509	\$9,889,866
% of Total Annual Payroll	16.23	16.17
Administrative Expense <sup>2</sup>	-	-
% of Total Annual Payroll	0.00	0.00
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years <sup>2</sup> (as of 10/1/2014)	18,643,357	18,452,463
% of Total Annual Payroll	30.19	30.16
Total Required Contribution	28,666,866	28,342,329
% of Total Annual Payroll	46.42	46.33
Expected Member Contributions	2,189,403	2,229,590
% of Total Annual Payroll	3.55	3.64
Expected City & Share Contribution	26,477,463	26,112,739
% of Total Annual Payroll	42.87	42.69

## F. Past Contributions

Plan Years Ending:	<u>9/30/2014</u>
Total Required Contribution City and Share Requirement	27,818,225 26,231,130
Actual Contributions Made:	
Members	6,813,490
City	25,769,253
Share Plan	461,877
Total	<u>33,044,620</u>

G. Net Actuarial Gain (Loss)	8,160,689
------------------------------	-----------

<sup>1</sup> The asset values and liabilities for DROP Members include accumulated DROP Balances.

<sup>2</sup> Contributions developed as of 10/1/2014 are adjusted for 15 months of interest.

<sup>3</sup> The Asset and Annuity Savings values include \$75,358 expected buy back contribution from Mr. Rodriguez.

## Total Plan

H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability  
as of:

<u>Year</u>	<u>Projected Unfunded Accrued Liability</u>
2014	233,445,124
2015	233,832,649
2016	233,611,096
2019	228,547,750
2029	188,866,933
2034	115,857,061
2044	0

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS  
General Employees

	<u>10/1/2014</u>	<u>10/1/2013</u>
A. Participant Data		
Number Included		
Actives	578	609
Service Retirees	699	681
DROP Retirees	7	8
Beneficiaries	34	22
Terminated Vested	67	64
Disability Retirees	69	71
Total	<u>1,454</u>	<u>1,455</u>
Total Annual Payroll	\$24,744,960	\$24,537,377
Payroll Under Assumed Ret. Age	24,452,639	24,388,872
Annual Rate of Payments to:		
Service Retirees	21,889,489	21,119,335
DROP Retirees	377,885	482,685
Beneficiaries	594,756	449,057
Terminated Vested	632,604	599,041
Disability Retirees	1,169,886	1,193,253
B. Liabilities		
Present Value of Benefits		
Active Members		
Retirement Benefits	76,438,680	71,267,342
Disability Benefits	3,318,330	3,215,203
Death Benefits	739,897	722,717
Vested Benefits	6,847,956	6,839,133
Refund of Contributions	0	0
Service Retirees	217,774,969	213,025,357
DROP Retirees <sup>1</sup>	5,197,549	8,313,286
Beneficiaries	3,568,465	3,285,240
Terminated Vested	4,253,935	4,155,158
Disability Retirees	8,810,596	8,985,528
Annuity Savings <sup>2</sup>	23,192,080	35,032,537
Total	<u>350,142,456</u>	<u>354,841,501</u>

<sup>1</sup> Includes accumulated DROP balances.

## General Employees

	<u>10/1/2014</u>	<u>10/1/2013</u>
B. Liabilities - (Continued)		
Present Value of Future Salaries	177,406,852	178,566,152
Normal Cost (Entry Age Normal)		
Retirement Benefits	2,384,433	2,372,651
Disability Benefits	179,339	182,810
Death Benefits	27,516	27,941
Vested Benefits	361,296	348,768
Refund of Contributions	0	0
Total Normal Cost	<u>2,952,584</u>	<u>2,932,170</u>
Present Value of Future Normal Costs	22,876,114	22,991,311
Actuarial Accrued Liability		
Retirement Benefits	58,144,698	52,871,141
Disability Benefits	2,019,541	1,883,825
Death Benefits	532,454	509,168
Vested Benefits	3,772,056	3,788,950
Refund of Contributions	0	0
Inactives	239,605,514	237,764,569
ASF Member Contributions <sup>2</sup>	23,192,080	35,032,537
Total Actuarial Accrued Liability	<u>327,266,342</u>	<u>331,850,190</u>

<sup>2</sup> Last year we added the Annuity Savings Reserve (attributable to inactive Members) to the Assets and Liabilities. This year it is subtracted from both to match Audit.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS  
Police Officers & Firefighters

	<u>10/1/2014</u>	<u>10/1/2013</u>
A. Participant Data		
Number Included		
Actives	513	504
Service Retirees	419	410
DROP Retirees	35	35
Beneficiaries	14	13
Terminated Vested	36	33
Disability Retirees	124	125
Total	<u>1,141</u>	<u>1,120</u>
Total Annual Payroll	\$37,537,514	36,923,650
Payroll Under Assumed Ret. Age	37,298,428	36,783,230
Annual Rate of Payments to:		
Service Retirees	20,615,578	19,844,678
DROP Retirees	2,536,077	2,528,262
Beneficiaries	325,573	401,468
Terminated Vested	493,058	412,961
Disability Retirees	4,294,058	4,250,305
B. Liabilities		
Present Value of Benefits		
Active Members		
Retirement Benefits	162,551,959	157,457,252
Disability Benefits	10,202,270	10,220,601
Death Benefits	1,806,441	1,821,195
Vested Benefits	10,267,196	10,220,864
Refund of Contributions	140,129	76,270
Service Retirees	217,185,639	211,025,887
DROP Retirees <sup>1</sup>	35,292,319	38,310,722
Beneficiaries	2,173,612	2,570,295
Terminated Vested	2,471,014	2,045,819
Disability Retirees	33,200,905	33,484,967
Annuity Savings <sup>2</sup>	42,783,092	64,625,522
Total	<u>518,074,576</u>	<u>531,859,394</u>

<sup>1</sup> Includes accumulated DROP balances.

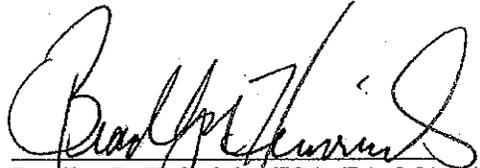
## Police Officers &amp; Firefighters

	<u>10/1/2014</u>	<u>10/1/2013</u>
B. Liabilities - (Continued)		
Present Value of Future Salaries	278,057,878	281,263,616
Normal Cost (Entry Age Normal)		
Retirement Benefits	4,839,829	4,780,453
Disability Benefits	641,878	631,270
Death Benefits	72,936	73,187
Vested Benefits	588,900	557,143
Refund of Contributions	8,037	8,556
Total Normal Cost	<u>6,151,580</u>	<u>6,050,609</u>
Present Value of Future Normal Costs	48,293,408	48,789,165
Actuarial Accrued Liability		
Retirement Benefits	124,594,063	118,885,205
Disability Benefits	5,191,603	5,154,708
Death Benefits	1,237,382	1,233,318
Vested Benefits	5,575,444	5,707,949
Refund of Contributions	76,095	25,837
Inactives	290,323,489	287,437,690
ASF Member Contributions <sup>2</sup>	42,783,092	64,625,522
Total Actuarial Accrued Liability	<u>469,781,168</u>	<u>483,070,229</u>

<sup>2</sup> Last year we added the Annuity Savings Reserve (attributable to inactive Members) to the Assets and Liabilities. This year it is subtracted from both to match Audit.

## STATEMENT BY ENROLLED ACTUARY

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.



Bradley R. Heinrichs, FSA, EA, MAAA  
Enrolled Actuary #14-6901

Please let us know when the report is approved by the Board and unless otherwise directed we will provide copies of the report to the following offices to comply with Chapter 112 Florida Statutes:

Mr. Keith Brinkman  
Bureau of Local  
Retirement Systems  
Post Office Box 9000  
Tallahassee, FL 32315-9000

Ms. Sarah Carr  
Municipal Police and Fire  
Pension Trust Funds  
Division of Retirement  
Post Office Box 3010  
Tallahassee, FL 32315-3010

## RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2013	\$239,534,168
(2) Expected UAAL as of October 1, 2014	240,596,072
(3) New UAAL Due to Assumption Change	1,009,741
(4) New UAAL Due to Actuarial (Gain)/Loss	(8,160,689)
(5) Total UAAL as of October 1, 2014	233,445,124

	Date Established	Years Remaining	10/1/2014 Amount	Amortization Amount
Experience Loss	10/1/1993	9	670,116	87,745
Experience Gain	10/1/1994	10	(342,582)	(41,181)
Experience Loss	10/1/1995	11	1,448,136	161,402
Experience Gain	10/1/1996	12	(1,920,996)	(200,137)
Experience Gain	10/1/1997	13	(8,532,043)	(836,600)
Experience Gain	10/1/1998	14	(16,544,965)	(1,535,703)
Experience Gain	10/1/1999	15	(4,357,383)	(384,770)
Experience Gain	10/1/2000	16	(14,623,863)	(1,233,791)
Experience Loss	10/1/2001	17	25,326,139	2,049,220
Experience Loss	10/1/2002	18	24,760,558	1,927,797
Experience Loss	10/1/2003	19	33,811,910	2,540,568
Experience Loss	10/1/2004	20	7,939,700	577,254
Experience Gain	10/1/2005	21	(2,929,643)	(206,587)
Experience Loss	10/1/2006	22	38,013,056	2,605,367
Experience Loss	10/1/2007	23	15,899,568	1,061,219
Experience Loss	10/1/2008	24	32,761,770	2,133,192
Experience Loss	10/1/2009	25	30,002,052	1,908,749
Experience Loss	10/1/2010	26	34,749,842	2,163,313
Experience Loss	10/1/2011	27	24,604,253	1,500,813
Experience Loss	10/1/2012	28	29,869,387	1,787,423
Assumption Change	10/1/1994	10	5,271,925	633,730
Assumption Change	10/1/2003	19	(8,973,612)	(674,262)
Assumption Change	10/1/2006	22	(8,189,702)	(561,312)
Assumption Change	10/1/2007	23	3,908,676	260,885
Assumption Change	10/1/2008	24	703,117	45,782
Assumption Change	10/1/2011	27	8,701,926	530,801
Assumption Change	10/1/2012	28	955,468	57,176
Plan Amendment	10/1/1990	6	7,178,885	1,327,296
Plan Amendment	10/1/1991	7	868,796	140,507
Plan Amendment	10/1/1992	8	14,064,588	2,030,795
Plan Amendment	10/1/2004	20	2,875,910	209,092
Method Change	10/1/2005	21	(27,879,313)	(1,965,939)
Method Change	10/1/2006	22	(20,374,999)	(1,396,477)
Plan Amendment	10/1/2012	28	3,595,555	215,163
Assumption Change	10/1/2013	29	986,098	57,956
Experience Loss	10/1/2013	29	6,166,235	362,409
Plan Amendment	10/1/2013	29	131,507	7,729
Assumption Change	10/1/2014	30	1,009,741	58,348
Experience Gain	10/1/2014	30	(8,160,689)	(471,562)
			233,445,124	16,933,410

## DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2013	239,534,168	
(2) Expected UAAL as of October 1, 2014	240,596,072	
(3) Summary of Actuarial (Gain)/Loss, by component:		Approximate Impact On Funding Requirements (% of Payroll)
Investment Return (Actuarial Asset Basis) <sup>1</sup>	(15,333,209)	-1.58%
Active Decrements (excluding mortality) <sup>2</sup>	6,156,188	0.63%
New Retirees (data correction)	695,577	0.07%
New Members	302,287	0.03%
Mortality (active and inactive)	1,699,967	0.18%
Salary Increases	(2,950,696)	-0.30%
(Gain)/Loss on Member Contribution Accounts <sup>3</sup>	1,527,823	0.16%
Other	<u>(258,626)</u>	-0.03%
Change in UAAL due to (Gain)/Loss	(8,160,689)	-0.84%
Assumption Change	1,009,741	0.10%
(4) Actual UAAL as of October 1, 2014	233,445,124	

<sup>1</sup> The actual return on the Market Value of Assets was 9.9% versus an expected 8.0%. This gain will be recognized over a 5 year period. The return on the Actuarial Value of Assets considers the gains and losses realized over the last 5 years. This return on the Actuarial Value of Assets was 10.9% and exceeded the 8.0% assumed rate.

<sup>2</sup> This loss is partially attributable to Members buying time to reach Normal Retirement as well as the fact that more Members retired earlier than expected during the past year. There were also less non-Retirement terminations than expected this year.

<sup>3</sup> Actual interest credited to employee contributions versus an assumed return of 8.0%.

ACTUARIAL ASSET VALUATION  
September 30, 2014

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year Ending	Gain/(Loss)	<u>Gains/(Losses) Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2014	2015	2016	2017	2018
09/30/2010	5,164,536	0	0	0	0	0
09/30/2011	(34,032,158)	(6,806,432)	0	0	0	0
09/30/2012	42,564,174	17,025,670	8,512,835	0	0	0
09/30/2013	25,240,867	15,144,520	10,096,347	5,048,173	0	0
09/30/2014	11,791,700	9,433,360	7,075,020	4,716,680	2,358,340	0
Total		34,797,118	25,684,202	9,764,853	2,358,340	0

Development of Investment Gain/(Loss)

Market Value of Assets, including DROP and ARF, 09/30/2013	608,462,135
Contributions	33,064,620
Benefit Payments & Admin Expenses	(63,299,504)
Expected Investment Earnings*	46,910,402
Actual Net Investment Earnings	58,702,102
2014 Actuarial Investment Gain/(Loss)	<u>11,791,700</u>

$$\begin{aligned} \text{*Expected Investment Earnings} &= 0.08 * 608,462,135 + (7,088,216 + 461,877) * ((1.08)^{.75} - 1) \\ &+ (1,587,095 + 1,182,367 + 4,064,028) * ((1.08)^{.5} - 1) - 63,299,504 * ((1.08)^{.5} - 1) \end{aligned}$$

Development of Actuarial Value of Assets

(1) Market Value of Assets, 09/30/2014	598,324,146
(2) Gains/(Losses) Not Yet Recognized	34,797,118
(3) Actuarial Value of Assets, 09/30/2014, (1) - (2)	<u>563,527,028</u>
(A) 09/30/2013 Actuarial Assets, including DROP:	536,705,686
(I) Net Investment Income:	
1. Change in Actuarial Value	58,393,152
2. Investment Expenses	(1,336,926)
Total	<u>57,056,226</u>
(B) 09/30/2014 Actuarial Assets, including DROP:	563,527,028
Actuarial Asset Rate of Return = 2I/(A+B-I):	10.94%
Market Value of Assets Rate of Return:	9.89%
10/01/2014 Limited Actuarial Assets:	563,527,028

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS  
 SEPTEMBER 30, 2014  
 Actuarial Asset Basis

REVENUES

Contributions:		
Member to Pension Reserve	1,587,095	
Buy-Back	1,182,367	
City	25,769,253	
Member to Annuity Savings	4,064,028	
State	461,877	
 Total Contributions		 33,064,620
 Total Earnings and Investment Gains		 58,393,152

EXPENDITURES

Distributions to Members:		
Benefit Payments	49,111,639	
Lump Sum DROP Distributions	7,042,727	
Refunds of Member Contributions	7,145,138	
 Total Distributions		 63,299,504
Expenses:		
Investment Related <sup>1</sup>	1,336,926	
Administrative	0	
 Total Expenses		 1,336,926
 Change in Net Assets for the Year		 26,821,342
 Net Assets Beginning of the Year		 536,705,686
 Net Assets End of the Year <sup>2</sup>		 563,527,028

<sup>1</sup>Investment Related expenses include investment advisory, custodial and performance monitoring fees.

<sup>2</sup>Net Assets may be limited for actuarial consideration.

## HISTORICAL ASSET INFORMATION

Plan Year Beg.	Market Value as of October 1	Actuarial Value as of October 1	Benefit Payments Including Refunds	Admin. Expenses	City and Member Contributions	Market Value Return	Actuarial Value Return	5-Yr Avg Market Value Return <sup>1</sup>
2002	402,138,764	452,978,637	34,633,468	0	13,166,091	14.92%	1.87%	5.88%
2003	439,086,771	439,793,566	38,269,509	0	15,762,562	10.26%	5.84%	5.44%
2004	460,467,837	442,293,992	37,862,782	0	20,143,384	9.54%	8.66%	4.70%
2005	485,852,494	462,096,761	39,774,335	0	21,394,652	7.39%	12.54%	7.39%
2006	502,694,862	500,501,443	42,212,123	0	20,361,974	11.97%	9.02%	10.82%
2007	539,707,290	522,796,029	46,565,110	0	24,238,313	-11.29%	5.01%	5.57%
2008	457,700,275	526,091,435	42,228,083	0	26,212,878	4.12%	4.22%	4.35%
2009	460,192,910	531,939,481	58,831,319	0	26,378,462	10.55%	4.14%	4.55%
2010	474,586,014	520,812,767	52,358,388	0	28,774,094	1.55%	2.85%	3.38%
2011	458,164,049	511,757,155	53,688,160	0	30,692,390	18.60%	3.69%	4.71%
2012	518,259,961	507,232,353	55,971,498	0	30,615,200	12.64%	8.80%	9.49%
2013 <sup>2</sup>	608,462,135	575,310,893	63,299,504	0	32,602,743	9.89%	10.94%	10.65%
2014 <sup>3</sup>	598,324,146	563,527,028						

<sup>1</sup> Credited rate of return on accumulated member contributions and DROP accounts for ensuing plan year.

<sup>2</sup> 10/1/13 assets include DROP and ARF Reserves.

<sup>3</sup> 10/1/14 assets include DROP, but not ARF Reserve.

**Age - Service - Salary Table**  
(All Active Members)

Age	Credited Service									Total
	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	
< 25	13	13	2							28
Avg. Pay	\$41,078	\$37,415	\$32,591							\$38,771
25 - 29	20	41	48	1						110
Avg. Pay	\$33,942	\$36,826	\$49,171	\$61,065						\$41,909
30 - 34	4	19	68	42						133
Avg. Pay	\$29,606	\$40,144	\$48,600	\$54,249						\$48,605
35 - 39	2	6	37	77	32					154
Avg. Pay	\$24,648	\$37,583	\$52,214	\$62,587	\$62,874					\$58,687
40 - 44	2	11	46	55	83	16				213
Avg. Pay	\$42,926	\$33,495	\$48,541	\$65,992	\$69,108	\$81,024				\$62,672
45 - 49		4	33	46	40	40				163
Avg. Pay		\$18,462	\$42,649	\$52,241	\$70,856	\$84,458				\$61,944
50 - 54	3	13	32	42	37	28	5	1		161
Avg. Pay	\$25,289	\$26,680	\$41,668	\$46,834	\$62,373	\$80,551	\$89,273	\$84,192		\$54,763
55 - 59		4	13	15	20	4	4			60
Avg. Pay		\$41,457	\$34,356	\$45,267	\$50,538	\$76,501	\$72,876			\$48,329
60 - 64		4	11	14	8	4		1		42
Avg. Pay		\$20,463	\$29,611	\$40,559	\$52,351	\$74,437		\$74,814		\$42,066
65 - 69		1	8	5	4	2			1	21
Avg. Pay		\$5,691	\$33,387	\$40,692	\$68,145	\$50,736			\$72,413	\$43,939
70+			2	3	1					6
Avg. Pay			\$6,134	\$43,737	\$48,002					\$31,914
<b>Total</b>	<b>44</b>	<b>116</b>	<b>300</b>	<b>300</b>	<b>225</b>	<b>94</b>	<b>9</b>	<b>2</b>	<b>1</b>	<b>1091</b>
	\$35,052	\$34,715	\$45,625	\$55,800	\$65,067	\$81,227	\$81,986	\$79,503	\$72,413	\$54,300

**ACTIVE DATA**  
**(General Employees)**

Historical Average Age & Service

<u>Valuation Date</u>	<u>Average Service Earned</u>	<u>Average Attained Age</u>	<u>Valuation Date</u>	<u>Average Service Earned</u>	<u>Average Attained Age</u>
10/1/2003	8.7	42.8	10/1/2009	10.8	45.6
10/1/2004	8.6	43.2	10/1/2010	10.6	45.0
10/1/2005	9.0	43.9	10/1/2011	10.9	44.9
10/1/2006	9.9	44.6	10/1/2012	11.3	45.0
10/1/2007	10.1	45.0	10/1/2013	9.8	45.5
10/1/2008	10.3	45.6	10/1/2014	10.4	45.8

Historical Individual Salary Increases

<u>Valuation Date</u>	<u>Average Salary</u>	<u>Actual Salary Increase</u>	<u>Valuation Date</u>	<u>Average Salary</u>	<u>Actual Salary Increase</u>	<u>Assumed Salary Increase</u>
10/1/2003	33,659	4.31%	10/1/2009	42,393	8.58%	6.38%
10/1/2004	33,331	4.05%	10/1/2010	42,405	3.43%	6.39%
10/1/2005	36,144	12.91%	10/1/2011	37,130	-8.53%	6.42%
10/1/2006	34,069	6.19%	10/1/2012	36,908	6.29%	6.39%
10/1/2007	37,639	10.52%	10/1/2013	40,260	11.74%	9.50%
10/1/2008	40,044	8.37%	10/1/2014	40,731	1.81%	0.00%

**Age - Service - Salary Table  
(General Employees)**

Age	Credited Service									Total
	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	
< 25	2	5	2							9
Avg. Pay	\$29,952	\$28,468	\$32,591							\$29,714
25 - 29	11	21	14							46
Avg. Pay	\$26,404	\$28,306	\$34,670							\$29,788
30 - 34	3	8	32	20						63
Avg. Pay	\$25,046	\$31,692	\$34,476	\$37,840						\$34,741
35 - 39	2	4	13	29	17					65
Avg. Pay	\$24,648	\$31,212	\$35,318	\$47,917	\$48,508					\$43,808
40 - 44		9	27	13	36	4				89
Avg. Pay		\$31,039	\$38,276	\$47,389	\$54,288	\$49,566				\$45,859
45 - 49		4	23	29	13	11				80
Avg. Pay		\$18,462	\$34,585	\$42,000	\$49,329	\$59,691				\$42,315
50 - 54	3	13	29	35	23	6	1			110
Avg. Pay	\$25,289	\$26,680	\$39,462	\$42,166	\$51,950	\$63,659	\$60,336			\$42,546
55 - 59		4	13	14	18	1	2			52
Avg. Pay		\$41,457	\$34,356	\$43,695	\$45,304	\$64,054	\$54,639			\$42,558
60 - 64		4	11	14	8	1				38
Avg. Pay		\$20,463	\$29,611	\$40,559	\$52,351	\$72,677				\$38,602
65 - 69		1	8	5	4	2				20
Avg. Pay		\$5,691	\$33,387	\$40,692	\$68,145	\$50,736				\$42,515
70+			2	3	1					6
Avg. Pay			\$6,134	\$43,737	\$48,002					\$31,914
<b>Total</b>	21	73	174	162	120	25	3			578
	\$26,222	\$28,337	\$35,276	\$43,028	\$51,416	\$59,001	\$56,538			\$40,731

**ACTIVE DATA**  
**(Police Officers & Firefighters)**

Historical Average Age & Service

<u>Valuation Date</u>	<u>Average Service Earned</u>	<u>Average Attained Age</u>	<u>Valuation Date</u>	<u>Average Service Earned</u>	<u>Average Attained Age</u>
10/1/2003	10.7	37.0	10/1/2009	11.0	38.8
10/1/2004	10.2	37.0	10/1/2010	11.2	39.1
10/1/2005	10.0	36.7	10/1/2011	11.2	39.2
10/1/2006	10.3	37.7	10/1/2012	12.0	39.5
10/1/2007	9.8	37.3	10/1/2013	11.9	39.9
10/1/2008	10.6	38.3	10/1/2014	12.0	39.9

Historical Individual Salary Increases

<u>Valuation Date</u>	<u>Average Salary</u>	<u>Actual Salary Increase</u>	<u>Valuation Date</u>	<u>Average Salary</u>	<u>Actual Salary Increase</u>	<u>Assumed Salary Increase</u>
10/1/2003	52,484	6.05%	10/1/2009	62,564	7.09%	7.54%
10/1/2004	50,526	3.47%	10/1/2010	64,725	5.32%	7.60%
10/1/2005	52,680	11.42%	10/1/2011	63,757	1.38%	7.64%
10/1/2006	52,203	9.33%	10/1/2012	69,104	2.36%	7.61%
10/1/2007	54,530	11.26%	10/1/2013	69,666	1.98%	0.00%
10/1/2008	60,048	8.50%	10/1/2014	69,589	2.25%	4.95%

**Age - Service - Salary Table  
(Police Officers and Firefighters)**

Age	Credited Service									Total
	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	
< 25	11	8								19
Avg. Pay	\$43,101	\$43,007								\$43,061
25 - 29	9	20	34	1						64
Avg. Pay	\$43,154	\$45,772	\$55,143	\$61,065						\$50,621
30 - 34	1	11	36	22						70
Avg. Pay	\$43,286	\$46,290	\$61,155	\$69,165						\$61,081
35 - 39		2	24	48	15					89
Avg. Pay		\$50,325	\$61,366	\$71,450	\$79,154					\$69,554
40 - 44	2	2	19	42	47	12				124
Avg. Pay	\$42,926	\$44,551	\$63,129	\$71,751	\$80,460	\$91,509				\$74,739
45 - 49			10	17	27	29				83
Avg. Pay			\$61,196	\$69,710	\$81,220	\$93,852				\$80,864
50 - 54			3	7	14	22	4	1		51
Avg. Pay			\$62,994	\$70,173	\$79,497	\$85,158	\$96,507	\$84,192		\$81,114
55 - 59				1	2	3	2			8
Avg. Pay				\$67,273	\$97,649	\$80,650	\$91,114			\$85,844
60 - 64						3		1		4
Avg. Pay						\$75,023		\$74,814		\$74,971
65 - 69									1	1
Avg. Pay									\$72,413	\$72,413
70+										
Avg. Pay										
<b>Total</b>	23	43	126	138	105	69	6	2	1	513
	\$43,114	\$45,545	\$59,918	\$70,793	\$80,668	\$89,280	\$94,710	\$79,503	\$72,413	\$69,589

**DATA RECONCILIATION**  
(Total Plan)

	<u>Active</u>	<u>Retired</u>	<u>DROP</u>	<u>Beneficiary</u>	<u>Vested</u>	<u>Disabled</u>	<u>Totals</u>
Prior Year	1,113	1,091	43	35	98	196	2,576
Active							
To Retiree	(38)	38					
To DROP Retiree	(1)		1				
To Vested	(10)				10		
To Disabled Retiree	(1)					1	
To Beneficiary	(3)			3			
To NonVested Term	(20)						(20)
Retiree							
To Death (No Benefits)		(18)					(18)
To Beneficiary		(3)		3			
DROP Retiree							
To Retiree		2	(2)				
Beneficiary							
To Death (No Benefits)				(4)			(4)
Vested							
To Retiree		7			(7)		
Disabled Retiree							
To Death (No Benefits)						(3)	(3)
To Beneficiary				2		(2)	
NonVested Term							
To Active	2						2
To Vested					2		2
Additions	49	1		9		1	60
Current Year	1,091	1,118	42	48	103	193	2,595

**DATA RECONCILIATION**  
**(General Employees)**

	<u>Active</u>	<u>Retiree</u>	<u>DROP</u>	<u>Beneficiary</u>	<u>Vested</u>	<u>Disabled</u>	<u>Totals</u>
Prior Year	609	681	8	22	65	71	1,456
Active							0
To Retiree	(25)	25					0
To TV	(7)				7		0
To Beneficiary	(3)			3			0
To NonVested Term	(18)						(18)
Retiree							0
To Death (No Benefits)		(13)					(13)
To Beneficiary		(2)		2			0
DROP Retiree							0
To Retiree		1	(1)				0
Beneficiary							0
To Death				(2)			(2)
TV							0
To Retiree		5			(5)		0
Disabled Retiree							0
To Death (No Benefits)						(2)	(2)
To Beneficiary				1		(1)	0
Additions	23	2	0	8	0	1	34
Departures to Police & Fire	(1)	0	0	0	0	0	(1)
Current Year	578	699	7	34	67	69	1,454

**DATA RECONCILIATION**  
**(Police Officers & Firefighters)**

	<u>Active</u>	<u>Retired</u>	<u>DROP</u>	<u>Beneficiary</u>	<u>Vested</u>	<u>Disabled</u>	<u>Totals</u>
Prior Year	504	410	35	13	33	125	1,120
Active							0
To Retiree	(13)	13					0
To DROP Retiree	(1)		1				0
To Vested	(3)				3		0
To Disabled Retiree	(1)					1	0
To NonVested Term	(2)						(2)
Retiree							0
To Death (No Benefits)		(5)					(5)
To Beneficiary		(1)		1			
DROP Retiree							0
To Retiree		1	(1)				0
Beneficiary							0
To Death (No Benefits)				(2)			(2)
Vested							0
To Retiree		1			(1)		0
Disabled Retiree							0
To Death (No Benefits)						(1)	(1)
To Beneficiary				1		(1)	
NonVested Term							0
To Active	2						2
To Vested					2		2
Additions	27	0	0	1	0	0	28
Departures To General	0	0	0	0	(1)	0	(1)
Current Year	513	419	35	14	36	124	1,141

## ACTUARIAL ASSUMPTIONS AND METHODS

### 1. Actuarial Cost Method

The entry age normal cost method was used to determine all liabilities, except that the liability associated with member contributions has been assumed to be equal to those contributions.

Prior to October 1, 1998, fiscal year City contributions made in excess of required valuation year contributions were credited to the temporary funding credit.

Beginning October 1, 1998, fiscal year contributions made in excess of required valuation year contributions are included in the experience gain or loss for the year. Experience gains and losses are amortized over a 15-year period.

Beginning October 1, 2007, the method of amortizing experience gains and losses of the System was changed from a 15-year to a 30-year level dollar method. The amortization amounts for outstanding gain and loss bases as of October 1, 2007 were recalculated to extend the amortization period an additional 15 years (for a total of 30 years).

Beginning October 1, 2008, the method of amortizing all outstanding unfunded liability bases was changed from a level dollar method to an increasing amortization based on a level percent of payroll. The aggregate payroll is assumed to increase at 4.0% per year, limited to average payroll growth for the previous 10 years.

Beginning October 1, 2011, the method of amortizing all outstanding unfunded liability bases was changed to an increasing amortization based on a level percent of payroll where the aggregate payroll is assumed to increase at 3.5% per year.

### 2. Decrements

- **Pre-Retirement Mortality**

RP-2000 Combined Mortality Table with a blue collar adjustment projected 15 years from valuation date.

- **Post-Retirement Healthy Mortality**

RP-2000 Combined Mortality Table with a blue collar adjustment projected 7 years from valuation date.

- **Post-Retirement Disabled Mortality**

RP-2000 Disabled Mortality Table

- **Disability (General Employees)**

Representative values of the assumed annual rates of disability among General employee members in active service are set forth in the following table:

Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	0.024%	35	0.104%	50	0.360%	65	0.784%
25	0.040%	40	0.152%	55	0.608%	70	0.688%
30	0.056%	45	0.224%	60	0.880%	75	0.592%

- Disability (Police Officers and Firefighters)**

85% of all disabilities are assumed to be in the line of duty and 15% are assumed not to be in the line of duty. Representative values of the assumed annual rates of disability among Police Officer and Firefighter members in active service are set forth in the following table:

Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	0.096%	35	0.248%	50	0.896%	65	2.192%
25	0.120%	40	0.384%	55	1.328%	70	2.624%
30	0.152%	45	0.584%	60	1.760%	75	3.056%

- Permanent Withdrawal from Active Status (used for members with less than six years of service)**

Representative values of the assumed annual rates of withdrawal among members in active service who have less than six years of service are set forth in the following tables:

*General Employees*

Years of Service	Rate
0	12.5%
1	12.5%
2	7.5%
3	7.5%
4	7.5%
5	7.5%

*Police Officers*

Years of Service	Rate
0	12.0%
1	12.0%
2	9.0%
3	7.5%
4	6.0%
5	5.0%

*Firefighters*

Years of Service	Rate
0	12.5%
1	9.5%
2	5.0%
3	4.0%
4	3.0%
5	2.5%

- Permanent Withdrawal from Active Status (used for members with at least six years of service)**

Representative values of the assumed annual rates of withdrawal among members in active service who have at least six years of service are set forth in the following tables:

*General Employees*

Age	Rate
25	5.0%
30	5.0%
35	5.0%
40	5.0%
45	5.0%
50	5.0%
55	3.0%
60	2.0%

*Police Officers*

Age	Rate
25	5.0%
30	4.5%
35	4.0%
40	4.0%
45	4.0%
50	1.0%
55	1.0%
60	1.0%

*Firefighters*

Age	Rate
25	2.0%
30	2.0%
35	2.0%
40	2.0%
45	2.0%
50	1.0%
55	1.0%
60	1.0%

- **Retirement (General Employees)**

Representative values of the assumed annual rates of retirement among eligible General Employee members are shown in the tables below:

a) General Employees with less than 25 years of eligible service:

Age	Rate	Age	Rate	Age	Rate	Age	Rate
45	0%	52	5%	59	15%	66	25%
46	0%	53	5%	60	15%	67	35%
47	0%	54	5%	61	5%	68	45%
48	0%	55	15%	62	15%	69	85%
49	0%	56	15%	63	5%	70	100%
50	10%	57	15%	64	5%		
51	5%	58	15%	65	75%		

b) General Employees with 25 years of eligible service:

Age	Rate	Age	Rate	Age	Rate	Age	Rate
45	0%	52	30%	59	40%	66	50%
46	0%	53	30%	60	40%	67	60%
47	0%	54	30%	61	40%	68	70%
48	0%	55	40%	62	50%	69	80%
49	0%	56	40%	63	30%	70	100%
50	50%	57	40%	64	30%		
51	30%	58	40%	65	80%		

c) General Employees with more than 25 years of eligible service:

Age	Rate	Age	Rate	Age	Rate	Age	Rate
45	0%	52	10%	59	20%	66	30%
46	0%	53	10%	60	20%	67	40%
47	0%	54	10%	61	10%	68	50%
48	0%	55	20%	62	20%	69	90%
49	0%	56	20%	63	10%	70	100%
50	15%	57	20%	64	10%		
51	10%	58	20%	65	80%		

- **Retirement (Police Officers and Firefighters)**

Representative values of the assumed annual rates of retirement among eligible Police Officer and Firefighter members are shown in the table below:

Service	Age < 65		Age ≥ 65
	Police Officers	Firefighters	
<15	0%	0%	100%
15-19	5%	2.5%	100%
20	25%	20%	100%
21-24	10%	10%	100%
25	50%	40%	100%
26	30%	30%	100%
27	40%	40%	100%
28	50%	45%	100%
29	60%	50%	100%
30+	100%	100%	100%

### 3. Interest Rates

8.00% per annum net of investment related expenses.

#### 4a. Salary Increases (General Employees)

Representative values of the assumed annual rates of increase in salaries for General employees are shown in the table below:

Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	9.0%	35	6.0%	50	4.0%	65	4.0%
25	8.0%	40	5.0%	55	4.0%	70	4.0%
30	7.0%	45	4.5%	60	4.0%	75	4.0%

A 5.0% and 9.5% salary increase is assumed as of October 1, 2011 and October 1, 2012 respectively. These increases reflect the restoration of a 17% pay concession that occurred on March 21, 2011 (with pay being restored to pre-concession levels on April 1, 2012) as well as the cessation of mandatory furlough days (1 in every 10 days ending on March 20, 2011). Other than the restoration of the above concessions, no salary increases for fiscal 2012 through 2014 are assumed. Beginning with fiscal 2015, pay is assumed to increase at the rates provided in the table above.

#### 4b. Salary Increases (Police Officers and Firefighters)

Representative values of the assumed annual rates of increase in salaries for Police Officers and Firefighters are shown in the table below:

Service	Police Officers	Firefighters
0	9.0%	9.0%
1	8.5%	8.5%
2	8.0%	8.0%
3	7.5%	7.5%
4	7.0%	7.0%
5	6.5%	6.5%
6-9	6.0%	6.0%
10	6.0%	5.0%
11	5.0%	4.5%
12-22	4.0%	4.0%
23+	4.0%	3.0%

The pay scale for the Police Officer and Firefighters also reflects short term salary freezes through the end of fiscal 2013.

#### 5. Expenses

Annual administrative expenses, exclusive of investment expenses and commissions, are assumed to be payable by the City outside of the pension trust. In addition, the interest rate set forth in item 3. above is assumed to be net of investment expenses and commissions.

#### 6. Assets

The actuarial value of assets (AVA) is equal to the market value of assets adjusted to reflect a five year phase-in of the difference between the expected versus actual return on the AVA. The AVA is limited to an 80%-120% corridor of the market value of assets.

#### 7. Funding Period (Pursuant to Chapter 112, Florida Statutes)

The annual payment towards the unfunded actuarial accrued liability has been determined as a level percent of pay. The aggregate payroll is assumed to increase at 3.5% per year as approved by the Division of Retirement.

#### 8. Refund of Member Contributions

It is assumed that all members take a refund of their accumulated employee contributions upon retiring from the System.

#### 9. Changes From Previous Valuation

See Changes Page.

\* Please note that we (Foster & Foster, Inc.) are using the assumptions adopted by the Board as guided by the prior actuary and don't have the necessary data to assess the reasonableness of the assumptions.

## SUMMARY OF PLAN PROVISIONS

For Police Officers hired on or after March 14, 2014, the Basic Pension is eliminated and the Service Pension minimum Age plus Service is changed from 70 points to 76 points to receive the Normal (full) Retirement Benefit and DROP eligibility. Additionally, the Vested or Deferred Benefits payable for these Members is payable at age 59 ½. Lastly, the automatic Cost of Living Adjustments for these Members is reduced from 2.0% per year to 1.0% per year.

For Firefighters hired on or after November 15, 2013, the Basic Pension is eliminated and the Service Pension minimum Age plus Service is changed from 70 points to 76 points to receive the Normal (full) Retirement Benefit and DROP eligibility. Additionally, the Vested or Deferred Benefits payable for these Members is payable at age 59 ½. Lastly, the automatic Cost of Living Adjustments for these Members is reduced from 2.0% per year to 1.0% per year.

### 1. Retirement Allowance

The Member's Retirement Allowance is equal to the sum of the following:

- (1) An Annuity, which is the actuarial equivalent of his Accumulated Member Contributions;
- (2) A Basic Pension, which is equal to \$1,800 (for those Members who have attained their Normal Retirement Age) or \$2,800 (for all other Members); and
- (3) A Service Pension, which is equal to 3% of Final Average Compensation multiplied by service up to 25 years (for those Members who have at least 20 years of service and whose age plus service equals at least 70) or 2% of Final Average Compensation multiplied by service up to 30 years (for all other Members).
- (4) An additional benefit equal to 1.5% of Average Final Compensation for each year of Credited Service that exceeds 25 years, up to a maximum additional benefit of 4.5% of Average Final Compensation. It is assumed that this benefit applies only to Normal Retirees (full benefits) and not to Vested or Deferred Retirees who get the 2.0% benefit accrual rate up to 30 years of service.

### 2. Normal Retirement Age and Allowance

- **Age**
  - Age 50 upon attainment of 10 years of service or any age upon attainment of 20 years of service (for those Members hired prior to January 27, 1970);
  - Age 55 upon attainment of 15 years of service or any age upon attainment of 20 years of service (for those Members hired after January 26, 1970 but prior to January 1, 1974); or
  - Any age with age plus service equal to at least 70 and with at least 20 years of service (for all other Members)
- **Amount**
  - Retirement Allowance
- **Form of Payment (applicable to the Annuity only)**
  - Life annuity (normal form of payment); or
  - Lump sum payment equal to Accumulated Member Contributions (optional).
- **Form of Payment (applicable to the Basic and Service Pensions only)**
  - Five-year certain and life annuity for General employees, and ten-year certain and life annuity for Firefighters and Police Officers (normal form of payment);
  - Normal form of payment actuarially adjusted to benefit payable during lifetime of member only (optional) (does not apply to General employees);

Normal form of payment actuarially reduced to 50% joint and survivor annuity with the reduced benefit payable upon the death of either the Member or his beneficiary (optional); Normal form of payment actuarially reduced to 66 2/3% joint and survivor annuity (optional);

Normal form of payment actuarially reduced to 75% joint and survivor annuity (optional) (does not apply to General employees); Normal form of payment actuarially reduced 100% joint and survivor annuity (optional);

Normal form of payment actuarially reduced 100% joint and survivor annuity with spouse as beneficiary and with a "pop-up" feature. A "pop-up" benefit increases to the amount of the unreduced pension upon the death of the beneficiary. (optional).

### 3. Early Retirement Eligibility and Allowance

- **Age**  
Age 55 with at least 10 years of service for General employees, and age 50 with at least 10 years of service for Firefighters and Police Officers.
- **Amount**  
100% of the Member's Annuity. In addition, for General employees, the member's Basic and Service Pensions multiplied by his Vested Interest, payable at age 55. Firefighters and Police Officers can commence their early retirement benefit at age 50 with a 3% per year reduction from normal retirement.
- **Form of Payment**  
Same as for Normal Retirement

### 4. Disability Retirement Eligibility and Allowance

- **Condition**  
The Member must be totally and permanently incapacitated for duty in his classified position as an employee of the City, as determined by both the Board of Trustees and by a medical committee consisting of one doctor appointed by the Board of Trustees and one doctor selected by the Member.
- **Amount**  
The Member's accrued Retirement Allowance and, for Firefighters and Police Officers, subject to a minimum of:
  - 25% of Average Final Compensation, for non-duty disability, after 10 years of service, and
  - 42% of Average Final Compensation, for duty related disability, with no service requirement.
- **Form of Payment**  
Same as for Normal Retirement

### 5. Deferred Retirement (Vested) Eligibility and Allowance

- **Age**  
Any age with at least 10 years of service.
- **Amount**  
100% of the Member's Annuity. In addition, for General employees, the member's Basic and Service Pensions multiplied by his Vested Interest, payable at age 55. Firefighters and Police Officers can commence their vested benefit at age 50 with a 3% per year reduction from normal retirement.
- **Form of Payment**  
Same as for Normal Retirement

## 6. Pre-Retirement Death Benefit

In the case of the death of a General employee Member prior to retirement, his beneficiary will receive a five-year certain annuity determined as if the Member had retired on the day before his death and elected a five-year certain and life annuity. In lieu of this five-year certain annuity, the beneficiary of the General employee may elect to receive  $\frac{1}{2}$  of the same amount payable over a ten-year period. For Firefighters and Police Officers, the Member's vested accrued benefit deferred to early (reduced) or normal retirement and payable for a minimum of 10 years. Alternatively, if the Member had attained his Normal or Early Retirement Age and had elected an optional form of payment, then his spouse will receive benefits as dictated by the option elected.

## 7. Vested Interest

A General employee member earns a Vested Interest in his Basic and Service Pensions in accordance with the following schedule. Firefighters and Police Officer Members earn a 100% Vested Interest with 10 years of service.

Years of Service	Vested Interest
Less than 10	0%
10	70%
11	73%
12	76%
13	79%
14	82%
15	85%
16	88%
17	91%
18	94%
19	97%
20 or more	100%

## 8. Average Final Compensation

Average compensation for the highest three years of service (not necessarily consecutive), where compensation includes base salary plus any longevity or special assignment pay and any pay received in connection with Florida's law enforcement special incentive program or Firefighters supplemental compensation program.

## 9. Membership Requirements

All classified employees of the City of Hialeah, Florida participate in the plan, including: (1) all full-time employees (except as provided by law), and (2) those part-time employees working 22½ hours or more per week who elect to participate after one year of continuous employment. Membership does not include any person whose services are compensated on a fee or contractual basis, the Board of Trustees' medical committee, elected or appointed officials who are not in classified service, and persons employed on a temporary or provisional basis for less than nine months.

Effective April 1, 2012, the Plan is closed to new general employee members hired on or after April 1, 2012. New general employees will instead participate in a defined contribution plan.

## 10. Accumulated Member Contributions

The Accumulated Member Contributions are the Member's Contributions accumulated with interest at the annual rates established by the Board of Trustees. Prior to the 1995/1996 plan year, interest was credited at the annual yield on the actuarial value of assets. Beginning with the 1995/1996 plan year, interest will be credited at the arithmetic average of the annual yields on the market value of assets for the preceding five years. Interest is credited each September 30 on the balance of the Accumulated Member Contributions as of the preceding October 1 as well as on additional Member Contributions made during the plan year. Members may borrow against their Accumulated Member Contributions as of the preceding October 1, subject to the restrictions set forth in the law.

## 11. Member Contributions

- 1.) All members must contribute 7% of compensation per year into the Annuity Savings Fund (with the exception that they may redirect some of these contributions to satisfy the additional requirements that follow).
- 2.) All members who were not eligible for Normal Retirement on the date the ordinance took effect will also be required to make the following additional contribution towards the pension portion of the Plan (to help offset the City's funding requirements)
  - a. Non-Police Officers and Firefighters:
    - 5.0% of pensionable compensation from May 15, 2014 to September 30, 2014.
    - 4.0% of pensionable compensation from October 1, 2014 forward, except that:
      - This will drop to 3.0% of pensionable compensation if the Funded Ratio is between 80% and 100%.
      - This will drop to 0.0% of pensionable compensation if the Funded Ratio exceeds 100%.
  - b. Firefighters:
    - 5.0% of pensionable compensation from October 1, 2013 to September 30, 2014 (4.0% of pensionable compensation if hired on or after November 15, 2013).
    - 4.0% of pensionable compensation from October 1, 2014 forward, except that:
      - This will drop to 3.0% of pensionable compensation if the Funded Ratio is between 80% and 100%.
      - This will drop to 0.0% of pensionable compensation if the Funded Ratio exceeds 100%.
  - c. Police Officers:
    - 5.0% of pensionable compensation from March 2, 2014 to September 30, 2014 (4.0% of pensionable compensation if hired on or after March 2, 2014).
    - 4.0% of pensionable compensation from October 1, 2014 forward, except that:
      - This will drop to 3.0% of pensionable compensation if the Funded Ratio is between 80% and 100%.
      - This will drop to 0.0% of pensionable compensation if the Funded Ratio exceeds 100%.

If a Police Officer or Firefighter terminates employment before they are vested, then they will receive a refund of these additional contributions. Non-Police Officers and Firefighters will not receive a refund of these contributions.

## 12. Share Plans Contributions

Effective with the year beginning October 1, 2005, the Firefighters' and Police Officers' share plans will make contributions to fund the cost of the minimum benefits under Chapter 99-1, Florida Statutes.

## 13. Cost-of-Living Adjustment

Members (including participants in the DROP and excluding beneficiaries and those Members who are receiving a Deferred Retirement Allowance) receive an automatic level 2% cost-of-living adjustment in their Basic and Service Pensions as of each anniversary of retirement or the first of the month following their 52<sup>nd</sup> birthday and limited to 10 such increases (for a total increase of 20%).

## 14. Deferred Retirement Option Program

Effective March 1, 2007 for Police Officers and Firefighters and February 19, 2008 for General employees, members are eligible to participate in a Deferred Retirement Option Program (DROP) upon the completion of 25 years of membership service credit provided that the sum of the member's age and service is equal to at least 70. The member's monthly retirement benefit (basic plus service pension), based on final average earnings and service upon entering the DROP, will be paid to the member's DROP account. At the end of each fiscal year, interest will be credited to the DROP account at the same rate credited to the annuity savings account.

Member contributions cease upon entering the DROP and the member shall be ineligible for disability benefits provided by the System. Upon termination of employment or death, the DROP account balance will be paid in a cash lump sum. The maximum period of participation in the DROP is 36 months and members cannot buy service in order to be eligible for the DROP.

General employees who are members of the retirement system are prohibited from entering the DROP on or after April 2, 2012.

## 15. Plan Effective Date

The Plan was initially effective on January 1, 1956.

## 16. Actuarial Equivalence

For purposes of computing optional forms of benefit payments and for purposes of computing any adjustments called for under the terms of the Plan, when such interest rate and mortality assumptions are not otherwise provided:

Interest Rate Assumption: The interest Rate assumption currently adopted by the Board is 7.0%.

Mortality Assumption: The mortality factors or table currently adopted by the Board is the male rates from 1971 Group Annuity Mortality Table for participants and the female rates from the 1971 Group Annuity Mortality Table for beneficiaries

**17. City Contribution Policy**

The City contributes to the Retirement System in accordance with the requirements of Part VII, Chapter 112 of the Florida Statutes. Effective August 25, 2009, the City implemented a contribution floor such that the City's contribution to the Retirement System will be at least 22% of the member payroll. The City may increase or decrease the floor by up to 2% of member payroll once every five years, if supported by an actuarial study. The floor shall not be less than 16% or more than 28% of member payroll.

**GOVERNMENTAL ACCOUNTING STANDARDS BOARD  
STATEMENT NO. 27**

**ANNUAL PENSION COSTS AND RELATED INFORMATION**

Contribution rates as of 9/30/14

City and Share	42.1%
Plan Members to DB Plan	2.7%
Plan Members to Annuity Savings	Up to 7.0%
 Annual Pension Cost	 27,103,738
Contributions made	26,231,130
Actuarial valuation date	10/1/2012
Actuarial cost method	Entry Age Normal
Amortization method	Level Percentage of Pay, Closed
Remaining amortization period	30 Years (as of 10/1/12)
Asset valuation method	4 Year Smooth
Actuarial assumptions:	
Investment rate of return	8.00%
Projected salary increase*	3.0% to 9.0%
* Includes inflation at	3.0%
Post Retirement COLA	2.0%           (10 increases)

**THREE YEAR TREND INFORMATION**

Year Ending	Annual Pension Cost (APC)	Percentage APC Contributed	Net Pension Obligation
9/30/14	27,103,738	97%	40,151,921
9/30/13	24,585,273	103%	39,279,313
9/30/12	23,016,028	105%	40,009,514

**GOVERNMENTAL ACCOUNTING STANDARDS BOARD  
STATEMENT NO. 27**

**DEVELOPMENT OF NET PENSION OBLIGATION (NPO)**

This municipal Defined Benefit Plan has been subject to the minimum funding standards since the adoption of the "Florida Protection of Public Employee Retirement Benefits Act" (Part VII of Chapter 112, Florida Statutes) in 1980. Accordingly, the sponsor has funded the actuarially determined required contributions for all years from October 1, 1987, through the transition date, October 1, 1997. Thus, the NPO on October 1, 1997, is 0.

The recent development of the Net Pension Obligation is as follows:

	<u>9/30/12</u>	<u>9/30/13</u>	<u>9/30/14</u>
1. Annual Pension Cost (APC)			
a. Actuarially Determined Contribution (ARC)	22,203,900	23,796,966	26,231,130
b. Interest on NPO	3,297,480	3,200,761	3,142,345
c. Adjustment to (ARC)	(2,485,352)	(2,412,454)	(2,269,737)
	-----	-----	-----
d. Annual Pension Cost	23,016,028	24,585,273	27,103,738
2. Net Pension Obligation (NPO)			
a. Annual Pension Cost (APC)	23,016,028	24,585,273	27,103,738
b. City Contributions Made	(23,763,141)	(24,853,597)	(25,769,253)
c. Share Contributions Made	(461,877)	(461,877)	(461,877)
	-----	-----	-----
d. Increase in NPO	(1,208,990)	(730,201)	872,608
e. NPO Beginning of Year	41,218,504	40,009,514	39,279,313
	-----	-----	-----
f. NPO End of Year	40,009,514	39,279,313	40,151,921

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2014

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Cash and Short Term Investments	40,333,382
Securities Lending Cash Collateral	65,126,062
Total Cash and Equivalents	105,459,444
Receivables:	
Other Receivables	35,373
Contributions	18,681,037
From Broker for Investments Sold	1,335,562
Investment Income	1,532,453
Total Receivable	21,584,425
Investments:	
U. S. Bonds and Bills	54,484,730
Federal Agency Guaranteed Securities	75,012,918
Corporate Bonds	93,898,297
Municipal Obligations	22,254,667
Stocks	304,311,251
Limited Partnership	10,909,271
Mutual Funds	6,443,087
Real Estate Investment Trust	973,780
Total Investments	568,288,001
Loans to Members	10,130,193
Total Assets	705,462,063
<u>LIABILITIES</u>	
Payables:	
Obligations Under Securities Lending	65,126,062
Accounts Payable and Accrued Expenses	242,867
To Broker for Investments Purchased	2,174,568
Annuity Reserve Fund for Retired Members	39,594,420
Total Liabilities	107,137,917
NET POSITION RESTRICTED FOR PENSIONS	598,324,146

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FOR THE YEAR ENDED SEPTEMBER 30, 2014  
Market Value Basis

ADDITIONS

## Contributions:

Member to Pension Reserve	1,587,095	
Buy-Back	1,182,367	
City	25,769,253	
Member to Annuity Savings	4,064,028	
State	461,877	
<b>Total Contributions</b>		<b>33,064,620</b>
 Investment Income:		
Net Increase in Fair Value of Investments	45,619,892	
Interest & Dividends	14,419,136	
Less Investment Expense <sup>1</sup>	(1,336,926)	
<b>Net Investment Income</b>		<b>58,702,102</b>
<b>Total Additions</b>		<b>91,766,722</b>

DEDUCTIONS

## Distributions to Members:

Benefit Payments	49,111,639	
Lump Sum DROP Distributions	7,042,727	
Refunds of Member Contributions	7,145,138	
<b>Total Distributions</b>		<b>63,299,504</b>
 Administrative Expense		 0
<b>Total Deductions</b>		<b>63,299,504</b>
<b>Net Increase in Net Position</b>		<b>28,467,218</b>
 <b>NET POSITION RESTRICTED FOR PENSIONS</b>		
Beginning of the Year		569,856,928
End of the Year		598,324,146

<sup>1</sup>Investment Related expenses include investment advisory, custodial and performance monitoring fees.

NOTES TO THE FINANCIAL STATEMENTS  
(For the Year Ended September 30, 2014)

Plan Description

*Plan Administration*

There is created a Board of Trustees in whom is vested the general administration, management and responsibility for the proper operation of the retirement system. The Board of Trustees shall consist of seven trustees appointed and elected in the following manner:

- (1) One trustee shall be appointed by the mayor. This trustee shall be an elector of the city.
- (2) One trustee shall be appointed by the city council. This trustee shall be an elector of the city.
- (3) Four trustees shall be appointed, one from each group; management, AFSCME Local, IAFF Local, and PBA. The appointee must be an active member of the retirement system or of the deferred retirement option program (DROP). Term of office for each trustee so elected shall be for a two-year period, and the trustee shall be voted into office and elected as determined by each group.
- (4) The seventh trustee shall be elected from the membership by majority vote by the trustees appointed pursuant to subsections (a)(1) through (3) of this section as soon as practicable after their appointment. This appointee shall be an elector of the city. The trustee so appointed shall serve for two years.

*Plan Membership as of October 1, 2013:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	1,365
Inactive Plan Members Entitled to but Not Yet Receiving Benefits	98
Active Plan Members	1,113
	2,576

*Benefits Provided*

For Police Officers hired on or after March 14, 2014, the Basic Pension is eliminated and the Service Pension minimum Age plus Service is changed from 70 points to 76 points to receive the Normal (full) Retirement Benefit and DROP eligibility. Additionally, the Vested or Deferred Benefits payable for these Members is payable at age 59 ½. Lastly, the automatic Cost of Living Adjustments for these Members is reduced from 2.0% per year to 1.0% per year.

For Firefighters hired on or after November 15, 2013, the Basic Pension is eliminated and the Service Pension minimum Age plus Service is changed from 70 points to 76 points to receive the Normal (full) Retirement Benefit and DROP eligibility. Additionally, the Vested or Deferred Benefits payable for these Members is payable at age 59 ½. Lastly, the automatic Cost of Living Adjustments for these Members is reduced from 2.0% per year to 1.0% per year.

The Plan provides retirement, termination, disability and death benefits.

Retirement Allowance

The Member's Retirement Allowance is equal to the sum of the following:

- (1) An Annuity, which is the actuarial equivalent of his Accumulated Member Contributions;
- (2) A Basic Pension, which is equal to \$1,800 (for those Members who have attained their Normal Retirement Age) or \$2,800 (for all other Members); and
- (3) A Service Pension, which is equal to 3% of Final Average Compensation multiplied by service up to 25 years (for those Members who have at least 20 years of service and whose age plus service equals at least 70) or 2% of Final Average Compensation multiplied by service up to 30 years (for all other Members).
- (4) An additional benefit equal to 1.5% of Average Final Compensation for each year of Credited Service that exceeds 25 years, up to a maximum additional benefit of 4.5% of Average Final Compensation. It is assumed that this benefit applies only to Normal Retirees (full benefits) and not to Vested or Deferred Retirees who get the 2.0% benefit accrual rate up to 30 years of service.

Normal Retirement Age and Allowance:

Age: Age 50 upon attainment of 10 years of service or any age upon attainment of 20 years of service (for those Members hired prior to January 27, 1970);

Age 55 upon attainment of 15 years of service or any age upon attainment of 20 years of service (for those Members hired after January 26, 1970 but prior to January 1, 1974); or

Any age with age plus service equal to at least 70 and with at least 20 years of service (for all other Members).

Amount: Retirement Allowance.

Form of Payment (applicable to Annuity only): Life annuity (normal form of payment); or Lump sum payment equal to Accumulated Member Contributions (optional).

Form of Payment (applicable to the Basic and Service Pensions only): Five-year certain and life annuity for General employees, and ten-year certain and life annuity for Firefighters and Police Officers (normal form of payment);

Normal form of payment actuarially adjusted to benefit payable during lifetime of member only (optional) (does not apply to General employees);

Normal form of payment actuarially reduced to 50% joint and survivor annuity with the reduced benefit payable upon the death of either the Member or his beneficiary (optional); Normal form of payment actuarially reduced to 66 2/3% joint and survivor annuity (optional);

Normal form of payment actuarially reduced to 75% joint and survivor annuity (optional) (does not apply to General employees); Normal form of payment actuarially reduced 100% joint and survivor annuity (optional);

Normal form of payment actuarially reduced 100% joint and survivor annuity with spouse as beneficiary and with a "pop-up" feature. A "pop-up" benefit increases to the amount of the unreduced pension upon the death of the beneficiary (optional).

Early Retirement Eligibility and Allowance:

Age: Age 55 with at least 10 years of service for General employees, and age 50 with at least 10 years of service for Firefighters and Police Officers.

Amount: 100% of the Member's Annuity. In addition, for General employees, the member's Basic and Service Pensions multiplied by his Vested Interest, payable at age 55. Firefighters and Police Officers can commence their early retirement benefit at age 50 with a 3% per year reduction from normal retirement.

Form of Payment: Same as for Normal Retirement.

Disability Retirement Eligibility and Allowance:

Condition: The Member must be totally and permanently incapacitated for duty in his classified position as an employee of the City, as determined by both the Board of Trustees and by a medical committee consisting of one doctor appointed by the Board of Trustees and one doctor selected by the Member.

Amount: The Member's accrued Retirement Allowance and, for Firefighters and Police Officers, subject to a minimum of: 25% of Average Final Compensation, for non-duty disability, after 10 years of service, and 42% of Average Final Compensation, for duty related disability, with no service requirement.

Form of Payment: Same as for Normal Retirement.

Deferred Retirement (Vested) Eligibility and Allowance:

Age: Any age with at least 10 years of service.

Amount: 100% of the Member's Annuity. In addition, for General employees, the member's Basic and Service Pensions multiplied by his Vested Interest, payable at age 55. Firefighters and Police Officers can commence their vested benefit at age 50 with a 3% per year reduction from normal retirement.

Form of Payment: Same as for Normal Retirement.

Pre-Retirement Death Benefit:

In the case of the death of a General employee Member prior to retirement, his beneficiary will receive a five-year certain annuity determined as if the Member had retired on the day before his death and elected a five-year certain and life annuity. In lieu of this five-year certain annuity, the beneficiary of the General employee may elect to receive ½ of the same amount payable over a ten-year period. For Firefighters and Police Officers, the Member's vested accrued benefit deferred to early (reduced) or normal retirement and payable for a minimum of 10 years. Alternatively, if the Member had attained his Normal or Early Retirement Age and had elected an optional form of payment, then his spouse will receive benefits as dictated by the option elected.

Vested Interest:

A General employee member earns a Vested Interest in his Basic and Service Pensions in accordance with the following schedule. Firefighters and Police Officer Members earn a 100% Vested Interest with 10 years of service.

Years of Service	Vested Interest
Less than 10	0%
10	70%
11	73%
12	76%
13	79%
14	82%
15	85%
16	88%
17	91%
18	94%
19	97%
20 or more	100%

Cost-of-Living Adjustment:

Members (including participants in the DROP and excluding beneficiaries and those Members who are receiving a Deferred Retirement Allowance) receive an automatic level 2% cost-of-living adjustment in their Basic and Service Pensions as of each anniversary of retirement or the first of the month following their 52nd birthday and limited to 10 such increases (for a total increase of 20%).

Contributions

Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Chapter 112, Florida Statutes.

## Investments

### *Investment Policy:*

The following was the Board's adopted asset allocation policy as of September 30, 2014:

Asset Class	Target Allocation
Domestic Equity	50%
International Equity	5%
Domestic Bonds	40%
Other	5%
Total	100%

### *Concentrations:*

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's fiduciary net position.

### *Rate of Return:*

For the year ended September 30, 2014 the annual money-weighted rate of return on Pension Plan investments, net of pension plan investment expense, was 10.22 percent.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

### Deferred Retirement Option Program

Effective March 1, 2007 for Police Officers and Firefighters and February 19, 2008 for General employees, members are eligible to participate in a Deferred Retirement Option Program (DROP) upon the completion of 25 years of membership service credit provided that the sum of the member's age and service is equal to at least 70. The member's monthly retirement benefit (basic plus service pension), based on final average earnings and service upon entering the DROP, will be paid to the member's DROP account. At the end of each fiscal year, interest will be credited to the DROP account at the same rate credited to the annuity savings account.

Member contributions cease upon entering the DROP and the member shall be ineligible for disability benefits provided by the System. Upon termination of employment or death, the DROP account balance will be paid in a cash lump sum. The maximum period of participation in the DROP is 36 months and members cannot buy service in order to be eligible for the DROP.

General employees who are members of the retirement system are prohibited from entering the DROP on or after April 2, 2012.

The DROP balance as September 30, 2014 is \$4,582,852.

## NET PENSION LIABILITY OF THE SPONSOR

The components of the net pension liability of the sponsor on September 30, 2014 were as follows:

Total Pension Liability	\$ 787,455,356
Plan Fiduciary Net Position	\$ (598,324,146)
Sponsor's Net Pension Liability	<u>\$ 189,131,210</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	75.98%

### *Actuarial Assumptions:*

The total pension liability was determined by an actuarial valuation as of October 1, 2013 updated to September 30, 2014 using the following actuarial assumptions.

Inflation	3.00%
Salary Increases	4.0% - 9.0%
Investment Rate of Return	8.00%

Pre-Retirement Mortality: RP-2000 Combined Mortality Table with a blue collar adjustment projected 15 years from valuation date.

Post-Retirement Healthy Mortality: RP-2000 Combined Mortality Table with a blue collar adjustment projected 7 years from valuation date.

Post-Retirement Disabled Mortality: RP-2000 Disabled Mortality Table.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expenses and inflation) are developed for each major asset class.

These ranges are combined to produce the long term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of September 30, 2014 are summarized in the following table:

<u>Asset Class</u>	<u>Long Term Expected Real Rate of Return</u>
Domestic Equity	6.60%
International Equity	7.13%
Domestic Bonds	1.79%
Other	4.97%

**Discount Rate:**

The discount rate used to measure the total pension liability was 8.00 percent.

The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those 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 was applied to all periods of projected benefit payments to determine the total pension liability.

	1% Decrease 7.00%	Current Discount Rate 8.00%	1% Increase 9.00%
Sponsor's Net Pension Liability	\$ 263,802,678	\$ 189,131,210	\$ 125,805,594

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS  
Last 10 Fiscal Years

	<u>09/30/2014</u>
Total Pension Liability	
Service Cost	8,982,779
Interest	60,285,831
Change in Excess State Money	-
Change in Funding Standard Account	-
Change in Annuity Savings Fund	4,064,028
Share Plan Allocation	-
Changes of Benefit Terms	-
Differences Between Expected and Actual Experience	-
Changes of Assumptions	-
Contributions - Buy Back	1,182,367
Benefit Payments, Including Refunds of Employee Contributions	<u>(63,299,504)</u>
Net Change in Total Pension Liability	11,215,501
Total Pension Liability - Beginning	776,239,855
Total Pension Liability - Ending (a)	<u>\$ 787,455,356</u>
Plan Fiduciary Net Position	
Contributions - Employer	25,769,253
Contributions - State	461,877
Contributions - Employee	1,587,095
Contributions - Buy Back	1,182,367
Contributions - Annuity Savings Fund	4,064,028
Net Investment Income	58,702,102
Benefit Payments, Including Refunds of Employee Contributions	<u>(63,299,504)</u>
Administrative Expense	-
Other	-
Net Change in Plan Fiduciary Net Position	<u>28,467,218</u>
Plan Fiduciary Net Position - Beginning	569,856,928
Plan Fiduciary Net Position - Ending (b)	<u>\$ 598,324,146</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 189,131,210</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	75.98%
Covered Employee Payroll	\$ 22,672,786
Net Pension Liability as a Percentage of covered Employee Payroll	834.18%

SCHEDULE OF CONTRIBUTIONS  
Last 10 Fiscal Years

	09/30/2014
Actuarially Determined Contribution Contributions in Relation to the Actuarially Determined Contributions	26,231,130
Contribution Deficiency (Excess)	26,231,130
	\$ -
 Covered Employee Payroll Contributions as a Percentage of Covered Employee Payroll	\$ 22,672,786 115.69%

Notes to Schedule

Valuation Date: 10/01/2012  
Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Actuarial Cost Method: The entry age normal cost method was used to determine all liabilities, except that the liability associated with member contributions has been assumed to be equal to those contributions.

Amortization Method: Beginning October 1, 2011, the method of amortizing all outstanding unfunded liability bases was changed to an increasing amortization based on a level percent of payroll where the aggregate payroll is assumed to increase at 3.5% per year.

Remaining Amortization Period: 30 Years (as of 10/01/2012).

Actuarial Value of Assets: The actuarial value of assets (AVA) is equal to the market value of assets adjusted to reflect a five year phase-in of the difference between the expected versus actual return on the AVA. The AVA is limited to an 80%-120% corridor of the market value of assets.

Inflation: 3.5% per year.

## Salary Increases:

General Employees			
Age	Rate	Age	Rate
20	9.0%	50	4.0%
25	8.0%	55	4.0%
30	7.0%	60	4.0%
35	6.0%	65	4.0%
40	5.0%	70	4.0%
45	4.5%	75	4.0%

A 5.0% and 9.5% salary increase is assumed as of October 1, 2011 and October 1, 2012 respectively. These increases reflect the restoration of a 17% pay concession that occurred on March 21, 2011 (with pay being restored to pre-concession levels on April 1, 2012) as well as the cessation of mandatory furlough days (1 in every 10 days ending on March 20, 2011). Other than the restoration of the above concessions, no salary increases for fiscal 2012 through 2014 are assumed. Beginning with fiscal 2015, pay is assumed to increase at the rates provided in the table above.

Police Officers and Firefighters		
Service	Police Officers	Firefighters
0	9.0%	9.0%
1	8.5%	8.5%
2	8.0%	8.0%
3	7.5%	7.5%
4	7.0%	7.0%
5	6.5%	6.5%
6-9	6.0%	6.0%
10	6.0%	5.0%
11	5.0%	4.5%
12-22	4.0%	4.0%
23+	4.0%	3.0%

## Interest Rate:

8.00% per annum net of investment related expenses.

## Retirement (General Employees):

General Employees with less than 25 years of Eligible Service		General Employees with 25 years of Eligible Service	
Age	Rate	Age	Rate
45	0%	45	0%
46	0%	46	0%
47	0%	47	0%
48	0%	48	0%
49	0%	49	0%
50	10%	50	50%
51	5%	51	30%
52	5%	52	30%
53	5%	53	30%
54	5%	54	30%
55	15%	55	40%
56	15%	56	40%
57	15%	57	40%
58	15%	58	40%
59	15%	59	40%
60	15%	60	40%
61	5%	61	40%
62	15%	62	50%
63	5%	63	30%
64	5%	64	30%
65	75%	65	80%
66	25%	66	50%
67	35%	67	60%
68	45%	68	70%
69	85%	69	80%
70	100%	70	100%
General Employees with more than 25 years of Eligible Service			
Age	Rate	Age	Rate
45	0%	58	20%
46	0%	59	20%
47	0%	60	20%
48	0%	61	10%
49	0%	62	20%
50	15%	63	10%
51	10%	64	10%
52	10%	65	80%
53	10%	66	30%
54	10%	67	40%
55	20%	68	50%
56	20%	69	90%
57	20%	70	100%

Retirement (Police Officers and Firefighters):

Service	Age <65		Age=65+
	Police Officers	Firefighters	
< 15	0%	0%	100%
15-19	5%	2.5%	100%
20	25%	20%	100%
21-24	10%	10%	100%
25	50%	40%	100%
26	30%	30%	100%
27	40%	40%	100%
28	50%	45%	100%
29	60%	50%	100%
30+	100%	100%	100%
General Employees		Police Officers	
Years of Service	Rate	Years of Service	Rate
0	12.5%	0	12.0%
1	12.5%	1	12.0%
2	7.5%	2	9.0%
3	7.5%	3	7.5%
4	7.5%	4	6.0%
5	7.5%	5	5.0%
Firefighters			
Years of Service	Rate		
0	12.5%		
1	9.5%		
2	5.0%		
3	4.0%		
4	3.0%		
5	2.5%		

Permanent Withdrawal from Active Status:

(used for members with less than six years of service)

Permanent Withdrawal from Active Status:  
(used for members with at least six years of service)

General Employees		Police Officers	
Years of Service	Rate	Years of Service	Rate
25	5.0%	25	5.0%
30	5.0%	30	4.5%
35	5.0%	35	4.0%
40	5.0%	40	4.0%
45	5.0%	45	4.0%
50	5.0%	50	1.0%
55	3.0%	55	1.0%
60	2.0%	60	1.0%
Firefighters			
Years of Service	Rate		
25	2.0%		
30	2.0%		
35	2.0%		
40	2.0%		
45	2.0%		
50	1.0%		
55	1.0%		
60	1.0%		

Disability Rates:

For Police Officers and Firefighters: 85% of all disabilities are assumed to be in the line of duty and 15% are assumed not to be in the line of duty.

General Employees		Police Officers and Firefighters	
Age	Rate	Age	Rate
20	0.024%	20	0.096%
25	0.040%	25	0.120%
30	0.056%	30	0.152%
35	0.104%	35	0.248%
40	0.152%	40	0.384%
45	0.224%	45	0.584%
50	0.360%	50	0.896%
55	0.608%	55	1.328%
60	0.880%	60	1.760%
65	0.784%	65	2.192%
70	0.688%	70	2.624%
75	0.592%	75	3.056%

Mortality:

Pre-Retirement Mortality: RP-2000 Combined Mortality Table with a blue collar adjustment projected 15 years from valuation date.

Post-Retirement Healthy Mortality: RP-2000 Combined Mortality Table with a blue collar adjustment projected 7 years from valuation date.

Post-Retirement Disabled Mortality: RP-2000 Disabled Mortality Table.

SCHEDULE OF INVESTMENT RETURNS  
Last 10 Fiscal Years

	<u>09/30/2014</u>
Annual Money-Weighted Rate of Return	
Net of Investment Expense	10.22%

NOTES TO THE FINANCIAL STATEMENTS  
(For the Year Ended September 30, 2014)

General Information about the Pension Plan

*Plan Description*

All classified employees of the City of Hialeah, Florida participate in the plan, including: (1) all full-time employees (except as provided by law), and (2) those part-time employees working 22½ hours or more per week who elect to participate after one year of continuous employment. Membership does not include any person whose services are compensated on a fee or contractual basis, the Board of Trustees' medical committee, elected or appointed officials who are not in classified service, and persons employed on a temporary or provisional basis for less than nine months. Effective April 1, 2012, the Plan is closed to new general employee members hired on or after April 1, 2012. New general employees will instead participate in a defined contribution plan.

There is created a Board of Trustees in whom is vested the general administration, management and responsibility for the proper operation of the retirement system. The Board of Trustees shall consist of seven trustees appointed and elected in the following manner:

- (1) One trustee shall be appointed by the mayor. This trustee shall be an elector of the city.
- (2) One trustee shall be appointed by the city council. This trustee shall be an elector of the city.
- (3) Four trustees shall be appointed, one from each group; management, AFSCME Local, IAFF Local, and PBA. The appointee must be an active member of the retirement system or of the deferred retirement option program (DROP). Term of office for each trustee so elected shall be for a two-year period, and the trustee shall be voted into office and elected as determined by each group.
- (4) The seventh trustee shall be elected from the membership by majority vote by the trustees appointed pursuant to subsections (a)(1) through (3) of this section as soon as practicable after their appointment. This appointee shall be an elector of the city. The trustee so appointed shall serve for two years.

*Plan Membership as of October 1, 2013:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	1,365
Inactive Plan Members Entitled to but Not Yet Receiving Benefits	98
Active Plan Members	1,113
	2,576

*Benefits Provided*

For Police Officers hired on or after March 14, 2014, the Basic Pension is eliminated and the Service Pension minimum Age plus Service is changed from 70 points to 76 points to receive the Normal (full) Retirement Benefit and DROP eligibility. Additionally, the Vested or Deferred Benefits payable for these Members is payable at age 59 ½. Lastly, the automatic Cost of Living Adjustments for these Members is reduced from 2.0% per year to 1.0% per year.

For Firefighters hired on or after November 15, 2013, the Basic Pension is eliminated and the Service Pension minimum Age plus Service is changed from 70 points to 76 points to receive the Normal (full) Retirement Benefit and DROP eligibility. Additionally, the Vested or Deferred Benefits payable for these Members is payable at age 59 ½. Lastly, the automatic Cost of Living Adjustments for these Members is reduced from 2.0% per year to 1.0% per year.

The Plan provides retirement, termination, disability and death benefits.

Retirement Allowance

The Member's Retirement Allowance is equal to the sum of the following:

- (1) An Annuity, which is the actuarial equivalent of his Accumulated Member Contributions;
- (2) A Basic Pension, which is equal to \$1,800 (for those Members who have attained their Normal Retirement Age) or \$2,800 (for all other Members); and
- (3) A Service Pension, which is equal to 3% of Final Average Compensation multiplied by service up to 25 years (for those Members who have at least 20 years of service and whose age plus service equals at least 70) or 2% of Final Average Compensation multiplied by service up to 30 years (for all other Members).
- (4) An additional benefit equal to 1.5% of Average Final Compensation for each year of Credited Service that exceeds 25 years, up to a maximum additional benefit of 4.5% of Average Final Compensation. It is assumed that this benefit applies only to Normal Retirees (full benefits) and not to Vested or Deferred Retirees who get the 2.0% benefit accrual rate up to 30 years of service.

Normal Retirement Age and Allowance:

Age: Age 50 upon attainment of 10 years of service or any age upon attainment of 20 years of service (for those Members hired prior to January 27, 1970);

Age 55 upon attainment of 15 years of service or any age upon attainment of 20 years of service (for those Members hired after January 26, 1970 but prior to January 1, 1974); or

Any age with age plus service equal to at least 70 and with at least 20 years of service (for all other Members).

Amount: Retirement Allowance.

Form of Payment (applicable to Annuity only): Life annuity (normal form of payment); or Lump sum payment equal to Accumulated Member Contributions (optional).

Form of Payment (applicable to the Basic and Service Pensions only): Five-year certain and life annuity for General employees, and ten-year certain and life annuity for Firefighters and Police Officers (normal form of payment);

Normal form of payment actuarially adjusted to benefit payable during lifetime of member only (optional) (does not apply to General employees);

Normal form of payment actuarially reduced to 50% joint and survivor annuity with the reduced benefit payable upon the death of either the Member or his beneficiary (optional); Normal form of payment actuarially reduced to 66 2/3% joint and survivor annuity (optional);

Normal form of payment actuarially reduced to 75% joint and survivor annuity (optional) (does not apply to General employees); Normal form of payment actuarially reduced 100% joint and survivor annuity (optional);

Normal form of payment actuarially reduced 100% joint and survivor annuity with spouse as beneficiary and with a "pop-up" feature. A "pop-up" benefit increases to the amount of the unreduced pension upon the death of the beneficiary (optional).

Early Retirement Eligibility and Allowance:

Age: Age 55 with at least 10 years of service for General employees, and age 50 with at least 10 years of service for Firefighters and Police Officers.

Amount: 100% of the Member's Annuity. In addition, for General employees, the member's Basic and Service Pensions multiplied by his Vested Interest, payable at age 55. Firefighters and Police Officers can commence their early retirement benefit at age 50 with a 3% per year reduction from normal retirement.

Form of Payment: Same as for Normal Retirement.

Disability Retirement Eligibility and Allowance:

Condition: The Member must be totally and permanently incapacitated for duty in his classified position as an employee of the City, as determined by both the Board of Trustees and by a medical committee consisting of one doctor appointed by the Board of Trustees and one doctor selected by the Member.

Amount: The Member's accrued Retirement Allowance and, for Firefighters and Police Officers, subject to a minimum of: 25% of Average Final Compensation, for non-duty disability, after 10 years of service, and 42% of Average Final Compensation, for duty related disability, with no service requirement.

Form of Payment: Same as for Normal Retirement.

Deferred Retirement (Vested) Eligibility and Allowance:

Age: Any age with at least 10 years of service.

Amount: 100% of the Member's Annuity. In addition, for General employees, the member's Basic and Service Pensions multiplied by his Vested Interest, payable at age 55. Firefighters and Police Officers can commence their vested benefit at age 50 with a 3% per year reduction from normal retirement.

Form of Payment: Same as for Normal Retirement.

Pre-Retirement Death Benefit:

In the case of the death of a General employee Member prior to retirement, his beneficiary will receive a five-year certain annuity determined as if the Member had retired on the day before his death and elected a five-year certain and life annuity. In lieu of this five-year certain annuity, the beneficiary of the General employee may elect to receive 1/2 of the same amount payable over a ten-year period. For Firefighters and Police Officers, the Member's vested accrued benefit deferred to early (reduced) or normal retirement and payable for a minimum of 10 years. Alternatively, if the Member had attained his Normal or Early Retirement Age and had elected an optional form of payment, then his spouse will receive benefits as dictated by the option elected.

Vested Interest:

A General employee member earns a Vested Interest in his Basic and Service Pensions in accordance with the following schedule. Firefighters and Police Officer Members earn a 100% Vested Interest with 10 years of service.

Years of Service	Vested Interest
Less than 10	0%
10	70%
11	73%
12	76%
13	79%
14	82%
15	85%
16	88%
17	91%
18	94%
19	97%
20 or more	100%

Cost-of-Living Adjustment:

Members (including participants in the DROP and excluding beneficiaries and those Members who are receiving a Deferred Retirement Allowance) receive an automatic level 2% cost-of-living adjustment in their Basic and Service Pensions as of each anniversary of retirement or the first of the month following their 52nd birthday and limited to 10 such increases (for a total increase of 20%).

*Contributions*

Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Chapter 112, Florida Statutes.

## Net Pension Liability

The Sponsor's net pension liability was measured as of September 30, 2014.

The total pension liability used to calculate the net pension liability was determined as of that date.

### *Actuarial Assumptions:*

The total pension liability was determined by an actuarial valuation as of October 1, 2013 updated to September 30, 2014 using the following actuarial assumptions.

Inflation	3.00%
Salary Increases	4.0% - 9.0%
Investment Rate of Return	8.00%

Pre-Retirement Mortality: RP-2000 Combined Mortality Table with a blue collar adjustment projected 15 years from valuation date.

Post-Retirement Healthy Mortality: RP-2000 Combined Mortality Table with a blue collar adjustment projected 7 years from valuation date.

Post-Retirement Disabled Mortality: RP-2000 Disabled Mortality Table.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expenses and inflation) are developed for each major asset class.

These ranges are combined to produce the long term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of September, 30 2014 are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long Term Expected Real Rate of Return</u>
Domestic Equity	50.00%	6.60%
International Equity	5.00%	7.13%
Domestic Bonds	40.00%	1.79%
Other	5.00%	4.97%
Total	<u>100.00%</u>	

### Discount Rate:

The discount rate used to measure the total pension liability was 8.00 percent.

The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate.

Based on those 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 was applied to all periods of projected benefit payments to determine the total pension liability.

## CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances at September 30, 2013	\$ 776,239,855	\$ 569,856,928	\$ 206,382,927
Changes for a Year:			
Service Cost	8,982,779		8,982,779
Interest	60,285,831		60,285,831
Change In Excess State Money	-		-
Change In Funding Standard Account	-		-
Share Plan Allocation	-		-
Differences Between Expected and Actual Experience	-		-
Changes of Assumptions	-		-
Changes of Benefit Terms	-		-
Contributions - Employer		25,769,253	(25,769,253)
Contributions - State		461,877	(461,877)
Contributions - Employee		1,587,095	(1,587,095)
Contributions - Buy Back	1,182,367	1,182,367	-
Contributions - Annuity Savings Fund	4,064,028	4,064,028	-
Net Investment Income		58,702,102	(58,702,102)
Benefit Payments, Including Refunds of Employee Contributions	(63,299,504)	(63,299,504)	-
Administrative Expense		-	-
Other Changes	-	-	-
New Changes	11,215,501	28,467,218	(17,251,717)
Balances at September 30, 2014	\$ 787,455,356	\$ 598,324,146	\$ 189,131,210

*Sensitivity of the net pension liability to changes in the discount rate.*

	Current Discount		
	1% Decrease	Rate	1% Increase
	7.00%	8.00%	9.00%
Sponsor's Net Pension Liability	\$ 263,802,678	\$ 189,131,210	\$ 125,805,594

*Pension plan fiduciary net position.*

Detailed information about the pension plan's fiduciary net position is available in a separately issued Plan financial report.

PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS

For the year ended September 30, 2015 the Sponsor will recognize a pension expense of \$19,975,890. On September 30, 2015 the Sponsor reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences Between Expected and Actual Experience	-	-
Changes of Assumptions	-	-
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	11,458,354
Total	<u>\$ -</u>	<u>\$ 11,458,354</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended September 30:	
2016	\$ (2,864,589)
2017	\$ (2,864,589)
2018	\$ (2,864,588)
2019	\$ (2,864,588)
2020	\$ -
Thereafter	\$ -

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS  
Last 10 Fiscal Years

	<u>09/30/2014</u>
Total Pension Liability	
Service Cost	8,982,779
Interest	60,285,831
Change in Excess State Money	-
Change in Funding Standard Account	-
Change in Annuity Savings Fund	4,064,028
Share Plan Allocation	-
Changes of Benefit Terms	-
Differences Between Expected and Actual Experience	-
Changes of Assumptions	-
Contributions - Buy Back	1,182,367
Benefit Payments, Including Refunds of Employee Contributions	(63,299,504)
Net Change in Total Pension Liability	<u>11,215,501</u>
Total Pension Liability - Beginning	776,239,855
Total Pension Liability - Ending (a)	<u><u>\$ 787,455,356</u></u>
 Plan Fiduciary Net Position	
Contributions - Employer	25,769,253
Contributions - State	461,877
Contributions - Employee	1,587,095
Contributions - Buy Back	1,182,367
Contributions - Annuity Savings Fund	4,064,028
Net Investment Income	58,702,102
Benefit Payments, Including Refunds of Employee Contributions	(63,299,504)
Administrative Expense	-
Other	-
Net Change in Plan Fiduciary Net Position	<u>28,467,218</u>
 Plan Fiduciary Net Position - Beginning	569,856,928
Plan Fiduciary Net Position - Ending (b)	<u><u>\$ 598,324,146</u></u>
 Net Pension Liability - Ending (a) - (b)	<u><u>\$ 189,131,210</u></u>
 Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	75.98%
 Covered Employee Payroll	\$ 22,672,786
Net Pension Liability as a Percentage of covered Employee Payroll	834.18%

**SCHEDULE OF CONTRIBUTIONS**  
Last 10 Fiscal Years

	09/30/2014
Actuarially Determined Contribution	26,231,130
Contributions in Relation to the	
Actuarially Determined Contributions	26,231,130
Contribution Deficiency (Excess)	\$ -
Covered Employee Payroll	\$ 22,672,786
Contributions as a Percentage of	
Covered Employee Payroll	115.69%

Notes to Schedule

Valuation Date: 10/01/2012

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

**Actuarial Cost Method:** The entry age normal cost method was used to determine all liabilities, except that the liability associated with member contributions has been assumed to be equal to those contributions.

**Amortization Method:** Beginning October 1, 2011, the method of amortizing all outstanding unfunded liability bases was changed to an increasing amortization based on a level percent of payroll where the aggregate payroll is assumed to increase at 3.5% per year.

**Remaining Amortization Period:** 30 Years (as of 10/01/2012).

**Actuarial Value of Assets:** The actuarial value of assets (AVA) is equal to the market value of assets adjusted to reflect a five year phase-in of the difference between the expected versus actual return on the AVA. The AVA is limited to an 80%-120% corridor of the market value of assets.

**Inflation:** 3.5% per year.

**Salary Increases:**

General Employees			
Age	Rate	Age	Rate
20	9.0%	50	4.0%
25	8.0%	55	4.0%
30	7.0%	60	4.0%
35	6.0%	65	4.0%
40	5.0%	70	4.0%
45	4.5%	75	4.0%

A 5.0% and 9.5% salary increase is assumed as of October 1, 2011 and October 1, 2012 respectively. These increases reflect the restoration of a 17% pay concession that occurred on March 21, 2011 (with pay being restored to pre-concession levels on April 1, 2012) as well as the cessation of mandatory furlough days (1 in every 10 days ending on March 20, 2011). Other than the restoration of the above concessions, no salary increases for fiscal 2012 through 2014 are assumed. Beginning with fiscal 2015, pay is assumed to increase at the rates provided in the table above.

Police Officers and Firefighters		
Service	Police Officers	Firefighters
0	9.0%	9.0%
1	8.5%	8.5%
2	8.0%	8.0%
3	7.5%	7.5%
4	7.0%	7.0%
5	6.5%	6.5%
6-9	6.0%	6.0%
10	6.0%	5.0%
11	5.0%	4.5%
12-22	4.0%	4.0%
23+	4.0%	3.0%

Interest Rate:

8.00% per annum net of investment related expenses.

## Retirement (General Employees):

General Employees with less than 25 years of Eligible Service		General Employees with 25 years of Eligible Service	
Age	Rate	Age	Rate
45	0%	45	0%
46	0%	46	0%
47	0%	47	0%
48	0%	48	0%
49	0%	49	0%
50	10%	50	50%
51	5%	51	30%
52	5%	52	30%
53	5%	53	30%
54	5%	54	30%
55	15%	55	40%
56	15%	56	40%
57	15%	57	40%
58	15%	58	40%
59	15%	59	40%
60	15%	60	40%
61	5%	61	40%
62	15%	62	50%
63	5%	63	30%
64	5%	64	30%
65	75%	65	80%
66	25%	66	50%
67	35%	67	60%
68	45%	68	70%
69	85%	69	80%
70	100%	70	100%
General Employees with more than 25 years of Eligible Service			
Age	Rate	Age	Rate
45	0%	58	20%
46	0%	59	20%
47	0%	60	20%
48	0%	61	10%
49	0%	62	20%
50	15%	63	10%
51	10%	64	10%
52	10%	65	80%
53	10%	66	30%
54	10%	67	40%
55	20%	68	50%
56	20%	69	90%
57	20%	70	100%

Retirement (Police Officers and Firefighters):

Service	Age <65		Age=65+
	Police Officers	Firefighters	
< 15	0%	0%	100%
15-19	5%	2.5%	100%
20	25%	20%	100%
21-24	10%	10%	100%
25	50%	40%	100%
26	30%	30%	100%
27	40%	40%	100%
28	50%	45%	100%
29	60%	50%	100%
30+	100%	100%	100%

General Employees		Police Officers	
Years of Service	Rate	Years of Service	Rate
0	12.5%	0	12.0%
1	12.5%	1	12.0%
2	7.5%	2	9.0%
3	7.5%	3	7.5%
4	7.5%	4	6.0%
5	7.5%	5	5.0%

Firefighters	
Years of Service	Rate
0	12.5%
1	9.5%
2	5.0%
3	4.0%
4	3.0%
5	2.5%

Permanent Withdrawal from Active Status:  
(used for members with less than six years of service)

**Permanent Withdrawal from Active Status:**

(used for members with at least six years of service)

General Employees		Police Officers	
Years of Service	Rate	Years of Service	Rate
25	5.0%	25	5.0%
30	5.0%	30	4.5%
35	5.0%	35	4.0%
40	5.0%	40	4.0%
45	5.0%	45	4.0%
50	5.0%	50	1.0%
55	3.0%	55	1.0%
60	2.0%	60	1.0%
Firefighters			
Years of Service	Rate		
25	2.0%		
30	2.0%		
35	2.0%		
40	2.0%		
45	2.0%		
50	1.0%		
55	1.0%		
60	1.0%		

**Disability Rates:**

For Police Officers and Firefighters: 85% of all disabilities are assumed to be

General Employees		Police Officers and Firefighters	
Age	Rate	Age	Rate
20	0.024%	20	0.096%
25	0.040%	25	0.120%
30	0.056%	30	0.152%
35	0.104%	35	0.248%
40	0.152%	40	0.384%
45	0.224%	45	0.584%
50	0.360%	50	0.896%
55	0.608%	55	1.328%
60	0.880%	60	1.760%
65	0.784%	65	2.192%
70	0.688%	70	2.624%
75	0.592%	75	3.056%

**Mortality:**

Pre-Retirement Mortality: RP-2000 Combined Mortality Table with a blue collar adjustment projected 15 years from valuation date.

Post-Retirement Healthy Mortality: RP-2000 Combined Mortality Table with a blue collar adjustment projected 7 years from valuation date.

Post-Retirement Disabled Mortality: RP-2000 Disabled Mortality Table.

COMPONENTS OF PENSION EXPENSE  
FISCAL YEAR SEPTEMBER 30, 2015

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 206,382,927	\$ -	\$ 25,769,253	
Total pension liability factors:				
Service cost	8,982,779			8,982,779
Interest	60,285,831			60,285,831
Change in Excess State Money	-			-
Change in Funding Standard Account	-			-
Change in Annuity Savings Fund	4,064,028			4,064,028
Share Plan Allocation	-			-
Changes in Benefit terms	-			-
Contributions - Buy back	1,182,367			1,182,367
Differences between expected and actual experience with regard to economic or demographic assumptions	-	-	-	-
Current year amortization		-	-	-
Changes in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization		-	-	-
Benefit payments	(63,299,504)			(63,299,504)
Net change	<u>11,215,501</u>	<u>-</u>	<u>-</u>	<u>11,215,501</u>
Plan fiduciary net position:				
Contributions - Employer	25,769,253		(25,769,253)	
Contributions - State	461,877			(461,877)
Contributions - Employee	1,587,095			(1,587,095)
Contributions - Buy back	1,182,367			(1,182,367)
Contributions - Annuity Savings Fund	4,064,028			(4,064,028)
Net investment income	44,379,159			(44,379,159)
Difference between projected and actual earnings on pension plan investments	14,322,943	14,322,943	-	
Current year amortization		(2,864,589)	-	(2,864,589)
Benefit payments	(63,299,504)			63,299,504
Administrative expenses	-			-
Other	-			-
Net change	<u>28,467,218</u>	<u>11,458,354</u>	<u>(25,769,253)</u>	<u>8,760,389</u>
Ending Balance	<u>\$ 189,131,210</u>	<u>\$ 11,458,354</u>	<u>\$ -</u>	<u>\$ 19,975,890</u>