The Employee Retirement System of the City of Providence

Actuarial Valuation and Review as of July 1, 2014

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April 24, 2015

Retirement Board
The Employee Retirement System of the City of Providence
City Hall
Providence, RI 02903

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of July 1, 2014. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2015 and later years and analyzes the preceding year's experience.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Retirement System. The census information and financial information on which our calculations were based was prepared by the staff of the System. That assistance is gratefully acknowledged.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

The actuarial calculations were directed under the supervision of Kathleen A. Riley, FSA, MAAA, EA. She is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of her knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in her opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

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Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

By:

Kathleen A. Riley, FSA, MAAA, EA	*William J. Connolly, FCA, MAAA, EA*
Senior Vice President and Actuary	*Consulting Actuary*

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Purpose

This report has been prepared by Segal Consulting to present a valuation of The Employee Retirement System of the City of Providence as of July 1, 2014. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of The Employee Retirement System of the City of Providence, as administered by the Board;
- The characteristics of covered active participants, inactive participants, and retired participants and beneficiaries as of July 1, 2014;
- The assets of the Plan as of June 30, 2014;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

1. The actuarial valuation report as of July 1, 2014 is based on financial information as of that date. Changes in the value of assets subsequent to that date are not reflected.
2. During the year ended June 30, 2014, the market value rate of return was 14.04%, compared to the assumed rate of return of 8.25%. Because the actuarial value of assets gradually recognizes market value fluctuations at 20% per year over a five-year period, the actuarial rate of return for the year ended June 30, 2014 was 12.39%. The actuarial value of assets as of June 30, 2014 was $338.3 million, or 94.6% of the market value of assets of $357.7 million.
3. The total unrecognized investment gain as of July 1, 2014 is $19,458,671. This investment gain will be recognized in the determination of the actuarial value of assets in the next few years, to the extent it is not offset by recognition of investment losses derived from future experience. This implies that earning the assumed rate of investment return (net of investment expenses) on a market value basis will result in investment gains on the actuarial value of assets in the next few years. The funding schedule shown in Section 2, Chart 18 reflects the deferred investment gains.

4. In prior valuations, the actuarial value of assets and the market value of assets included the discounted contribution expected to be paid by the City for the fiscal year following the valuation date. This valuation excludes such discounted contributions from reported assets. This did not affect the determination of the contribution requirement, which is based on projected liabilities and assets.

5. This valuation reflects the following changes in actuarial assumptions and methods:

   - The calculation of the actuarial value of assets and the market value of assets has been changed to no longer include the discounted contribution expected to be paid by the City for the fiscal year following the valuation date.

   - The liability for inactive vested participants who were active in the prior valuation (*i.e.*, for whom final compensation can be estimated) is the greater of the employee's contribution balance or the present value of a deferred annuity. For all other inactive vested participants, the liability is equal to the employee's contribution balance.

   - Based on additional information provided with this valuation, we have assumed that any Class B retired participant whose total benefit is greater than the base compensation of a current employee holding the same rank that the retiree held at the time of retirement will not receive a COLA in any year until this is no longer true. We have assumed that average compensation for all ranks will increase by 3.5% per year.

   - Participants identified by the City who opted out of the Consent Judgments agreed to by the City regarding the resumption of retiree COLAs are assumed to have their COLAs commence on January 1, 2036, when the Plan was projected to be greater than 70% funded with the prior valuation. Previously, their COLAs were assumed to commence on January 1, 2033.

   The change in the asset method increased the unfunded liability by $61.5 million and the change in assumptions increased the unfunded liability by $776,797 for a total increase of $62.2 million.

6. The unfunded liability has increased by $62.8 million from $831.5 million as of July 1, 2013 to $894.3 million as of July 1, 2014. The unfunded liability was expected to increase to $845.6 million. The difference between the expected unfunded liability of $845.6 million and the actual unfunded liability of $894.3 million is attributable to the $61.5 million increase in liabilities due to the asset method change and the $0.8 million increase in liabilities due to assumption changes, offset by an investment gain on an actuarial basis of $12.9 million and an experience gain of $0.6 million.

7. The annual contribution required to fund the System is comprised of an employer normal cost payment and a payment on the unfunded actuarial accrued liability. To determine the unfunded liability as of July 1, 2015, the liabilities are rolled forward using standard actuarial techniques and the actuarial value of assets are projected based on an anticipated employer contribution of $66,543,967 for fiscal 2015 and assuming that the market value of assets return 8.25% net of investment expenses.

8. Because the fiscal 2015 appropriation has already been budgeted at $66,543,967, the results of this valuation will first be reflected in the fiscal 2016 appropriation of $70,858,867. The funding schedule in Chart 18 fully funds the System by June 30, 2040. The unfunded liability, less the liability associated with the 1995 Deferral, is amortized through June 30, 2040. As of July 1, 2015, there are 25 years remaining on this schedule. The amortization payments are calculated to increase 3.5% per year. The 1995 deferral liability is amortized through June 30, 2031 in level payments. Recommended contributions are assumed to be paid on June 30. If the contribution is made after June 30, Segal will calculate the additional interest charge based on the actual date of payment.

   Chart 18 in Section 2 shows the detail of the funding schedule.

9. On a market value basis, the funded ratio has decreased from 32.4% as of July 1, 2013 to 29.0% as of July 1, 2014. On an actuarial basis, the funded ratio has decreased from 31.4% as of July 1, 2013 to 27.4% as of July 1, 2014. The decrease is due to the change in asset valuation method.

10. Section 5 shows the disclosure information required by GASB Statement No. 67 for the fiscal year ended June 30, 2014. The disclosure information required by GASB Statements No. 67 and 68 for the fiscal year ended June 30, 2015 will be provided when June 30, 2015 financial information is available.

Summary of Key Valuation Results

	2014	2013
Contributions for plan year beginning July 1:		
Recommended for fiscal 2015 and 2014	$66,543,967	$61,614,784
Recommended for fiscal 2016 and 2015	70,858,867	66,543,967
Actual contribution for fiscal 2014	- -	62,140,000
Funding elements for plan year beginning July 1:		
Total normal cost, without interest	$17,782,678	$17,408,238
Market value of assets	357,712,000	393,059,827
Actuarial value of assets	338,253,329	380,484,015
Actuarial accrued liability	1,232,590,168	1,212,007,656
Unfunded actuarial accrued liability	894,336,839	831,523,641
Funded ratio based on market value of assets	29.0%	32.4%
Funded ratio based on actuarial value of assets	27.4%	31.4%
Demographic data for plan year ending June 30:		
Number of retired participants and beneficiaries	3,108	3,094
Number of inactive participants entitled to a return of employee contributions	393	407
Number of inactive participants with a vested right to a deferred or immediate benefit	35	N/A*
Number of active participants	2,986	2,998
Total compensation	$137,504,822	$134,863,923
Average compensation	46,050	44,985

Notes: Recommended contribution for fiscal 2014 was determined by the prior actuary based on the June 30, 2011 valuation and the Critical Status Emergence Plan and has been adjusted to include interest to the expected payment date of October 15, 2014.
Assets as of July 1, 2013 include the discounted contribution expected to be paid by the City for the fiscal year following the valuation date.
Recommended contributions are assumed to be paid on June 30. If the contribution is made after June 30, Segal will calculate the additional interest charge based on the date of payment.

* *Included with inactive participants entitled to a return of their employee contributions.*

A. PARTICIPANT DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered participants, including active participants, inactive participants, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these participant groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A through H.

A historical perspective of how the participant population has changed over the past seven valuations can be seen in this chart.

CHART 1

Participant Population: 2007 – 2014

Year Ended June 30	Active Participants	Inactive Participants	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
2007	3,083	179	2,821	0.97
2008	3,008	237	2,875	1.03
2009	2,955	455	2,883	1.13
2010	2,998	432	2,929	1.12
2011	2,987	435	2,999	1.15
2013	2,998	407	3,094	1.17
2014	2,986	428	3,108	1.18

Note: Participants who retired prior to June 30, but were not in pay status, were included as active participants.

Active Participants
Plan costs are affected by the age, years of service and compensation of active participants. In this year's valuation, there were 2,986 active participants with an average age of 46.8, average years of service of 12.9 years and average compensation of $46,050. The 2,998 active participants in the prior valuation had an average age of 46.6, average service of 12.7 years and average compensation of $44,985.

Among the active participants, there were none with unknown age and/or service information.

Inactive Participants
In this year's valuation, there were 35 participants with a vested right to a deferred or immediate vested benefit and 393 participants entitled to a return of their employee contributions.

These graphs show a distribution of active participants by age and by years of service.

CHART 2

Distribution of Active Participants by Age as of June 30, 2014

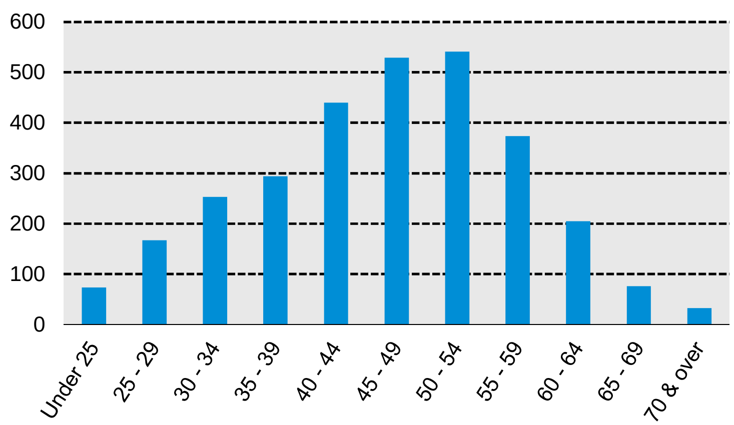
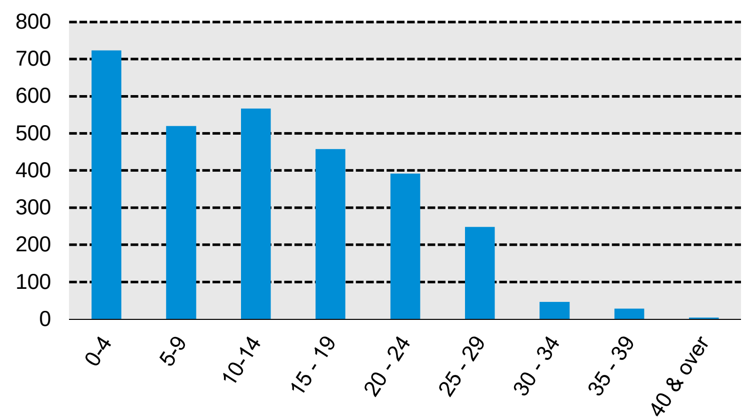


CHART 3

Distribution of Active Participants by Years of Service as of June 30, 2014



Retired Participants and Beneficiaries

As of June 30, 2014, 2,562 retired participants and 546 beneficiaries were receiving total monthly benefits of $7,490,244. For comparison, in the previous valuation, there were 2,546 retired participants and 548 beneficiaries receiving monthly benefits of $7,473,957. In addition, there was one retired participant in suspended status this year and none in the prior valuation.

These graphs show a distribution of the current retired participants based on their monthly amount and age, by type of pension.

CHART 4

Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2014

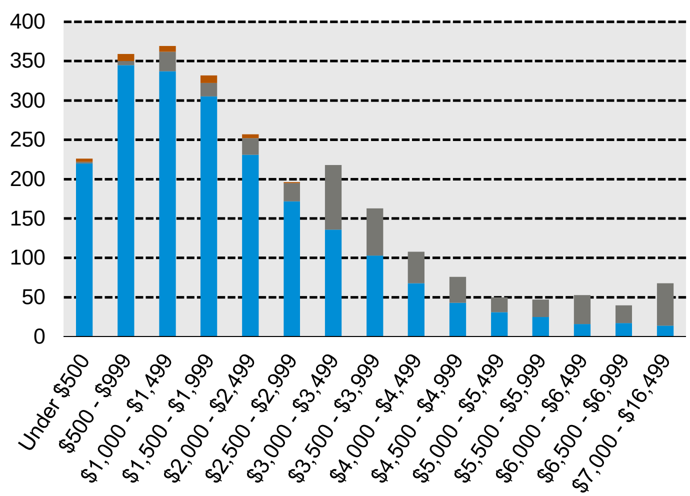
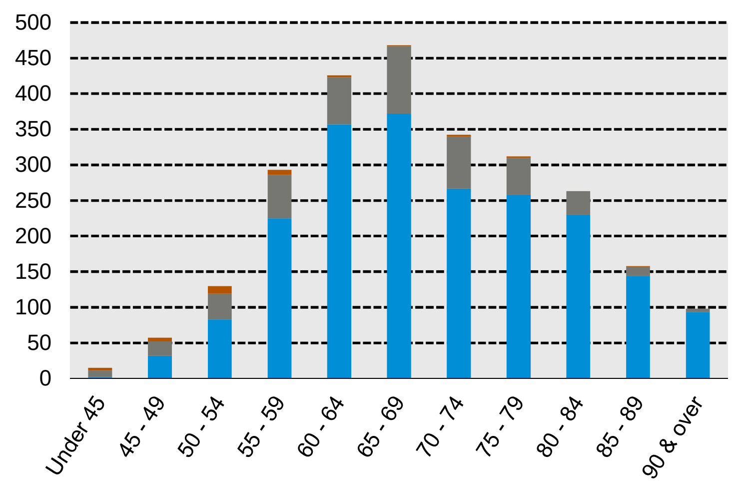


CHART 5

Distribution of Retired Participants by Type and by Age as of June 30, 2014



B. FINANCIAL INFORMATION

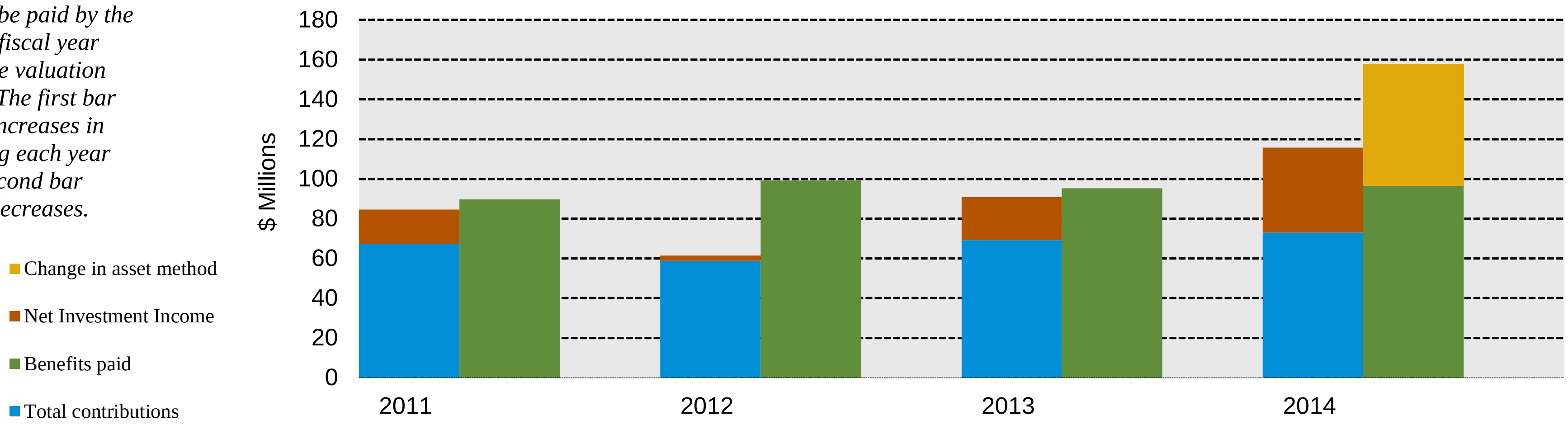
Retirement plan funding anticipates that, over the long term, both contributions and net investment earnings (less investment fees) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits I and J.

The chart depicts the components of changes in the actuarial value of assets over the last four years. Assets as of July 1, 2014 no longer include the discounted contribution expected to be paid by the City for the fiscal year following the valuation date. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2011 – 2014



It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The chart shows the determination of the actuarial value of assets as of the valuation date.

CHART 7

Determination of Actuarial Value of Assets for Year Ended June 30, 2014

1. Market value of assets, June 30, 2014			$357,712,000
	Original	Unrecognized	
2. Calculation of unrecognized return*	Amount	Return	
(a) Year ended June 30, 2014	$18,753,464	$15,002,771	
(b) Year ended June 30, 2013	9,709,109	5,825,465	
(c) Year ended June 30, 2012	-23,084,313	-9,233,725	
(d) Year ended June 30, 2011	39,320,798	7,864,160	
(e) Year ended June 30, 2010	14,653,966	0	
(f) Total unrecognized return			19,458,671
3. Preliminary actuarial value: (1) - (2f)			338,253,329
4. Adjustment to be within 20% corridor			0
5. Final actuarial value of assets as of June 30, 2014: (3) + (4)			$338,253,329
6. Actuarial value as a percentage of market value: (5) ÷ (1)			94.6%

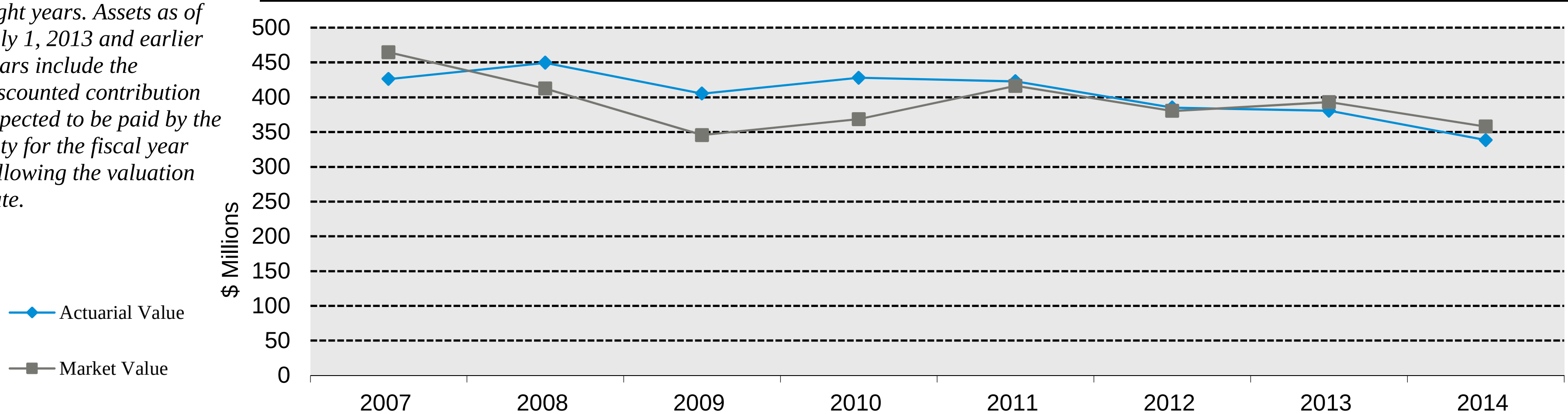
* *Unrecognized return is the difference between the total return and the expected return on a market value basis and is recognized at 20% per year over a five-year period.*

Both the actuarial value and market value of assets are representations of the System's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the System's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

This chart shows the change in the actuarial value of assets versus the market value over the past eight years. Assets as of July 1, 2013 and earlier years include the discounted contribution expected to be paid by the City for the fiscal year following the valuation date.

CHART 8

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 2007 – 2014



C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The net experience gain is $13,462,953. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 9

Actuarial Experience for Year Ended June 30, 2014

1.	Net gain from investments*	$12,908,109
2.	Net gain from other experience**	554,844
3.	Net experience gain: (1) + (2)	$13,462,953

* *Details in Chart 10*

** *Details in Chart 13*

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the System's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.25%. The actual rate of return on an actuarial basis for the 2014 plan year was 12.39%.

Since the actual return for the year was greater than the assumed return, the System experienced an actuarial gain of $12,908,109 during the year ended June 30, 2014 with regard to its investments.

This chart shows the gain/(loss) due to investment experience.

CHART 10

Actuarial Value Investment Experience for Year Ended June 30, 2014

1.	Actual return	$38,601,141
2.	Average value of assets	311,430,688
3.	Actual rate of return: (1) ÷ (2)	12.39%
4.	Assumed rate of return	8.25%
5.	Expected return: (2) x (4)	$25,693,032
6.	Actuarial gain: (1) – (5)	$12,908,109

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the market value investment return for the last four years.

As indicated below, the experience in the past few years has shown both higher and lower rates of return than the long-term assumption of 8.25%. Interest rates have declined substantially in the current economic environment, resulting in lower expected returns on the System's assets. We will continue to monitor the System's investment returns and asset allocation and review the assumption with the Board.

CHART 11

Investment Return – Actuarial Value vs. Market Value: 2011 - 2014

	Change in Asset Method		Actuarial Value Investment Return		Market Value Investment Return	
Year Ended June 30	**Amount**	**Percent**	**Amount**	**Percent**	**Amount**	**Percent**
2011	- -	- -	N/A	3.42%	N/A	21.33%
2012	- -	- -	$3,391,254	0.97	$5,100,797	1.49
2013	- -	- -	18,132,553	5.70	35,563,000	11.35
2014	-$61,472,487	-19.74%	38,601,141	12.39	45,484,000	14.04
Total	-$61,472,487		$60,124,948		$86,147,797	

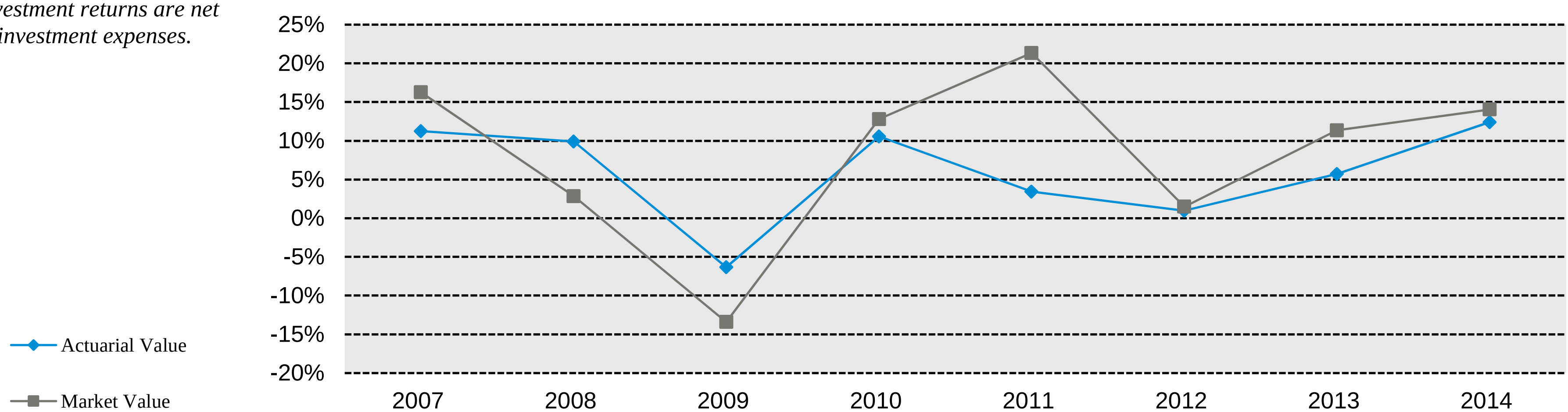
Note: Investment returns are net of investment expenses.

Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

This chart illustrates how this leveling effect has actually worked over the years 2007 - 2014. Note: Investment returns are net of investment expenses.

CHART 12

Market and Actuarial Rates of Return for Years Ended June 30, 2007 - 2014



Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

The net gain from this other experience for the year ended June 30, 2014 amounted to $554,844, which is 0.05% of the actuarial accrued liability.

A brief summary of the demographic gain/(loss) experience of the System for the year ended June 30, 2014 is shown in the chart below.

This valuation reflects the following changes in actuarial assumptions and methods:

- The calculation of the actuarial value of assets and the market value of assets has been changed to no longer include the discounted contribution expected to be paid by the City for the fiscal year following the valuation date.
- The liability for inactive vested participants who were active in the prior valuation (*i.e.*, for whom final compensation can be estimated) is the greater of the employee's contribution balance or the present value of a deferred annuity. For all other inactive vested participants, the liability is equal to the employee's contribution balance.
- Based on additional information provided with this valuation, we have assumed that any Class B retired participant whose total benefit is greater than the base compensation of a current employee holding the same rank that the retiree held at the time of retirement will not receive a COLA in any year until this is no longer true. We have assumed that average compensation for all ranks will increase by 3.5% per year.

The chart shows elements of the experience gain/(loss) for the most recent year.

CHART 13

Experience Due to Changes in Demographics for Year Ended June 30, 2014

1.	More deaths than expected amongst retired members and beneficiaries	$1,125,750
2.	Salary increases greater than expected for continuing actives	-1,349,036
3.	Miscellaneous gain	778,130
4.	Net experience gain	$554,844

- Participants identified by the City who opted out of the Consent Judgments agreed to by the City regarding the resumption of retiree COLAs are assumed to have their COLAs commence on January 1, 2036, when the Plan was projected to be greater than 70% funded with the prior valuation. Previously, their COLAs were assumed to commence on January 1, 2033.

The change in the asset method increased the unfunded liability by $61.5 million and the change in assumptions increased the unfunded liability by $62.1 million.

The unfunded liability has increased by $62.8 million from $831.5 million as of July 1, 2013 to $894.3 million as of July 1, 2014. The unfunded liability was expected to increase to $845.6 million. The difference between the expected unfunded liability of $845.6 million and the actual unfunded liability of $894.3 million is attributable to the $61.5 million increase in liabilities due to the asset method change and the $0.8 million increase in liabilities due to assumption changes, offset by an investment gain on an actuarial basis of $12.9 million and an experience gain of $0.6 million.

CHART 14

Development of Unfunded Actuarial Accrued Liability and (Gain)/Loss for Year Ended June 30, 2014

1.	Unfunded actuarial accrued liability at beginning of year		$831,523,641
2.	Normal cost at beginning of year		17,408,238
3.	Employer contributions		-62,140,000
4.	Employee contributions		-10,873,000
5.	Interest		
	(a) For whole year on (1) + (2)	$70,036,880	
	(b) For half year on (4)	-405,251	
	(c) Total interest		69,631,629
6.	Expected unfunded actuarial accrued liability		$845,550,508
7.	Changes due to:		
	(a) Investment gain	-$12,908,109	
	(b) Other experience gain	-554,844	
	(c) Asset method change	61,472,487	
	(d) Assumptions	776,797	
	(e) Total changes		48,786,331
8.	Unfunded actuarial accrued liability at end of year		$894,336,839

D. CONTRIBUTION FOR FISCAL YEAR BEGINNING JULY 1, 2015

The annual contribution required to fund the System is comprised of an employer normal cost payment and a payment on the unfunded actuarial accrued liability.

The contribution requirements as of July 1, 2015 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Because the 2015 appropriation has already been budgeted at $66,543,967, the results of this valuation will first be reflected in the 2016 appropriation.

To determine the unfunded liability as of July 1, 2015, the liabilities are rolled forward using standard actuarial techniques and the actuarial value of assets are projected based on an anticipated employer contribution of $66,543,967 for fiscal 2015 and assuming that the market value of assets return 8.25% net of investment expenses.

The chart compares this valuation's recommended contribution with the prior valuation.

CHART 15

Recommended Contribution

	Year Beginning July 1 2014 Amount	2014 % of Pay	2013 Amount	2013 % of Pay
1. Total normal cost	$17,782,678	12.48%	$17,408,238	12.44%
2. Expected employee contributions	-11,200,356	-7.86%	-10,954,488	-7.83%
3. Employer normal cost: (1) + (2)	$6,582,322	4.62%	$6,453,750	4.61%
4. Actuarial accrued liability	1,232,590,168		1,212,007,656	
5. Actuarial value of assets	338,253,329		380,484,015	
6. Unfunded actuarial accrued liability: (4) - (5)	$894,336,839		$831,523,641	
7. Employer normal cost projected to July 1, 2015 and July 1, 2014, adjusted for timing	7,374,752	5.00%	7,230,700	4.99%
8. Unfunded actuarial accrued liability projected to July 1, 2015 and July 1, 2014	898,627,043		836,941,449	
9. Amortization of 1995 Deferral, adjusted for timing	471,667	0.32%	471,667	0.33%
10. Payment on remaining unfunded actuarial accrued liability as of July 1, 2015 and July 1, 2014, adjusted for timing	63,012,448	42.72%	58,841,600	40.64%
11. Total fiscal 2016 and 2015 contribution: (7) + (9) + (10), adjusted for timing	$70,858,867	48.04%	$66,543,967	45.96%
12. Projected compensation as of July 1, 2015 and July 1, 2014	$147,491,458		$144,789,696	

Notes: Recommended contributions are assumed to be paid on June 30. If the contribution is made after June 30, Segal will calculate the additional interest charge based on the date of payment.
Assets as of July 1, 2013 include the discounted contribution expected to be paid by the City for the fiscal year following the valuation date.

The unfunded liability, less the liability associated with the 1995 Deferral, is amortized through June 30, 2040. As of July 1, 2015, there are 25 years remaining on this schedule. The amortization payments are calculated to increase 3.5% per year. The 1995 Deferral liability is amortized through June 30, 2031 in level payments.

Chart 16 shows the appropriation through June 30, 2041.

CHART 16
Funding Schedule

								As of Beginning of Fiscal Year			
(1) Fiscal Year Ended June 30	(2) Employer Normal Cost	(3) Amortization of Deferral Liability	(4) Amortization of Remaining Unfunded Liability	(5) Total Plan Cost: (2) + (3) + (4)	(6) Increase	(7) Payroll	(8) Contributions as a % of Payroll: (5) / (7)	(9) Actuarial Accrued Liability	(10) Actuarial Value of Assets	(11) Total Unfunded Accrued Liability	(12) Funded Ratio
2015	$7,125,364	$471,667	$58,946,936	$66,543,967	- -	$142,503,824	46.70%	$1,232,590,168	$338,253,329	$894,336,839	27.44%
2016	7,374,752	471,667	63,012,448	70,858,867	6.48%	147,491,458	48.04%	1,247,645,496	349,018,453	898,627,043	27.97%
2017	7,632,868	471,667	65,113,008	73,217,543	3.33%	152,653,659	47.96%	1,270,651,256	362,827,394	907,823,862	28.55%
2018	7,900,018	471,667	66,951,673	75,323,358	2.88%	157,996,537	47.67%	1,294,535,584	383,367,778	911,167,806	29.61%
2019	8,176,519	471,667	69,027,132	77,675,318	3.12%	163,526,416	47.50%	1,319,430,313	404,052,232	915,378,080	30.62%
2020	8,462,697	471,667	71,443,081	80,377,445	3.48%	169,249,840	47.49%	1,345,118,038	423,720,065	921,397,973	31.50%
2021	8,758,891	471,667	73,943,589	83,174,147	3.48%	175,173,585	47.48%	1,372,195,660	446,697,103	925,498,557	32.55%
2022	9,065,452	471,667	76,531,615	86,068,734	3.48%	181,304,660	47.47%	1,400,748,057	473,311,125	927,436,932	33.79%
2023	9,382,743	471,667	79,210,221	89,064,631	3.48%	187,650,323	47.46%	1,431,131,690	504,184,493	926,947,197	35.23%
2024	9,711,139	471,667	81,982,579	92,165,385	3.48%	194,218,085	47.45%	1,462,485,865	538,747,413	923,738,452	36.84%
2025	10,051,029	471,667	84,851,969	95,374,665	3.48%	201,015,718	47.45%	1,494,202,907	576,710,279	917,492,628	38.60%
2026	10,402,815	471,667	87,821,788	98,696,270	3.48%	208,051,268	47.44%	1,526,485,441	618,623,308	907,862,133	40.53%
2027	10,766,914	471,667	90,895,551	102,134,132	3.48%	215,333,062	47.43%	1,559,589,130	665,121,826	894,467,304	42.65%
2028	11,143,756	471,667	94,076,895	105,692,318	3.48%	222,869,719	47.42%	1,593,896,062	717,002,423	876,893,639	44.98%
2029	11,533,787	471,667	97,369,586	109,375,040	3.48%	230,670,159	47.42%	1,629,545,770	774,856,968	854,688,802	47.55%
2030	11,937,470	471,667	100,777,522	113,186,659	3.48%	238,743,615	47.41%	1,666,973,682	839,614,307	827,359,375	50.37%
2031	12,355,281	471,667	104,304,735	117,131,683	3.49%	247,099,641	47.40%	1,706,361,019	911,993,685	794,367,334	53.45%
2032	12,787,716	- -	107,955,401	120,743,117	3.08%	255,748,129	47.21%	1,748,191,956	993,065,718	755,126,238	56.81%
2033	13,235,286	- -	111,733,840	124,969,126	3.50%	264,699,313	47.21%	1,793,202,183	1,083,733,431	709,468,752	60.44%
2034	13,698,521	- -	115,644,524	129,343,045	3.50%	273,963,789	47.21%	1,841,888,926	1,185,622,842	656,266,084	64.37%
2035	14,177,969	- -	119,692,083	133,870,052	3.50%	283,552,522	47.21%	1,895,064,122	1,300,300,610	594,763,512	68.62%
2036	14,674,198	- -	123,881,306	138,555,504	3.50%	293,476,860	47.21%	1,953,315,631	1,429,176,212	524,139,419	73.17%
2037	15,187,795	- -	128,217,151	143,404,946	3.50%	303,748,550	47.21%	2,017,444,866	1,573,945,251	443,499,615	78.02%
2038	15,719,368	- -	132,704,752	148,424,120	3.50%	314,379,750	47.21%	2,088,082,561	1,736,211,379	351,871,182	83.15%
2039	16,269,546	- -	137,349,418	153,618,964	3.50%	325,383,041	47.21%	2,166,307,945	1,918,112,142	248,195,803	88.54%
2040	16,838,980	- -	142,156,648	158,995,628	3.50%	336,771,447	47.21%	2,252,701,735	2,121,379,196	131,322,539	94.17%
2041	17,428,344	- -	- -	17,428,344	-89.04%	348,558,448	5.00%	2,348,330,975	2,348,330,975	- -	100.00%

Notes: Recommended contributions are assumed to be paid on June 30. If the contribution is made after June 30, Segal will calculate the additional interest charge based on the date of payment.
Normal cost and amortization payments of remaining unfunded liability increase at 3.5% per year.
Assumes contribution of budgeted amount for fiscal year 2015.
Schedule reflects deferred investment gains.

Chart 17 shows the contribution for the fiscal year beginning July 1, 2015 for Class A and Class B.

CHART 17

Contribution by Class and Department

		Class A		Class B - Police		Class B - Fire		Class B - Total	
		Amount	% of Pay	Amount	% of Pay	Amount	% of Pay	Amount	% of Pay
1.	Total normal cost	$8,326,609	9.68%	$4,784,419	17.63%	$4,671,650	15.94%	$9,456,069	16.75%
2.	Expected employee contributions	-6,862,664	-7.97%	-2,084,293	-7.68%	-2,253,399	-7.69%	-4,337,692	-7.69%
3.	Employer normal cost: (1) + (2)	$1,463,945	1.70%	$2,700,126	9.95%	$2,418,251	8.25%	$5,118,377	9.07%
4.	Actuarial accrued liability	435,721,078		373,339,766		423,529,324		796,869,090	
5.	Actuarial value of assets	119,572,676		102,453,696		116,226,957		218,680,653	
6.	Unfunded actuarial accrued liability: (4) - (5)	$316,148,402		$270,886,070		$307,302,367		$578,188,437	
7.	Employer normal cost projected to July 1, 2015, adjusted for timing	1,640,186	1.84%	3,025,187	10.77%	2,709,379	8.93%	5,734,566	9.82%
8.	Unfunded actuarial accrued liability projected to July 1, 2015	317,664,990		272,185,533		308,776,520		580,962,053	
9.	Amortization of 1995 Deferral, adjusted for timing	145,834	0.16%	152,435	0.54%	173,398	0.57%	325,833	0.56%
10.	Payment on remaining unfunded actuarial accrued liability as of July 1, 2015, adjusted for timing	22,274,924	25.01%	19,085,867	67.97%	21,651,657	71.37%	40,737,524	69.73%
11.	Total fiscal 2016 contribution: (7) + (9) + (10), adjusted for timing	$24,060,944	27.01%	$22,263,489	79.28%	$24,534,434	80.87%	$46,797,923	80.11%
12.	Projected compensation as of July 1, 2015	$89,072,983		$28,080,496		$30,337,979		58,418,475	

Notes: Recommended contributions are assumed to be paid on June 30. If the contribution is made after June 30, Segal will calculate the additional interest charge based on the date of payment.

July 1, 2014 actuarial value of assets allocated in proportion to July 1, 2014 actuarial accrued liability.

July 1, 2015 unfunded actuarial accrued liability allocated in proportion to July 1, 2014 unfunded actuarial accrued liability.

Class A includes Elected Officials.

Chart 18 shows the contribution for the fiscal year beginning July 1, 2015 for the departments of Class A.

CHART 18

Class A Contribution by Department

	Total Contribution	Projected Compensation
General	$9,250,314	$34,244,420
School	9,136,265	33,822,212
School Crossing Guards	237,985	881,016
Water	3,615,102	13,383,013
Workforce Development (JTPA)	283,265	1,048,639
Fire Civilians	369,382	1,367,441
Police Civilians	1,168,631	4,326,242
Total	$24,060,944	$89,072,983

Note: Contribution is allocated in proportion to projected compensation.

EXHIBIT A

Table of Plan Coverage – Class A

Category	Year Ended June 30 2014	Year Ended June 30 2013	Change From Prior Year
Active participants in valuation:			
Number	2,123	2,164	-1.9%
Average age	48.1	47.7	N/A
Average years of service	11.7	11.3	N/A
Total compensation	$83,059,219	$83,718,661	-0.8%
Average compensation	39,124	38,687	1.1%
Participant contributions	90,412,996	87,424,116	3.4%
Inactive participants entitled to a refund of employee contributions	368	380	N/A
Inactive participants with a vested right to a deferred or immediate benefit	35	N/A*	N/A
Retired participants:			
Number in pay status	1,472	1,453	1.3%
Average age	72.1	72.0	N/A
Average monthly benefit	$1,513	$1,521	-0.5%
Number in suspended status	1	0	N/A
Disabled participants:			
Number in pay status	89	88	1.1%
Average age	67.1	66.8	N/A
Average monthly benefit	$1,591	$1,557	2.2%
Number in suspended status	0	0	N/A
Beneficiaries in pay status:			
Number in pay status	207	210	-1.4%
Average age	78	78	N/A
Average monthly benefit	$1,124	$1,072	4.9%

* *Included with inactive participants entitled to a return of their employee contributions.*

Note: Includes elected officials.

EXHIBIT B

Table of Plan Coverage – Class B

Category	Year Ended June 30 2014	Year Ended June 30 2013	Change From Prior Year
Active participants in valuation:			
Number	863	834	3.5%
Average age	43.5	43.7	N/A
Average years of service	16.0	16.2	N/A
Total compensation	$54,445,603	$51,145,262	6.5%
Average compensation	63,089	61,325	2.9%
Participant contributions	90,983,797	88,064,660	3.3%
Inactive participants entitled to a refund of employee contributions	25	27	-7.4%
Inactive participants with a vested right to a deferred or immediate benefit	0	0	N/A
Retired participants:			
Number in pay status	591	587	0.7%
Average age	65.6	65.3	N/A
Average monthly benefit	$3,378	$3,376	0.1%
Disabled participants:			
Number in pay status	410	418	-1.9%
Average age	65.2	64.8	N/A
Average monthly benefit	$4,883	$4,919	-0.7%
Beneficiaries in pay status:			
Number in pay status	339	338	0.3%
Average age	74	74	N/A
Average monthly benefit	$2,627	$2,559	2.7%

EXHIBIT C

Participants in Active Service as of June 30, 2014 – Class A
By Age, Years of Service, and Average Compensation

		Years of Service								
Age	**Total**	**0-4**	**5-9**	**10-14**	**15 - 19**	**20 - 24**	**25 - 29**	**30 - 34**	**35 - 39**	**40 & over**
Under 25	48	48	- -	- -	- -	- -	- -	- -	- -	- -
	$25,736	$25,736	- -	- -	- -	- -	- -	- -	- -	- -
25 - 29	102	81	21	- -	- -	- -	- -	- -	- -	- -
	$31,850	$31,666	$32,562	- -	- -	- -	- -	- -	- -	- -
30 - 34	155	80	51	24	- -	- -	- -	- -	- -	- -
	$35,387	$33,125	$37,207	$39,059	- -	- -	- -	- -	- -	- -
35 - 39	196	67	47	47	34	1	- -	- -	- -	- -
	$37,876	$32,606	$41,371	$38,059	$41,757	$86,184	- -	- -	- -	- -
40 - 44	295	71	52	69	72	27	4	- -	- -	- -
	$40,067	$40,146	$33,141	$40,230	$42,337	$44,761	$53,385	- -	- -	- -
45 - 49	349	81	54	73	70	55	16	- -	- -	- -
	$40,795	$31,437	$33,831	$38,989	$42,879	$56,761	$55,905	- -	- -	- -
50 - 54	371	71	65	82	75	48	26	3	1	- -
	$39,551	$31,374	$36,225	$37,382	$38,399	$48,971	$57,930	$76,819	$58,804	- -
55 - 59	300	54	45	49	67	55	19	4	7	- -
	$40,817	$34,167	$37,284	$37,527	$36,089	$46,511	$62,755	$54,550	$70,973	- -
60 - 64	198	27	32	42	46	27	16	5	2	1
	$42,278	$43,663	$34,629	$45,800	$37,808	$42,730	$46,207	$55,956	$86,322	$75,887
65 - 69	76	11	13	13	13	8	7	3	5	3
	$41,177	$31,099	$37,054	$30,044	$56,113	$48,953	$44,162	$41,816	$49,460	$37,370
70 & over	33	2	5	11	7	4	3	- -	1	- -
	$36,071	$32,415	$23,346	$36,916	$34,075	$41,848	$48,539	- -	$51,173	- -
Total	2,123	593	385	410	384	225	91	15	16	4
	$39,124	$33,204	$35,883	$38,957	$40,298	$49,058	$54,952	$56,926	$64,171	$47,000

EXHIBIT D

Participants in Active Service as of June 30, 2014 – Class B
By Age, Years of Service, and Average Compensation

		Years of Service							
Age	**Total**	**0-4**	**5-9**	**10-14**	**15 - 19**	**20 - 24**	**25 - 29**	**30 - 34**	**35 - 39**
Under 25	26	26	- -	- -	- -	- -	- -	- -	- -
	$43,306	$43,306	- -	- -	- -	- -	- -	- -	- -
25 - 29	65	52	13	- -	- -	- -	- -	- -	- -
	$48,712	$45,352	$62,154	- -	- -	- -	- -	- -	- -
30 - 34	98	34	55	9	- -	- -	- -	- -	- -
	$56,525	$45,175	$62,239	$64,493	- -	- -	- -	- -	- -
35 - 39	98	9	34	50	5	- -	- -	- -	- -
	$61,561	$48,458	$61,902	$63,413	$64,307	- -	- -	- -	- -
40 - 44	145	9	22	54	27	33	- -	- -	- -
	$63,636	$47,236	$63,085	$62,487	$66,265	$68,206	- -	- -	- -
45 - 49	180	- -	10	27	28	71	44	- -	- -
	$65,798	- -	$62,812	$62,315	$66,619	$66,334	$67,225	- -	- -
50 - 54	170	- -	1	16	8	50	83	10	2
	$67,908	- -	$61,335	$64,048	$64,363	$64,810	$69,262	$80,570	$74,221
55 - 59	74	- -	- -	1	6	12	27	21	7
	$74,316	- -	- -	$56,659	$59,636	$65,255	$72,601	$79,792	$95,138
60 - 64	7	- -	- -	- -	- -	1	3	- -	3
	$66,614	- -	- -	- -	- -	$70,320	$66,761	- -	$65,231
Total	863	130	135	157	74	167	157	31	12
	$63,089	$45,242	$62,319	$62,989	$65,524	$66,194	$69,218	$80,043	$84,175

EXHIBIT E

Service Retirees as of June 30, 2014

	Class A		Class B		Total	
Age	Number	Amount	Number	Amount	Number	Amount
40-44	1	$24,492	1	$25,248	2	$49,740
45-49	1	33,636	31	996,456	32	1,030,092
50-54	16	437,436	67	2,208,060	83	2,645,496
55-59	134	3,326,688	91	3,626,148	225	6,952,836
60-64	246	5,338,272	111	4,647,528	357	9,985,800
65-69	264	5,004,108	108	4,894,140	372	9,898,248
70-74	216	3,398,640	51	2,301,348	267	5,699,988
75-79	210	2,873,712	48	2,135,796	258	5,009,508
80-84	187	3,083,688	43	1,641,924	230	4,725,612
85-89	120	2,075,088	24	992,244	144	3,067,332
90-94	57	834,852	15	458,004	72	1,292,856
95-99	18	258,048	1	29,592	19	287,640
100 & over	2	34,368	- -	- -	2	34,368
Total	1,472	$26,723,028	591	$23,956,488	2,063	$50,679,516

EXHIBIT F

Class A Disabled Retirees as of June 30, 2014

	Ordinary		Accidental		Total	
Age	**Number**	**Amount**	**Number**	**Amount**	**Number**	**Amount**
40-44	- -	- -	1	$33,660	1	$33,660
45-49	2	$41,040	2	59,964	4	101,004
50-54	7	85,668	2	52,536	9	138,204
55-59	4	41,160	5	138,516	9	179,676
60-64	2	21,192	11	239,664	13	260,856
65-69	1	4,092	11	263,424	12	267,516
70-74	2	26,556	15	255,036	17	281,592
75-79	2	21,948	13	229,788	15	251,736
80-84	- -	- -	5	102,732	5	102,732
85-89	- -	- -	3	58,968	3	58,968
90-94	- -	- -	1	23,232	1	23,232
Total	20	$241,656	69	$1,457,520	89	$1,699,176

EXHIBIT G

Class B Disabled Retirees as of June 30, 2014

	Ordinary		Accidental		Total	
Age	Number	Amount	Number	Amount	Number	Amount
25-29	- -	- -	1	$36,024	1	$36,024
30-34	- -	- -	- -	- -	- -	- -
35-39	- -	- -	- -	- -	- -	- -
40-44	4	$78,132	7	279,324	11	357,456
45-49	3	61,392	18	737,844	21	799,236
50-54	4	93,084	34	1,476,060	38	1,569,144
55-59	3	69,612	56	2,709,240	59	2,778,852
60-64	1	10,044	55	3,139,344	56	3,149,388
65-69	- -	- -	84	5,095,464	84	5,095,464
70-74	- -	- -	58	3,986,640	58	3,986,640
75-79	- -	- -	39	3,104,232	39	3,104,232
80-84	- -	- -	28	2,157,624	28	2,157,624
85-89	1	19,104	10	853,608	11	872,712
90-94	- -	- -	3	79,092	3	79,092
95-99	- -	- -	1	38,952	1	38,952
Total	16	$331,368	394	$23,693,448	410	$24,024,816

EXHIBIT H

Beneficiaries as of June 30, 2014

	Class A		Class B		Total	
Age	Number	Amount	Number	Amount	Number	Amount
Under 20	- -	- -	3	$36,960	3	$36,960
20-24	- -	- -	- -	- -	- -	- -
25-29	- -	- -	- -	- -	- -	- -
30-34	- -	- -	- -	- -	- -	- -
35-39	- -	- -	- -	- -	- -	- -
40-44	2	$12,744	1	30,144	3	42,888
45-49	2	56,004	5	106,908	7	162,912
50-54	5	43,908	9	204,096	14	248,004
55-59	12	150,804	18	442,428	30	593,232
60-64	15	266,460	38	1,162,884	53	1,429,344
65-69	13	174,552	52	1,674,348	65	1,848,900
70-74	21	306,252	31	1,117,944	52	1,424,196
75-79	27	329,988	41	1,669,068	68	1,999,056
80-84	34	461,400	55	1,995,732	89	2,457,132
85-89	41	595,596	55	1,545,744	96	2,141,340
90-94	20	246,936	24	567,468	44	814,404
95-99	12	122,064	5	95,220	17	217,284
100 & over	3	25,008	2	38,760	5	63,768
Total	207	$2,791,716	339	$10,687,704	546	$13,479,420

EXHIBIT I

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2014		Year Ended June 30, 2013	
Actuarial value of assets at the beginning of the year				
Net assets, including discounted contribution		$380,484,015		$385,106,813
Discounted contribution		-57,274,827		-53,713,177
Net assets, without discounted contribution		$323,209,188		$331,393,636
Contribution income:				
Employer contributions	$62,140,000		$58,145,000	
Employee contributions	10,873,000		10,940,000	
Net contribution income		73,013,000		69,085,000
Net investment income		38,601,141		18,132,552
Total income available for benefits		$111,614,141		$87,217,552
Less benefit payments		-$96,570,000		-$95,402,000
Change in reserve for future benefits		$15,044,141		-$8,184,448
Actuarial value of assets at the end of the year				
Net assets, including discounted contribution		$338,253,329		$323,209,188
Discounted contribution		0		57,274,827
Net assets, without discounted contribution		$338,253,329		$380,484,015

Notes: Investment income is net of investment expenses.
The asset method as of June 30, 2014 has been changed to no longer include the discounted contribution expected to be paid by the City for the fiscal year following the valuation date.

EXHIBIT J

Development of the Fund Through June 30, 2014

Year Ended June 30	Employer Contributions	Employee Contributions	Net Investment Return	Benefit Payments	Actuarial Value of Assets at End of Year
2011	$56,654,000	$10,708,000	$17,222,288	$89,636,000	$422,839,189
2012	48,583,000	10,291,000	3,391,253	99,273,000	385,106,813
2013	58,145,000	10,940,000	18,132,552	95,402,000	380,484,015
2014	62,140,000	10,873,000	38,601,141	96,570,000	338,253,329

Notes: Net investment return is net of investment expenses.
Assets as of July 1, 2013 and earlier years include the discounted contribution expected to be paid by the City for the fiscal year following the valuation date.
Figures do not add due to the inclusion of discounted contributions in 2013 and earlier years.

EXHIBIT K

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or actuarial assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal cost: The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial accrued liability for actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial accrued liability for pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded actuarial accrued liability: The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There are many approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the unfunded actuarial accrued liability:	Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.
Investment return:	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

EXHIBIT I

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1.	Retired participants as of the valuation date (including 546 beneficiaries in pay status and 1 retired participant in suspended status)		3,109
2.	Participants active during the year ended June 30, 2014		2,986
3.	Inactive participants with a right to a return of their employee contributions as of June 30, 2014		393
4.	Inactive participants with a vested right to a deferred or immediate benefit as of June 30, 2014		35

The actuarial factors as of the valuation date are as follows:

1.	Total normal cost		$17,782,678
2.	Expected employee contributions		-11,200,356
3.	Employer normal cost: (1) + (2)		$6,582,322
4.	Actuarial accrued liability		1,232,590,168
	Retired participants and beneficiaries	$829,137,951	
	Inactive participants	10,661,654	
	Active participants	392,790,563	
5.	Actuarial value of assets ($357,712,000 at market value)		338,253,329
6.	Unfunded actuarial accrued liability: (4) – (5)		894,336,839

EXHIBIT I (continued)

Summary of Actuarial Valuation Results

The actuarial factors projected to July 1, 2015 are as follows:

1.	Employer normal cost, adjusted for timing	$7,374,752
2.	Unfunded actuarial accrued liability	898,627,043
3.	Payment on 1995 deferral, adjusted for timing	471,667
4.	Payment on remaining unfunded actuarial accrued liability, adjusted for timing	63,012,448
5.	Total recommended fiscal 2016 contribution: (1) + (3) + (4)	$70,858,867
6.	Projected compensation	$147,491,458
7.	Total recommended contribution as a percentage of projected compensation: (5) ÷ (6)	48.04%

Notes: Recommended contributions are assumed to be paid on June 30. If the contribution is made after June 30, Segal will calculate the additional interest charge based on the date of payment.
Assumes contribution of budgeted amount for fiscal year 2015.

EXHIBIT II

Funded Ratio

A critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the actuarial value of assets to the actuarial accrued liabilities of the Plan as calculated. High ratios indicate a well-funded plan with assets sufficient to cover the plan's actuarial accrued liabilities. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other factors.

The chart below depicts a history of the funded ratios for this plan. On a market value basis, the funded ratio has decreased from 32.4% as of July 1, 2013 to 29.0% as of July 1, 2104. On an actuarial basis, the funded ratio has decreased from 31.4% as of July 1, 2013 to 27.4% as of July 1, 2014. These decreases are due to the change in the asset method.

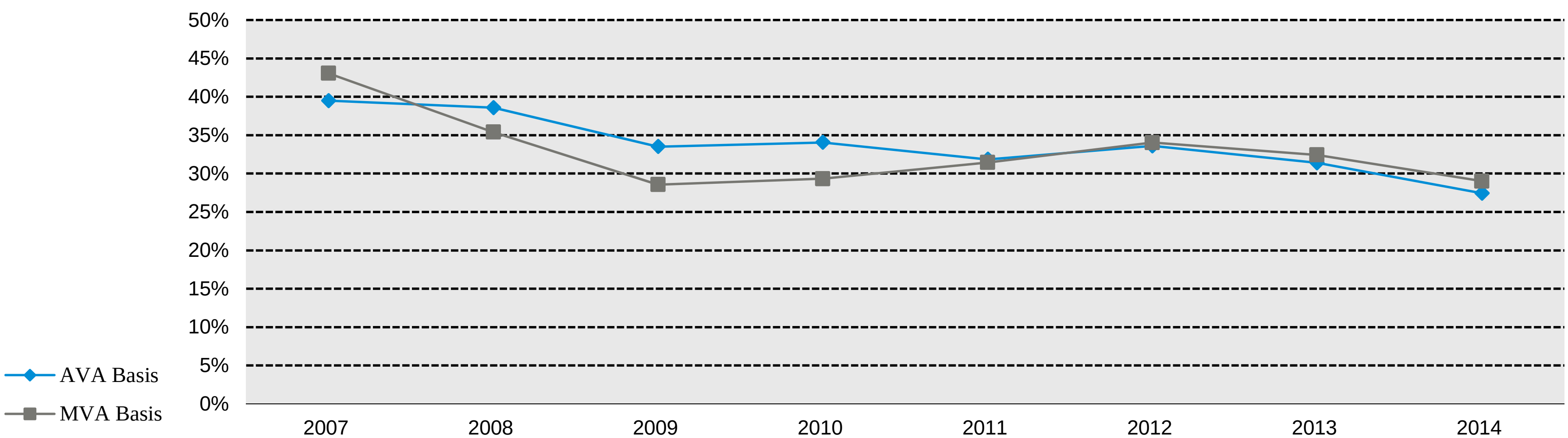


EXHIBIT III

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Class A Healthy:	RP-2000 Combined Healthy Mortality Table projected 21 years with Scale AA
Class B Healthy:	RP-2000 Combined Healthy Blue Collar Mortality Table projected 21 years with Scale AA
Disabled Retiree:	RP-2000 Combined Healthy Mortality Table set forward 3 years
	The above mortality assumptions were determined to contain provisions appropriate to reasonably reflect future mortality improvement, based on a review of mortality experience of the plan.

Termination Rates before Retirement:

Class A – Rate (%)

	Mortality		
Age	**Male**	**Female**	**Disability**
20	0.02	0.01	0.02
25	0.03	0.02	0.03
30	0.04	0.02	0.05
35	0.07	0.04	0.08
40	0.09	0.05	0.10
45	0.11	0.08	0.18
50	0.15	0.12	0.22
55	0.24	0.23	0.28
60	0.48	0.46	0.36

Notes: 33.33% of the disability rates shown represent accidental disability.
40.00% of the death rates shown represent accidental death.

	Class B – Rate (%)		
	Mortality		
Age	Male	Female	Disability
20	0.02	0.01	0.08
25	0.03	0.02	0.13
30	0.07	0.02	0.19
35	0.10	0.04	0.25
40	0.12	0.06	0.37
45	0.14	0.10	0.66
50	0.16	0.14	1.14
55	0.28	0.24	1.64
60	0.59	0.45	2.28

Notes: 90% of the disability rates shown represent accidental disability.
50% of the death rates shown represent accidental death.

Withdrawal Rates:

	Rate per year (%)		
Age	Class A	Age	Class B
20	14.00	20	2.50
25	11.50	25	1.90
30	9.00	30	1.40
35	6.50	35	0.90
40	5.00	40	0.55
45	3.75	45	0.35
50	2.50	50	0.15
55	1.25	55	0.00
60	0.00	60	0.00

Retirement Rates:

	Rate per year (%)		
Age	Class A		Class B
	Fewer than 10 Years of Service	10 Years of Service or More	
40	2.00	4.50	5.50
41	2.25	5.00	5.50
42	2.50	5.50	5.50
43	2.75	6.00	5.50
44	3.00	6.50	5.50
45	3.25	7.00	5.75
46	3.50	7.50	6.00
47	3.75	8.00	6.25
48	4.00	8.50	6.50
49	4.25	9.00	6.75
50	4.50	9.50	7.00
51	5.00	10.00	7.25
52	5.50	10.50	7.50
53	6.00	11.00	7.75
54	6.50	11.50	8.00
55	7.00	12.00	10.00
56	7.00	12.00	12.50
57	7.00	12.00	15.00
58	7.00	12.00	17.50
59	7.00	12.00	25.00
60	10.00	12.50	100.00
61	11.00	13.50	- -
62	12.00	14.50	- -

Retirement Rates:

Rate per year (%)

Age	Class A: Fewer than 10 Years of Service	Class A: 10 Years of Service or More	Class B
63	13.00	16.00	- -
64	14.00	17.50	- -
65	15.00	20.00	- -
66 – 74	15.00	20.00	- -
75	100.00	100.00	- -

Retirement Age for Vested Former Participants:

Vested former participants who terminated after June 30, 2013
Assumed to retire at minimum age for a Normal Service Retirement.

Vested participants who terminated prior to June 30, 2013
Assumed to take an immediate refund of their employee contributions.

Current active participants who terminate after valuation date
Participants in the Fire department who terminate with 20 or more years of service are assumed to retire on their 25th anniversary of employment and who terminate with less than 20 years of service are assumed to take an immediate refund of their employee contributions. Other participants who terminate at age 45 or older and are vested are assumed to retire at their minimum age for a Normal Service Retirement and who terminate prior to age 45 or without vesting are assumed to take an immediate refund of their employee contributions.

Unknown Data for Participants: Same as those exhibited by participants with similar known characteristics. For retirees missing beneficiary information, Class A members who elected Option 2 or 3 are assumed to have a beneficiary of the opposite sex with males three years older than females. Class B members who did not elect Option 1 are assumed to be married to someone the same age.

Percent Married: 80%.

Age of Spouse: Females three years younger than males for Class A. Females and males the same age for Class B.

Benefit Election: All participants are assumed to elect the Maximum Retirement Option.

Net Investment Return: 8.25%

Interest on Employee Contributions: 4.00%, compounded weekly. No interest for inactive members after five years.

Salary Increases: 3.5% per year, before reflecting longevity.

Base wages are increased by the following percentages to reflect longevity compensation:

	Rate of base wage increase (%)
Class A	
Years of Service	**Hired on or before October 23, 1999**
5 - 10	4%
10 - 15	5%
15 - 20	6%
20+	7%
Years of Service	**Hired after October 23, 1999**
7 – 12	3%
12 – 17	4%
17 - 20	5%
20+	6%

	Rate of base wage increase (%)
Class B – Fire	
Years of Service	**Hired on or before June 30, 1996**
5 - 10	8%
10 - 15	9%
15 - 20	10%
20+	11%
Years of Service	**Hired after June 30, 1996**
5 - 10	7%
10 - 15	8%
15 - 20	9%
20+	10%

Class B - Police	**Rate of base wage increase (%)**
Years of Service	**Hired on or before June 30, 1998**
6 – 11	8%
11 - 16	9%
16 – 21	10%
21+	11%
Years of Service	**Hired after June 30, 1998**
6 – 11	7%
11 - 16	8%
16 – 21	9%
21+	10%

Total Service: Total service is based on date of hire provided in the data. In addition, 1.0 and 0.5 years of service were added to the service totals for participants of the Police and Fire departments, respectively, to estimate the impact of Purchased Service.

2014 Salary: Salaries for the year ending June 30, 2014 are equal to the total of pensionable wages earned during the plan year as provided in the data, except for participants who were hired during the plan year, those who were in transition from active to retiree status as of July 1, 2014 and participants receiving worker's compensation, for whom current rate of pay was used, if available.

COLA: COLAs commence on January 1, 2023, except for participants identified by the City who opted out of the Consent Judgments agreed to by the City. For these participants, COLA's will commence on January 1, 2036, when the Plan was projected to be greater than 70% funded with the prior valuation. Previously, their COLAs were assumed to commence on January 1, 2033. Any Class B retired participant whose total benefit is greater than the base of compensation of a current employee holding the same rank that the retiree held at the time of retirement will not receive a COLA in any year until this is no longer true. We have assumed that Class B average compensation for all ranks will increase by 3.5% per year. Future COLAs will not exceed 3% per year.

Actuarial Value of Assets:	Market value of assets as reported in the City's Financial Statement less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected market return, and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value. (Previously, the actuarial value of assets included the discounted contribution expected to be paid by the City for the fiscal year following the valuation date.)
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age of the participant at date of hire. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salary. Normal Cost is determined by using the plan of benefits applicable to each participant.
Changes in Assumptions:	This valuation reflects the following changes in actuarial assumptions and methods: ➤ The calculation of the actuarial value of assets and the market value of assets has been changed to no longer include the discounted contribution expected to be paid by the City for the fiscal year following the valuation date. ➤ The liability for inactive vested participants who were active in the prior valuation (i.e., for whom final compensation can be estimated) is the greater of the employee's contribution balance or the present value of a deferred annuity. For all other inactive vested participants, the liability is equal to the employee's contribution balance. ➤ Based on additional information provided with this valuation, we have assumed that any Class B retired participant whose total benefit is greater than the base compensation of a current employee holding the same rank that the retiree held at the time of retirement will not receive a COLA in any year until this is no longer true. We have assumed that average compensation for all ranks will increase by 3.5% per year. ➤ Participants identified by the City who opted out of the Consent Judgments agreed to by the City regarding the resumption of retiree COLAs are assumed to have their COLAs commence on January 1, 2036, when the Plan was projected to be greater than 70% funded with the prior valuation. Previously, their COLAs were assumed to commence on January 1, 2033.

EXHIBIT IV

Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30

Normal Service Retirement

Age and Service Requirements: The minimum age for normal service retirement is:

Class A members hired prior to July 1, 1995:

Age 55 or the age at which 25 years of service are completed, if earlier.

Class A members hired between July 1, 1995 and June 30, 2004:

Age 55 or the age at which 30 years of service are completed, if earlier.

Class A members hired between July 1, 2004 and June 30, 2009:

Age 60 or the age at which 30 years of service are completed, if earlier.

Class A members hired on or after July 1, 2009:

Age 62 with 10 years of service or the age at which 30 years of service are completed, if earlier.

Class B members hired prior to July 1, 2004:

Age 55 or the age at which 20 years of service are completed, if earlier.

Class B members of the Police Department hired between July 1, 2004 and June 30, 2011 and Class B members of the Fire Department hired between July 1, 2004 and June 30, 2012:

Age 55 or the age at which 23 years of service are completed, if earlier.

Class B members of the Police Department hired on or after July 1, 2011 and Class B members of the Fire Department hired on or after July 1, 2012:

Age 55 or the age at which 25 years of service are completed, if earlier.

Amount:

Annuity Based on Member Contributions: An annuity which is the actuarial equivalent of his or her accumulated contributions at the time of his or her retirement.

Pension Based on City Contributions:

Class A members hired prior to July 1, 1996:

A pension which, when added to the annuity, exclusive of any excess annuity, will give a total retirement allowance of 2.5% of final compensation for each year of total service credited not in excess of 20 years, plus 2% of final compensation for each year of total service credited in excess of 20 years, limited to 100% of final compensation.

Class A members hired on or after July 1, 1996:

A pension which, when added to the annuity, exclusive of any excess annuity, will give a total retirement allowance of 2% of final compensation for each year of total service credited, limited to 100% of final compensation.

Fire hired prior to July 1, 1996:

A pension which, when added to the annuity, exclusive of any excess annuity, will give a total retirement allowance of 2.5% of final compensation for each year of total service credited not in excess of 20 years, plus 2% of final compensation for each year of total service credited in excess of 20 years, limited to 75% of final compensation.

Fire hired on or after July 1, 1996:

A pension which, when added to the annuity, exclusive of any excess annuity, will give a total retirement allowance of 2% of final compensation for each year of total service credited, limited to 75% of final compensation.

Police:

A pension which, when added to the annuity, exclusive of any excess annuity, equals:

Members hired prior to September 1, 2001:

Years of Service	Percentage of Final Compensation	Years of Service	Percentage of Final Compensation
Prior to 20	2.5% per year	26	62%
20	50%	27	64%
21	52%	28	66%
22	54%	29	68%
23	56%	30	75%
24	58%	31	72%
25	65%	32	80%

Members hired on or after September 1, 2001 and prior to July 1, 2011:

Years of Service	Percentage of Final Compensation	Years of Service	Percentage of Final Compensation
Prior to 20	2.5% per year	26	62%
20	50%	27	64%
21	52%	28	66%
22	54%	29	68%
23	56%	30	70%
24	58%	31	72%
25	60%	32	75%

Members hired on or after July 1, 2011:

Years of Service	Percentage of Final Compensation	Years of Service	Percentage of Final Compensation
Prior to 25	2.0% per year	30	62.5%
25	50.0%	31	65.0%
26	52.5%	32	67.5%
27	55.0%	33	70.0%
28	57.5%	34	72.5%
29	60.0%	35	75.0%

For Non-Union members of the Police Department, the same benefits as described above, but with a maximum benefit of 75% of compensation.

Final compensation is the average of the highest four years of base compensation including longevity pay earned by a member during his total service as an employee.

Early Retirement:

Age Requirement:	Age 55 for Class A members hired on or after July 1, 2004. Other members will not receive early retirement benefits.
Service Requirement:	10 years of service.
Amount:	

Class A members hired between July 1, 2004 and June 30, 2009:

The member's Normal Service Retirement benefit reduced by 5/12% per month for each month between retirement commencement and age 60.

Class A members hired on or after July 1, 2009:

The member's Normal Service Retirement benefit reduced by 5/12% per month for each month between retirement commencement and age 62.

Deferred Retirement:

Age Requirement:	Minimum age for Normal Service Retirement.
Service Requirement:	10 years of service.
Amount:	Same as Normal Service Retirement.

Any member who withdraws from employment is eligible to receive a refund of his or her accumulated contributions at withdrawal, in lieu of a Deferred Retirement benefit.

Ordinary Disability Retirement:

Age Requirement: None.

Service Requirement: For members of the Police Department, 10 years of service, but fewer than 20. For all others, 10 years of service.

Amount:

Annuity Based on Member Contributions: An annuity which is the actuarial equivalent of his or her accumulated contributions at the time of his retirement.

Pension Based on City Contributions:

Class A members:

A pension which, when added to the annuity, exclusive of any excess annuity, will give a total retirement allowance of 90% of 2% of final compensation for each year of total service which would have been credited had the member continued in service to the minimum age for a Normal Service Retirement. Such retirement allowance, exclusive of any excess annuity, is not to exceed 45% of final compensation.

Police:

A pension which, when added to the annuity, will give a total retirement allowance equal to a percentage of final compensation, as described in the following table:

Years of Service	Percentage of Final Compensation	Years of Service	Percentage of Final Compensation
10	22.50%	15	33.75%
11	24.75%	16	36.00%
12	27.00%	17	38.25%
13	29.25%	18	40.50%
14	31.50%	19	42.75%

Fire:

A pension which, when added to the annuity, exclusive of any excess annuity, will give a total retirement allowance of 90% of 2.5% of final compensation for each year of total service which would have been credited had the member continued in service to the minimum age for a Normal Service Retirement. Such retirement allowance, exclusive of any excess annuity, is not to exceed 45% of the member's final compensation.

Accidental Disability Retirement:

Age Requirement: None.

Service Requirement: None.

Amount:

Annuity Based on Member Contributions:

An annuity that is the actuarial equivalent of his or her accumulated contributions at the time of his or her retirement.

Pension Based on City Contributions:

A pension of 66-2/3% of final compensation, but not less than the Normal Service Retirement allowance. Upon the death of a member within 5 years after accidental disability retirement as a result of an accident while in the performance of duty, a pension of one-half of the member's final compensation is paid to his or her widow until he or she dies or remarries, at which point the pension is paid to his or her child or children until they attain age 19. Upon the death of a Class B member beyond 5 years, 67.5% of his or her monthly benefit will be paid to his or her surviving spouse.

Accidental Death Benefit:

Age Requirement:	None.
Service Requirement:	None.
Amount:	If a member dies due to an accident in the performance of duty, a pension of one-half of the member's final compensation is paid to his or her surviving spouse until he or she dies or remarries, at which point the pension is payable to his or her child or children until they attain age 19. If there are no other dependents, the pension is payable to his or her dependent parents. In addition, a lump sum payment of the member's accumulated contributions is made.

Ordinary Death Benefit: Should a member die before retirement, his or her estate or beneficiary is entitled to a refund of the member's accumulated contributions. If the member has attained minimum retirement age, has not made an optional election as described below and is survived by a spouse, such spouse is entitled, in lieu of the return of the member's accumulated contributions, to a benefit equal to that which would have been payable to such spouse upon the death of the member had the member retired on the day of his or her death and elected to receive a benefit under the provisions of Option 2, as described below, and nominated such spouse as his or her designated beneficiary. For a Class B member, the benefit to the spouse shall not be less than 67½% of the benefit that would have been paid to such retired member without reduction.

Benefit upon Death after Retirement:

Class A:	Benefits under any option as described below.
Class B:	Upon the death of a Class B pensioner, 67½% of his or her retirement allowance is paid to his or her surviving spouse until he or she dies or remarries, at which point the benefit is paid to any dependent children until they attain age 18.

Options at Retirement:

Maximum Retirement Option:	An unreduced retirement allowance payable during the retired member's life, where no monthly payments will continue to the member's beneficiary, but where, upon the member's death, any unpaid portion of his or her accumulated contributions will be paid to his or her beneficiary.

Option 1:	A reduced retirement allowance payable during the retired member's life, where no monthly payments will continue to the member's beneficiary, but where, upon the member's death, any amount that payments made are less than the present value of his or her retirement allowance at his or her date of retirement will be paid to his or her beneficiary.
Option 2:	A reduced retirement allowance payable during the retired member's life, where upon the member's death, the entire monthly benefit will continue to be paid to his or her beneficiary for the remainder of his or her life.
Option 3:	A reduced retirement allowance payable during the retired member's life, where upon the member's death, 50% of the monthly benefit will continue to be paid to his or her beneficiary for the remainder of his or her life.
Option 4:	An unreduced retirement allowance payable during the retired member's life, where the member's accumulated contributions are paid immediately as a lump sum payment, with the pension portion of his or her benefit payable during the retired member's life, where no monthly payments will continue to the member's beneficiary. Members of the Police Department who retire on an Accidental Disability Retirement may not elect Option 4. Class B members may not elect Options 2 or 3. Married Class B members may not elect Option 1.
Cost of Living Adjustment	A ten-year freeze period was implemented effective January 1, 2013 and no COLAs will be granted during this period. COLAs will resume on January 1, 2023. Once COLAs resume, they will be paid in the amount of the lesser of 3% compounded or the percentage the member received prior to the freeze, provided that their total benefit is lower than 150% of the Rhode Island state median income and is lower than the base compensation of a current employee holding the same rank that the retiree held at the time of retirement. If the member's benefit is above either of these amounts, no COLA will be granted. 150% of the state median income as reported by the City was approximately $80,000 as of the valuation date. It is assumed that the median income will increase by 3.5% per year.

Class A:	3% compounded for members who retired prior to December 18, 1991 and were not members of Local 1033. 3% simple on first $12,000 of annual benefit for members of Local 1033 who retired prior to December 18, 1991. None for members who retired after December 18, 1991.
Police:	5% compounded for members who retired prior to January 1, 1990; 6% compounded for members who retired between January 1, 1990 and December 18, 1991; 5% compounded for members who retired between December 19, 1991 and December 31, 1992; 3% simple on first $12,000 of annual benefit for Non-Union Police who retired January 1, 1993 and later; 3% compounded for other retired members who retired January 1, 1993 and later; 5% compounded for special court awarded members; for all members hired on or after July 1, 2012, the COLA will be based on the Consumer Price Index for the Northeast Region but shall not be less than 1% and shall not exceed 3% simple and 150% of the Rhode Island state median income.
Fire:	5% compounded for members who retired prior to January 1, 1990; 6% compounded for members who retired between January 1, 1990 and December 18, 1991; 5% compounded for members who retired between December 19, 1991 and June 30, 1992; 6% compounded for members who retired between July 1, 1992 and June 30, 1995; 3% simple on first $12,000 of annual benefit for members who retired between July 1, 1995 and March 16, 2006; 3% compounded for members who retired March 17, 2006 or later; 5% compounded for special court awarded members; for all members hired on or after July 1, 2012, the COLA will be based on the Consumer Price Index for the Northeast Region but shall not exceed 3% simple. The initial COLA payment is deferred until the January 1 that occurs three years after the member's retirement date.
Provisions for Elected Officials	Any person who has served as Mayor or City Councilman for at least eight full legislative years is entitled to an additional retirement allowance on the basis of such service as an elected official upon attainment of age 52 or the completion of 20 consecutive years as an elected official, whichever is earlier, or the occurrence of total and permanent disability prior thereto. Such retirement allowance is currently $350 for each year of service, provided that no more than 20 years of such service are to be used in determining the allowance.

	Upon the death of any such elected official, benefits are payable in accordance with the Class A provisions of the act. An elected official may elect to withdraw his accumulated contributions in lieu of his rights to the allowance based on service as an elected official.
Contributions:	
Class A:	8% of compensation.
Police:	8% of compensation
Firefighters hired before July 1, 2011:	8% of compensation.
Firefighters hired on or after July 1, 2011:	9% of compensation.
Elected Officials:	$350 per year. Class B member contributions may cease after 32.5 years of service.
Changes in Plan Provisions	There have been no changes in the plan of benefits since our prior valuation.

EXHIBIT 1

General Information – "Financial Statements", Note Disclosures and Required Supplementary Information for a Single Employer Pension Plan

Plan membership. At June 30, 2013, pension plan membership consisted of the following:

Inactive employees or beneficiaries currently receiving benefits	3,094
Inactive employees entitled to but not yet receiving benefits	407
Active employees	2,998
Total	6,499

EXHIBIT 2

Net Pension Liability

The components of the net pension liability of the Retirement System at June 30, 2014 were as follows:

Total pension liability	$1,230,289,193
Plan fiduciary net position	357,712,000
Association's net pension liability	872,577,193
Plan fiduciary net position as a percentage of the total pension liability	29.08%

Actuarial assumptions. The total pension liability was determined by an actuarial valuation as of July 1, 2013, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.5%
Salary increases	3.5% per year, before reflecting increases due to longevity
Investment rate of return	8.25%, net of pension plan investment and administrative expenses, including inflation

Mortality rates for healthy retirees were based on RP-2000 Combined Healthy Mortality Table projected 21 years with Scale AA from 2000 for Class A employees and RP-2000 Combined Healthy Blue Collar Mortality Table projected 21 years with Scale AA from 2000 for Class B employees. Disabled retiree mortality rates were based on RP-2000 Combined Healthy Mortality Table set forward 3 years.

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 expense 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 June 30, 2014 are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return
Domestic equity	6.60%
Core fixed income	2.20%
High yield fixed income	4.70%
Short-term governmental money market	1.80%

Discount rate: The discount rate used to measure the total pension liability was 8.25%. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that the City of Providence’s contributions will be made at the actuarially determined contribution rates. 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.

Sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the Retirement System, calculated using the discount rate of 8.25%, as well as what the System’s net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (7.25%) or 1-percentage-point higher (9.25%) than the current rate:

	1% Decrease (7.25%)	Current Discount (8.25%)	1% Increase (9.25%)
Net pension liability	$1,001,927,281	$872,577,193	$763,950,705

EXHIBIT 3

Schedules of Changes in the Retirement System's Net Pension Liability – Last Ten Fiscal Years

	2014	2013	2012	2011	2010
Total pension liability					
Service cost	$18,844,418	(Historical information prior to implementation of GASB 67/68 is not required)			
Interest	96,007,119				
Changes of benefit terms	0				
Differences between expected and actual experience	0				
Changes of assumptions	0				
Benefit payments, including refunds of employee contributions	-96,570,000				
Net change in total pension liability	$18,281,537				
Total pension liability – beginning	1,212,007,656				
Total pension liability – ending (a)	$1,230,289,193				
Plan fiduciary net position					
Contributions – employer	$62,140,000				
Contributions – employee	10,873,000				
Net investment income	47,003,000				
Benefit payments, including refunds of employee contributions	-96,570,000				
Administrative expense	-1,519,000				
Net change in plan fiduciary net position	$21,927,000				
Plan fiduciary net position – beginning	335,785,000				
Plan fiduciary net position – ending (b)	$357,712,000				
City's net pension liability – ending (a) – (b)	$872,577,193				
Plan fiduciary net position as a percentage of the total pension liability	29.08%				
Covered employee payroll	$139,893,426				
City's net pension liability as percentage of covered employee payroll	623.74%				

EXHIBIT 4

Schedule of City of Providence's Contributions to the Retirement System – Last Ten Fiscal Years

Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered-Employee Payroll
2005	(Historical information prior to implementation of GASB 67/68 is not required)				
2006					
2007					
2008					
2009					
2010					
2011					
2012					
2013					
2014	$61,614,784	$62,140,000	$(525,216)	$139,893,426	44.42%

EXHIBIT 5

Notes to Required Supplementary Information

Valuation date	Actuarial determined contribution rates are calculated as of July 1, two years prior to the end of the fiscal year in which contributions are reported.
Methods and used assumptions to determine contribution rates:	
Actuarial cost method	Entry age
Amortization method	Level dollar for the 1995 deferral liability and increasing 3.5% per year for the remaining unfunded liability
Remaining amortization period	27 years remaining for fiscal year ending June 30, 2014 contribution (18 years remaining for the 1995 deferral)
Asset valuation method	Market value of assets as reported by the City less unrecognized returns in each of the last five years plus the discounted contribution paid by the City in the following year. Unrecognized return is equal to the difference between the actual market return and the expected market return and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value.
Actuarial assumptions:	
Investment rate of return	8.25%, net of pension plan investment and administrative expenses, including inflation
Inflation rate	3.5%
Projected salary increases	3.5% per year before reflecting increases due to longevity compensation
Cost of living adjustments	10-year freeze as of January 1, 2013 and 3% thereafter.
Benefit changes:	There have been no changes in benefit provisions since GASB 67/68 implementation
Assumption changes:	The actuarial assumptions used in this report reflect the assumptions proposed in the Experience Investigation for the Five Year Period Ending June 30, 2011 submitted to the Board on April 2, 2012, with the following exceptions: ➤ The retirement rate for Class B participants is 100% at age 60.