City of Providence

Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2013 in accordance with GASB Statements No. 43 and No. 45







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December 9, 2014

Mr. Lawrence J. Mancini
Director, Finance Department
Providence City Hall
25 Dorrance Street
Providence, RI 02903

Dear Mr. Mancini:

We are pleased to submit this report on our actuarial valuation of postemployment welfare benefits as of June 30, 2013 under Governmental Accounting Standards Board (GASB) Statements Number 43 and 45. This report replaces the report dated November 11, 2014. It establishes the liabilities of the postemployment welfare benefit plan in accordance with GASB Statements Number 43 and 45 for the fiscal year beginning July 1, 2013 and summarizes the actuarial data.

This report is based on information received from the City. The actuarial projections were based on the assumptions and methods described in Exhibit II and on the plan of benefits as summarized in Exhibit III.

We look forward to discussing this with you at your convenience. Sincerely,

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

*B*v:

Kathleen A. Riley, FSA, MAAA, EA Senior Vice President and Actuary

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Daniel J. Rhodes, FSA, MAAA

Vice President and Consulting Actuary

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PURPOSE

This report presents the results of our actuarial valuation of the City of Providence (the "City" or the "Employer") postemployment welfare benefit plan as of June 30, 2013. The results are in accordance with the Governmental Accounting Standards, which prescribe an accrual methodology for accumulating the value of other postemployment benefits (OPEB) over participants' active working lifetimes. The accounting standard supplements cash accounting, under which the expense for postemployment benefits is equal to benefit and administrative costs paid on behalf of retirees and their dependents (*i.e.*, a pay-as-you-go basis).

HIGHLIGHTS OF THE VALUATION

During the fiscal year ending June 30, 2014, we project the City will pay benefits (net of retiree contributions) on behalf of retired employees of about \$31,299,000. This amount is less than the annual "cost" (the "Annual Required Contribution," or ARC) of approximately \$65,210,000.

The GASB statements provide the method for selecting the investment return assumption (discount rate). If the benefits are fully funded, the discount rate should be based on the estimated long-term investment yield on the investments expected to be used to finance the payment of benefits. If financing continues to be pay-as-you-go, the discount rate should be based on the expected yield on the assets of the employer. If the benefits are partially funded, a blended discount rate can be used that reflects the proportionate amounts of plan and employer assets expected to be used. We have used a 4.0% pay-as-you-go discount rate.

To determine the amortization payment on the unfunded actuarial accrued liability (UAAL), an amortization period and amortization method must be selected. We have used a 30-year open amortization of the UAAL (the maximum permitted by the GASB statements), with payments increasing at 3.5% per year. The GASB statements allow for either an open or closed amortization period. In open amortization, the period is reset to the initial value every year and the UAAL is reamortized, while under a closed amortization, the remaining period decreases and the UAAL is eventually "paid off."

Assets set aside to fund OPEB liabilities must be held in a trust or equivalent arrangement, through which assets are accumulated and benefits are paid as they come due. Employer contributions to the plan are irrevocable, plan assets are dedicated to providing benefits to retirees and their spouses in accordance with the terms of the plan, and plan assets are legally protected from creditors of the employer.

GASB guidelines prohibit the offset of OPEB obligations by the future value of Medicare Part D subsidies. Therefore, these calculations do not include an estimate for retiree prescription drug plan federal subsidies that the Employer may be eligible to receive for plan years beginning in 2006.

Employer decisions regarding plan design, cost sharing between the Employer and its retirees, actuarial cost method, amortization techniques, and integration with Medicare are just some of the decisions that affect the magnitude of OPEB obligations. We are available to assist you with any investigation of such options you may wish to undertake.



This valuation does not include the potential impact of any future changes due to the Patient Protection and Affordable Care Act (PPACA) and the Health Care and Education Reconciliation Act (HCERA) of 2010 other than the excise tax on high cost health plans beginning in 2018 (reflected in this valuation) and those previously adopted as of the valuation date.

DATA USED

This valuation was performed using employee and retiree census data provided by the City that included the plan in which the employee or retiree is currently enrolled, the cost of the plan, and the employee's or retiree's contribution toward that plan. Spouses were identified by marriage code or a coverage code. Access only spouses were identified based on our understanding of the coverage rules. No liability is included for access only spouses or access only benefits. Assumptions we made regarding missing information are outlined in Exhibit II of Section 4.

Segal Consulting did not audit the data, although it was reviewed for reasonability. The results of the valuation are dependent on the accuracy of the data. While the data resulted in uncertainties, we did not feel that the data could not be used for the purpose of this analysis.

A summary of the eligibility requirements and cost sharing provisions of the retiree health plan was not available. Our understanding of the available benefits and cost sharing provisions is based on the documentation we received (primarily collective bargaining agreements) and our discussions with the City. A summary of our understanding of the plan of benefits is provided in Exhibit III of Section 4.

CHANGES SINCE THE PRIOR VALUATION

The following changes are reflected in this valuation:

- The per capita costs used in this valuation were based on the premium and claims information received from the City and described on page 17 of this report. The prior valuation was based on working rates provided by the City.
- The future trend on per capita health costs was revised.
- The demographic assumptions for teachers were changed to match the assumptions used in the Employees' Retirement System of Rhode Island Actuarial Valuation Report as of June 30, 2013, dated December 17, 2013, completed by Gabriel, Roeder Smith & Company.
- The Medicare Part B Penalty paid for by the City on behalf of Police and Fire retirees and spouses was reflected.
- > Retiree contributions were updated as described in Section 4, Exhibit III on page 31.
- > The excise tax on high cost health plans beginning in 2018 was included in this valuation. The addition of the excise tax in this valuation resulted in a 1.91% increase in the actuarial accrued liability and a 3.25% increase in the normal cost.



- > Retirement eligibility for teachers has changed since the prior valuation was completed.
- Police and Fire retirees have moved to the Post 65
 Plan for Police and Fire.
- > The Projected Unit Credit cost method was used in the current and prior valuation. In the prior valuation, benefits were allocated from date of hire to the employee's first eligibility age. In the current valuation, benefits were allocated from date of hire to the employee's assumed retirement age.

KEY VALUATION RESULTS

- > The unfunded actuarial accrued liability (UAAL) as of June 30, 2013 is \$1,032,887,000. Going forward, net unfunded plan obligations will be expected to change due to normal plan operations, which consist of continuing accruals for active members, plus interest on the total actuarial accrued liability, less expected benefit payments and contributions. Future valuations will analyze the difference between actual and expected unfunded actuarial accrued liabilities.
 - o As of June 30, 2013 the ratio of assets to the AAL (the funded ratio) is 0.00%.
- > The **Annual Required Contribution (ARC)** for fiscal year 2014 is \$65,210,000. The ARC is expected to remain relatively level as a percentage of payroll, as long as the ARC is fully funded each year. If the ARC is not fully funded, it may be expected to increase as a percentage of payroll over time.

Plan obligations of \$1,032,887,000 as of June 30, 2013 represent a decrease of \$116,228,000 from \$1,149,115,000 as shown in the June 30, 2011 valuation completed by Buck Consultants, LLC.



ACCOUNTING REQUIREMENTS

The Governmental Accounting Standards Board (GASB) issued Statement Number 43 -- Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, and Statement Number 45 - Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. Under these statements, all state and local governmental entities that provide other post employment benefits (OPEB) are required to report the cost of these benefits on their financial statements.

The statements cover postemployment benefits of health, prescription drug, dental, vision and life insurance coverage for retirees; long-term care coverage, life insurance and death benefits that are *not* offered as part of a pension plan; and long-term disability insurance for employees. These benefits, referred to as OPEB, are typically financed on a pay-as-yougo basis. The new standard introduces an accrual-basis accounting requirement; thereby recognizing the employer cost of postemployment benefits over an employee's career. The standards also introduce a consistent accounting requirement for both pension and non-pension benefits.

The total cost of providing postemployment benefits is projected, taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions. This amount is then discounted to determine the actuarial present value of the total projected benefits (APB). The actuarial accrued liability (AAL) is the portion of the present value of the total projected benefits allocated to years of employment prior to the measurement date. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and actuarial value of assets in the Plan.

Once the UAAL is determined, the Annual Required Contribution (ARC) is determined as the normal cost (the APB allocated to the current year of service) and the amortization of the UAAL. This ARC is compared to actual contributions made and any difference is reported as the net OPEB obligation (NOO). In addition, required supplementary information (RSI) must be reported, including historical information about the UAAL and the progress in funding the Plan.

The benefits valued in this report are limited to those described in Exhibit III of Section 4.



This graph shows how the actuarial present value of the total projected benefits (APB) is broken down and allocated to various accounting periods.

The exact breakdown depends on the actuarial cost method and amortization methods selected by the employer.

GASB 43/45 Measurement

Present Value of Future Benefits

Future Accounting Periods

Future Accruals (Actives)

Current Period

Historical Accounting Periods Normal Cost (Actives)

Actuarial Accrued Liability (Actives + Retirees) **Normal Cost**

30 Years Amortization of Unfunded Actuarial Accrued Liability Annual Required Contribution (ARC)

Net OPEB Obligation = ARC₁ + ARC₂ + ARC₃ +

- Contribution₁ - Contribution₂ - Contribution₃ -



Actuarial computations under GASB statements are for purposes of fulfilling certain welfare plan accounting requirements. The calculations shown in this report have been made on a basis consistent with our understanding of GASB. Determinations for purposes other than meeting the financial accounting requirements of GASB may differ significantly from the results reported here.

Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of the valuation and on the pattern of sharing costs between the employer and plan members. The projection of benefits does not incorporate the potential effect of legal or contractual funding limitations on the pattern of cost sharing between the employer and plan members in the future.

Actuarial calculations reflect a long-term perspective, and the methods and assumptions use techniques designed to reduce short term volatility in accrued liabilities and the actuarial value of assets, if any.

The calculation of an accounting obligation does not, in and of itself, imply that there is any legal liability to provide the benefits valued, nor is there any implication that the Employer is required to implement a funding policy to satisfy the projected expense.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and the actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.



SUMMARY OF VALUATION RESULTS ALL DEPARTMENTS

The key results for the current and prior valuation are shown on a pay-as-you-go basis.

		-you-go erest rate)
	June 30, 2013	June 30, 2011
Actuarial Accrued Liability by Participant Category		
1. Current retirees, beneficiaries and dependents	\$610,839,557	\$655,581,000
2. Current active members	<u>422,047,411</u>	493,534,000
3. Total: (1) + (2)	\$1,032,886,967	\$1,149,115,000
4. Actuarial value of assets	<u>0</u>	<u>0</u>
5. Unfunded actuarial accrued liability (UAAL): (3) – (4)	\$1,032,886,967	\$1,149,115,000
Annual Required Contribution for Fiscal Year Ending June 30, 2014 and June 30, 2012		
6. Normal cost as of July 1, 2013 and 2011	\$27,054,186	\$27,272,000
7. Adjustment for timing	<u>535,779</u>	809,000
8. Normal cost adjusted for timing: (6) + (7)	\$27,589,965	\$28,081,000
9. 30-year amortization (increasing 3.5% per year) of the UAAL	36,889,446	40,996,000
10. Adjustment for timing	<u>730,555</u>	1,277,000
11. Amortization payment adjusted for timing: (9) + (10)	\$37,620,001	\$42,273,000
12. Total Annual Required Contribution (ARC): (8) + (11)	65,209,966	70,354,000
13. Projected benefit payments	\$31,298,650	\$32,252,000

Notes: Assumes payment in the middle of the fiscal year.

June 30, 2011 figures are from the City of Providence July 1, 2011 Actuarial Valuation of the Post Retirement Benefits Plan, dated December 29, 2012, by Buck Consultants, LLC.



10-YEAR PROJECTION OF ARC

30 Years Open (4.0% discount rate)

Fiscal Year Ended June 30	(1) Projected Benefit Payments	(2) Normal Cost	(3) Amortization of UAAL	(4) ARC (3) + (2)	(5) Funding	(6) Assets at End of Year	(7) AAL at End of Year	(8) UAAL at End of Year (7) – (6)
2014	\$31,298,650	\$27,589,965	\$37,620,001	\$65,209,966			\$1,070,420,315	\$1,070,420,315
2015	33,909,192	28,969,464	38,987,047	67,956,511			1,108,199,574	1,108,199,574
2016	36,621,172	30,417,937	40,363,050	70,780,987			1,146,201,474	1,146,201,474
2017	39,654,617	31,938,834	41,747,162	73,685,996			1,184,180,947	1,184,180,947
2018	42,764,335	33,535,776	43,130,458	76,666,234			1,222,136,864	1,222,136,864
2019	45,638,692	35,212,565	44,512,895	79,725,460			1,260,389,734	1,260,389,734
2020	48,430,457	36,973,193	45,906,148	82,879,341			1,299,121,161	1,299,121,161
2021	50,827,559	38,821,853	47,316,831	86,138,684			1,338,842,542	1,338,842,542
2022	53,304,701	40,762,946	48,763,571	89,526,517			1,379,606,113	1,379,606,113
2023	55,804,637	42,801,093	50,248,269	93,049,362			1,421,529,293	1,421,529,293
2024	58,618,787	44,941,148	51,775,203	96,716,351			1,464,441,955	1,464,441,955

Notes: Assumes payment in the middle of the fiscal year.

Amortization payments calculated to increase 3.5% per year.



DEPARTMENT RESULTS

Actuarial Accrued Liability (AAL) and Annual Required Contribution - Pay-As-You-Go (4.0%)

			General					
		Class A	Police	Fire	Subtotal	School	Water	Total
	tuarial Accrued Liability by rticipant Category							
1.	Current retirees, beneficiaries and dependents	\$69,436,097	\$208,919,510	\$189,796,786	\$468,152,393	\$130,717,373	\$11,969,790	\$610,839,556
2.	Current active members	31,395,625	116,224,180	113,504,283	<u>261,124,088</u>	<u>149,168,927</u>	11,754,396	422,047,411
3.	Total as of June 30, 2013: $(1) + (2)$	\$100,831,722	\$325,143,690	\$303,301,069	\$729,276,481	\$279,886,300	\$23,724,186	\$1,032,886,967
4.	Actuarial value of assets as of June 30, 2013	<u>0</u>	<u>0</u>	<u>0</u>	<u>O</u>	<u>0</u>	<u>0</u>	<u>0</u>
5.	Unfunded actuarial accrued liability (UAAL) as of June 30, 2013: (3) – (4)	\$100,831,722	\$325,143,690	\$303,301,069	\$729,276,481	\$279,886,300	\$23,724,186	\$1,032,886,967
	nual Required Contribution for cal Year Ending June 30, 2014							
6.	Normal cost as of July 1, 2013	\$2,515,212	\$7,071,415	\$6,404,424	\$15,991,051	\$10,189,173	\$873,962	\$27,054,186
7.	Adjustment for timing	<u>49,811</u>	140,042	126,833	<u>316,686</u>	<u>201,785</u>	<u>17,308</u>	<u>535,779</u>
8.	Normal cost adjusted for timing: $(6) + (7)$	\$2,565,023	\$7,211,457	\$6,531,257	\$16,307,737	\$10,390,958	\$891,270	\$27,589,965
9.	30-year amortization (increasing 3.5% per year) of the UAAL as of June 30, 2013	3,601,194	11,612,471	10,832,365	26,046,030	9,996,109	847,307	36,889,446
10	Adjustment for timing	71,318	229,972	214,523	515,813	197,962	16,780	730,555
	, E	71,316	229,912	<u>214,323</u>	313,613	197,902	10,780	<u>/30,333</u>
11.	Amortization payment adjusted for timing: $(9) + (10)$	\$3,672,512	\$11,842,443	\$11,046,888	\$26,561,843	\$10,194,071	\$864,087	\$37,620,001
12.	Total Annual Required Contribution (ARC): (8) + (11)	6,237,535	19,053,900	17,578,145	42,869,580	20,585,029	1,755,357	65,209,966
13.	Projected benefit payments	\$4,979,255	\$8,950,114	\$8,438,266	\$22,367,635	\$8,097,180	\$833,835	\$31,298,650

Note: Assumes payment in the middle of the fiscal year.



December 9, 2014

ACTUARIAL CERTIFICATION

This is to certify that Segal Consulting, a Member of The Segal Group, Inc. has conducted an actuarial valuation of certain benefit obligations of the City of Providence other postemployment benefit programs as of June 30, 2013, in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statements Number 43 and 45 for the determination of the liability for postemployment benefits other than pensions.

The actuarial valuation is based on the plan of benefits verified by the City and on participant, premium data and claims experience provided by the City or from vendors employed by the City. Segal Consulting does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. Segal, however, does review the data for reasonableness and consistency.

The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may be significantly different from the results reported here. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security at termination or adequacy of funding an ongoing plan.

To the best of our knowledge, this report is complete and accurate and in our opinion presents the information necessary to comply with GASB Statements Number 43 and 45 with respect to the benefit obligations addressed. The signing actuaries are members of the Society of Actuaries, the American Academy of Actuaries, and other professional actuarial organizations and collectively meet their "General Qualification Standards for Statements of Actuarial Opinion" to render the actuarial opinion contained herein. Further, in our opinion, the assumptions as approved by the City are reasonably related to the experience and expectations of the postemployment benefit programs.

Kathleen A. Riley, FSA, MAAA, EA Senior Vice President and Actuary Daniel J. Rhodes, FSA, MAAA Vice President and Consulting Actuary



CHART 1
Required Supplementary Information – Schedule of Employer Contributions

Fiscal Year Ended June 30,	Annual OPEB Costs	Actual Contributions	Percentage Contributed
2008	\$40,447,000	\$35,660,000	88.2%
2009	43,282,000	35,022,000	80.9%
2010	79,947,000	39,011,000	36.3%
2011	64,437,000	30,009,000	46.6%
2012	70,635,000	33,843,000	47.9%
2013	74,246,000	36,175,000	48.7%
2014	65,829,898	29,619,800	45.0%

Notes: 2008 - 2013 information as shown in the City's financial statements. Fiscal 2014 contribution is actual amount provided by the City.



This schedule of funding progress presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

CHART 2
Required Supplementary Information – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]
07/01/2007	\$0	\$542,413,000	\$542,413,000	0.00%	\$256,157,000	211.75%
07/01/2008	1,035,000	593,903,000	592,868,000	0.17%	274,827,000	215.72%
07/01/2009	1,040,000	1,498,491,000	1,497,451,000	0.07%	268,871,000	556.94%
07/01/2010	1,040,000	1,212,615,000	1,211,575,000	0.09%	267,593,000	452.77%
07/01/2011	0	1,149,115,000	1,149,115,000	0.00%	266,731,000	430.81%
07/01/2012	0	1,190,552,000	1,190,552,000	0.00%	260,546,000	456.95%
07/01/2013	0	1,032,886,967	1,032,886,967	0.00%		

Notes: Enter covered payroll for fiscal 2014.

2007 – 2012 information as shown in the City's financial statement.



CHART 3
Required Supplementary Information – Net OPEB Obligation/(Asset) (NOO/NOA)

Fiscal Year Ended June 30,	Annual Required Contribution (a)	Interest on Existing NOO (b)	ARC Adjustment (c)	Annual OPEB Cost (a) + (b) + (c) (d)	Actual Contribution Amount (e)	Net Increase in NOO (d) - (e) (f)	NOO as of Following Date (g)
2008	\$9,600,000	\$0	\$30,847,000	\$40,447,000	\$35,660,000	\$4,787,000	\$4,787,000
2009	43,147,000	407,000	(272,000)	43,282,000	35,022,000	8,260,000	13,047,000
2010	79,580,000	1,109,000	(742,000)	79,947,000	39,011,000	40,936,000	63,980,000
2011	63,906,000	2,559,000	(2,028,000)	64,437,000	30,009,000	34,428,000	98,408,000
2012	70,354,000	3,936,000	(3,655,000)	70,635,000	33,843,000	36,792,000	135,200,000
2013	73,860,000	5,408,000	(5,022,000)	74,246,000	36,175,000	38,071,000	173,271,000
2014	65,209,966	6,930,840	(6,310,908)	65,829,898	29,619,800	36,210,098	209,481,098

Notes: 2008 - 2013 information as shown in the City's financial statements. Fiscal 2014 contribution is actual amount provided by the City.



CHART 3

Required Supplementary Information – Net OPEB Obligation/(Asset) (NOO/NOA) – by Department

Fiscal Year Ended June 30,	Annual Required Contribution (a)	Interest on Existing NOO (b)	ARC Adjustment (c)	Annual OPEB Cost (a) + (b) + (c) (d)	Actual Contribution Amount (e)	Net Increase in NOO (d) - (e) (f)	NOO as of Following Date (g)
General							
2013							\$124,144,000
2014	\$42,869,580	\$4,965,760	\$(4,521,596)	\$43,313,744	\$21,464,814	\$21,848,930	145,992,930

Notes: Fiscal 2013 NOO is based on total NOO as reported in the City of Providence CAFR for the fiscal year ended June 30, 2013, dated December 31, 2013, minus the allocation for Water and School.

Fiscal 2014 contribution is total amount provided by the City less amounts allocated to School and Water.

School							
2013							\$45,074,000
2014	\$20,585,029	\$1,802,960	\$(1,641,694)	\$20,746,295	\$7,717,388	\$13,028,907	58,102,907

Notes: Fiscal 2013 NOO is estimated from the June 30, 2011 NOO shown in the City of Providence July 1, 2011 Actuarial Valuation of the Post Retirement Benefits Plan, dated December 31, 2012 by Buck Consultants, LLC, projected to 2013 using standard actuarial techniques.

Fiscal 2014 contribution is actual amount provided by the City.

Water							
2013							\$4,053,000
2014	\$1,755,357	\$162,120	\$(147,618)	\$1,769,859	\$437,598	\$1,332,261	5,385,261

Notes: Fiscal 2013 NOO is based on the figures shown in the City of Providence CAFR for the fiscal year ended June 30, 2013, dated December 31, 2013. Fiscal 2014 contribution is actual amount provided by the City.



CHART 4 Summary of Required Supplementary Info	rmation
Valuation date	June 30, 2013
Actuarial cost method	Projected Unit Credit
Amortization method	Payments increasing at 3.5% per year
Remaining amortization period	30 years open
Asset valuation method	Market value
Actuarial assumptions:	
Investment rate of return	4.0%
Inflation rate	3.5%
Medical cost trend rate	8.0% decreasing by 0.5% per year to an ultimate rate of 5.0% per year
Drug cost trend rate	8.0% decreasing by 0.5% per year to an ultimate rate of 5.0% per year
Part B trend rate	5.0%
Administrative cost trend rate	3.0%
Plan membership:	
Current retirees	4,139
Current active participants	<u>4,688</u>
Total	8,827



This exhibit summarizes the participant data used for the current and prior valuations.

EXHIBIT I Summary of Participant Data

	July 1, 2013	July 1, 2011
Active employees covered for medical benefits		
Number of employees		
Male	2,047	N/A
Female	<u>2,641</u>	<u>N/A</u>
Total	4,688	5,109
Average age	46.9	N/A
Average service	13.7	N/A
Average age at hire	33.2	N/A
Retired employees covered for medical benefits		
Number	4,139	3,631
Average age	69.7	N/A

Note: Retired employees reflects the number of individual and family policies.



EXHIBIT I (Continued) Summary of Participant Data

		General				
	Class A	Police	Fire	School	Water	Total
Active employees covered for medical benefits						
Male	407	402	409	656	173	2,047
Female	<u>259</u>	<u>75</u>	<u>17</u>	<u>2,240</u>	<u>50</u>	<u>2,641</u>
Total	666	477	426	2,896	223	4,688
Average age	47.3	44.1	43.9	47.7	47.7	46.9
Average service	11.7	15.4	16.3	13.5	12.9	13.7
Average age at hire	35.6	28.7	27.6	34.2	34.8	33.2
Retired employees covered for medical benefits						
Number of individuals	980	633	600	1,791	135	4,139
Average age	72.2	66.1	66.8	70.8	67.0	69.7



EXHIBIT II

Actuarial Assumptions and Actuarial Cost Method

Data: Detailed census data, claims, premium rates and administrative fees for

postemployment welfare benefits were provided by the City of Providence.

Actuarial Cost Method: Projected Unit Credit. For active employees, benefits are allocated from date of hire to

assumed retirement age.

Per Capita Cost Development:

Insured plans (Blue Cross Blue Shield Plan 65, Blue Chip for Medicare and Blue Medicare Rx) Per capita costs were based on the fully insured premium rates effective July 1, 2013 for Plan 65; January 1, 2013 and January 1, 2014 for Blue Chip for Medicare; and January 1, 2014 for Blue Medicare Rx trended to the midpoint of the valuation year at assumed trend rates. For Plan 65 that is not community rated, actuarial factors were applied to the premium to estimate individual retiree and spouse costs by age and by gender.

Self-Funded plans (Blue Cross Blue Shield Classic and Healthmate Coast to Coast, Caremark Rx) Per capita claims costs were based on the monthly paid claims experience by participant group for the period July 1, 2011 through June 30, 2013. Claims were separated into two 12-month periods and adjusted as follows:

- > paid claims were multiplied by a factor to yield an estimate of incurred claims,
- total claims were divided by the number of adult members to yield a per capita claim cost, and
- the per capita claim cost was trended to the midpoint of the valuation year at assumed trend rates.

Taking a weighted average, per capita claims for the two periods were combined. The weights used in this average account for a number of factors including each plan year's volatility of claims experience and distance to the valuation year. Actuarial factors were then applied to the weighted average cost to estimate individual retiree and spouse costs by age and by gender.



Measurement Date: June 30, 2013

Discount Rate: 4.0% pay-as-you-go

Pre-Retirement 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

Teachers 50% of the RP-2000 Combined Tables with White Collar Adjustment

Postetirement Mortality Rates (if different):

Disabled Retiree (Non-Teachers): RP-2000 Combined Healthy Mortality Table set forward 3 years

Teachers

Healthy Male* RP-2000 Healthy Annuitant with Large Benefit Amount Adjustment Mortality Table

for males set back one year and projected generationally with Scale AA

Healthy Female* RP-2000 Healthy Annuitant with Large Benefit Amount Adjustment Mortality Table

for females set back three years and projected generationally with Scale AA

Disabled Retiree 60% of the PBGC Mortality Table Va for males and VIa for females for Disabled

Lives Receiving Social Security Benefits

The above mortality assumptions were determined to contain provisions appropriate

to reasonably reflect future mortality improvements.



^{*} These tables are intended to approximate the Gabriel, Roeder Smith & Company (GRS) tables used in the Employees' Retirement System of Rhode Island Actuarial Valuation Report as of June 30, 2013, dated December 17, 2013 completed by Gabriel, Roeder Smith & Company.

ermination Rates before Retirement:		Clas	ss A – Rate (%)	
		Мог	rtality	
	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

Note: 33.33% of the disability rates shown represent accidental disability.

Class B - Rate (%)

Mortality

	11101	tunty	
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

Note: 90% of the disability rates shown represent accidental disability.



Teachers - Rate (%)

	Mor	tality	Ordinary Disability	Accidental Disability
Age	Male	Female		
25	0.02	0.01	0.23	0.04
30	0.02	0.01	0.28	0.04
35	0.03	0.02	0.38	0.06
40	0.04	0.03	0.55	0.09
45	0.07	0.05	0.90	0.14
50	0.10	0.08	1.53	0.24
55	0.17	0.13	2.53	0.40
60	0.28	0.23	3.53	0.56

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

Teachers - Rate (%

	reachers - Rate (%)		
Service	Male	Female	
0	17.00	8.90	
1	9.00	7.78	
2	5.62	6.81	
3	4.55	5.95	
4	3.64	5.21	
5	2.89	4.55	
6	2.29	3.98	
7	1.81	3.48	
8	1.45	3.05	
9	1.20	2.66	
10	1.20	2.33	
11	1.20	2.04	
12	1.20	1.78	
13	1.20	1.56	
14	1.20	1.36	
15	1.20	1.19	
16	1.20	1.04	
17	1.20	0.91	
18	1.20	0.80	
19	1.20	0.70	
20	0.94	0.61	
21	0.94	0.53	
22	0.94	0.47	
23	0.94	0.41	
24	0.94	0.36	



SECTION 4: Supporting Information for the City of Providence June 30, 2013 Measurement Under GASB 43 and 45

Retirement Rates:		Rate per	year (%)	
	Age		ss 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	Clas	Class B				
	Fewer than 10 Years of Service	10 Years of Service or More				
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				

Teachers - Rate (%)

5	Service (00/28)			Age (60/10)		
Service	Male	Female	Age	Male	Female	
28	25.00	20.00	60	20.00	20.00	
29	15.00	15.00	61	15.00	15.00	
30-31	20.00	20.00	62	30.00	25.00	
32-33	30.00	30.00	63	25.00	20.00	
34	40.00	35.00	64	10.00	20.00	
35	55.00	50.00	65	25.00	35.00	
36-39	40.00	40.00	66-74	25.00	25.00	
40	100.00	100.00	75	100.00	100.00	

Dependents:

Demographic data was available for most of the spouses of current retirees, except School retirees and Local 1033 retirees. For future Class A and teacher retirees and current Class A and Teacher retirees missing spousal information, husbands were assumed to be three years older than their wives. For future Class B retirees and Class B retirees missing spousal information, husbands were assumed to be the same age as their wives. For future retirees who elect to continue their health coverage at retirement, 80% of retirees with employer-paid spouse coverage were assumed to have an eligible spouse who also opts for health coverage at that time.



Per Capita Health Costs:

Fiscal 2013 - 2014 medical and prescription drug claims costs are shown in the table below for retirees and for spouses at selected ages. These costs are net of deductibles and other benefit plan cost sharing provisions.

Self-Insured Non-Medicare Plans

	Medical		Prescription Drug					
	Retiree		Spouse		Retiree		Spouse	
Age	Male	Female	Male	Female	Male	Female	Male	Female
45	\$5,526	\$6,932	\$3,428	\$5,174	\$1,721	\$2,159	\$1,068	\$1,612
50	6,559	7,470	4,581	5,998	2,043	2,327	1,427	1,868
55	7,789	8,042	6,130	6,943	2,426	2,505	1,909	2,163
60	9,250	8,668	8,207	8,053	2,881	2,700	2,556	2,508
65	10,986	9,338	10,986	9,338	3,422	2,909	3,422	2,909
70	12,733	10,063	12,733	10,063	3,966	3,135	3,966	3,135
75	13,722	10,832	13,722	10,832	4,274	3,374	4,274	3,374
80	14,776	11,678	14,776	11,678	4,603	3,638	4,603	3,638
				İ				

	Plan 65		Post 65 Plan for Police and Fire					
	Ret	tiree	Spouse		Retiree		Spouse	
Age	Male	Female	Male	Female	Male	Female	Male	Female
45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
65	1,789	1,521	1,789	1,521	2,876	2,445	2,876	2,445
70	2,073	1,639	2,073	1,639	3,333	2,634	3,333	2,634
75	2,234	1,764	2,234	1,764	3,592	2,836	3,592	2,836
80	2,406	1,902	2,406	1,902	3,868	3,057	3,868	3,057

Blue Chip:

\$1,818

Blue Medicare Rx (PDP)

\$2,238 if enrolled in Plan 65 or the Post 65 Plan for Police and Fire



Annual Medicare Part B Penalty Reimbursement for Police and Fire

\$894

Health Care Cost Trend Rates:

Health care trend measures the anticipated overall rate at which health plan costs are expected to increase in future years. The rates shown below are "net" and are applied to the net per capita costs shown above. The trend shown for a particular plan year is the rate that is applied to that year's cost to yield the next year's projected cost.

Year Ending June 30	Medical/ Prescription Drug	Part B	
2014	8.0%	5.0%	
2015	7.5%	5.0%	
2016	7.0%	5.0%	
2017	6.5%	5.0%	
2018	6.0%	5.0%	
2019	5.5%	5.0%	
2020 & later	5.0%	5.0%	

Retiree Contribution Increase Rate:

Contributions do not increase after retirement, Local 1033 and Teacher contributions increase with trend until benefits commence.

Administrative Expenses:

Based on current vendor contracted rates and fees, an administrative expense load of \$316 per participant for the self-insured plans increasing at 3.0% per year was added for projected incurred self-insured claim costs in developing the benefit obligations.

Participation and Coverage Election: 100% of active employees with coverage are assumed to elect retiree coverage.

100% of retirees over age 65 are assumed to remain with their current medical plan

for life.

For current retirees under age 65 and future retirees, 100% are assumed to be eligible for Medicare and are assumed to enroll in Plan 65 upon reaching age 65, or, if Class B, to enroll in the Post 65 Plan for Police and Fire that coordinates with Medicare upon reaching age 65.



Plan Design: Development of plan liabilities was based on the substantive plan of benefits in effect

as described in Exhibit III.

Annual Maximum Benefits: No increase in the annual maximum benefit levels was assumed.

Lifetime Maximum Benefits: No information was available regarding accumulations toward lifetime maximum

benefits and no such accumulations were assumed.

Missing Participant Data: A missing census item for a given participant was assumed to equal the average value

of that item over all other participants of the same status for whom the item is known.

Health Care Reform Assumption: This valuation does not include the potential impact of any future changes due to the

Patient Protection and Affordable Care Act (PPACA) and the Health Care and Education Reconciliation Act (HCERA) of 2010 other than the excise tax on high cost health plans beginning in 2018 (reflected with this valuation) and those previously adopted as of the valuation date. The addition of the excise tax in this valuation increased the actuarial accrued liability by 1.91% and normal cost by 3.25%.

Medicare Part D Subsidy

Assumption: GASB guidelines prohibit the offset of OPEB obligations by the future value of

Medicare Part D subsidies. Therefore, these calculations do not include an estimate for retiree prescription drug plan federal subsidies that the Employer may be eligible

to receive for plan years beginning in 2006.

Demographic Assumptions: The demographic assumptions used in this valuation are the same as used in the City

of Providence Employee Retirement System Actuarial Valuation as of July 1, 2013, dated January 31, 2014 completed by Segal Consulting for non-teachers and for teachers the Employees' Retirement System of Rhode Island Actuarial Valuation Report as of June 30, 2013, dated December 17, 2013, completed by Gabriel, Roeder Smith & Company. As noted earlier, the mortality assumption for healthy retired teachers used in this valuation is an approximation of the assumption used in the ERSRI valuation. A review of the demographic assumptions is beyond the scope of this assignment, however, we have no reason to doubt the reasonableness of the

assumptions.



Assumption Changes since Prior Valuation:

- > The per capita health costs were updated to reflect current experience.
- > The future trend on per capita health costs was revised.
- > The demographic assumptions for teachers were changed to match the assumptions used in the Employees' Retirement System of Rhode Island Actuarial Valuation Report as of June 30, 2013, dated December 17, 2013, completed by Gabriel, Roeder Smith & Company.
- > The Medicare Part B Penalty paid for by the City on behalf of Police and Fire retirees and spouses was reflected.
- > Retiree contributions were updated as described in Section 4, Exhibit III on page 31.
- The excise tax on high cost health plans beginning in 2018 was included in this valuation. The addition of the excise tax in this valuation resulted in a 1.91% increase in the actuarial accrued liability and a 3.25% increase in the normal cost.
- > The allocation of benefits for the Projected Unit Credit cost method is from date of hire to assumed retirement age.



EXHIBIT IIISummary of Plan

This exhibit summarizes the major benefit provisions as included in the valuation. To the best of our knowledge, the summary represents the substantive plans as of the measurement date. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

Eligibility:

The following groups of retirees receiving a pension from the Employee Retirement System of the City of Providence or Employees' Retirement System of Rhode Island are first eligible for postretirement medical benefits:

Class A:

- Members hired prior to July 1, 1995: Age 55 and 10 years of service or the age at which 25 years of service are completed, if earlier.
- ➤ Members hired between July 1, 1995 and June 30, 2004: Age 55 and 10 years of service or the age at which 30 years of service are completed, if earlier.
- ➤ Members hired on or after July 1, 2004: Age 55 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 and 10 years of service or the age at which 20 years of service are completed, if earlier.
- Members of the Police Department hired between July 1, 2004 and June 30, 2011 and members of the Fire Department hired between July 1, 2004 and June 30, 2012: Age 55 and 10 years of service or the age at which 23 years of service are completed, if earlier.
- Members of the Police Department hired on or after July 1, 2011 and members of the Fire Department hired on or after July 1, 2012: Age 55 and 10 years of service or the age at which 25 years of service are completed, if earlier.



Teachers:

- ➤ Members with less than five years of contributory service as of June 30, 2012 and members hired on or after that date are eligible for retirement on or after their Social Security normal retirement age, with 10 years of service.
- ➤ Members who had at least five years of contributory service as of June 30, 2012 will be eligible for retirement at an individually determined age. This age is the result of interpolating between the member's Article 7 Retirement Date and the member's Social Security normal retirement age. The interpolation is based on service as of June 30, 2012 divided by projected service at the member's Article 7 Retirement Date. The minimum retirement age is 59.
- ➤ Members with 10 or more years of contributory service on June 30, 2012 may choose to retire at their Article 7 Retirement Date if they continue to work and contribute until that date.
- ➤ A member who is within five years of reaching their retirement eligibility date, as described in this section, and has 20 or more years of service, may elect to retire at any time.
- > Article 7 Retirement Date (member's retirement date as of September 30, 2009):
 - Article 7 Retirement Date Grandfathered Schedule A members members with at least 10 years of contributory service as June 30, 2005 and eligible for retirement at September 30, 2009 are eligible to retire on or after age 60 if they have credit for 10 years of service or at any age if they have credit for 28 years of service.
 - O Article 7 Retirement Date Schedule B members members with less than 10 years of contributory service as June 30, 2005 and members hired on or after that date are eligible to retire on or after age 65 if they have credit for 10 years of service, or on or after age 62 if they have credit for 20 years of service.
 - Article 7 Retirement Date Schedule A members who are not grandfathered,
 i.e., members who had at least 10 years of creditable service at June 30, 2005
 but who were not eligible to retire on September 30, 2009, will be eligible for



retirement at an individually determined age. This age is a result of interpolating between the retirement age under the rules applicable to Grandfathered Schedule A members and the retirement age applicable to Schedule B members. The interpolation is based on service as of September 30, 2009 divided by projected service at the retirement age for Grandfathered Schedule A members.

Disability: Accidental (job-related) Disability has no age or service requirement. Ordinary (non-job related) Disability has no age requirement but requires 10 years of creditable service.

Pre-Retirement Death: Surviving spouses of members who die in active service are eligible for subsidized benefits. The benefit summary beginning on page 32 describes which spouses are eligible for subsidized benefits.

Post-Retirement Death: Surviving spouse is eligible. The benefit summary beginning on page 32 describes which spouses are eligible for subsidized benefits.

Benefit Types: Medical and prescription drug benefits are provided to all eligible retirees through

plans offered by Blue Cross Blue Shield of Rhode Island and CVS Caremark.

Prescription drug benefits are paid by the retiree, except for Class B retirees. Vision and dental benefits are offered but are 100% retiree paid. Any benefit that is 100%

paid by the retiree has no impact on this valuation and has been excluded.

Duration of Coverage: Lifetime.

Dependent Coverage: Certain married and surviving spouses are eligible to receive subsidized medical

coverage. A description of these rules can be found in the benefit summary on page

32.

Medicare Integration Rule (Police and Fire only):

Carve-out method in which the plan benefit is first determined without regard to

Medicare payments, and is then reduced by the amount of such payments.



Retiree Contributions for Future Retirees:

Local 1033:

Local 1033.				
> Pre-65 (20%, effective July 1, 2014)	\$1,565			
➤ Plan 65				
o Local 1033 hired before June 30, 2008	\$0			
o Local 1033 hired after June 30, 2008	\$1,884			
Teachers:				
> Pre-65	\$1,086			
> Plan 65	\$0			
Other Class A:				
> Pre-65	\$0			
> Plan 65	\$0			
Class B:				
> Pre-65				
o Fire	\$0			
o Police	\$600			
> Post 65 Plan for Police and Fire (assuming all opted into settlement and will not pay for coverage)				
o Fire	\$0			
o Police	\$0			

Notes: Contributions for current retirees are reported in the data.

The portion of the contribution attributable to access only benefits is excluded.

Contributions do not increase after retirement. Local 1033 and Teacher contributions increase with trend until benefits commence.



Benefit Descriptions:

	Medical [*]	
	Under 65	Over 65
	Key:	A = Employer Paid B = Retiree Paid/Access Only C = Co-share
<u>Local 1033</u>		
Current Retirees (using contribution from data)		
Future Retirees		
Retiree	С	A, if hired before July 1, 2008, otherwise B
Spouse	В	В
Surviving Spouse	C	A, if hired before July 1, 2008, otherwise B
<u>Teachers</u>		
Current Retirees (using contribution from data)		
Future Retirees		
Retiree	C	A
Spouse	В	В
Surviving Spouse	C	A
Other Class A		
Current Retirees (using contribution from data)		
Future Retirees		
Retiree	A	A
Spouse	В	В
Surviving Spouse	A	A

^{*} For Police and Fire, also includes prescription drug coverage.



	Medical [*]		
	Under 65	Over 65	
	Key:	A = Employer Paid B = Retiree Paid/Access Only C = Co-share	
<u>Police</u>			
Current Retirees (using contribution from data)			
Future Retirees			
Retiree	C	A	
Spouse	A, if hired before July 1, 1998, otherwise	B A, if hired before July 1, 1998, otherwise B	
Surviving Spouse	C	A	
<u>Fire</u>			
Current Retirees (using contribution from data)			
Future Retirees			
Retiree	A	A	
Spouse	A, if hired before July 1, 1996, otherwise	B A, if hired before July 1, 1996, otherwise B	
Surviving Spouse	A	A	

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^{*} For Police and Fire, also includes prescription drug coverage.