Segal Consulting

City of Providence

Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2018 and Governmental Accounting Standards Board (GASB) Statement No. 75 Accounting Valuation Report for Reporting Date June 30, 2019

Segal Consulting

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December 23, 2019

Ms. Sara Silveria
Director, Finance Department
Providence City Hall
25 Dorrance Street
Providence, RI 02903

Dear Ms. Silveria:

We are pleased to submit this report on our actuarial valuation of postemployment welfare benefits as of June 30, 2018. The purpose of this report is to provide the actuarial information that will need to be disclosed in order to comply with Governmental Accounting Standards Board (GASB) Statement No. 75 as of June 30, 2019. This report summarizes the actuarial data used in the valuation and changes in assumptions since the prior valuation.

This report is based on information received from the City of Providence and vendors employed by the City of Providence. 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 measurements shown in this actuarial valuation may not be applicable for other purposes. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security at termination of the plan, or determining short-term cash flow requirements.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: retiree group benefits program experience or rates of return on assets differing from that anticipated by the assumptions; changes in 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 retiree group benefits program provisions or applicable law. Retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements.

The actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. The actuarial calculations were directed under our supervision. We are members of the American Academy of Actuaries and collectively meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the City of Providence are reasonably related to the experience of and the expectations for the Plan.

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

Sincerely,

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

By:

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

Mark J. Noonan, ASA, MAAA
Vice President and Health Actuary

cc: Mr. Lawrence Mancini
Ms. Krystle Lindberg

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City of Providence Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2018 and GASB Statement No. 75 Accounting Valuation Report for Reporting Date of June 30, 2019

Section 1: Executive Summary and Valuation Results

Important Information about Actuarial Valuations

An actuarial valuation is a budgeting tool with respect to defining future uncertain obligations of a postretirement health plan. As such, it will never forecast the precise future stream of benefit payments. It is an estimated forecast – the actual cost of the plan will be determined by the benefits and expenses paid, not by the actuarial valuation.

In order to prepare a valuation, Segal Consulting ("Segal") relies on a number of input items. These include:

Plan of benefits	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. For example, a plan may provide health benefits to post-65 retirees that coordinates with Medicare. If so, changes in the Medicare law or administration may change the plan's costs without any change in the terms of the plan itself. It is important for the City of Providence to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Participant data	An actuarial valuation for a plan is based on data provided to the actuary by the plan. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is not necessary to have perfect data for an actuarial valuation: the valuation is an estimated forecast, not a prediction. The uncertainties in other factors are such that even perfect data does not produce a "perfect" result. Notwithstanding the above, it is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Assets	Part of the cost of a plan will be paid from existing assets – the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the City of Providence. Some plans include assets, such as private equity holdings, real estate, or hedge funds that are not subject to valuation by reference to transactions in the marketplace. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to reflect gradually year-to-year changes in the market value of assets in determining the contribution requirements.
Actuarial assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. To determine the future costs of benefits, Segal collects claims, premiums, and enrollment data in order to establish a baseline cost for the valuation measurement, and then develops short- and long-term health care cost trend rates to project increases in costs in future years. This forecast also requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year, as well as forecasts of the plan's benefits for each of those events. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets or, if there are no assets, a rate of return based on a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale). All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions the actuary selects within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model necessarily uses approximations and estimates that may lead to significant changes in our results but will have no impact on the actual cost of the plan. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

Given the above, the user of Segal's actuarial valuation (or other actuarial calculations) needs to keep the following in mind:

- The actuarial valuation is prepared for use by the City of Providence. It includes information for compliance with accounting standards and for the plan's auditor. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- If the City of Providence is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- An actuarial valuation is a measurement at a specific date – it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.
- Sections of this report include actuarial results that are not rounded, but that does not imply precision.
- Critical events for a plan include, but are not limited to, decisions about changes in benefits and contributions. The basis for such decisions needs to consider many factors such as the risk of changes in plan enrollment, emerging claims experience, health care trend, and investment losses, not just the current valuation results.
- Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The City of Providence should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by the City of Providence upon delivery and review. The City of Providence should notify Segal immediately of any questions or concerns about the final content.

As Segal Consulting has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

Purpose

This report presents the results of our actuarial valuation of the postemployment welfare benefit program for the City of Providence as of June 30, 2018. The purpose of this report is to calculate the liabilities to be used for accounting requirements.

This report also presents certain disclosure information for the City of Providence (the “Employer”) Other Postemployment Benefits (OPEB) plan as of June 30, 2019, required by Governmental Accounting Standards Board (GASB) Statement No. 75. 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.

Highlights of the Valuation

- The prior actuarial valuation as of June 30, 2016 was initially completed to comply with GASB Statements No. 43 and 45. The liabilities determined in accordance with GASB 43/45 were calculated using a 4.0% discount rate and the Projected Unit Credit Actuarial Cost Method. The June 30, 2016 valuation results were recalculated to comply with the requirements of the revised accounting standards, GASB Statements No. 74 and 75. For comparison purposes, we are showing the June 30, 2016 liabilities using a discount rate of 3.58% and the Entry Age Normal Actuarial Cost Method. These assumptions were used for the GASB 75 financial reporting as of June 30, 2018.

- GASB 75 permits a measurement date as early as the end of the fiscal year prior to the reporting date. This June 30, 2019 accounting report uses a measurement date of June 30, 2018.

- GASB 74 and 75 specify that the discount rate to be used is a blend of the long-term expected rate of return on OPEB Trust assets and a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher as shown in the Bond Buyer 20-Bond General Obligation Index (GO bond). The blending is based on the sufficiency of projected assets to make projected benefit payments. Because the plan is not funded, we have used the GO bond rates of 3.58% as of June 30, 2017 and 3.87% as of June 30, 2018.

- In addition to the change in the discount rate, the following assumptions were revised with this valuation:
  - The per capita costs and trends were updated to reflect current experience.
  - The mortality and salary increase assumptions for non teachers were changed to match the assumptions recommended in the Employees’ Retirement System of Rhode Island Actuarial Experience Investigation for the six-year period ending June 30, 2016, dated May 15, 2017, completed by Gabriel, Roeder Smith & Company.
  - The excise tax on high cost health plans beginning in 2022 was recalculated.

- The unfunded actuarial accrued liability (UAAL) as of June 30, 2018 is $1,062.7 million. This represents an increase of $68.4 from $994.3 million as of June 30, 2016. The unfunded liability had been expected to increase by $64.8 million due to normal plan operations. The difference between the actual and expected increase was the net effect of the following:

	(In Millions)
June 30, 2016 unfunded actuarial liability	$994.3
June 30, 2018 expected unfunded actuarial liability	1,059.1
Change due to:	
• Experience loss	49.1
• Updating per capita costs, contributions, future trends and excise tax projection	1.8
• Changes in demographic assumptions	4.3
• Change in discount rate	-51.6
Net loss	$3.6
June 30, 2018 unfunded actuarial accrued liability	$1,062.7

- Section 2 includes the information required under GASB 75 and Section 3 includes the Supplemental Information.

Other Considerations

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 2022 (reflected in this valuation) and those previously adopted as of the valuation date.

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.

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

City of Providence

		3.87% Discount Rate June 30, 2018	3.58% Discount Rate June 30, 2016
Actuarial Accrued Liability by Participant Category			
1	Current retirees, beneficiaries and dependents	$665,423,885	$610,388,264
2	Current active members	397,276,625	383,909,311
3	Total as of June 30: (1) + (2)	$1.062,700,510	$994,297,575
4	Actuarial value of assets as of June 30	0	0
5	Unfunded actuarial accrued liability (UAAL) as of June 30: (3) - (4)	$1,062,700,510	$994,297,575

Summary of Participant Data

City of Providence

	June 30, 2018	June 30, 2016
Active employees covered for medical benefits		
Number of employees		
• Male	1,874	1,857
• Female	2,425	2,525
• Total	4,299	4,382
Average age	47.8	47.8
Average service	14.7	14.5
Retired employees, spouses and beneficiaries covered for medical benefits		
Number of individuals	3,878	3,783
Average age	71.5	70.7

Section 2: GASB 75

Exhibit 1 – General Information

At June 30, 2018, the City of Providence plan membership consisted of the following:

	June 30, 2018
Retired members and beneficiaries currently receiving benefits	3,878
Active members	4,299
Total	8,177

We have assumed other general information about the Plan will be provided by the City of Providence's auditors.

Exhibit 2 – Net OPEB Liability

The components of the net OPEB liability of the City of Providence are as follows:

	June 30, 2018	June 30, 2017
Total OPEB Liability	$1,062,700,510	$1,027,758,813
Plan Fiduciary Net Position	0	0
Net OPEB Liability	1,062,700,510	1,027,758,813
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability*	0.0%	0.0%

* These funded percentages are not necessarily appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligation or the need for or the amount of future contributions.

Actuarial assumptions. The total OPEB liability as of June 30, 2018 was measured by an actuarial valuation as of June 30, 2018 using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Actuarial Assumptions:

Wage inflation:	3.5%
Salary increases:	• Non-Teachers: 3.5% per year before reflecting longevity. Longevity compensation varies from 3.0% to 11.0% based on years of service, date of hire and Class. • Teachers: Service-related increases – 13.0% decreasing over 10 years to an ultimate level of 3.0%.
Discount rate:	3.87% as of June 30, 2018 and 3.58% as of June 30, 2017
Investment rate of return:	N/A
Health care trend rates:	• Non-Medicare medical: 7.0% decreasing by 0.25% for 10 years to an ultimate level of 4.5% per year • Medicare medical: 6.0% decreasing by 0.25% for 6 years to an ultimate level of 4.5% per year • Prescription drug: 9.0% decreasing by 0.25% for 18 years to an ultimate level of 4.5% per year • Part B: 4.5% Administrative: 3.0%

Mortality rates:

- Pre-Retirement
  - Class A Healthy: RP-2006 Employee Mortality Table projected generationally with Scale BB2D
  - Class B Healthy: RP-2006 Blue Collar Employee Mortality Table projected generationally with Scale BB2D
  - Teachers: 75% of the RP-2014 Employee Mortality Table
- Post-Retirement
  - Class A Healthy: RP-2006 Healthy Annuitant Mortality Table projected generationally with Scale BB2D, set forward one year
  - Class B Healthy: RP-2006 Blue Collar Healthy Annuitant Mortality Table projected generationally with Scale BB2D, set forward one year
  - Class A and B Disabled Retirees: RP-2006 Blue Collar Healthy Annuitant Mortality Table projected generationally with Scale BB2D, set forward three years
- Teachers*
  - Healthy: RP-2014 White Collar Healthy Annuitant Mortality Table projected generationally with 120% of Scale MP-2014
  - Disabled Retiree: RP-2014 Disabled Retiree Mortality Table projected generationally with 120% of Scale MP-2014

  * These tables are intended to approximate the tables used in the Employees' Retirement System of Rhode Island Actuarial Valuation Report as of June 30, 2018, dated December 18, 2018 completed by Gabriel, Roeder Smith & Company.

Exhibit 3 – Determination of Discount Rate and Investment Rate of Return

Development of Long-Term Rate

Does not apply because there are no invested assets.

Determination of Discount Rate

Because the plan is not funded, the discount rate is based on the yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rate of AA/Aa or higher as shown in the Bond Buyer 20-Bond General Obligation Index (3.58% as of June 30, 2017 and 3.87% as of June 30, 2018). This determination is in accordance with GASB Statement No. 75.

Exhibit 4 – Schedule of Changes in the Net OPEB Liability

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a)-(b)
Balance at June 30, 2017	$1,027,758,813	$0	$1,027,758,813
Changes for the year:			
• Service cost	$23,532,998	$0	$23,532,998
• Interest	37,115,410	0	37,115,410
• Differences between expected and actual experience	49,104,801	0	49,104,801
• Changes in assumptions	-45,456,327	0	-45,456,327
• Contributions - employer	0	29,355,185	-29,355,185
• Net investment income	0	0	0
• Benefit payments	-29,355,185	-29,355,185	0
• Administrative expenses	0	0	0
Net changes	$34,941,697	$0	$34,941,697
Balance at June 30, 2018	$1,062,700,510	$0	$1,062,700,510

Notes to Schedule:

Changes in Assumptions:	• The per capita health costs were updated. • Contributions were updated to reflect new CBA agreements. • The medical and prescription drug trend assumptions were updated. • The discount rate at June 30, 2018 was 3.87% compared to the June 30, 2017 rate of 3.58% • The excise tax on high cost health plans beginning in 2022 was revised. • The salary increase assumption and demographic assumptions for teachers were updated to be consistent with the Employees' Retirement System of Rhode Island Actuarial Valuation Report as of June 30, 2018, dated December 18, 2018, completed by Gabriel, Roeder Smith & Company.
Changes in Plan Provisions:	None.

Exhibit 5 – Sensitivity

Sensitivity of the net OPEB liability to changes in the discount rate

The following presents the net OPEB liability well as what the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate.

Net OPEB liability as of June 30, 2018	1% Decrease	Current Discount Rate	1% Increase
Class A	$115,229,609	$100,176,801	$88,109,548
Police	406,949,570	341,275,985	290,511,180
Fire	400,421,863	336,479,345	287,435,752
School	307,877,832	261,310,490	224,240,431
Water	27,186,053	23,457,889	20,485,988
Grand Total	$1,257,664,927	$1,062,700,510	$910,782,898

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates

The following presents the net OPEB liability as well as what the net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage point higher than the current rates.

Net OPEB liability as of June 30, 2018	1% Decrease	Current Trend Rates	1% Increase
Class A	$86,896,132	$100,176,801	$116,973,225
Police	288,507,160	341,275,985	409,716,815
Fire	286,248,846	336,479,345	401,945,959
School	218,140,767	261,310,490	317,292,836
Water	20,048,240	23,457,889	27,828,133
Grand Total	$899,841,145	$1,062,700,510	$1,273,756,968

Exhibit 6 – Schedule of Contributions

This report does not include a calculation of the actuarially determined contribution as the City of Providence does not have assets invested in a qualified OPEB Trust at this time and funds the plan on a pay-as-you-go basis.

Exhibit 7 – OPEB Expense and Deferred Outflows/Inflows of Resources Related to OPEB

Reporting Date for Employer under GASB 75	June 30, 2019	June 30, 2018
Measurement Date for Employer under GASB 75	**June 30, 2018**	**June 30, 2017**
OPEB expense		
• Service cost	$23,532,998	$35,273,360
• Interest	37,115,410	32,832,076
• Projected earnings on OPEB Trust investments	0	0
• Recognized portion of current-period difference between expected and actual experience	8,184,134	0
• Recognized portion of current-period difference between projected and actual earnings on OPEB plan investments		0
• Administrative expenses		0
• Recognition of current year period plan change		0
• Recognized portion of current year period assumption change	-7,576,055	-23,925,789
• Recognition of deferred outflows of resources		0
• Recognition of deferred inflows of resources	-23,925,789	0
• Total OPEB expense	$37,330,698	$44,179,647

Deferred Outflows of Resources and Deferred Inflows of Resources

Reporting Date for Employer under GASB 75		June 30, 2019	June 30, 2018
Measurement Date for Employer under GASB 75		**June 30, 2018**	**June 30, 2017**
Deferred Outflows of Resources			
Differences between expected and actual experience		$40,920,667	$0
Changes of assumptions		0	0
Changes of benefit terms		0	0
Net difference between projected and actual earnings on OPEB Trust investments		0	0
Total		$40,920,667	$0
Deferred Inflows of Resources			
Differences between expected and actual experience		$0	$0
Changes of assumptions		133,583,432	119,628,948
Changes of benefit terms		0	0
Net difference between projected and actual earnings on OPEB Trust investments		0	0
Total		$133,583,432	$119,628,948
Projected Recognition of Deferred Outflows/(Inflows) Year Ended June 30:			
	2019	N/A	-$23,925,789
	2020	-$23,317,710	-23,925,789
	2021	-23,317,710	-23,925,789
	2022	-23,317,710	-23,925,789
	2023	-23,317,714	-23,925,792
	2024	608,079	0
	Thereafter	0	0

Note: Average expected remaining service lives as of June 30, 2018 is 6 years.

Exhibit 8 – Proportionate Shares

Groups	June 30, 2018		June 30, 2017	
	OPEB Liability	Proportionate Share	OPEB Liability	Proportionate Share
Class A	$100,176,801	9.426626%	$83,356,976	8.110558%
Police	341,275,985	32.114032%	351,589,313	34.209321%
Fire	336,479,345	31.662669%	333,286,762	32.428500%
School	261,310,490	24.589288%	239,060,799	23.260399%
Water	23,457,889	2.207385%	20,464,963	1.991222%
Grand Total	**$1,062,700,510**	**100.000000%**	**$1,027,758,813**	**100.000000%**

	FYE 2017 NOL based on FYE 2018 Proportionate Share (a)	FYE 2017 NOL based on FYE 2017 Proportionate Share (b)	Change in Proportionate Share (a)-(b)
Class A	$96,882,979	$83,356,976	$13,526,003
Police	330,054,795	351,589,313	-21,534,518
Fire	325,415,871	333,286,762	-7,870,891
School	252,718,574	239,060,799	13,657,775
Water	22,686,594	20,464,963	2,221,631
Grand Total	**$1,027,758,813**	**$1,027,758,813**	**$0**

Exhibit 9 – Proportionate Share Allocations

Component Unit	Reporting Year Established	Original Balance	Outstanding Balance at June 30, 2018	Amount Recognized During FYE June 30, 2019	Outstanding Balance	Deferred Outflows/(Inflows) Recognized in Future Reporting Years				
						2020	2021	2022	2023	2024
Class A	2018	$878,244	$878,244	$146,374	$731,870	$146,374	$146,374	$146,374	$146,374	$146,374
Police	2018	-2,391,388	-2,391,388	-398,565	-1,992,823	-398,565	-398,565	-398,565	-398,565	-398,563
Fire	2018	-2,113,658	-2,113,658	-352,276	-1,761,382	-352,276	-352,276	-352,276	-352,276	-352,278
School	2018	3,369,703	3,369,703	561,617	2,808,086	561,617	561,617	561,617	561,617	561,618
Water	2018	257,099	257,099	42,850	214,249	42,850	42,850	42,850	42,850	42,849
Grand Total	**2018**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Component Unit	Reporting Year Established	Original Balance	Outstanding Balance at June 30, 2018	Amount Recognized During FYE June 30, 2019	Outstanding Balance	Deferred Outflows/(Inflows) Recognized in Future Reporting Years				
						2020	2021	2022	2023	2024
Class A	2019	$13,526,003	$13,526,003	$2,254,333	$11,271,670	$2,254,333	$2,254,333	$2,254,333	$2,254,333	$2,254,338
Police	2019	-21,534,518	-21,534,518	-3,589,086	-17,945,432	-3,589,086	-3,589,086	-3,589,086	-3,589,086	-3,589,088
Fire	2019	-7,870,891	-7,870,891	-1,311,815	-6,559,076	-1,311,815	-1,311,815	-1,311,815	-1,311,815	-1,311,816
School	2019	13,657,775	13,657,775	2,276,296	11,381,479	2,276,296	2,276,296	2,276,296	2,276,296	2,276,295
Water	2019	2,221,631	2,221,631	370,272	1,851,359	370,272	370,272	370,272	370,272	370,271
Grand Total	**2019**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Exhibit 10 – Allocated OPEB Expense

	2018 Share of Cost Allocator	Net OPEB Liability	Proportionate Share of Plan OPEB Expense	Net Amortization of Deferred Amounts	Total Employer OPEB Expense
Class A	9.426626%	$100,176,801	$3,519,025	$2,400,707	$5,919,732
Police	32.114032%	341,275,985	11,988,392	-3,987,651	8,000,741
Fire	31.662669%	336,479,345	11,819,895	-1,664,091	10,155,804
School	24.589288%	261,310,490	9,179,353	2,837,913	12,017,266
Water	2.207385%	23,457,889	824,032	413,122	1,237,154
Total	**100.00000000%**	**$1,062,700,510**	**$37,330,697**	**$0**	**$37,330,697**

Exhibit 11 – Other Allocated Items

Component Unit	Deferred Outflows of Resources: Differences Between Expected and Actual Experience	Deferred Outflows of Resources: Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Deferred Outflows of Resources: Total Deferred Outflows of Resources	Deferred Inflows of Resources: Changes of Assumptions	Deferred Inflows of Resources: Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Deferred Inflows of Resources: Total Deferred Inflows of Resources	Deferred Inflows/(Outflows) Recognized In Future OPEB Expense (Year Ended June 30): 2020	2021	2022	2023	2024
Class A	-$3,857,438	$11,857,166	$7,999,728	$12,592,411	$0	$12,592,411	$56,260	$56,260	$56,260	$56,259	$2,311,659
Police	-13,141,276	-17,945,432	-31,086,708	42,899,026	1,594,258	44,493,284	-11,077,343	-11,077,343	-11,077,343	-11,077,344	-3,393,809
Fire	-12,956,575	-6,559,076	-19,515,651	42,296,080	1,409,106	43,705,186	-8,694,824	-8,694,824	-8,694,824	-8,694,826	-1,119,282
School	-10,062,101	2,246,469	-7,815,632	32,847,215	-11,381,479	21,465,736	-3,457,363	-3,457,363	-3,457,363	-3,457,364	2,425,817
Water	-903,277	2,022,758	1,119,481	2,948,701	0	2,948,701	-144,440	-144,440	-144,440	-144,440	383,694
Grand Total	**-$40,920,667**	**-$8,378,115**	**-$49,298,782**	**$133,583,433**	**-$8,378,115**	**$125,205,318**	**-$23,317,710**	**-$23,317,710**	**-$23,317,710**	**-$23,317,715**	**$608,079**

Section 3: Supplemental Information

EXHIBIT I – 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:	Entry Age Normal – Level percentage of payroll
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, 2018 for Plan 65 and January 1, 2018 for Blue Chip for Medicare and Blue Medicare Rx. Actuarial factors were applied to the premiums 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 including Post 65 Plan for Police and Fire)	Per capita claims costs were based on the monthly paid claims experience by participant group for the period July 1, 2015 through June 30, 2018 for the Medical plans and July 1, 2016 through June 30, 2018 for the Rx plan Claims were separated into 12-month periods and adjusted as follows: • actual large claims were replaced by the expected amount of large claims to smooth out random fluctuations in experience, • 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, • the per capita claim was adjusted for the effect of any plan changes, and • the per capita claim cost was trended to the midpoint of the valuation year at assumed trend rates. Per capita claims for each plan year were then combined by taking a weighted average. 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.
Valuation Date:	June 30, 2018
Expected Return on Assets:	N/A
Discount Rate:	3.87% as of June 30, 2018 and 3.58% as of June 30, 2017 The discount rate is a blend of the long-term expected rate of return on OPEB Trust assets and a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher. The blending is based on the sufficiency of projected assets to make projected benefit payments.

Salary Increases:	*Class A and B:* 3.5% per year, before reflecting longevity. Base wages are increased by the following percentages to reflect longevity compensation:

Class A Years of Service	Rate of base wage increase (%) 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%
Class B – Fire Years of Service	**Rate of base wage increase (%) 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 Years of Service	**Rate of base wage increase (%) 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%

	Teachers:

Years of Service	Increase
1	13.00%
2	12.00%
3	9.25%
4	8.50%
5 - 6	8.00%
7	7.50%
8	7.25%
9 - 10	7.00%
11 or more	3.00%

Pre-Retirement Mortality Rates:

Class A Healthy: RP-2006 Employee Mortality Table projected generationally with Scale BB2D

Class B Healthy: RP-2006 Blue Collar Employee Mortality Table projected generationally with Scale BB2D

Teachers: 75% of the RP-2014 Employee Mortality Table

Postretirement Mortality Rates:

Class A Healthy: RP-2006 Healthy Annuitant Mortality Table projected generationally with Scale BB2D, set forward one year

Class B Healthy: RP-2006 Blue Collar Healthy Annuitant Mortality Table projected generationally with Scale BB2D, set forward one year

Class A and B Disabled Retirees: RP-2006 Blue Collar Healthy Annuitant Mortality Table projected generationally with Scale BB2D, set forward three years

Teachers

Healthy:* RP-2014 White Collar Healthy Annuitant Mortality Table projected generationally with 120% of Scale MP-2014

Disabled Retiree:* RP-2014 Disabled Retiree Mortality Table projected generationally with 120% of Scale MP-2014

The underlying tables with generational projection to the ages of participants as of the measurement date reasonably reflect the mortality experience of the plan as of the measurement date. The mortality tables were then adjusted to future years using generational projection to reflect future mortality improvement between the measurement date and those years.

* 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, 2018, dated December 18, 2018 completed by Gabriel, Roeder Smith & Company.

Non-Teacher Annuitant Mortality Rates:

	Class A – Rate per year (%)			
	Mortality		Disabled	
Age	Male	Female	Male	Female
55	0.64	0.41	0.77	0.54
60	0.89	0.66	1.18	0.88
65	1.39	1.07	1.96	1.40
70	2.23	1.72	3.19	2.26
75	3.66	2.76	5.23	3.70
80	6.11	4.62	8.60	6.26
85	10.45	8.15	14.19	10.82
90	17.77	14.26	22.40	17.84

Note: Mortality rates shown do not reflect generational projection.

	Class B – Rate per year (%)			
	Mortality		Disabled	
Age	Male	Female	Male	Female
55	0.68	0.45	0.77	0.54
60	0.98	0.72	1.18	0.88
65	1.60	1.16	1.96	1.40
70	2.63	1.87	3.19	2.26
75	4.29	3.03	5.23	3.70
80	7.05	5.05	8.60	6.26
85	11.61	8.71	14.19	10.82
90	19.01	14.81	22.40	17.84

Note: Mortality rates shown do not reflect generational projection.

Teacher Annuitant Mortality Rates:

	Rate per year (%)							
	Mortality				Disabled			
	Current		Previous		Current		Previous	
Age	Male	Female	Male	Female	Male	Female	Male	Female
55	0.39	0.27	0.41	0.21	2.34	1.45	2.89	1.77
60	0.52	0.39	0.60	0.37	2.66	1.70	3.62	1.99
65	0.76	0.65	0.99	0.64	3.17	2.09	4.07	2.22
70	1.24	1.06	1.57	1.03	4.03	2.82	4.43	2.57
75	2.13	1.76	2.48	1.76	5.43	4.10	5.65	2.98
80	3.73	3.04	4.52	3.10	7.66	6.10	6.77	4.48
85	6.84	5.46	8.23	5.28	11.33	9.04	10.09	6.77
90	12.62	10.02	13.88	8.64	17.30	13.27	15.15	10.09

Note: Mortality rates shown do not reflect generational projection.

Termination Rates Before Retirement:

	Class A – Rate per year (%)		
	Mortality		
Age	Male	Female	Disability
20	0.05	0.02	0.02
25	0.05	0.02	0.03
30	0.05	0.02	0.05
35	0.06	0.03	0.08
40	0.08	0.05	0.10
45	0.12	0.08	0.18
50	0.20	0.12	0.22
55	0.30	0.17	0.28
60	0.50	0.28	0.36

Notes: Mortality rates do not reflect generational projection.
33.33% of the disability rates shown represent accidental disability.

	Class B – Rate per year (%)		
	Mortality		
Age	Male	Female	Disability
20	0.07	0.02	0.08
25	0.07	0.02	0.13
30	0.06	0.02	0.19
35	0.07	0.03	0.25
40	0.10	0.05	0.37
45	0.16	0.09	0.66
50	0.26	0.13	1.14
55	0.38	0.19	1.64
60	0.64	0.31	2.28

Notes: Mortality rates do not reflect generational projection.
90% of the disability rates shown represent accidental disability.

Age	Teachers - Rate per year (%)				
	Mortality		Ordinary Disability		Accidental Disability
	Male	Female	Male	Female	
25	0.04	0.01	0.03	0.02	0.00
30	0.03	0.02	0.03	0.02	0.00
35	0.04	0.02	0.05	0.03	0.01
40	0.05	0.03	0.07	0.04	0.01
45	0.07	0.05	0.11	0.07	0.01
50	0.13	0.08	0.18	0.12	0.02
55	0.21	0.13	0.30	0.20	0.03
60	0.35	0.18	0.42	0.28	0.04
65	0.62	0.28	0.69	0.46	0.07

Previously,

Age	Teachers - Rate per year (%)				
	Mortality		Ordinary Disability		Accidental Disability
	Male	Female	Male	Female	
25	0.02	0.01	0.27	0.23	0.04
30	0.02	0.01	0.33	0.28	0.04
35	0.03	0.02	0.45	0.38	0.06
40	0.04	0.03	0.66	0.55	0.09
45	0.07	0.05	1.08	0.90	0.14
50	0.10	0.08	1.83	1.53	0.24
55	0.17	0.13	3.03	2.53	0.40
60	0.28	0.23	4.23	3.53	0.56

Withdrawal Rates:

Rate (%)			
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

Rate (%)			
Service	Teachers	Service	Teachers
0	15.00	13	1.43
1	10.00	14	1.32
2	7.50	15	1.23
3	6.48	16	1.15
4	4.82	17	1.08
5	3.83	18	1.02
6	3.17	19	0.96
7	2.70	20	0.91
8	2.36	21	0.87
9	2.09	22	0.83
10	1.87	23	0.79
11	1.70	24	0.76
12	1.55		

Previously,

Rate (%)			
Service	Teachers	Service	Teachers
0	18.00	13	1.43
1	12.00	14	1.32
2	8.00	15	1.23
3	6.48	16	1.15
4	4.82	17	1.08
5	3.83	18	1.02
6	3.17	19	0.96
7	2.70	20	0.91
8	2.36	21	0.87
9	2.09	22	0.83
10	1.87	23	0.79
11	1.70	24	0.76
12	1.55		

Retirement Rates:

	Rate (%)				Rate (%)		
	Class A				Class A		
Age	Fewer than 10 Years of Service	10 Years of Service or More	Class B	Age	Fewer than 10 Years of Service	10 Years of Service or More	Class B
40	2.00	4.50	5.50	54	6.50	11.50	8.00
41	2.25	5.00	5.50	55	7.00	12.00	10.00
42	2.50	5.50	5.50	56	7.00	12.00	12.50
43	2.75	6.00	5.50	57	7.00	12.00	15.00
44	3.00	6.50	5.50	58	7.00	12.00	17.50
45	3.25	7.00	5.75	59	7.00	12.00	25.00
46	3.50	7.50	6.00	60	10.00	12.50	100.00
47	3.75	8.00	6.25	61	11.00	13.50	0
48	4.00	8.50	6.50	62	12.00	14.50	0
49	4.25	9.00	6.75	63	13.00	16.00	0
50	4.50	9.50	7.00	64	14.00	17.50	0
51	5.00	10.00	7.25	65	15.00	20.00	0
52	5.50	10.50	7.50	66 – 74	15.00	20.00	0
53	6.00	11.00	7.75	75	100.00	100.00	0

Retirement Rates: Teachers	A flat 25% per year retirement probability for members eligible for unreduced retirement until age 67, 35% for all ages through age 74, then 100% at age 75. A 40% retirement probability at first eligibility will only be applied if the member has reached age 65 or has at least 25 years of service. Rates based on the years from Normal Retirement Age for Teachers eligible for a reduced retirement benefit.

Years from Normal Retirement Age	Rate (%)
5	2%
4	2%
3	2%
2	3%
1	4%

Dependents:	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:

Medical and prescription drug claims costs for fiscal year 2018 - 2019 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
40	$5,009	$6,442	$3,114	$5,175	$1,486	$1,911	$924	$1,535
45	5,956	7,472	3,694	5,577	1,767	2,216	1,096	1,654
50	7,069	8,052	4,938	6,465	2,097	2,388	1,465	1,918
55	8,395	8,668	6,607	7,484	2,490	2,571	1,960	2,220
60	9,970	9,343	8,845	8,679	2,957	2,771	2,623	2,574
64	11,438	9,911	11,166	9,769	3,393	2,940	3,312	2,897
65	11,841	10,065	11,841	10,065	3,512	2,985	3,512	2,985
70	13,724	10,846	13,724	10,846	4,070	3,217	4,070	3,217
75	14,789	11,675	14,789	11,675	4,386	3,463	4,386	3,463
80	15,926	12,587	15,926	12,587	4,724	3,733	4,724	3,733

	Plan 65				Post 65 Plan for Police and Fire			
	Retiree		Spouse		Retiree		Spouse	
Age	Male	Female	Male	Female	Male	Female	Male	Female
65	$1,920	$1,632	$1,920	$1,632	$3,022	$2,569	$3,022	$2,569
70	2,225	1,759	2,225	1,759	3,502	2,768	3,502	2,768
75	2,398	1,893	2,398	1,893	3,774	2,980	3,774	2,980
80	2,582	2,041	2,582	2,041	4,065	3,212	4,065	3,212

	Blue Chip				Blue Medicare Rx (PDP)			
	Retiree		Spouse		Retiree		Spouse	
Age	Male	Female	Male	Female	Male	Female	Male	Female
65	$1,844	$1,567	$1,844	$1,567	$2,369	$2,014	$2,369	$2,014
70	2,137	1,689	2,137	1,689	2,746	2,170	2,746	2,170
75	2,303	1,818	2,303	1,818	2,959	2,336	2,959	2,336
80	2,480	1,960	2,480	1,960	3,186	2,518	3,186	2,518

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.

	Medical			
Year Ending June 30	Under Age 65	Over Age 65	Prescription Drug	Part B Penalty
2019	7.00%	6.00%	9.00%	4.50%
2020	6.75%	5.75%	8.75%	4.50%
2021	6.50%	5.50%	8.50%	4.50%
2022	6.25%	5.25%	8.25%	4.50%
2023	6.00%	5.00%	8.00%	4.50%
2024	5.75%	4.75%	7.75%	4.50%
2025	5.50%	4.50%	7.50%	4.50%
2026	5.25%	4.50%	7.25%	4.50%
2027	5.00%	4.50%	7.00%	4.50%
2028	4.75%	4.50%	6.75%	4.50%
2029	4.50%	4.50%	6.50%	4.50%
2030	4.50%	4.50%	6.25%	4.50%
2031	4.50%	4.50%	6.00%	4.50%
2032	4.50%	4.50%	5.75%	4.50%
2033	4.50%	4.50%	5.50%	4.50%
2034	4.50%	4.50%	5.25%	4.50%
2035	4.50%	4.50%	5.00%	4.50%
2036	4.50%	4.50%	4.75%	4.50%
2037 and later	4.50%	4.50%	4.50%	4.50%

The trend rate assumptions were developed using Segal's internal guidelines, which are established each year using data sources such as the 2019 Segal Health Trend Survey, internal client results, trends from other published surveys prepared by the S&P Dow Jones Indices, consulting firms and brokers, and CPI statistics published by the Bureau of Labor Statistics.

Retiree Contribution Increase Rate:	With the exception of Teachers, Local 1033 and Non-Union employees, contributions are not assumed to increase from their current amounts. For Teachers, Local 1033 and Non-Union employees, medical contributions are assumed to increase with trend until the member retires and then remain frozen and prescription drug contributions are assumed to increase at 4.5% per year.
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 Class A current retirees under age 65 and future retirees, and Class B retirees hired after 1986, 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. For Class B current retirees under age 65 and future retirees hired before 1986, 70% are assumed to be eligible for Medicare and are assumed to enroll in the Post 65 Plan for Police and Fire that coordinates with Medicare upon reaching age 65, and 30% are assumed to be ineligible for Medicare and remain enrolled in a non-Medicare plan
Plan Design:	Development of plan liabilities was based on the substantive plan of benefits in effect as described in Exhibit II.
Administrative Expenses:	Based on current vendor contracted rates and fees, an administrative expense load of $307 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.
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 2022 (reflected with this valuation) and those previously adopted as of the valuation date.
Demographic and Salary Increase Assumptions:	The demographic assumptions used in this valuation are the same as used in The Employee Retirement System of the City of Providence Actuarial Valuation and Review as of July 1, 2018, dated August 7, 2019, completed by Segal Consulting for non-teachers and the Employees' Retirement System of Rhode Island Actuarial Valuation Report as of June 30, 2018, dated December 18, 2018, completed by Gabriel, Roeder Smith & Company for teachers. 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. The remaining demographic assumptions, such as enrollment elections, were based on the experience of the Plan and the experience of similar plans.
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.

Justification for Assumption Changes Since Prior Valuation:	Based on past experience and future expectations, the following actuarial assumptions were changed: • The per capita health costs were updated. • Contributions were updated to reflect new CBA agreements. • The medical and prescription drug trend assumptions were updated. • The discount rate at June 30, 2018 was 3.87% compared to the June 30, 2017 rate of 3.58% • The excise tax on high cost health plans beginning in 2022 was revised. • The salary increase assumption and demographic assumptions for teachers were updated to be consistent with the Employees' Retirement System of Rhode Island Actuarial Valuation Report as of June 30, 2018, dated December 18, 2018, completed by Gabriel, Roeder Smith & Company.

EXHIBIT II – SUMMARY 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 The 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.
- Members will be eligible to retire upon attainment of age 65 with 30 years of service, age 64 with 31 years of service, age 63 with 32 years of service, or age 62 with 33 years of service.

	• 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. – 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 below describes which spouses are eligible for subsidized benefits.
Post-Retirement Death:	Surviving spouse is eligible. The benefit summary below 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. The Medicare Part B Penalty is paid for by the City for retirees and spouses if applicable. Vision and dental benefits are offered but are 100% retiree paid and have been excluded from this valuation.
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 below.
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 City and Non-Union**	• Pre-65 (20%, effective July 1, 2014)	20% of projected medical costs frozen at the last day worked
		• Plan 65	
		– Local 1033 hired before June 30, 2008	$0
		– Local 1033 hired after June 30, 2008	$2,066
	Local 1033 School and Teachers:	• Pre-65	
		– Local 1033 hired before August 1, 2004	$1,482
		– Local 1033 hired after August 1, 2004	$1,205
		• Plan 65	$0
	Other Class A:	• Pre-65	$0
		• Plan 65	$0
	Class B:	• Pre-65	
		– Fire	
		» If retired July 1, 2018 through June 30, 2019	$674
		» If retired July 1, 2019 through June 30, 2020	$694
		» If retired July 1, 2020 through June 30, 2021	$715
		» If retired July 1, 2021 through June 30, 2022	$765
		» If retired July 1, 2022 and after	$796
		– Police	
		» If retired July 1, 2018 and after	$850
		• Post 65 Plan for Police and Fire (assuming all opted into settlement and will not pay for coverage)	
		– Fire	$0
		– Police	$0

Notes: Contributions for current retirees are reported in the data.
With the exception of Teachers, Local 1033 and Non-Union employees, contributions are not assumed to increase from their current amounts. For Teachers, Local 1033 and Non-Union employees, contributions are assumed to increase with trend until the member retires and then remain frozen.

Key A=Employer Paid B=Retiree Paid/Access Only C=Co-share	Medical Under 65	 Over 65
Local 1033 City and Non-Union		
Current Retirees (using contribution from data)		
• Retiree	C	A, if hired before July 1, 2008, otherwise B
• Spouse	B	B
• Surviving Spouse	B, if retired after September 2, 1992	A, if hired before July 1, 2008, otherwise B
Local 1033 School and Teachers		
Current Retirees (using contribution from data)		
• Retiree	C	A
• Spouse	B	B
• Surviving Spouse	B, if retired after September 2, 1992	A
Other Class A		
Current Retirees (using contribution from data)		
• Retiree	C	A
• Spouse	B	B
• Surviving Spouse	C	A
Police		
Current Retirees (using contribution from data)		
• 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
Fire		
Current Retirees (using contribution from data)		
• Retiree	C	A
• Spouse	A, if hired before July 1, 1996, otherwise B	A, if hired before July 1, 1996, otherwise B
• Surviving Spouse	C	A

Plan Changes Since the Prior Valuation:	None.

EXHIBIT III – DEFINITION OF 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.
Actuarial Accrued Liability (AAL):	Present value of all future benefit payments for current retirees and active employees taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions.
Unfunded Actuarial Accrued Liability (UAAL):	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.
Normal Cost:	The amount of contributions required to fund the benefit allocated to the current year of service.
Actuarially Determined Contribution:	A target or recommended contribution to an OPEB plan for the reporting period based on the most recent measurement available.
Valuation Date:	The date at which the actuarial valuation is performed
Covered Employee Payroll:	The payroll of the employees that are provided OPEB benefits
Entry Age Actuarial Cost Method:	An actuarial cost method where the present value of the projected benefits for an individual is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age
Healthcare Cost Trend Rates:	The rate of change in per capita health costs over time
Discount Rate:	The interest rate used to determine the actuarial present value of projected benefit payments.
Expected Return on Assets:	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.
Real Rate of Return:	The rate of return on an investment after removing inflation