

**JULY 1, 2017**  
**ACTUARIAL VALUATION OF**  
**THE POST RETIREMENT BENEFITS PLAN**  
**OF**  
**THE CITY OF PAWTUCKET**

**October, 2017**

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## SECTION I - OVERVIEW

The City of Pawtucket has engaged Sherman Actuarial Services, LLC (SAS) to prepare an actuarial valuation of their post-retirement benefits program as of July 1, 2017. This valuation was performed using employee census data, enrollment data, premiums, participant contributions and plan provision information provided by personnel of the City of Pawtucket. SAS did not audit these data, although they were reviewed for reasonability. The results of the valuation are dependent on the accuracy of the data.

The purposes of the valuation are to analyze the current funded position of the City's post-retirement benefits program, determine the level of contributions necessary to assure sound funding and provide reporting and disclosure information for financial statements, governmental agencies and other interested parties. This valuation report contains information required by the Governmental Accounting Standards Board's Statements Nos. 43 and 45, respectively entitled "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans" and "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions."

According to GASB principles, if the benefits are not prefunded, the rate earned by the General Asset Account must be used to select the discount rate used to measure the plan. To measure on that basis we have used a discount rate of 4%. The 4% scenario figures should be reflected in the City's financial statements based on the City's current Pay-as-You-Go funding approach. Should the City decide to set up an OPEB Trust Fund and fully fund the obligation, we also provide the results using a discount rate of 7.5%.

Section II provides a summary of the principal valuation results. Section VI provides a projection of expense and funding amounts.

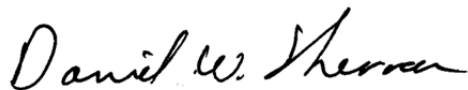
While the actuary believes that the assumptions are reasonable for financial reporting purposes, it should be understood that there is a range of assumptions that could be deemed reasonable that would yield different results. Moreover, while the actuary considers the assumption set to be reasonable based on prior plan experience, it should be understood that future plan experience may differ considerably from what has been assumed.

The report was prepared under the supervision of Daniel Sherman, an Associate of the Society of Actuaries and a Member of the American Academy of Actuaries, who takes responsibility for the overall appropriateness of the analysis, assumptions and results. Daniel Sherman is deemed to meet the General Qualification Standard and the basic education and experience requirement in the pension area. Based on over twenty years of performing FAS 106 valuations of similar complexity, Mr. Sherman is qualified by experience in retiree medical valuation. Daniel Sherman has met the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The costs and actuarial exhibits presented in this report have been prepared in accordance with Generally Accepted Accounting Practices and the requirements of GASB 45. I am available to answer questions about this report.

Respectfully Submitted,

SHERMAN ACTUARIAL SERVICES, LLC



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Daniel Sherman, ASA, MAAA

October 25, 2017

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Date

## SECTION II - SUMMARY

	<u>Full Prefunding</u>	<u>Pay-As-You-Go</u>	
	7.5%	4.0%	
	July 1, 2017	July 1, 2017	Difference
a) Actuarial valuation date	July 1, 2017	July 1, 2017	Difference
b) Actuarial Value of Assets	\$ 0	\$ 0	\$ 0
c) Actuarial Accrued Liability			
Active participants	\$ 54,703,913	\$ 94,963,034	\$ 40,259,121
Retired participants	173,123,301	261,131,210	88,007,909
Total AAL	\$ 227,827,214	\$ 356,094,244	\$ 128,267,030
d) Unfunded Actuarial Liability "UAL" [ c - b ]	\$ 227,827,214	\$ 356,094,244	\$ 128,267,030
e) Funded ratio [ b / c ]	0.0%	0.0%	0.0%
f) Annual covered payroll	\$ 99,566,691	\$ 99,566,691	
g) UAL as percentage of covered payroll	228.8%	357.6%	
h) Normal Cost for fiscal year 2017	\$ 3,640,902	\$ 7,147,730	\$ 3,506,828
i) Amortization of UAL for fiscal year 2017	\$ 12,833,565	\$ 13,157,380	\$ 323,815
j) Interest	\$ 0	\$ 0	\$ 0
k) Annual Required Contribution "ARC" for fiscal year 2017 [ h + i + j ]	\$ 16,474,467	\$ 20,305,110	\$ 3,830,643
l) Expected claims payments	\$ 13,994,454	\$ 13,994,454	\$ 0

\* 30-year amortization, increasing 3.25% per year

### SECTION III - MEDICAL PREMIUMS

#### Monthly Premiums effective July 1, 2017

Health benefits are available to employees and retirees through several plans. The following are gross monthly rates per subscriber for plans in which most current City employees and/or retirees are enrolled:

	<u>Individual</u>	<u>Family</u>
Blue Cross Classic - Teachers	\$920.83	\$2,381.43
Blue Cross Classic – School Non-Teachers	\$1,008.28	\$2,187.80
Blue Cross - Fire	\$1,010.57	\$2,609.63
Blue Cross - Police	\$914.51	\$1,968.24
Healthmate - Teachers	\$603.47	\$1,459.62
Healthmate – School Non-Teachers	\$659.72	\$1,774.60
Healthmate – Police, City, Water	\$659.72	\$1,794.09
Healthmate - Fire	\$825.60	\$2,105.77
Plan 65	\$195.23	
Delta Dental	\$24.76	\$77.14

School retirees contribute towards their coverage in the amount of 15% of stated premiums.

## SECTION IV - REQUIRED SUPPLEMENTARY INFORMATION

## Schedule of Funding Progress on a Pay-as-You-Go Basis - 4%

Actuarial Valuation Date	(a) Actuarial Value of Assets	(b) Actuarial Accrued Liability (AAL)	(b) - (a) Unfunded AAL (UAL)	(a) / (b) Funded Ratio	Covered Payroll	[(b)-(a)] / (c) UAL as Percentage of Covered Payroll
7/1/2007	0	414,578	414,578	0.00%	n/a	n/a
7/1/2009	0	378,184	378,184	0.00%	n/a	n/a
7/1/2011	0	311,500	311,500	0.00%	92,030	338.48%
7/1/2013	0	309,654	309,654	0.00%	91,107	339.88%
7/1/2015	0	345,227	345,227	0.00%	90,925	379.68%
7/1/2017	0	356,094	356,094	0.00%	99,567	357.64%

Amounts in Thousands

## SECTION V - NET OPEB OBLIGATION

GASB Statement No. 45 requires the development of Annual OPEB Cost and Net OPEB Obligation (NOO). This development is shown in the following table.

### Development of OPEB Cost and Net OPEB Obligation (NOO)

#### Annual Net OPEB Obligations - City, including Water

Year Ending June 30	(a) Annual Required Contribution	(b) Interest on NOO	(c) Amortization of NOO	(d) Annual OPEB Cost (a)+(b)-(c)	(e) Contribution	(f) Change in NOO (d)-(e)	(g) NOO Balance
2009	31,011,620	867,492	733,941	31,145,171	10,032,096	21,113,075	40,390,667
2010	19,285,740	1,716,603	1,638,017	22,960,272	11,416,382	11,543,890	51,934,557
2011	24,211,420	2,207,219	2,174,140	24,244,499	12,541,409	11,703,090	63,637,647
2012	19,285,740	2,545,505	2,675,421	19,155,824	12,939,217	6,216,607	69,854,254
2013	20,257,675	2,794,170	3,043,553	20,008,292	12,953,770	7,054,522	76,908,776
2014	17,636,868	3,076,351	2,862,356	17,850,863	12,892,143	4,958,720	81,867,496
2015	19,664,769	3,274,700	3,046,907	19,892,562	9,976,571	9,915,990	91,783,487
2016	20,604,671	3,671,339	3,415,956	20,860,054	11,109,056	9,750,998	101,534,485
2017	20,305,107	4,061,379	3,778,864	20,587,622	13,994,453	6,593,169	108,127,654

#### Annual Net OPEB Obligations - Water Only

Year Ending June 30	(a) Annual Required Contribution	(b) Interest on NOO	(c) Amortization of NOO	(d) Annual OPEB Cost (a)+(b)-(c)	(e) Contribution	(f) Change in NOO (d)-(e)	(g) NOO Balance
2010	487,390	23,622	22,540	488,472	186,166	302,306	858,115
2011	505,925	38,615	35,923	508,617	229,447	279,170	1,137,285
2012	424,086	45,491	47,813	421,764	313,512	108,252	1,245,537
2013	444,602	49,821	54,267	440,156	318,644	121,512	1,367,049
2014	260,765	54,682	50,878	264,569	192,924	71,645	1,438,694
2015	406,962	57,548	53,545	410,965	319,403	91,562	1,530,256
2016	388,398	61,210	56,952	392,656	286,842	105,814	1,636,069
2017	382,751	65,443	60,890	387,304	361,345	25,959	1,662,028



## SECTION VI - SCHEDULE OF EMPLOYER CONTRIBUTIONS

The Government Accounting Standards Board's Statement No. 45 "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions" outlines various requirements of a funding schedule that will amortize the unfunded actuarial liability and cover normal costs. Amortization of the unfunded actuarial liability is to be based on a schedule that extends no longer than 30 years. The contribution towards the amortization of the unfunded actuarial liability may be made in level payments or in payments increasing at the same rate as salary increases. There is no requirement to actually fund the Annual Required Contribution, however.

In the amortization schedules shown on the following pages, the amortization of the unfunded accrued liability is increasing at 3.0% for 30 years. The normal cost is expected to increase at the same rate as the assumed ultimate health care trend rate. The contributions were computed assuming that the contribution is paid at the end of the fiscal year. Projected benefit payments/employer contributions reflect only the benefit for those individuals now employed or retired, not any future entrants.

Paragraph 12 of GASB 45 stipulates that valuations must be performed at least biennially. The following projections are intended only to illustrate long-term implications of Prefunding versus Pay-as-You-Go.

## SECTION VI - SCHEDULE OF EMPLOYER CONTRIBUTIONS

## Pay-as-You-Go Basis - 4%

Fiscal Year		Amortization		Estimated
<u>Ending In</u>	<u>Normal Cost</u>	<u>of UAL</u>	<u>ARC*</u>	<u>Premium Cost</u>
2017	7,147,730	13,157,377	20,305,107	13,994,453
2018	7,469,378	13,685,831	21,155,209	14,613,247
2019	7,805,500	13,957,397	21,762,897	15,139,046
2020	8,156,748	14,216,021	22,372,769	16,116,729
2021	8,523,802	14,480,704	23,004,506	16,602,585
2022	8,907,373	14,755,554	23,662,927	17,004,717
2023	9,308,205	15,028,835	24,337,040	17,740,388
2024	9,727,074	15,296,049	25,023,123	18,609,899
2025	10,164,792	15,568,026	25,732,818	19,210,497
2026	10,622,208	15,835,487	26,457,695	20,077,626
2027	11,100,207	16,096,828	27,197,035	21,002,738
2028	11,599,716	16,365,462	27,965,178	21,594,391
2029	12,121,703	16,627,800	28,749,503	22,570,174
2030	12,667,180	16,883,501	29,550,681	23,572,255
2031	13,237,203	17,130,032	30,367,235	24,658,388
2032	13,832,877	17,366,107	31,198,984	25,794,567
2033	14,455,356	17,590,347	32,045,703	26,983,098
2034	15,105,847	17,801,272	32,907,119	28,226,392
2035	15,785,610	17,997,294	33,782,904	29,526,973
2036	16,495,962	18,176,715	34,672,677	30,887,480
2037	17,238,280	18,337,714	35,575,994	32,310,675
2038	18,014,003	18,478,342	36,492,345	33,799,447
2039	18,824,633	18,596,517	37,421,150	35,356,816
2040	19,671,741	18,690,013	38,361,754	36,985,944
2041	20,556,969	18,756,452	39,313,421	38,690,137
2042	21,482,033	18,793,296	40,275,329	40,472,854
2043	22,448,724	18,797,835	41,246,559	42,337,712
2044	23,458,917	18,767,180	42,226,097	44,288,497
2045	24,514,568	18,698,251	43,212,819	46,329,168
2046	25,617,724	18,587,765	44,205,489	48,463,866
2047	26,770,522	18,432,225	45,202,747	50,696,925

## SECTION VI - SCHEDULE OF EMPLOYER CONTRIBUTIONS

## Full Prefunding – 7.5%

Fiscal Year <u>Ending In</u>	<u>Normal Cost</u>	Amortization <u>of UAL</u>	<u>ARC*</u>	Estimated <u>Premium Cost</u>
2017	3,640,902	12,833,565	16,474,467	13,994,453
2018	3,804,743	13,250,656	17,055,399	14,613,247
2019	3,975,956	13,648,176	17,624,132	15,139,046
2020	4,154,874	14,057,621	18,212,495	16,116,729
2021	4,341,843	14,479,350	18,821,193	16,602,585
2022	4,537,226	14,913,731	19,450,957	17,004,717
2023	4,741,401	15,361,143	20,102,544	17,740,388
2024	4,954,764	15,821,977	20,776,741	18,609,899
2025	5,177,728	16,296,636	21,474,364	19,210,497
2026	5,410,726	16,785,535	22,196,261	20,077,626
2027	5,654,209	17,289,101	22,943,310	21,002,738
2028	5,908,648	17,807,774	23,716,422	21,594,391
2029	6,174,537	18,342,007	24,516,544	22,570,174
2030	6,452,391	18,892,267	25,344,658	23,572,255
2031	6,742,749	19,459,035	26,201,784	24,658,388
2032	7,046,173	20,042,806	27,088,979	25,794,567
2033	7,363,251	20,644,090	28,007,341	26,983,098
2034	7,694,597	21,263,413	28,958,010	28,226,392
2035	8,040,854	21,901,315	29,942,169	29,526,973
2036	8,402,692	22,558,354	30,961,046	30,887,480
2037	8,780,813	23,235,105	32,015,918	32,310,675
2038	9,175,950	23,932,158	33,108,108	33,799,447
2039	9,588,868	24,650,123	34,238,991	35,356,816
2040	10,020,367	25,389,627	35,409,994	36,985,944
2041	10,471,284	26,151,316	36,622,600	38,690,137
2042	10,942,492	26,935,855	37,878,347	40,472,854
2043	11,434,904	27,743,931	39,178,835	42,337,712
2044	11,949,475	28,576,249	40,525,724	44,288,497
2045	12,487,201	29,433,536	41,920,737	46,329,168
2046	13,049,125	30,316,542	43,365,667	48,463,866
2047	13,636,336	-	13,636,336	50,696,925

## SECTION VII – DEPARTMENT RESULTS

	City	Fire	Police	School	Water	Total
<b>Accrued Liability @ 7.5%</b>						
Active	6,699,957	11,661,937	12,319,398	22,682,763	1,339,858	54,703,913
Retired	8,505,905	70,818,774	84,361,439	7,227,724	2,209,459	173,123,301
<b>Total</b>	<b>15,205,862</b>	<b>82,480,711</b>	<b>96,680,837</b>	<b>29,910,487</b>	<b>3,549,317</b>	<b>227,827,214</b>

**Annual Required Contribution FYE 2017**

Normal Cost	342,997	799,052	925,506	1,503,378	69,971	3,640,902
Amortization of UAL	856,550	4,646,159	5,446,056	1,684,865	199,934	12,833,564
<b>Total</b>	<b>1,199,547</b>	<b>5,445,211</b>	<b>6,371,562</b>	<b>3,188,243</b>	<b>269,905</b>	<b>16,474,466</b>
Claims Cost	959,669	4,908,462	5,357,725	2,454,655	313,943	13,994,454

**Annual Required Contribution FYE 2018**

Normal Cost with interest	358,432	835,009	967,154	1,571,029	73,120	3,804,742
Amortization of UAL with interest	884,388	4,797,159	5,623,053	1,739,623	206,432	13,250,655
<b>Total</b>	<b>1,242,820</b>	<b>5,632,168</b>	<b>6,590,207</b>	<b>3,310,652</b>	<b>279,552</b>	<b>17,055,397</b>

**Accrued Liability @ 4%**

Active	11,192,642	21,651,457	24,430,850	35,429,327	2,258,758	94,963,034
Retired	12,323,945	104,335,787	133,528,214	8,019,642	2,923,622	261,131,210
<b>Total</b>	<b>23,516,587</b>	<b>125,987,244</b>	<b>157,959,064</b>	<b>43,448,969</b>	<b>5,182,380</b>	<b>356,094,244</b>

**Annual Required Contribution FYE 2017**

Normal Cost	627,650	1,736,364	2,056,178	2,600,666	126,872	7,147,732
Amortization of UAL	868,918	4,655,122	5,836,453	1,605,402	191,485	13,157,377
<b>Total</b>	<b>1,496,568</b>	<b>6,391,486</b>	<b>7,892,631</b>	<b>4,206,068</b>	<b>318,357</b>	<b>20,305,109</b>
Claims Cost	959,669	4,908,462	5,357,725	2,454,655	313,943	13,994,454

**Annual Required Contribution FYE 2018**

Normal Cost with interest	655,894	1,814,500	2,148,706	2,717,695	132,581	7,469,378
Amortization of UAL with interest	886,266	4,748,060	5,952,975	1,637,453	195,308	13,420,059
<b>Total</b>	<b>1,542,160</b>	<b>6,562,560</b>	<b>8,101,681</b>	<b>4,355,148</b>	<b>327,889</b>	<b>20,889,437</b>

**SCHEDULE A – ACTIVE DISTRIBUTION**

## Age/Service Distribution as of July 1, 2017

Attained Age	<5	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
< 20	0	0	0	0	0	0	0	0	0
20-24	26	0	0	0	0	0	0	0	26
25-29	89	18	1	0	0	0	0	0	108
30-34	70	59	28	5	0	0	0	0	162
35-39	44	29	65	39	0	0	0	0	177
40-44	21	10	50	74	18	1	0	0	174
45-49	23	24	39	79	60	13	3	0	241
50-54	22	23	31	54	39	44	7	0	220
55-59	24	18	34	43	46	31	20	1	217
60-64	11	6	21	34	27	18	6	4	127
65-69	7	2	6	10	6	9	1	3	44
70+	2	1	1	2	2	0	1	1	9
<b>Total Employees</b>	<b>339</b>	<b>190</b>	<b>276</b>	<b>340</b>	<b>198</b>	<b>116</b>	<b>38</b>	<b>9</b>	<b>1,505</b>

## SCHEDULE B – RETIREE DISTRIBUTION

Retiree Distribution as of July 1, 2017

Number of Employees			
Attained Age	Female	Male	Total
< 20	2	1	3
20-24	0	0	0
25-29	1	0	1
30-34	0	2	2
35-39	1	3	4
40-44	0	2	2
45-49	1	18	19
50-54	3	43	46
55-59	19	58	77
60-64	89	95	184
65-69	18	87	105
70-74	11	73	84
75-79	11	43	54
80-84	5	25	30
85-89	0	19	19
90-94	2	12	14
95+	0	2	2
Total	163	483	646

## SCHEDULE C - ACTUARIAL ASSUMPTIONS AND METHODS

### ***Interest:***

Pay-as-You-Go: 4.00% per year, net of investment expenses  
 Full Prefunding: 7.50% per year, net of investment expenses

### ***Actuarial Cost Method:***

Projected Unit Credit. Benefits are attributed ratably to service from date of hire until full eligibility date. Full eligibility date is assumed to be first eligibility for retiree medical benefits.

### ***Healthcare Cost Trend Rate:***

<u>Year</u>	<u>Inflation Rate</u>
2017	5.5%
2018	5.0%
2019 & after	4.5%

### ***Amortization Period:***

30-year level percent of pay assuming 3.25% aggregate annual payroll growth, open basis for Pay-as-You-Go. The amortization period is 30 years for all future valuations.

### ***Participation:***

95% of future retirees are assumed to participate in the retiree medical plan. 65% of future school retirees are assumed to participate in the dental plan. 90% of future Public Safety retirees are assumed to participate in the dental plan.

### ***Marital Status:***

80% of male employees and 60% of female employees are assumed to have a covered spouse at retirement. Wives are assumed to be three years younger than their husbands.

***Pre-Age 65 Retirees***

Current retirees who are under age 65 are assumed to remain in their current medical plan until age 65. Current active employees who are assumed to retire prior to age 65 are valued with a weighted-average premium. This weighted-average premium is based on the medical plan coverage of current retirees under age 65.

***Post-Age 65 Retirees***

Current retirees over age 65 remain in their current medical plan until death for purposes of measuring their contributions. It is assumed that future retirees are Medicare eligible. It is furthermore assumed that all current retirees over 65 will participate in the Medicare Supplement plan in the same proportion as current retirees over 65. Per capita costs were developed from the City developed monthly costs. Amounts to be received in the future for the Medicare Part D Retiree Drug Subsidy are not reflected in the valuation.

***Termination Benefit:***

No benefits will payable for terminations prior to retirement eligibility.

***Medical Plan Costs:***

The estimated gross per capita incurred claim costs for all retirees and beneficiaries for 2017 are based on current costs and age-weighted adjustments. Sample costs are shown in the following table.

<u>Age</u>	<u>School</u>	<u>Public Safety</u>	<u>All Others</u>
50	8,679	8,819	7,971
55	10,159	10,323	9,331
60	12,008	12,202	11,029
64	13,886	14,110	12,753
65	14,280	1,862	1,862
70	16,716	2,180	2,180
75	18,820	2,454	2,454
80	20,576	2,683	2,683
85	21,948	2,862	2,862

It is assumed that future retirees participate in the same manner as current retirees. Employee cost sharing is based on current rates. Future cost sharing is based on the weighted average of the current cost sharing of retirees and beneficiaries.



***Service Retirement – Police and Fire***

Based on an analysis of experience and anticipated changes in behavior, the assumed annual retirement rates are illustrated as follows for Police:

<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>
20	0.20	30	0.25
21	0.20	31	0.20
22	0.20	32	0.20
23	0.05	33	0.35
24	0.05	34	0.35
25	0.05	35	0.50
26	0.05	36	0.50
27	0.05	37	0.50
28	0.05	38	0.50
29	0.05	39+	1.00

Based on an analysis of experience and anticipated changes in behavior, the assumed annual retirement rates are illustrated as follows for Firefighters:

<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>
20	0.10	28	0.10
21	0.15	29	0.10
22	0.15	30	0.25
23	0.15	31	0.20
24	0.10	32	0.20
25	0.10	33	0.35
26	0.10	34	0.35
27	0.10	35+	0.60

***Service Retirement – Teachers***

Based on expected experience, the assumed annual retirement rates are illustrated at the following ages and years of service:

<u>Age</u>	<u>&lt; 28</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31 - 34</u>	<u>35</u>	<u>36 - 39</u>	<u>40</u>
60	0.20	0.25	.015	0.30	0.30	0.55	0.40	1.00
61	0.15	0.25	.015	0.30	0.30	0.55	0.40	1.00
62	0.30	0.25	.015	0.30	0.30	0.55	0.40	1.00
63	0.25	0.25	.015	0.30	0.30	0.55	0.40	1.00
64	0.10	0.25	.015	0.30	0.30	0.55	0.40	1.00
65	0.25	0.25	.015	0.30	0.30	0.55	0.40	1.00
66	0.25	0.25	.015	0.30	0.30	0.55	0.40	1.00
67	0.25	0.25	.015	0.30	0.30	0.55	0.40	1.00
68	0.25	0.25	.015	0.30	0.30	0.55	0.40	1.00
69	0.25	0.25	.015	0.30	0.30	0.55	0.40	1.00
70	0.25	0.25	.015	0.30	0.30	0.55	0.40	1.00
71	0.25	0.25	.015	0.30	0.30	0.55	0.40	1.00
72	0.25	0.25	.015	0.30	0.30	0.55	0.40	1.00
73	0.25	0.25	.015	0.30	0.30	0.55	0.40	1.00
74	0.25	0.25	.015	0.30	0.30	0.55	0.40	1.00
75	1.00		1.00	1.00	1.00	1.00	1.00	1.00

***Service Retirement – All Others***

Based on expected experience, the assumed annual retirement rates are illustrated at the following ages and years of service:

<u>Service</u>	<u>Rate</u>
20	0.12
21	0.10
22	0.10
23	0.10
24	0.12
25	0.14
26	0.16
27	0.18
28	0.20
29	0.20
30	0.35
At age 65, regardless of service	1.00

***Annual Rate of Withdrawal Prior to Retirement***

According to the following table:

<u>Service</u>	<u>General Employees</u>		<u>Teachers</u>		<u>Fire and Police</u>
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Rates</u>
0	0.1750	0.1800	0.1700	0.0890	0.0600
5	0.0552	0.0584	0.0289	0.0455	0.0212
10	0.0260	0.0255	0.0120	0.0233	0.0115
15	0.0201	0.0159	0.0120	0.0119	0.0054
20	0.0175	0.0112	0.0094	0.0061	0.0000

***Annual Rate of Mortality***

It is assumed that the pre-retirement and post retirement mortality for general employees and Teachers are represented by the MERS Class A assumptions for 2013. It is assumed that the pre-retirement and post retirement mortality for Public Safety employees are represented by the RP2000 Mortality Table with Blue Collar adjustment, projected to 2011 using Scale AA. For disabled general and Teacher members is represented by the MERS mortality assumptions for 2013. For Public Safety disabled retirees, it is represented by RP2000 Mortality Table with Blue Collar adjustment, projected to 2011 using Scale AA, set forward 1 year for males and 2 years for females.

***Annual Rate of Disability Prior to Retirement***

Based on an analysis of experience, the assumed annual rates of disability may best be illustrated by the following rates at the following ages:

<u>Age</u>	<u>General Employees</u>		<u>Teachers</u>		<u>Fire and Police</u>
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	
20	0.00000	0.00000	0.0027	0.0027	0.0005
30	0.00105	0.00042	0.0032	0.0032	0.0020
40	0.00209	0.00094	0.0064	0.0064	0.0020
50	0.00580	0.00232	0.0177	0.0177	0.0063

## SCHEDULE D - SUMMARY OF PROGRAM PROVISIONS

***Retirement Medical Insurance:*** Retirees may choose Healthmate or Blue Cross Classic. School retirees pay a 15% share of their post-retirement medical costs. Public Safety and Teachers and beneficiaries over the age of 65 may continue to participate in the plan until death. All other retirees, beneficiaries and active employees are eligible for participation until age 65.

***Retirement Dental Insurance:*** Retirees may choose Delta Dental. School retirees pay a 15% share of their post-retirement costs. Public Safety and Teachers and beneficiaries over the age of 65 may continue to participate in the plan until death.

***Spousal Coverage:*** Current and future retirees may elect to include their spouses as part of their post-retirement benefits.

***Administrative Costs:*** The City pays administrative costs for each member of the plan as part of the monthly premium.

***Retirement Eligibility:*** Fire and Police: 20 years of service.  
Teachers: Age 60 and 10 years of service, or 28 years of service.  
All Others: Age 58 and 10 years of service, or 30 years of service.

***Disability Eligibility:*** Fire and Police: Total and permanent.  
All Others: 5 years of service.

**SCHEDULE E - CONSIDERATIONS OF HEALTH CARE REFORM**

**Early Retiree Reinsurance Program ("ERRP") - Effective June 1, 2011:** Due to the short-term nature of the payments expected to be received under this program, we do not reflect this program in long-term GASB 45 liabilities.

**Removal of Lifetime Maximum:** The elimination of the lifetime maximums would have no impact on the retiree health plan obligations since, as far as we are aware, the plan has no lifetime maximums.

**Medicare Advantage Plans - Effective January 1, 2011:** The law provides for reductions to the amounts that would be provided to Medicare Advantage plans starting in 2011. Since the City does not offer these plans, the reductions would have no impact.

**Expansion of Child Coverage to Age 26:** Since few retirees cover children on retiree health plans, this provision will likely have a relatively small effect on the gross benefit cost. We have reflected an estimate of the amount of additional cost by assuming a higher healthcare trend rate.

**Medicare Part D Subsidy - Shrinking Medicare Prescription Drug "Donut Hole"- Starting January 1, 2011:** RDS payments are not reflected as an ongoing offsetting item in GASB 45 valuations, and so no direct impact is reflected. RDS actuarial equivalence testing does not reflect the new donut hole shrinking Part D benefits. Thus, the changes to Medicare Part D have no impact on the calculations.

**Excise Tax on High-Cost Employer Health Plans (aka Cadillac Tax) - Effective January 1, 2020:** There is considerable uncertainty about how the tax would be applied, and considerable latitude in grouping of participants for tax purposes. We have estimated the Cadillac taxes applicable and included them in the liabilities.

**Other:** We have not identified any other specific provision of health care reform that would be expected to have a significant impact on the measured obligation. As additional guidance on the legislation is issued, we will continue to monitor any potential impacts.

## SCHEDULE F - GLOSSARY OF TERMS

### **Actuarial Accrued Liability**

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of OPEB benefits and expenses which is not provided for by future Normal Costs and therefore is the value of benefits already earned.

### **Actuarial assumptions**

Assumptions as to the occurrence of future events affecting OPEB costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided OPEB benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.

### **Actuarial cost method**

A procedure for determining the Actuarial Present Value of OPEB benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.

### **Actuarial experience gain or loss**

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

### **Amortization (of unfunded actuarial accrued liability)**

That portion of the OPEB plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability or the Unfunded Frozen Actuarial Accrued Liability.

### **Annual OPEB cost**

An accrual-basis measure of the periodic cost of an employer's participation in a defined benefit OPEB plan.

### **Annual required contributions of the employer (ARC)**

The employer's periodic expense to a defined benefit OPEB plan, calculated in accordance with the parameters. It is the value of the cash contributions for a funded plan and the value of the expense entry in the profit and loss section of the financial statements.

### **Closed amortization period (closed basis)**

A specific number of years that is counted from one date and, therefore, declines to zero with the passage of time. For example, if the amortization period initially is thirty years on a closed basis, twenty-nine years remain after the first year, twenty-eight years after the second year, and so forth. In contrast, an open amortization period (open basis) is one that begins again or is recalculated at each actuarial valuation date. Within a maximum number of years specified by law or policy (for example, thirty years), the period may increase, decrease, or remain stable.

### **Covered payroll**

Annual compensation paid to active employees covered by an OPEB plan. If employees also are covered by a pension plan, the covered payroll should include all elements included in compensation on which contributions to the pension plan are based. For example, if pension contributions are calculated on base pay including overtime, covered payroll includes overtime compensation.

### **Defined benefit OPEB plan**

An OPEB plan having terms that specify the benefits to be provided at or after separation from employment. The benefits may be specified in dollars (for example, a flat dollar payment or an amount based on one or more factors such as age, years of service, and compensation), or as a type or level of coverage (for example, prescription drugs or a percentage of healthcare insurance premiums).

### **Funded ratio**

The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

## SCHEDULE F - GLOSSARY OF TERMS

### **Funding policy**

The program for the amounts and timing of contributions to be made by plan members, employer(s), and other contributing entities (for example, state government contributions to a local government plan) to provide the benefits specified by an OPEB plan.

### **Healthcare cost trend rate**

The rate of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

### **Investment return assumption (discount rate)**

The rate used to adjust a series of future payments to reflect the time value of money.

### **Level dollar amortization method**

The amount to be amortized is divided into equal dollar amounts to be paid over a given number of years; part of each payment is interest and part is principal (similar to a mortgage payment on a building). Because payroll can be expected to increase as a result of inflation, level dollar payments generally represent a decreasing percentage of payroll; in dollars adjusted for inflation, the payments can be expected to decrease over time.

### **Level percentage of projected payroll amortization method**

Amortization payments are calculated so that they are a constant percentage of the projected payroll of active plan members over a given number of years. The dollar amount of the payments generally will increase over time as payroll increases due to inflation; in dollars adjusted for inflation, the payments can be expected to remain level.

### **Net OPEB Obligation**

The cumulative difference since the effective date of this Statement between annual OPEB cost and the employer's contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt. It will be included as a balance sheet entry on the financial statements.

### **Normal cost**

That portion of the Actuarial Present Value of OPEB benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. It is the value of benefits to be accrued in the valuation year by active employees.

### **OPEB-related debt**

All long-term liabilities of an employer to an OPEB plan, the payment of which is not included in the annual required contributions of a sole or agent employer (ARC) or the actuarially determined required contributions of a cost-sharing employer. Payments generally are made in accordance with installment contracts that usually include interest. Examples include contractually deferred contributions and amounts assessed to an employer upon joining a multiple-employer plan.

### **Other postemployment benefits**

Postemployment benefits other than pension benefits. Other postemployment benefits (OPEB) include postemployment healthcare benefits, regardless of the type of plan that provides them, and all postemployment benefits provided separately from a pension plan, excluding benefits defined as termination offers and benefits.

### **Pay-as-You-Go**

A method of financing an OPEB plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

### **Required supplementary information (RSI)**

Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.