

# July 1, 2014 Postretirement Benefits Analysis of City of Cranston Fire and Police

*November 2014*

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## Section 1 – Overview

The City of Cranston (“The City”) has engaged Buck Consultants, LLC (Buck) to prepare an actuarial valuation of their post-retirement benefits program as of July 1, 2014. The City provided employee census data, enrollment data, premiums, asset value, and plan provision information for the Public Safety Employees OPEB Plan. Buck 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 postretirement 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 Government Accounting Standards Board’s Statements Nos. 43 and 45, respectively entitled “Financial Reporting for Post-employment Benefit Plans Other Than Pension Plans” and “Accounting and Financial Reporting by Employers for Post-employment Benefits Other Than Pensions.” Use of this report for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. No one may make any representations or warranties based on any statements or conclusions contained in this report without the written consent of Buck. The attached pages should not be provided without a copy of this report in its entirety.

This valuation reflects anticipated impacts due to Health Care Reform. Specifically, an additional liability expected due to the excise tax on high cost health plans (aka, “Cadillac Tax”) as well as an additional liability due to the requirement to cover adult children up to age 26, were both explicitly reflected in the valuation.

The economic assumptions other than discount rate and the demographic assumptions used for financial accounting purposes were chosen by the plan sponsor with our advice. The discount rate to use for this analysis of 7.5% (same as used in the previous valuation), was prescribed by the employer and we have not evaluated of the continued suitability of that rate for this purpose. The demographic assumptions were the same as used in the previous valuation except that the mortality assumption has been updated to reflect the results of recent research published by the Society of Actuaries, as discussed below.

We believe the assumptions that we evaluated are reasonable for financial accounting purposes. The demographic assumptions used represent a reasonable estimate of future demographic experience of the plan participants. Given the assumptions selected, the costs and actuarial exhibits presented in this report have been prepared in accordance with the requirements of GASB 43 and 45. 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.

It should be understood that future plan experience may differ considerably from what has been assumed. 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 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. In particular, given that the majority of individuals only receive subsidized coverage prior to age 65, variations in assumed and actual retirement ages can have a dramatic impact on results.

If all the assumptions of the July 1, 2013 valuation had been met, we would have expected the Actuarial Accrued Liability to increase from approximately \$60.1 million to \$62.3 million. The difference between the expected Actuarial Accrued Liability and the actual Actuarial Accrued Liability of \$56.8 million is shown in the table below (in millions):

<b>Expected AAL at 7/1/2014 @ 7.5% discount rate</b>	<b>\$62.3</b>
Favorable Claims Experience	\$(5.0)
Revised Mortality Rates	(0.8)
Other Plan Experience (e.g. updated census information)	<u>0.3</u>
<b>Actual AAL at 7/1/2014 @ 7.5% discount rate</b>	<b>\$56.8</b>

The mortality assumption used in this valuation was updated based on the recent Society of Actuaries' (SOA) RP-2014 Mortality Tables Report, released in October 2014<sup>1</sup>. Specifically, for healthy (non-disabled) retirees and active employees, we used the RP-2014 table, with blue-collar adjustment, projected on a fully generational basis using the MP-2014 projection scale. For disabled retirees, we used the RP-2014 table for disabled members, projected on a fully generational basis using the MP-2014 projection scale.

Our valuation was prepared in accordance with generally accepted actuarial principles and practices, and, to the best of our knowledge, fairly reflects the value of the benefits under the Plan as of July 1, 2014. The valuation was prepared under my supervision. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries and have met the Qualifications Standard of the American Academy of Actuaries to render the actuarial opinions contained herein.

<sup>1</sup> <https://www.soa.org/Research/Experience-Study/Pension/research-2014-rp.aspx>

Thank you for this opportunity to be of service. I am available to answer questions about this report.

Respectfully Submitted,

BUCK CONSULTANTS, LLC



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Reza Vahid, CFA, FSA, MAAA  
Director, Health & Productivity  
Health Practice

November 13, 2014

Date

## Section 2 – Required Information

	Full Prefunding	Full Prefunding
Interest Rate	7.5%	7.5%
Increasing Rate	3.75%	3.75%
Amortization Period	23 years	22 years
a) Actuarial valuation date	July 1, 2013	July 1, 2014
b) Actuarial Value of Assets	\$ 1,089,925	\$ 2,918,296
c) Actuarial Accrued Liability		
Active participants	\$ 26,900,500	\$ 24,891,683
Retired participants	33,159,036	31,950,562
Total AAL	\$ 60,059,536	\$ 56,842,245
d) Unfunded Actuarial Liability "UAL" [ c - b ]	\$ 58,969,611	\$ 53,923,949
e) Funded ratio [ b / c ]	1.81%	5.13%
f) Annual covered payroll	\$ 21,576,605	\$ 21,982,918
g) UAL as percentage of covered payroll [ d / f ]	273.30%	245.30%
h) Normal Cost for upcoming fiscal year	\$ 1,430,205	\$ 1,278,770
i) Amortization of UAL for upcoming fiscal year	\$ 3,685,914	\$ 3,469,840
j) Annual Required Contribution "ARC" for upcoming fiscal year [ h + i ]	\$ 5,116,119	\$ 4,748,610
k) Expected benefit payments for upcoming fiscal year	\$ 3,647,128	\$ 3,687,984
l) Increase in annual cost to fund the Plan [ j - k ]	\$ 1,468,991	\$ 1,060,626

Numbers may not add due to rounding.

## Section 3 – Medical Premiums

Health benefits are available to employees and pre-Medicare retirees through several different medical plans, including Classic Blue Cross, Health Mate HMO, and United Health PPO. The city pays a portion of the medical premium for retiree only until the retiree reaches age 65. The retiree pays the full premium for Medicare coverage. Costs for dependent coverage are paid for by the retiree after age 65.

The following rates were provided by the City. These rates are gross of retiree contributions and reflect the average cost of coverage, including administration fees, for plan participants. It is our understanding that the plan is self-insured and the premiums below include any applicable stop-loss and administrative fees.

### Annual Premiums Effective July 1, 2014

#### Health Mate – Fire

Individual	8,532
Family	19,882

#### Health Mate – Police

Individual	8,336
Family	19,882

#### Blue Cross Classic – Police and Fire

Individual	8,592
Family	21,746

#### United Health Care – Police and Fire

Individual	9,655
Family	26,436

## Section 4 – Membership Data

### Census data effective July 1, 2014

The following members were provided by The City for this valuation.

Number of Employees*	Total
Actives	
Count	333
Average Age	41.8
Average Service	13.5
Retirees with Medical Coverage	
Less than Age 65**	169
Age 65 or Older	16
Dependents	143
Average Age of Retirees with Medical Coverage	58.1
Retirees with Life Insurance Coverage Only	164
Total**	
Count	825

\*Census data only includes current eligible employees and former employees of the Police and Fire departments.

\*\*Counts include 25 retirees valued with Buyback Reimbursements.



## Section 5 – Required Supplementary Information

### Schedule of Funding Progress

Actuarial Valuation Date	(a) Actuarial Value of Assets	(b) Actuarial Accrued Liability (AAL)	(b) - (a) Unfunded AAL (UAL)	(a) / (b) Funded Ratio
July 1, 2004	0	38,136,229	38,136,229	0.00%
July 1, 2005	0	40,134,094	40,134,094	0.00%
July 1, 2006	0	47,921,198	47,921,198	0.00%
July 1, 2007	127,671	47,222,807	47,095,136	0.27%
July 1, 2008	505,545	52,191,492	51,685,947	0.97%
July 1, 2009	397,327	50,533,441	50,136,114	0.79%
July 1, 2010	450,533	50,765,110	50,314,577	0.89%
July 1, 2011	114,890	52,934,184	52,819,294	0.22%
July 1, 2012	255,153	63,353,593	63,098,440	0.40%
July 1, 2013	1,089,925	60,059,536	58,969,611	1.81%
July 1, 2014	2,918,296	56,842,245	53,923,949	5.13%

## Section 6 – 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)**

Year Ending June 30	Annual Required Contribution	Interest on NOO	Adjustment to ARC	Annual OPEB Cost (1) + (2) - (3)	Contribution	Change in NOO (4) - (5)	NOO Balance
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
2007	3,515,765			3,515,765	3,692,176	(176,411)	(176,411)
2008	3,606,418	0	0	3,606,418	3,700,648	(94,230)	(270,641)
2009	4,047,835	(7,538)	(4,864)	4,045,161	3,273,843	771,318	500,677
2010	4,092,301	54,167	(141,459)	4,287,927	3,649,942	637,985	1,138,662
2011	4,089,059	91,093	64,134	4,116,018	3,500,000	616,018	1,754,680
2012	4,405,694	140,374	114,922	4,431,146	4,420,103	11,043	1,765,723
2013	5,412,191	132,429	115,456	5,429,164	4,405,694	1,023,470	2,789,193
2014	5,116,119	209,189	187,415	5,137,893	5,412,191	(274,298)	2,514,895
2015	4,748,610	188,617	173,963	4,763,264			

Note: Fiscal Year Ending 6/30/2007 through 6/30/2013 values are as originally published in audited financial statements.

## ***Section 7 – Schedule of Employer Contributions***

The Governmental 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 schedule shown on the following page, amortization of the unfunded accrued liability is increasing at 3.75% for 22 years. For purposes of this projection, the normal cost is expected to increase at the same rate as the assumed ultimate health care trend rate. In reality, the normal cost is likely to grow slower, if not decline due to later assumed retirement ages under RIRSA (the Rhode Island Retirement Security Act of 2011). The contributions were computed assuming that the contribution is paid on July 1, at the beginning of the fiscal year, and that earnings on assets are as anticipated.

Paragraph 12 of GASB 45 stipulates that valuations must be performed at least biennially; however the City has traditionally had valuations performed annually. The following projections are intended only to illustrate long-term cash flow implications of Prefunding versus Pay-as-You-Go costs. The pay-as-you-go amounts shown reflect benefits only those individuals currently employed by the City.

## Section 7 – Schedule of Employer Contributions

Fiscal Year	Amortization			
	<u>Ending In</u>	<u>Normal Cost</u>	<u>of UAL</u>	<u>ARC</u>
2015	1,278,770	3,469,840	4,748,610	3,687,984
2016	1,336,315	3,599,959	4,936,274	4,018,992
2017	1,396,449	3,734,957	5,131,406	4,416,719
2018	1,459,289	3,875,018	5,334,307	4,745,423
2019	1,524,957	4,020,331	5,545,288	4,995,177
2020	1,593,580	4,171,093	5,764,673	5,391,309
2021	1,665,291	4,327,509	5,992,800	5,657,346
2022	1,740,229	4,489,791	6,230,020	5,775,626
2023	1,818,539	4,658,158	6,476,697	5,977,428
2024	1,900,373	4,832,839	6,733,212	6,127,863
2025	1,985,890	5,014,070	6,999,960	5,674,003
2026	2,075,255	5,202,098	7,277,353	5,692,000
2027	2,168,641	5,397,177	7,565,818	5,722,649
2028	2,266,230	5,599,571	7,865,801	5,765,096
2029	2,368,210	5,809,555	8,177,765	5,724,658
2030	2,474,779	6,027,413	8,502,192	5,607,108
2031	2,586,144	6,253,441	8,839,585	5,698,336
2032	2,702,520	6,487,945	9,190,465	5,333,591
2033	2,824,133	6,731,243	9,555,376	5,456,144
2034	2,951,219	6,983,665	9,934,884	5,472,907
2035	3,084,024	7,245,552	10,329,576	5,818,650
2036	3,222,805	7,517,260	10,740,065	5,484,862
2037	3,367,831	-	3,367,831	5,616,125
2038	3,519,383	-	3,519,383	5,154,681
2039	3,677,755	-	3,677,755	5,098,022
2040	3,843,254	-	3,843,254	5,045,403
2041	4,016,200	-	4,016,200	5,030,714
2042	4,196,929	-	4,196,929	5,230,935
2043	4,385,791	-	4,385,791	5,434,344
2044	4,583,152	-	4,583,152	5,529,234
2045	4,789,394	-	4,789,394	5,536,285
2046	5,004,917	-	5,004,917	5,318,727
2047	5,230,138	-	5,230,138	4,821,151

## **Schedule A – Actuarial Assumptions and Methods**

<b>Interest:</b>	7.50% per year, net of investment expenses, as prescribed by the City. Consistent with assumption adopted for MERS.
<b>Actuarial Cost Method:</b>	Projected Unit Credit. Benefits are attributed from date of hire until full benefit eligibility.
<b>Asset Valuation Method:</b>	Market value.
<b>Amortization period:</b>	Closed basis. The amortization period is a specific number of years that is counted from one date, declining to zero with the passage of time. As of the valuation date, 22 years remain. Amortization amounts are assumed to increase with overall salary increases of 3.75%.
<b>Future Participation:</b>	<p>85% of Police officers are assumed to elect retiree benefit coverage from the City. 15% are assumed to receive coverage elsewhere, with the City reimbursing the difference in premium up to the amount of the City-provided benefit.</p> <p>100% of Firefighters are assumed to elect retiree benefit coverage from the City.</p>
<b>Current Participation:</b>	For purposes of measuring life insurance coverage, male reported covered “retirees” are assumed to be retirees with life insurance coverage, and female reported covered “retirees” are assumed to surviving spouses without life insurance coverage.
<b>Medical Plan Costs:</b>	For retirees and their dependents, estimated net per capita incurred claim costs for 2014-2015, normalized to age 65 based on the morbidity rates disclosed below, are \$11,799. The amount was based on premium amounts provided by the City and weighted based on current retiree enrollment elections. It is assumed that future retirees and current retirees now under age 65 will be Medicare eligible when they reach age 65, at which point Cranston subsidized coverage will cease.

For dependent children, we assumed the cost of children would be 50% of the cost of an age 65 retiree. Additionally, we assumed 50% of married participants would have covered children.

Police retirees who do not elect City coverage are eligible to be reimbursed for the cost of coverage, up to the City-provided benefit level. Based on actual reimbursement data from the City, we assumed that future retirees electing this option would receive \$2,570 annually. Reimbursement amounts for current retirees were provided by the City.

We further assumed that the reimbursement amount would increase in future years according to the medical trend assumption below.

**CPI:** 3.0% per year

**Administrative Costs:** Assumed to be included in the reported premiums for medical insurance. 10% of benefit amount for life insurance.

**Morbidity Rates:**

<u>Age</u>	<u>Annual Increase Retiree</u>
64 and below	2.50%
65 and above	2.00%

**Medical Trend:**

<u>Fiscal Year Ending In</u>	<u>Trend</u>
2015	7.5%
2016	7.0%
2017	6.5%
2018	6.0%
2019	5.5%
2020	5.0%
2021+	4.5%

**Termination Rates:** Termination rates are based on the Police and Fire termination rate table published in the 2010 MERS Experience Study.

**Retirement Rates:** For retirees participating in the state pension plan, retirement rates are based on the Police and Fire retirement rate table with the Optional 20 year retirement elections published in the 2010 MERS Experience Study, as modified by the 2012 MERS valuation report to account for later retirement eligibility ages resulting from RIRSA. Retirees are assumed to retire when they are first eligible for an unreduced benefit, with an additional 10% per year of deferral added to the retirement rate at first eligibility. All members are assumed to retire upon reaching age 65 with at least 10 years of service. The published rates are service-based rates but are assumed to be applicable at all ages.

All other retirees are assumed to retire according to the retirement rates published in the report for the City pension plan.

**Disability Rates:** Accidental and ordinary disability rates are based on the Fire and Police disability rate table published in the 2010 MERS Experience Study.

**Mortality Rates:** For healthy (non-disabled) retirees and active employees, RP-2014 table, with blue-collar adjustment, projected on a fully generational basis using the MP-2014 projection scale.

For disabled retirees, RP-2014 table for disabled members, projected on a fully generational basis using the MP-2014 projection scale.

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

## **Schedule B - Summary of Program Provisions**

<b>Retirement Eligibility:</b>	<p>20 years of service for healthy retirees.</p> <p>Firefighters who become disabled in the line of duty are eligible to receive individual coverage after 5 years of service and family coverage after 10 years of service.</p> <p>Disabled Police are eligible to participate with no service requirement.</p>
<b>Pre-65 Medical Insurance:</b>	<p>Current retirees who are under age 65 are assumed to remain covered by the medical plan until age 65, at which time their city provided cost coverage stops unless they are not eligible for Medicare.</p> <p>Retirees are offered several different medical plans including Classic Blue Cross, Health Mate HMO and United Health PPO. Police retirees may also choose to opt out of city-provided medical coverage in which case they are eligible to be reimbursed for the cost of coverage, up to the City-provided benefit level.</p>
<b>Post-65 Medical Insurance:</b>	<p>Retirees over age 65 remain in the medical plan until death, if not eligible for Medicare. It is assumed that retirees who are now under age 65 will become eligible for Medicare when they reach age 65.</p> <p>Most retirees over age 65 are offered a Medicare supplement plan (Plan 65) on a retiree pay-all-basis, but the premiums charged for this plan are assumed to be self-supporting and, thus, no liability associated with this benefit is reflected in the valuation.</p>
<b>Dental Insurance:</b>	<p>Dental insurance is available to retirees on a retiree pay all basis. The premiums are assumed to be self-supporting thus the dental benefits are not reflected in this valuation.</p>



**Retiree Contributions:**

Neither retirees, nor their dependents, contribute toward the cost of City subsidized medical and life insurance benefits included in our valuation calculations. Retirees contribute the full cost of all other coverage, such as for post-65 medical insurance and for additional life insurance benefits.

**Dependent Coverage:**

For police, dependents are eligible for coverage upon the member's retirement date, or upon the member's death while in active service. City paid benefits for dependents of retired employees cease at the retiree's normal retirement age, or upon the death of the retiree. City paid benefits for surviving spouses of police who died in active service cease at the retiree's normal retirement age. In both cases, the normal retirement age is assumed to be age 65.

For firefighters, dependents are eligible for coverage upon the member's retirement date, or upon the member's death while in active service if the active member has attained 10 years of service. Dependents' City paid benefits cease at the retiree's normal retirement age (assumed to be age 65).

**Life Insurance Benefit:**

Police retirees are entitled to a City paid life insurance benefit of \$17,000 if they retired after July 1, 1982. Firemen retiring after July 1, 1981 are eligible for the \$17,000 benefit. Fire retirees retired between July 1, 2002 and June 30, 2007 are entitled to a City paid life insurance benefit of \$20,000 and if a firemen retirees after July 1, 2007, a \$25,000 life insurance benefit is payable.

In addition to the above, firefighters who retire with an occupational injury or illness receive a City paid life insurance benefit of \$50,000 if death occurs within 3 years of his/her retirement date.

Our valuation does not include any other life insurance products for which the retiree pays the full premium.

## **Schedule C – Considerations of Health Care Reform**

**Early Retiree Reinsurance Program ("ERRP"):** This program is no longer operational.

**Removal of Lifetime Maximum:** Any cost in relations to removal of any historic annual or lifetime maximums is assumed to already have been reflected in the premiums that we were provided.

**Expansion of Child Coverage to Age 26:** Cost of expansion of coverage to adult children is assumed to be reflected in the premiums provided. Given the higher probability of children coverage, we have modified this calculation to more explicitly reflect the cost of covering children.

**Excise Tax on High-Cost Employer Health Plans (aka Cadillac Tax) - Effective January 1, 2018:**

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 tax based on average premium amount without age adjustment and a 3.0% CPI assumption, and have included the estimated tax in the liabilities. The liability and normal cost attributable to the Cadillac tax are \$987,327 and \$32,074 respectively.

**Other Revenue Raisers:** The Health Care Reform includes a variety of other revenue raisers that involve additional costs on providers (such as medical device manufacturers) and insurers. We considered these factors when developing the trend assumptions.

**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.