July 1, 2016 Postretirement Benefits Analysis of City of Cranston Fire and Police

December 2016

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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, 2016. 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 for the fiscal year ending June 30, 2017, by the requirements in the Governmental Accounting Standards Board's ("GASB") Statement No. 45 entitled and "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions". We understand that separate plan accounting under GASB 43 has not been performed in the past and thus we did not provide a schedule of employer contributions due to the upcoming revised accounting standards discussed below.

Revised GASB Accounting Standards

Governmental Accounting Standards Board (GASB) Statement No. 74 (GASB 74) replaces GASB 43 for plan years beginning after June 15, 2016. GASB 75 replaces GASB 45 for plan years beginning after June 15, 2017. *The calculations included in this report are not appropriate for reporting under GASB 74 or 75.* Furthermore, we understand that separate plan accounting for The City has typically not been performed. A separate actuarial review will be needed to calculate financial information under the new GASB standards, and if separate plan accounting under GASB 74 is required.

Methods and Assumptions

We reflected more recent plan premium equivalent rates in effect as of July 1, 2016 in developing per capita costs. This resulted in lower per capita costs compared to the June 30, 2015 costs and reduced plan liabilities by approximately 5%.

The economic assumptions other than the discount rate and the demographic assumptions used for financial accounting purposes were chosen by the plan sponsor with our advice. These assumptions are the same as those used in the July 30, 2015 valuation, released in December 2015.

All other assumptions are the same as those used in the prior valuation as of June 30, 2015 and released in December 2015.

We believe these assumptions are reasonable for financial accounting purposes. The demographic assumptions used represent a reasonable estimate of future demographic experience of the plan participants. The demographic assumptions reflect the impact of Rhode Island pension reform, and subsequent settlement. The union representing Cranston's Police and Fire employees and retirees recently challenged the results of this settlement through litigation, but we understand the terms of the settlement were upheld. Therefore, Police and Fire retirees are bound by the terms of the settlement.

Qualifications

Given the assumptions selected, the costs and actuarial exhibits presented in this report have been prepared in accordance with the requirements of GASB 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.

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. Measurement of the sensitivity of these results is outside the scope of our assignment.

Use of this report for any other purposes or by anyone other than The City and its auditors may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, or inapplicability of the report for that purpose. The attached pages should not be provided without a copy of this cover letter. Because of the risk of misinterpretation of actuarial results, you should ask Buck to review any statement you wish to make on the results contained in this report. Buck will not accept any liability for any such statement made without review by Buck.

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, 2016. The valuation was prepared under my supervision. I am an Associate 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.

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

Respectfully Submitted,

BUCK CONSULTANTS, LLC

Scott Bush

Scott Bush, ASA, MAAA
Director, Health Practice

December 12, 2016
Date

Section 2 – Required Information

		Full Prefunding	Full Prefunding
	Interest Rate	7.9%	7.9%
	Increasing Rate	3.75%	3.75%
	Amortization Period	21 years	20 years
a)	Actuarial valuation date	July 1, 2015	July 1, 2016
b)	Actuarial Value of Assets	$ 4,060,566	$ 4,546,812
c)	Actuarial Accrued Liability		
	Active participants	$ 26,453,158	$ 26,750,135
	Retired participants	33,440,552	33,565,778
	Total AAL	$ 59,893,710	$ 60,315,913
d)	Unfunded Actuarial Accrued Liability "UAAL" [c - b]	$ 55,833,144	$ 55,769,101
e)	Funded ratio [b / c]	6.78%	7.54%
f)	Annual covered payroll	$ 21,573,372	$ 22,996,148
g)	UAAL as percentage of covered payroll [d / f]	258.81%	242.52%
h)	Normal Cost for upcoming fiscal year	$ 1,228,993	$ 1,163,083
i)	Amortization of UAAL for upcoming fiscal year	$ 3,826,723	$ 3,945,758
j)	Annual Required Contribution "ARC" for upcoming fiscal year [h + i]	$ 5,055,716	$ 5,108,841
k)	Expected benefit payments for upcoming fiscal year	$ 3,838,222	$ 4,014,279

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, 2016	
Health Mate – Fire	
Individual	8,153
Family	19,248
Health Mate – Police	
Individual	7,970
Family	18,795
Blue Cross Classic – Police and Fire	
Individual	8,210
Family	20,542
United Health Care – Police and Fire	
Individual	11,376
Family	31,147

Section 4 – Membership Data

Census data effective July 1, 2016

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

Number of Employees*	**Total**
Actives	
Count	334
Average Age	43.1
Average Service	14.5
Retirees with Medical Coverage	
Less than Age 65**	164
Age 65 or Older	14
Dependents	139
Average Age of Retirees with Medical Coverage	58.9
Retirees with Life Insurance Coverage Only	166
Total**	
Count	817

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

**Counts include 23 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 (UAAL)	(a) / (b) Funded Ratio
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%
July 1, 2015	4,060,566	59,893,710	55,833,144	6.78%
July 1, 2016	4,546,812	60,315,913	55,769,101	7.54%

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)
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	5,116,119	(352,855)	2,162,040
2016	5,055,716	170,801	159,890	5,066,627	4,748,610	318,017	2,480,057
2017	5,108,841	195,925	189,330	5,115,436			

Note: Fiscal Year Ending 6/30/2008 through 6/30/2015 values are as originally published in audited financial statements.

Schedule A – Actuarial Assumptions and Methods

Discount Rate:	7.90% per year, net of investment expenses, as prescribed by the City.
Funding Policy:	The City is pre-funding the Unfunded Actuarial Accrued Liability (UAAL) by contributing the annual required contribution annually for over the 20 year amortization period, assuming contributions are made at the beginning of the year. The UAAL is not sufficient to cover the estimated cost of settling the plan's benefit obligations, but is appropriate to use to estimate the ARC for the purpose of prefunding the benefit.
Actuarial Cost Method:	Projected Unit Credit. Benefits are attributed from date of hire until full benefit eligibility.
Asset Valuation Method:	Market value.
Amortization period:	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, 20 years remain. Amortization amounts are assumed to increase with overall salary increases of 3.75%.
Future Participation:	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. 100% of Firefighters are assumed to elect retiree benefit coverage from the City. These assumptions are derived from observations of enrollment of safety officers in similar plans and general expectations based on actuarial judgement as experience is not credible to develop assumption independently.
Current Participation:	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.
Medical Plan Costs:	For retirees and their dependents, estimated net per capita incurred claim costs for 2015-2016, normalized to age 65 based on the morbidity rates disclosed below, are $13,818. 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 $3,407 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, but would not be affected by the age of the retiree.

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 Factors: Per capita costs are adjusted to reflect the relative cost of health coverage based on a retiree's age and sex. Representative relative values, relative to a male aged 65 are presented in the table below:

Age	Male	Female
25	0.1450	0.2984
30	0.1800	0.4251
35	0.2253	0.4631
40	0.2843	0.4639
45	0.3524	0.4911
50	0.4602	0.5723
55	0.6038	0.6667
60	0.7779	0.7776
65	1.0000	0.9107
70	1.0894	1.0178
75	1.1700	1.1024
80	1.2283	1.1652
85	1.2372	1.2087
90	1.2143	1.2208
95	1.1975	1.1718
100	1.1816	1.0742

The age/sex health care cost relativities implemented in this valuation reflect associated differences in medical costs are based on data from the recent study, "Health Care Costs - From Birth to Death" prepared by Dale H. Yamamoto and sponsored by the Society of Actuaries.

Healthcare Cost Trend:	Applies to stated medical plan premiums and per capita medical costs.

Year	Trend
FY2017 → FY2018	7.25%
FY2018 → FY2019	7.00%
FY2019 → FY2020	6.75%
FY2020 → FY2021	6.50%
FY2021 → FY2022	6.25%
FY2022 → FY2023	6.00%
FY2023 → FY2024	5.75%
FY2024 → FY2025	5.50%
FY2025 → FY2026	5.25%
FY2026 and later	5.00%

The initial trend rates are developed using Buck's National Health Care Trend Survey. The survey gathers information of trend expectations for the coming year from various insurers and PBMs. These trends are broken out by drug and medical, as well type of coverage (e.g. PPO, HMO, POS). We selected plans that most closely match Cranston City's benefits and blended the drug trend to the corresponding medical trend to create the composite initial trends. The ultimate trend is developed based on a building block approach which considers CPI, GDP, and Technology growth. We looked at projections published by CMS as well as considering the latest Getzen model as published by the Society of Actuaries to come up with these expectations.

Termination Rates: All employees are assumed to terminate from active service based on the MERS General Employees' rate tables for Police and Fire employees published in the 2014 ERSRI Experience Study.

Retirement Rates: All employees participating in the state retirement system are assumed to retire from active service based on the MERS General Employees' rate tables for Police and Fire employees published in the 2014 ERSRI Experience Study. Employees who are not eligible to retire at an earlier date as a result of the settlement agreement, 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. We assumed that the published rates are service-based rates but are assumed to be applicable at all ages.

All other retirees participate in the town pension plan and 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 2014 ERSRI Experience Study.

Pre-Retirement Mortality Rates: 75% of the RP-2000 Combined tables with white-collar adjustment for males and females, consistent with the pre-retirement mortality assumption recommended in the 2014 ERSRI Experience Study. We believe it is reasonable to not apply an explicit mortality improvement scale to the base tables, since doing so would not have a significant effect on the valuation results.

Post-Retirement Mortality Rates: For healthy retirees, 115% of RP-2000 Combined Healthy for Males with White Collar adjustments, projected with Scale AA from 2000, consistent with post-retirement mortality assumption recommended by 2014 ERSRI Experience Study. 95% of RP-2000 Combined Healthy for Females with White Collar adjustments, projected with Scale AA from 2000, consistent with post-retirement mortality assumption recommended by 2014 ERSRI Experience Study. A sensitivity run using the Tables above projected with Scale BB from 2000, which reflects more recent mortality improvement, impacted the AAL by 0.9%. Therefore, we felt it appropriate to use the same assumption used for the State System.

For disabled retirees, 60% of the PBGC Table Va for disabled males eligible for Social Security disability benefits, consistent with post-retirement mortality assumption recommended by 2014 ERSRI Experience Study. 60% of the PBGC Table VIa for disabled females eligible for Social Security disability benefits, consistent with post-retirement mortality assumption recommended by 2014 ERSRI Experience Study.

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. These assumptions are consistent with observations of enrollment of safety officers in similar plans and general expectations based on actuarial judgement as experience is not credible to develop assumption independently.

Schedule B - Summary of Program Provisions

Retirement Eligibility:	20 years of service for healthy retirees. 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. Disabled Police are eligible to participate with no service requirement.
Pre-65 Medical Insurance:	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. 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.
Post-65 Medical Insurance:	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. 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.
Dental Insurance:	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.

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

We have not identified any specific provision of health care reform that would be expected to have a significant impact on the measured obligation, other than the Excise Tax on High-Cost Employer Health Plans ("Cadillac Tax"). 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. As additional guidance on the legislation is issued, we will continue to monitor any potential impacts.