

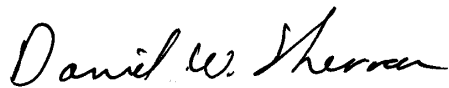
**REPORT ON
THE VALUATION OF
CITY OF CRANSTON
FIRE AND POLICE DEPARTMENT
PENSION PLANS
AS OF JULY 1, 2009**

December 2009

This report presents the results of the actuarial valuation of the City of Cranston Fire Department and Police Department Pension Plans, prepared as of July 1, 2009. The purpose of this valuation was to determine the current funded position of the Pension Plans and the FYE contributions needed to fund these pension obligations. A 23-year amortization schedule for the unfunded accrued liability has been utilized.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,



12/22/09

Daniel W. Sherman, ASA, MAAA, EA
Director and Consulting Actuary

Date



12/10/2009

Marcus Cleary, ASA, MAAA
Consultant

Date

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**REPORT ON THE VALUATION OF THE CITY OF CRANSTON
FIRE AND POLICE DEPARTMENT PENSION PLANS
AS OF JULY 1, 2009**

SECTION I - SUMMARY OF PRINCIPAL RESULTS

For convenience of reference, the principal results of the valuation are summarized below:

Valuation Date: July 1, 2009	Fire	Police	Total
Number of active members			
Vested	50	20	70
Nonvested	<u>0</u>	<u>0</u>	<u>0</u>
Total	50	20	70
Annual salaries	\$ 3,357,126	\$ 1,281,810	\$ 4,638,936
Number of service retirees, disability retirees, and beneficiaries	221	205	426
Annual retirement allowances	\$ 10,804,045	\$ 9,240,709	\$ 20,044,754
Number of former members entitled to deferred benefits	0	0	0
Valuation value of assets without receivable	\$ 24,870,783	\$ 18,533,588	\$ 43,404,371
Valuation value of assets with receivable	\$ 35,247,887	\$ 26,821,152	\$ 62,069,039
Unfunded actuarial accrued liability without receivable	\$133,506,551	\$ 110,744,577	\$ 244,251,128
Total normal contribution rate	31.05%	32.74%	N/A
Recommended City FYE 2011 contribution assumed payable January 1, 2011	\$ 13,313,511	\$ 10,634,217	\$ 23,947,728

Comments on the valuation results as of July 1, 2009 are given in Section IV and the appropriation payable by the City during the fiscal period beginning July 1, 2010 is set out in Section V.

SECTION I - SUMMARY OF PRINCIPAL RESULTS (continued)

Actuarial Experience

In performing the actuarial valuation, various assumptions are made regarding such factors as mortality, retirement, disability, and withdrawal rates as well as both payroll, salary increases, and investment returns. A comparison of the current valuation and the prior valuation is made to determine how closely actual experience corresponded to anticipated occurrences. This analysis of the system provides insight into the overall quality of the actuarial assumptions and helps explain any change in the annual appropriation.

During the last year, the total unfunded actuarial accrued liability increased by \$16,425,881 (7.2%) to \$244,237,470 from an expected accrued liability of \$227,811,589. The increase is the result of a \$4,712,990 net liability loss and a \$11,726,549 investment loss. The actual investment return was -15.0% during 2008, which is less than our assumed return of 8%.

The sources of the (gain)/loss are as follows:

Investment	\$ 11,726,549
Salary Increases	192,846
Retiree Mortality	184,711
Active Retirement Decrement	2,359,371
Active Termination Decrement	5
Active Mortality Decrement	(13,650)
Active Disability Decrement	223,990
Retiree Data Corrections with new spouse information	<u>1,765,717</u>
Total (gain)/loss	\$ 16,439,539

SECTION I - SUMMARY OF PRINCIPAL RESULTS (continued)

Schedule A of this report presents the results of the valuation and shows the present and prospective assets and liabilities of the Pension Plans as of July 1, 2009.

Schedule B of this report outlines the actuarial assumptions used in the valuation.

Schedule C of this report presents a summary of the main provisions of the Pension Plans used in the valuations. Please note that cost of living increases granted to fire retirees in receipt prior to January 1, 1995 and their beneficiaries as well as police retirees in receipt before November 25, 1996 and their beneficiaries have been included.

Schedule D details the age and service breakdown of the active participants and the salary used in the valuation.

Schedule E shows a projection of expected pension payments over the next 40 years assuming no new participants are added to the plan.

Schedule F provides a forecast of the appropriation payments over the next 30 years assuming no new participants are added to the plan and that payments are made mid-fiscal year. The appropriation for FYE 2010 will remain as budgeted, while results of this report will officially go into effect for the FYE 2011 appropriation.

Schedule G illustrates the development of the Net Pension Obligation as of June 30, 2009.

SECTION II - EMPLOYEE DATA

Employee data was furnished by the City. Buck did not edit the data although they were reviewed for reasonableness and consistency with the prior year's information. Schedule D shows the number and annual salaries of active members.

The number and annual retirement allowances of retired and disabled lives and beneficiaries as of July 1, 2009 are as follows:

	<u>Number</u>	<u>Annual Allowances</u>
Retired Lives	263	\$ 13,807,291
Disabled Lives	83	\$ 3,989,291
Beneficiaries	<u>80</u>	<u>\$ 2,248,172</u>
Total	426	\$ 20,044,754

SECTION III - ASSETS

The amount of the assets taken into account in the valuation was obtained from information submitted by the City.

The value of the assets of the system as of July 1, 2009 was as follows:

Fund		Fire		Police		Total
Cash	\$	1,078,702	\$	50,863	\$	1,129,565
Paine Webber		0		0		0
Columbia Partners		43		43		86
PIMCO Bond Account		3		3		6
UBS Money Market		233		233		466
JMS Account		15,626,873		10,317,517		25,944,390
Janney-Equities Stocks		63,826		63,826		127,652
Janney-Equit. Mut Fnd/ETF/UIT		4,992,522		4,992,522		9,985,044
Janney-Fx Inc Mut Fnd/ETF/UIT		3,107,744		3,107,744		6,215,488
Janney-Taxable Dividends		837		837		1,674
Accrued Interest Receivable		<u>0</u>		<u>0</u>		<u>0</u>
Total Market Value of Assets	\$	24,870,783	\$	18,533,588	\$	43,404,371
Contribution Receivable		<u>10,377,104</u>		<u>8,287,564</u>		<u>18,664,668</u>
Valuation Value of Assets with Receivable	\$	35,247,887	\$	26,821,152	\$	62,069,039

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report presents the results of the valuation and shows the present and prospective assets and liabilities of the Pension Plans as of July 1, 2009. Total aggregate actuarial liabilities equal (a) \$255,068,776, which equals the present value of obligations to retired members and their beneficiaries, plus (b) \$42,457,877, which equals the value of prospective benefits of active members, for a total of \$297,526,653. Against these prospective liabilities, the Plans have present assets of \$43,404,371. This leaves \$254,122,282 to be met by future contributions.

The unadjusted unfunded accrued liability amounts to \$244,251,128, leaving \$9,871,154 to be met by future normal contributions. We recommend normal contribution rates of 31.05% for Fire and 32.74% for Police. Applying these rates to the compensation of active members and assuming payment in FYE 2011 would produce a total normal contribution of \$1,838,683. Estimated employee contributions are \$605,879, leaving \$1,232,805 as the City's normal contribution.

Before amortizing the unfunded liability for the past service contribution payment, adjustments were made under the assumption that payment begins in FYE 2011. Adjusting for interest and an asset receivable of \$20,157,842 (which is the FYE 2010 budgeted contribution payment of \$19,396,892 accumulated to July 1, 2010), the new adjusted unfunded accrued liability amounts to \$244,819,643. Amortizing an adjusted unfunded accrued liability of \$254,424,037 over a period of 23 years results in a past service contribution of \$22,714,924, commencing in FYE 2011.

SECTION V - ACCOUNTING INFORMATION

Information required under Statement No.25 of Governmental Accounting Standard Board (GASB) is shown below:

SCHEDULE OF FUNDING PROGRESS \$000

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as % of Covered Payroll [(b)-(a)]/(c)
July 1, 1996	\$ 11,760	\$ 158,974	\$ 147,214	7.4%	\$ 14,078	1046%
July 1, 1998	17,461	174,057	156,596	10.0%	10,553	1484%
July 1, 1999	17,953	187,737	169,784	9.6%	9,855	1723%
July 1, 2001	20,805	211,799	190,994	9.8%	11,148	1713%
July 1, 2002	19,237	256,292	237,055	7.5%	10,654	2225%
July 1, 2003	17,960	218,407	200,447	8.2%	9,596	2089%
July 1, 2004	27,622	242,850	215,228	11.4%	9,446	2279%
July 1, 2005	31,641	252,222	220,581	12.5%	7,879	2800%
July 1, 2006	39,606	257,475	217,869	15.4%	7,013	3107%
July 1, 2007	51,372	259,643	208,271	19.8%	6,678	3119%
July 1, 2008	50,961	278,857	227,896	18.3%	6,093	3740%
July 1, 2009	43,404	287,655	244,251	15.1%	5,416	4510%

SCHEDULE A - RESULTS OF THE VALUATION AS OF JULY 1, 2009

	Fire	Police	Total
1. Actuarial Liabilities			
(a) Present value of benefits to be paid on account of active members	\$ 32,054,041	\$ 10,403,836	\$ 42,457,877
(b) Present value of benefits payable to retired members and beneficiaries	<u>133,337,082</u>	<u>121,731,694</u>	<u>255,068,776</u>
(c) Total actuarial liabilities	\$ 165,391,123	\$ 132,135,530	\$ 297,526,653
2. Market Value of Assets	\$ 24,870,783	\$ 18,533,588	\$ 43,404,371
3. Total Prospective Contributions by the City (1(c) minus 2)	\$ 140,520,340	\$ 113,601,942	\$ 254,122,282
4. Unfunded Accrued Liability	\$ 133,506,551	\$ 110,744,577	\$ 244,251,128
5. Present Value of Future Normal Contributions	\$ 7,013,789	\$ 2,857,365	\$ 9,871,154
6. Present Value of Future Salaries of Present Active Members	\$ 22,589,000	\$ 8,727,000	\$ 31,316,000
7. Normal Contribution Rate (5 divided by 6)	31.05%	32.74%	31.52%
8. Valuation Payroll used for Contribution Purposes	\$ 4,029,893	\$ 1,386,149	\$ 5,416,042
9. Normal Cost Including Interest			
(a) Employees	\$ 457,504	\$ 148,374	\$ 605,878
(b) City	<u>895,401</u>	<u>337,403</u>	<u>1,232,804</u>
(c) Total ((a) plus (b))	\$ 1,352,905	\$ 485,777	\$ 1,838,682
10. Asset Receivable as of July 1, 2009	\$ 10,377,104	\$ 8,287,564	\$ 18,664,668
11. Adjusted Unfunded Accrued Liability for FYE 2011 payment	\$ 139,092,066	\$ 115,331,971	\$ 254,424,037
12. City Contribution to Amortize Unfunded Accrued Liability over 23 Years	\$ 12,418,110	\$ 10,296,814	\$ 22,714,924
13. Total Contribution (Employees plus City) (9(c) plus 12)	\$ 13,771,015	\$ 10,782,591	\$ 24,553,606
14. Recommended City Contribution for FYE 2011 payment (13 minus 9(a))	\$ 13,313,511	\$ 10,634,217	\$ 23,947,728

SCHEDULE B - SUMMARY OF ASSUMPTIONS

Investment Return	8%																		
Postretirement mortality	RP-2000 healthy male and female tables. Set forward three years for disabled lives.																		
Preretirement mortality	RP-2000 healthy male and female tables. A special table is used for disability. (7.5% of deaths assumed to be service related)																		
Disability	<table border="0" style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;"><u>Age</u></th> <th style="text-align: left;"><u>Rate</u></th> </tr> </thead> <tbody> <tr><td>20</td><td>0.12%</td></tr> <tr><td>25</td><td>0.17%</td></tr> <tr><td>30</td><td>0.22%</td></tr> <tr><td>35</td><td>0.29%</td></tr> <tr><td>40</td><td>0.44%</td></tr> <tr><td>45</td><td>0.72%</td></tr> <tr><td>50</td><td>1.21%</td></tr> <tr><td>55</td><td>1.21%</td></tr> </tbody> </table> <p style="margin-left: 40px;">92.5% assumed to be ordinary disabilities 7.5% assumed to be accidental disabilities</p>	<u>Age</u>	<u>Rate</u>	20	0.12%	25	0.17%	30	0.22%	35	0.29%	40	0.44%	45	0.72%	50	1.21%	55	1.21%
<u>Age</u>	<u>Rate</u>																		
20	0.12%																		
25	0.17%																		
30	0.22%																		
35	0.29%																		
40	0.44%																		
45	0.72%																		
50	1.21%																		
55	1.21%																		
Withdrawals before service retirement	None except death and disability																		
Future salary increases	3.0% annually																		
Assumed retirement age	Completion of 20 years of service but not later than age 65																		
	<table border="0" style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;"><u>Age</u></th> <th style="text-align: left;"><u>Rate</u></th> </tr> </thead> <tbody> <tr><td>45</td><td>10%</td></tr> <tr><td>50</td><td>20%</td></tr> <tr><td>55</td><td>50%</td></tr> <tr><td>60</td><td>50%</td></tr> <tr><td>65</td><td>100%</td></tr> </tbody> </table>	<u>Age</u>	<u>Rate</u>	45	10%	50	20%	55	50%	60	50%	65	100%						
<u>Age</u>	<u>Rate</u>																		
45	10%																		
50	20%																		
55	50%																		
60	50%																		
65	100%																		
Cost-of-living increases after retirement	3.0% annually																		
Valuation method	Attained Age Normal method																		
Expenses	Paid by the City																		

SCHEDULE C - SUMMARY OF MAIN PROVISIONS OF PENSION SYSTEMS

FIRE AND POLICE

Final compensation is the member's base compensation rate, including longevity and holiday pay for Fire and holiday pay for Police, at retirement.

Service is total employment by the City plus any purchased service.

Service Pension

Eligibility	20 years of service.
Amount	A pension equal to 2½% of the member's final compensation for each year of service up to 20 years plus 2% of final compensation for each year of service, up to 10 years, in excess of 20 years. An additional 5% of final compensation is added to the pension at age 55.

Deferred Pension

Eligibility	10 years of service.
Amount	A deferred pension commencing at age 55, equal to 2½% of final compensation for each year of total service.

Ordinary Disability Pension

Eligibility	Total and permanent disability at any age.
Amount	A pension equal to 50% of final compensation.

SCHEDULE C - SUMMARY OF MAIN PROVISIONS OF PENSION SYSTEMS
(Continued)

Work Related Disability Pension

Eligibility	Work related total and permanent disability at any age. Impairment due to heart condition or hypertension presumed to be work related.
Amount	A pension of $66\frac{2}{3}\%$ of final compensation, but not less than the service pension.

Death Benefit

Eligibility	Death in active service after 1 year of service or after termination with a deferred pension. (No service requirement if death is work related).
Amount	A pension of $33\frac{1}{3}\%$ of the member's final compensation is paid to his widow until she dies or remarries. The benefit increases to $67\frac{1}{2}\%$ of final compensation if the member has 20 years of service. (The pension is 50% if death is work related). In the event of death after termination with a deferred pension, the widow receives $67\frac{1}{2}\%$ of the deferred pension starting when the member would have been age 55.

Benefit upon Death after Retirement

Upon death of a retired member, $67\frac{1}{2}\%$ of his pension is paid to his widow. No benefits are payable upon the death of unmarried members.

Cost of Living Adjustment

Pensions are increased each year by the percentage increase in pay granted to active members. This provision does not apply to deferred pensions payable to the member or survivor.

Contributions by Members

Firefighters	10.5% of final compensation
Police	10% of final compensation

SCHEDULE D - EMPLOYEE DATA- ACTIVE PARTICIPANT COUNT AND SALARY SCATTER

Age	Service						<Total> Salary
	Less 10 Salary	10 to 14 Salary	15 to 19 Salary	20 to 24 Salary	25 to 29 Salary	30 and Over Salary	
35 to 39							
40 to 44		2	3	2			7
45 to 49			3	30 1,933,130	6		39 2,583,664
50 to 54			3	9	7		19
55 to 59			1	2			3
60 to 64						2	2
65 and Over							
<Total>		2	10	43 2,759,437	13	2	70 4,638,936

* Salary not shown with fewer than 20 participants

SCHEDULE E - PROJECTION OF PENSION PAYMENTS OVER 40 YEARS

CITY OF CRANSTON FIRE AND POLICE PENSION PLANS

YEAR ENDING	PENSION PAYMENTS
6/30/2010	20,755,697
6/30/2011	21,368,936
6/30/2012	22,024,994
6/30/2013	22,669,410
6/30/2014	23,383,122
6/30/2015	24,013,885
6/30/2016	24,566,777
6/30/2017	25,120,453
6/30/2018	25,627,386
6/30/2019	26,105,287
6/30/2020	26,486,903
6/30/2021	26,773,043
6/30/2022	27,029,277
6/30/2023	27,242,341
6/30/2024	27,398,950
6/30/2025	27,458,506
6/30/2026	27,461,914
6/30/2027	27,398,361
6/30/2028	27,280,222
6/30/2029	27,091,280
6/30/2030	26,831,449
6/30/2031	26,499,466
6/30/2032	26,103,927
6/30/2033	25,635,914
6/30/2034	25,093,332
6/30/2035	24,478,349
6/30/2036	23,791,217
6/30/2037	23,033,198
6/30/2038	22,206,847
6/30/2039	21,316,040
6/30/2040	20,365,793
6/30/2041	19,362,065
6/30/2042	18,311,618
6/30/2043	17,222,013
6/30/2044	16,101,758
6/30/2045	14,959,994
6/30/2046	13,806,354
6/30/2047	12,651,314
6/30/2048	11,505,870
6/30/2049	10,381,185

SCHEDULE F - APPROPRIATION FORECAST OVER 30 YEARS

CITY OF CRANSTON FIRE AND POLICE PENSION PLANS

Fiscal Year Ending	Normal Cost**	Past Service Amortization	Total
06/30/2010*	\$ 1,229,221	\$ 18,167,671	\$ 19,396,892
06/30/2011	1,232,804	22,714,924	23,947,728
06/30/2012	1,148,901	22,714,924	23,863,825
06/30/2013	1,051,385	22,714,924	23,766,309
06/30/2014	920,584	22,714,924	23,635,508
06/30/2015	792,257	22,714,924	23,507,181
06/30/2016	708,201	22,714,924	23,423,125
06/30/2017	615,193	22,714,924	23,330,117
06/30/2018	525,727	22,714,924	23,240,651
06/30/2019	422,426	22,714,924	23,137,350
06/30/2020	333,214	22,714,924	23,048,138
06/30/2021	279,635	22,714,924	22,994,559
06/30/2022	225,007	22,714,924	22,939,931
06/30/2023	172,928	22,714,924	22,887,852
06/30/2024	119,959	22,714,924	22,834,883
06/30/2025	82,467	22,714,924	22,797,391
06/30/2026	59,280	22,714,924	22,774,204
06/30/2027	41,590	22,714,924	22,756,514
06/30/2028	25,632	22,714,924	22,740,556
06/30/2029	14,619	22,714,924	22,729,543
06/30/2030	6,914	22,714,924	22,721,838
06/30/2031	3,563	22,714,924	22,718,487
06/30/2032	3,097	22,714,924	22,718,021
06/30/2033	969	22,714,924	22,715,893
06/30/2034	0	0	0
06/30/2035	0	0	0
06/30/2036	0	0	0
06/30/2037	0	0	0
06/30/2038	0	0	0
06/30/2039	0	0	0

* The appropriation for FYE 2010 will remain as budgeted.

** Normal cost was trended according to projected salary, assuming no new participants are added to the plan.

SCHEDULE G - DEVELOPMENT OF NPO FOR FISCAL YEAR ENDING JUNE 30, 2009

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Fiscal Year	Val. Int. Rate	Amortization Years	Amortization Factor	ARC City Cont.	Actual City Cont.	Beginning of year NPO	Annual Pension Cost [(5)+(7)*(2)-(7)/(4)]	Increase in NPO [(8)-(6)]	End of Year NPO [(7)+(9)]
1989-1990	8.00%	40	11.9246	6,791,992	3,703,000	-	6,791,992	3,088,992	3,088,992
1990-1991	8.00%	40	11.9246	6,791,992	4,267,434	3,088,992	6,780,068	2,512,634	5,601,626
1991-1992	8.00%	40	11.9246	10,940,483	3,950,320	5,601,626	10,918,859	6,968,539	12,570,165
1992-1993	8.00%	40	11.9246	10,940,483	5,041,249	12,570,165	10,891,959	5,850,710	18,420,875
1993-1994	8.00%	40	11.9246	10,940,483	5,671,320	18,420,875	10,869,374	5,198,054	23,618,929
1994-1995	8.00%	40	11.9246	13,733,262	6,133,800	23,618,929	13,642,087	7,508,287	31,127,216
1995-1996	8.00%	40	11.9246	13,733,262	7,343,643	31,127,216	13,613,103	6,269,460	37,396,676
1996-1997	8.00%	40	11.9246	16,940,010	7,182,962	37,396,676	16,795,649	9,612,687	47,009,363
1997-1998	8.00%	40	11.9246	16,940,010	8,124,186	47,009,363	16,758,542	8,634,356	55,643,719
1998-1999	8.00%	40	11.9246	16,029,156	8,241,549	55,643,719	15,814,357	7,572,808	63,216,527
1999-2000	8.00%	39	11.8786	16,012,994	10,149,365	63,216,527	15,748,433	5,599,068	68,815,595
2000-2001	8.00%	38	11.8288	16,012,994	12,610,513	68,815,595	15,700,610	3,090,097	71,905,692
2001-2002	8.00%	37	11.7752	18,996,537	9,482,990	71,905,692	18,642,456	9,159,466	81,065,158
2002-2003	8.00%	36	11.7172	24,945,408	14,949,999	81,065,158	24,512,145	9,562,146	90,627,304
2003-2004	8.00%	30	11.2578	21,877,449	23,876,569	90,627,304	21,077,454	(2,799,115)	87,828,189
2004-2005	8.00%	29	11.1584	22,147,958	20,024,158	87,828,189	21,303,175	1,279,017	89,107,206
2005-2006	8.00%	28	11.0511	21,723,021	21,339,876	89,107,206	20,788,384	(551,492)	88,555,714
2006-2007	8.00%	27	10.9352	21,723,021	21,723,021	88,555,714	20,709,227	(1,013,794)	87,541,920
2007-2008	8.00%	26	11.6748	20,785,343	19,889,000	87,541,920	20,290,331	401,331	87,943,251
2008-2009	8.00%	25	11.5288	20,062,219	19,087,000	87,943,251	19,469,516	382,516	88,325,767

Actual city contributions through fiscal year 1996-1997 provided from audit worksheet received from City.

Report provided for fiscal 1989-1990, 1991-1992, 1994-1995 and fiscals 1998-1999 and later, excluding fiscal 2000-2001.