

City of Cranston
Fire and Police Department Pension Plans
Actuarial Valuation Report

As of July 1, 2013

December 2013

December 6, 2013

Mr. Robert F. Strom
Finance Director
City of Cranston
869 Park Avenue
Cranston, RI 02910

Dear Mr. Strom:

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, 2013. The purpose of this valuation is 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.

Please note the valuation results are based on the two pension ordinances passed on April 22, 2013 by the Cranston City Council and signed by the Mayor that imposed a ten year freeze on cost of living adjustments and extended the amortization schedule from FYE 2033 to FYE 2037.

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

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. Because of limited scope, Buck performed no analysis of the potential range of such future differences.

This report was prepared under the supervision of Philip Bonanno, a Fellow of the Society of Actuaries, an Enrolled Actuary, a Member of the American Academy of Actuaries and a Fellow of the Conference of Consulting Actuaries, and Andrew Zmich, an Associate of the Society of Actuaries and a Member of the American Academy of Actuaries, who have each met the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Philip Bonanno, FSA, EA, MAAA, FCA
Director, Consulting Actuary



Andrew Zmich, ASA, MAAA
Consultant

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**REPORT ON THE VALUATION OF THE CITY OF CRANSTON
FIRE AND POLICE DEPARTMENT PENSION PLANS
AS OF JULY 1, 2013**

SECTION I - SUMMARY OF PRINCIPAL RESULTS

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

Valuation Date: July 1, 2013	Fire	Police	Total
Number of active members			
Vested	29	13	42
Nonvested	<u>0</u>	<u>0</u>	<u>0</u>
Total	29	13	42
Average active age	52.49	51.31	52.13
Average active service	27.81	24.47	26.78
Annual regular pay with holiday/longevity load	\$ 2,615,068	\$ 1,091,256	\$ 3,706,324
Number of service retirees, disability retirees and beneficiaries	222	205	427
Average inactive age	67.53	65.70	66.65
Annual retirement allowances	\$ 12,990,032	\$ 10,445,700	\$ 23,435,733
Number of former members entitled to deferred benefits	0	0	0
Valuation value of assets without receivable	\$ 36,732,259	\$ 21,852,799	\$ 58,585,058
Valuation value of assets with receivable*	\$ 48,598,891	\$ 31,567,604	\$ 80,166,495
Unfunded actuarial accrued liability without receivable	\$ 125,879,465	\$ 105,661,945	\$ 231,541,410
Total normal contribution rate	30.46%	34.72%	31.89%
Recommended City FYE 2015 contribution assumed payable January 1, 2015	\$ 11,544,095	\$ 9,518,301	\$ 21,062,396

* The contribution receivable is the sum of the City budgeted amount of \$21,994,344 and the expected State allocation of \$381,766, adjusted for timing. The \$381,766 was split between Fire and Police in proportion to their share of the total Market Value of Assets.

Comments on the valuation results as of July 1, 2013 are given in Section IV and the appropriation payable by the City during the fiscal period beginning July 1, 2014 is set out on Page 10.

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 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 (UAL) was expected to increase from \$290,277,474 to \$291,232,332. The actual UAL at the end of the year was \$231,541,410. The chart below reconciles the actual to expected UAL. The primary sources of changes were a \$4,714,337 loss for unexpected Fire COLAs, a \$1,781,966 investment gain, and a \$63,225,418 decrease due to plan provision changes from the City pension ordinances passed on April 22, 2013. The actual investment return was 10.9% during the FYE 2013, which was more than the assumed return of 7.50%.

The sources of the (Gain)/Loss are as follows:

	Demographic (Gain)/Loss	Other (Gain)/Loss	UAL
Expected UAL			\$291,232,332
Salary increases	(98,273)		
Retiree mortality	(1,311,704)		
Active retirement decrement	1,719,150		
Active mortality decrement	(11,094)		
Active disability decrement	295,254		
Other	<u>(453,016)</u>		
Subtotal	140,317		
Investment (Gain)/Loss		(1,781,966)	
Fire COLA*		4,714,337	
Plan changes (pension ordinances)		(63,225,418)	
Assumption revision to reflect additional year of mortality improvement		<u>461,808</u>	
Subtotal		(59,831,239)	
Total change in UAL			<u>(59,690,922)</u>
Actual UAL			\$231,541,410

* City previously confirmed all 2012-13 fiscal year COLAs were reported in benefits used in the July 1, 2012 valuation. The data supplied for the July 1, 2013 valuation reflected a 2% COLA paid in January 2013 and a 1% COLA paid in June 2013 for fire retirees, thus creating an actuarial loss.

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, 2013.

Schedule B of this report outlines the actuarial assumptions and methods used in the preparation of the valuation. All methods and assumptions have been selected in accordance with the applicable Actuarial Standards of Practice (ASOPs) and we have determined that the assumptions are reasonable individually and in the aggregate.

Schedule C of this report presents a summary of the main provisions of the Pension Plans used in the valuations. The cost-of-living provision changed due to an ordinance passed on April 22, 2013 whereby cost-of-living increases have been suspended for a ten year period effective July 1, 2013.

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 payments are made mid-fiscal year. The appropriation for FYE 2014 will remain as budgeted, while results of this report will officially go into effect for the FYE 2015 appropriation.

Schedule G illustrates the development of the Net Pension Obligation as of June 30, 2013.

SECTION II - EMPLOYEE DATA

Employee and inactive participant data was furnished by the City. Buck did not audit the data although they were reviewed for reasonableness and consistency with the prior year's information. The validity of the actuarial computations presented in this report is dependent upon the accuracy of the data provided.

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, 2013 are as follows:

	<u>Number</u>	<u>Average Age</u>	<u>Annual Allowances</u>
Retired Lives	260	64.66	\$ 16,055,005
Disabled Lives	80	63.30	4,410,358
Beneficiaries	<u>87</u>	<u>75.66</u>	<u>2,970,370</u>
Total	427	66.65	\$ 23,435,733

SECTION III - ASSETS

The amount of the assets taken into account in the valuation was obtained from information submitted by the City and the validity of the results presented in this report is dependent upon the accuracy of the financial information provided.

The value of the assets of the system as of July 1, 2013 was as follows:

Fund	Fire	Police	Total
Cash	\$513,110	\$333,179	\$846,289
PIMCO Bond Account	3	3	6
JMS Other Investments (REIT)	2,409,625	1,355,414	3,765,039
JMS-Non-Performing Annuity	1,957,133	1,100,888	3,058,021
JMS Account	1,322,058	239,287	1,561,345
Janney-Equities Stocks/Options	21,716,869	13,631,261	35,348,130
Janney-Fx Inc Mut Fnd/ETF/UIT	8,813,461	5,192,767	14,006,228
Due From State of RI	<u>0</u>	<u>0</u>	<u>0</u>
Total Market Value of Assets	\$36,732,259	\$21,852,799	\$58,585,058
Contribution Receivable	<u>11,866,632</u>	<u>9,714,805</u>	<u>21,581,437</u>
Valuation Value of Assets with Receivable	\$48,598,891	\$31,567,604	\$80,166,495

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, 2013. Total aggregate actuarial liabilities equal (a) \$263,824,461, which equals the present value of obligations to retired members and their beneficiaries, plus (b) \$31,289,772, which equals the value of prospective benefits of active members, for a total of \$295,114,233. Against these prospective liabilities, the Plans have present assets of \$58,585,058. This leaves \$236,529,175 to be met by future contributions.

The unadjusted unfunded accrued liability amounts to \$231,541,410, leaving \$4,987,765 to be met by future normal contributions. We recommend normal contribution rates of 30.46% for Fire and 34.71% for Police. Applying these rates to the compensation of active members and assuming payment in FYE 2015 would produce a total normal contribution of \$1,255,278. Estimated employee contributions are \$409,772, leaving \$845,506 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 2015. After adjusting for interest, an asset receivable of \$21,581,437 and mid-year payments, the new adjusted unfunded accrued liability amounts to \$234,863,474. The asset receivable is comprised of the FYE 2014 budgeted contribution payment of \$21,994,344 and \$381,766 of the initially expected \$763,531 state allocation, discounted to July 1, 2013. The other half of the state allocation, although not recognized now, will slightly lower the contribution if made up. Amortizing this adjusted unfunded accrued liability through FYE 2037 results in a past service contribution of \$20,216,890, commencing in FYE 2015.

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%
July 1, 2010	45,900	290,733	244,833	15.8%	4,797	5104%
July 1, 2011	55,357	311,401	256,044	17.8%	4,558	5617%
July 1, 2012	53,405	343,683	290,277	15.5%	4,108	7066%
July 1, 2013*	58,585	290,126	231,541	20.2%	3,706	6248%

* Reflects the ten-year COLA freeze effective July 1, 2013

On June 25, 2012 GASB released Statement Nos. 67 and 68, which will supersede the requirements of Statement Nos. 25 and 27, respectively. The effective date for the financial reporting under Statement No. 67 is for the financial reporting year commencing after June 15, 2013 and for Statement No. 68 is for the financial reporting year commencing after June 15, 2014. Since the July 1, 2013 valuation results are used for fiscal year ending June 30, 2013 financial reporting (i.e. the financial reporting year commencing July 1, 2012) the GASB 67 requirements will first be reflected in next year's valuation.

SCHEDULE A - RESULTS OF THE VALUATION AS OF JULY 1, 2013

	Fire	Police	Total
1. Actuarial Liabilities			
(a) Present value of benefits to be paid on account of active members	\$ 22,428,931	\$ 8,860,841	\$ 31,289,772
(b) Present value of benefits payable to retired members and beneficiaries	143,343,627	120,480,834	263,824,461
(c) Total actuarial liabilities	<u>\$ 165,772,558</u>	<u>\$ 129,341,675</u>	<u>\$ 295,114,233</u>
2. Market Value of Assets	\$ 36,732,259	\$ 21,852,799	\$ 58,585,058
3. Total Prospective Contributions by the City (1(c) minus 2)	\$ 129,040,299	\$ 107,488,876	\$ 236,529,175
4. Unfunded Accrued Liability	\$ 125,879,465	\$ 105,661,945	\$ 231,541,410
5. Present Value of Future Normal Contributions	\$ 3,160,834	\$ 1,826,931	\$ 4,987,765
6. Present Value of Future Salaries of Present Active Members	\$ 10,378,000	\$ 5,263,000	\$ 15,641,000
7. Normal Contribution Rate (5 divided by 6)	30.46%	34.71%	31.89%
8. Valuation Payroll used for Contribution Purposes	\$ 2,615,068	\$ 1,091,256	\$ 3,706,324
9. Normal Cost Including Interest			
(a) Employees	\$ 293,234	\$ 116,538	\$ 409,772
(b) City	\$ 557,423	\$ 288,083	\$ 845,506
(c) Total (7 times 8, plus interest)	<u>\$ 850,657</u>	<u>\$ 404,621</u>	<u>\$ 1,255,278</u>
10. Asset Receivable as of July 1, 2013	\$ 11,866,632	\$ 9,714,805	\$ 21,581,437
11. Adjusted Unfunded Accrued Liability for FYE 2015 payment	\$ 127,634,271	\$ 107,229,203	\$ 234,863,474
12. City Contribution to Amortize Unfunded Accrued Liability through FYE 2037	\$ 10,986,672	\$ 9,230,218	\$ 20,216,890
13. Total Contribution (Employees plus City) (9(c) plus 12)	\$ 11,837,329	\$ 9,634,839	\$ 21,472,168
14. Recommended City Contribution for FYE 2015 payment (13 minus 9(a))	\$ 11,544,095	\$ 9,518,301	\$ 21,062,396

SCHEDULE B - SUMMARY OF ASSUMPTIONS

Investment Return 7.50% per annum, compounded annually.

Post-retirement mortality Pensioners: RP-2000 combined male and female tables with Blue Collar Adjustment and mortality improvements projected to 2023 with Scale AA. The RP-2000 healthy male and female tables with mortality improvements projected to 2022 with Scale AA were used the prior valuation.

Disabled Pensioners: RP-2000 combined male and female tables with Blue Collar Adjustment, 3 year set forward, and mortality improvements projected to 2023 with Scale AA. The RP-2000 healthy male and female tables with 3 year set forward and mortality improvements projected to 2022 with Scale AA were used the prior valuation.

Beneficiaries: The RP-2000 combined male and female tables with mortality improvements projected to 2023 with Scale AA. The RP-2000 healthy male and female tables with mortality improvements projected to 2022 with Scale AA were used the prior valuation.

Pre-retirement mortality The RP-2000 combined male and female tables with mortality improvements projected to 2023 with Scale AA. The RP-2000 healthy male and female tables with mortality improvements projected to 2022 with Scale AA were used the prior valuation. (92.5% of deaths are assumed to be service related.)

Disability	<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%

92.5% assumed to be accidental disabilities
7.5% assumed to be ordinary disabilities

SCHEDULE B - SUMMARY OF ASSUMPTIONS (continued)

Withdrawals before service retirement	None except death and disability																										
Future salary increases	3.0% annually																										
Assumed retirement	Rates of retirement are based on an employee's length of service, as follows: <table border="0" style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;"><u>Completed</u> <u>Years of Service</u></th> <th style="text-align: left;"><u>Rate</u></th> </tr> </thead> <tbody> <tr><td>20</td><td>20%</td></tr> <tr><td>21</td><td>4%</td></tr> <tr><td>22</td><td>4%</td></tr> <tr><td>23</td><td>4%</td></tr> <tr><td>24</td><td>4%</td></tr> <tr><td>25</td><td>15%</td></tr> <tr><td>26</td><td>10%</td></tr> <tr><td>27</td><td>10%</td></tr> <tr><td>28</td><td>10%</td></tr> <tr><td>29</td><td>10%</td></tr> <tr><td>30</td><td>50%</td></tr> <tr><td>31 and greater</td><td>20%</td></tr> </tbody> </table> <p style="margin-left: 40px;">100% probability of retirement is assumed at age 65.</p>	<u>Completed</u> <u>Years of Service</u>	<u>Rate</u>	20	20%	21	4%	22	4%	23	4%	24	4%	25	15%	26	10%	27	10%	28	10%	29	10%	30	50%	31 and greater	20%
<u>Completed</u> <u>Years of Service</u>	<u>Rate</u>																										
20	20%																										
21	4%																										
22	4%																										
23	4%																										
24	4%																										
25	15%																										
26	10%																										
27	10%																										
28	10%																										
29	10%																										
30	50%																										
31 and greater	20%																										
Cost-of-living increases after retirement	No COLAs will be paid for a ten year period effective July 1, 2013. Upon the expiration of the ten year period, 3.0% annually, effective each July 1.																										
Actuarial Funding Method	Attained Age Normal method with the UAAL funded on a level dollar basis over a closed period																										
Actuarial Value of Assets	Equal to Market Value of Assets																										
Expenses	Paid by the City																										
Definition of pay	Regular pay plus a 20.04% holiday/longevity load (8.14% for holiday and 11% for longevity).																										
Percent Married	80% of active employees are assumed to be married with the husband assumed to be 3 years older than the wife.																										

SCHEDULE C - SUMMARY OF MAIN PROVISIONS OF PENSION SYSTEMS

FIRE AND POLICE

The plan is closed to employees hired on or after July 1, 1995.

Final compensation is the member's base compensation rate, including longevity and holiday pay 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. Note that there is no actuarial reduction for the spouse coverage.

Cost of Living Adjustment

Pensions increases are frozen for a ten year period effective July 1, 2013. Upon the expiration of the ten year period, the COLA is capped at 3%.

Contributions by Members

Firefighters	10.5% of base compensation plus longevity and holiday pay
Police	10% of base compensation plus longevity and holiday pay

SCHEDULE D - EMPLOYEE DATA - ACTIVE PARTICIPANT COUNT AND REGULAR PAY SCATTER

Age	Service						
	Less than 10 Regular Pay	10 to 14 Regular Pay	15 to 19 Regular Pay	20 to 24 Regular Pay	25 to 29 Regular Pay	30 and Over Regular Pay	<Total> Regular Pay
35 to 39							
40 to 44				1			1
45 to 49			2	5	4		11
50 to 54				5	15	3	23 1,708,295
55 to 59				1	4	1	6
60 to 64					1		1
65 and Over							
<Total>			2	12	24 1,810,998	4	42 3,087,574

Notes:

1. Regular Pay not shown in cells with fewer than 20 participants.
2. Total Regular Pay shown is before the holiday/longevity load.

SCHEDULE E - PROJECTION OF PENSION PAYMENTS OVER 40 YEARS

CITY OF CRANSTON
FIRE AND POLICE PENSION PLANS

YEAR ENDING	PENSION PAYMENTS
6/30/2014	\$ 23,536,641
6/30/2015	23,682,619
6/30/2016	23,767,189
6/30/2017	23,755,266
6/30/2018	23,708,951
6/30/2019	23,603,161
6/30/2020	23,439,630
6/30/2021	23,155,500
6/30/2022	22,794,432
6/30/2023	22,404,979
6/30/2024	22,639,399
6/30/2025	22,852,580
6/30/2026	23,002,598
6/30/2027	23,117,621
6/30/2028	23,169,055
6/30/2029	23,184,947
6/30/2030	23,158,636
6/30/2031	23,077,998
6/30/2032	22,947,359
6/30/2033	22,772,077
6/30/2034	22,537,703
6/30/2035	22,245,228
6/30/2036	21,893,055
6/30/2037	21,479,591
6/30/2038	21,002,793
6/30/2039	20,462,754
6/30/2040	19,860,871
6/30/2041	19,198,554
6/30/2042	18,478,403
6/30/2043	17,704,414
6/30/2044	16,880,007
6/30/2045	16,010,145
6/30/2046	15,101,664
6/30/2047	14,161,447
6/30/2048	13,196,850
6/30/2049	12,216,915
6/30/2050	11,231,371
6/30/2051	10,250,402
6/30/2052	9,284,386
6/30/2053	8,343,315

SCHEDULE F - APPROPRIATION FORECAST OVER 30 YEARS

CITY OF CRANSTON
FIRE AND POLICE PENSION PLANS

Fiscal Year Ending	Normal Cost**	Past Service Amortization	Total
06/30/2014*	\$ 1,096,179	\$ 21,279,931	\$ 22,376,110
06/30/2015	845,506	20,216,890	21,062,396
06/30/2016	685,738	20,216,890	20,902,628
06/30/2017	580,651	20,216,890	20,797,541
06/30/2018	476,795	20,216,890	20,693,685
06/30/2019	387,676	20,216,890	20,604,566
06/30/2020	290,450	20,216,890	20,507,340
06/30/2021	219,248	20,216,890	20,436,138
06/30/2022	172,438	20,216,890	20,389,328
06/30/2023	141,628	20,216,890	20,358,518
06/30/2024	111,548	20,216,890	20,328,438
06/30/2025	85,550	20,216,890	20,302,440
06/30/2026	55,257	20,216,890	20,272,147
06/30/2027	36,899	20,216,890	20,253,789
06/30/2028	22,501	20,216,890	20,239,391
06/30/2029	16,248	20,216,890	20,233,138
06/30/2030	10,027	20,216,890	20,226,917
06/30/2031	4,882	20,216,890	20,221,772
06/30/2032	3,263	20,216,890	20,220,153
06/30/2033	2,621	20,216,890	20,219,511
06/30/2034	370	20,216,890	20,217,260
06/30/2035	0	20,216,890	20,216,890
06/30/2036	0	20,216,890	20,216,890
06/30/2037	0	20,216,890	20,216,890
06/30/2038	0	0	0
06/30/2039	0	0	0
06/30/2040	0	0	0
06/30/2041	0	0	0
06/30/2042	0	0	0
06/30/2043	0	0	0

* The appropriation for FYE 2014 will remain as budgeted and includes \$381,766 expected State incentive aid.

** 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, 2013

(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
2009-2010	8.00%	24	11.3711	22,209,224	19,396,892	88,325,767	21,507,692	2,110,800	90,436,567
2010-2011	8.00%	23	11.2007	23,947,728	19,947,728	90,436,567	23,108,496	3,160,768	93,597,335
2011-2012	8.00%	22	11.0168	24,154,120	20,369,456	93,957,335	23,146,036	2,776,580	96,373,915
2012-2013	8.00%	21	10.8181	25,705,110	21,994,344	96,373,915	24,506,482	2,512,138	98,886,053

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