



Burlington Employees' Retirement System

Report on the Sixty-First Actuarial Valuation

Prepared as of June 30, 2014

January 2015



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Retirement Board Burlington Employees' Retirement System Burlington, VT 05401

Members of the Board:

Chapter 24, Article II, Section 24-60 of the Burlington Code of Ordinances provides for actuarial valuations of the assets and liabilities of the Burlington Employees' Retirement System at least once every three years and more often if the Retirement Board so directs.

The sixty-first actuarial valuation of the System, prepared as of June 30, 2014, has now been completed and the results are presented in this report, together with the determination of the amount of contributions payable by the City in accordance with the Retirement Board's funding policy and information on disclosures required for accounting purposes by the Governmental Accounting Standards Board.

The Board of Trustees and staff of the Retirement office may use this report for the review of the operation of the System. The report may also be used in the preparation of BERS' audited financial statements. Use of this report for any other purpose or by anyone other than the Board of Trustees, the staff of the Retirement office or 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. No one may make any representations or warranties based on any statements or conclusions contained in this report without Buck Consultants' prior written consent.

The actuarial assumptions and methods used in this valuation are described in Schedule B.

The results of the valuation are based on the Plan provisions in effect on June 30, 2014. A summary of the System provisions is shown in Schedule C.

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. An analysis of the potential range of future results is beyond the scope of this valuation.

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

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and I am available to answer questions about it.

Respectfully submitted,

David I. Drimele

David L. Driscoll, FSA, EA, MAAA Principal and Consulting Actuary

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Section I - Summary of Principal Results

For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized below.

Valuation Date	June 30, 2013	June 30, 2014
Class A:		
Number of active members	170	175
Earnable compensation for employees below maximum retirement age	\$ 10,151,640	\$ 10,287,071
Number of retirees and beneficiaries	154	167
Annual retirement benefits	\$ 5,517,310	\$ 6,359,699
Number with vested rights	12	13
Class B:		
Number of active members	700	754
Earnable compensation for employees below maximum retirement age	\$ 35,636,533	\$ 37,566,282
Number of retirees and beneficiaries	407	425
Annual retirement benefits	\$ 5,463,564	\$ 5,761,991
Number with vested rights	346	343
Actuarial Value of Assets:		
Class A	\$ 65,466,699	\$ 70,858,939
Class B	78,478,121	87,552,488
Unfunded Past Service Cost:		
Class A	\$ 27,668,857	\$ 30,404,821
Class B	35,925,772	34,135,064
Contributions for Fiscal Year	2015	2016
Class A:		
Normal Contribution Rate	9.33%	10.83%
Past Service Contribution	\$ 2,584,590	\$ 2,862,064
Class B:		
Normal Contribution Rate	5.53%	7.07%
Past Service Contribution	\$ 3,370,523	\$ 3,217,340



Comments on the valuation results as of June 30, 2014, are given in Section IV and further discussion of the contribution levels is set forth in Section V. Section VI presents the referenced disclosure information for accounting purposes. Effective with this valuation, the actuarial cost method used for the funding of the System has been changed from the projected unit credit method to the entry age normal method with normal cost determined as a level percentage of pay. The new funding method is described in greater detail on page 5 of this report. The unfunded liability of the System increased by approximately \$67,000 as a result of this change.

Schedule B of this report outlines the full set of actuarial assumptions and methods employed. Effective with this valuation, the post-retirement mortality assumption has been changed to 105% of the probabilities in the RP-2000 Combined Mortality Tables for Males and Females with full generational projection by Scale BB. The unfunded liability of the System increased by approximately \$5.4 million as a result of this change.

Schedule C presents a summary of the principal System provisions as interpreted for the valuation.



Section II - Participant Data

Participant data were furnished by the City of Burlington. Buck did not audit the data, although they were reviewed for reasonableness and consistency with prior data. The accuracy of the results of the valuation is dependent on the accuracy of the data.

Tables 1 through 4 of Schedule D show the number and annual earnable compensation of active members who were included in the valuation, while Tables 5 through 14 of Schedule D show the number and annual retirement benefits of retirees and beneficiaries included in the valuation. In addition, there are 13 Class A former members and 343 Class B former members entitled to deferred vested benefits.



Section III - Assets

The amount of assets taken into account in this valuation is based on information reported by the City of Burlington.

Assets are valued on the basis of a five-year expected average market value method. The operation of this method is described in Schedule B. Based on this method, the actuarial value of assets amount to \$158,411,427. This may be compared to current book and market values of \$135,766,620 and \$164,216,609, respectively.

As part of the valuation procedure, investment earnings for the year ending June 30, 2014, have been analyzed. Based on the procedures used and certain approximations, the yield for the year has been estimated to be 14.97% based on the market value of assets and 10.98% based on the actuarial value of assets.

Reconciliation of Market Value of Plan Assets, July 1, 2010 - June 30, 2014						
	July 1, 2010 - June 30, 2011	July 1, 2011 - June 30, 2012	July 1, 2012 - June 30, 2013	July 1, 2013 - June 30, 2014		
Market value at beginning of period	111,790,020	134,079,722	135,532,844	144,020,307		
Contributions during period	11,662,386	12,546,410	12,711,462	13,162,589		
Total investment income	22,411,312	1,420,339	8,842,397	21,464,817		
Benefit payments and expenses	(11,783,996)	(12,513,627)	(13,066,396)	(14,431,104)		
Market value at end of period	134,079,722	135,532,844	144,020,307	164,216,609		
Expected market value at end of period	120,606,747	144,840,194	146,006,340	154,222,676		
Investment gain/(loss) for the year	13,472,975	(9,307,350)	(1,986,033)	9,993,933		

Year Ended	Investment Gain / (Loss)		Weight		Weighted Gain / (Loss)
June 30, 2014	9,993,933	Х	0.80	=	7,995,146
June 30, 2013	(1,986,033)	х	0.60	=	(1,191,620)
June 30, 2012	(9,307,350)	Х	0.40	=	(3,722,940)
June 30, 2011	13,472,975	х	0.20	=	2,694,595
					5,775,181

Actuarial Value of Assets = Market Value minus weighted gain / (loss) = \$158,411,427



Section IV - Comments on Valuation

The method used to determine Normal Cost and Accrued Actuarial Liability is the Entry Age Normal Cost Method. Under the Entry Age Normal Cost Method, an annual Normal Cost is determined for each covered active Member, which is the contribution required to provide all the projected pension benefits assuming this contribution is payable over a period ending on the date of retirement (separation from active service) expressed as a level percentage of compensation. The Actuarial Accrued Liability is determined as the excess of the total present value of all pension benefits over the total present value of future Normal Costs. The Unfunded Actuarial Accrued Liability as of the valuation date is determined as the excess of the Actuarial Accrued Liability over the assets of the Fund. The Normal Cost and Accrued Actuarial Liability are derived by making certain assumptions as to the rates of interest, mortality, turnover, etc., which are assumed to reflect experience for many years into the future. Since actual experience will differ from the assumptions, the costs determined must be regarded as estimates of the true costs of the Plan. The effects of any actuarial gains or losses are immediately reflected in the Unfunded Actuarial Accrued Liability and the Normal Cost. The unfunded actuarial accrued liability is amortized in level dollar amounts over periods up to 30 years.

Schedule A of this report contains the valuation balance sheet, which shows the present and prospective assets and liabilities of the Plan as of June 30, 2014. The valuation balance sheet shows that as of June 30, 2014, the Plan has accrued liabilities of \$222,951,312. Of this amount, \$132,346,912 represents the present value of benefits payable on account of retired members, beneficiaries and former members entitled to deferred vested benefits and \$90,604,400 represents the accrued liability for prospective benefits payable on account of active members. Against these liabilities the Plan has actuarial assets of \$158,411,427. The difference between the total liabilities of \$222,951,312 and the assets of \$158,411,427 is \$64,539,885, which represents the unfunded past service cost as of June 30, 2014. The Plan's unfunded accrued liability increased by \$945,256 from its level of \$63,594,629 as of June 30, 2013. Schedule A contains a breakdown of the assets and liabilities described above by membership class.



Section V - Appropriation to be made by the City

Article II, Division 1, Section 24 - 32 of the Ordinances governing the operation of the System provides that the Retirement Board shall certify to the Board of Finance the amounts payable by the City to the System, including an estimated amount required for operating expenses.

The contribution by the City, excluding operating expenses, consists of:

- (i) a normal contribution to cover the cost of benefits expected to accrue under the Plan during the fiscal year following the valuation date, reduced by required Class A member contributions equal to 10.8% of compensation and required Class B member contributions equal to 3.05% of compensation on average, plus
- (ii) a past service contribution to liquidate the unfunded past service cost over a 30-year period from the date of establishment in accordance with the policy adopted by the Retirement Board. The initial unfunded past service cost to be amortized over 30 years was that in existence as of June 30, 2004.

Based on the latest valuation results and the adopted funding policy, the following table sets forth the basis for determining the City's contributions for the fiscal year ending June 30, 2015.



Contributions payable by the City to the system

Contribution	Amount	Percent of Compensation
Class A		
Normal	\$ 1,236,072*	10.83%
Past Service	2,862,064	25.07%*
Total	\$ 4,098,136	
Class B		
Normal	\$ 2,623,462*	7.07%
Past Service	3,217,340	8.67%*
Total	\$ 5,840,802	

^{*} Estimated based on fiscal year-end 2016 budget payrolls of \$11,414,532 and \$37,101,918 for Class A and Class B, respectively.

The recommended normal contribution rates in the table above should be applied to the respective earnable compensation of Class A and Class B members of the System for the fiscal year ending 2016 in order to determine the required appropriations for currently accruing benefits. In addition, the amount estimated to be required for operating expenses of the System is to be included in the certification of the Retirement Board. Further, the table below incorporates the split of the Class B contribution between Burlington Electric Department (BED), Burlington School District (BSD), and other participating entities.

Contribution	Amount	Percent of Compensation
Burlington Electric Department (BED) - Class B		
Normal	\$ 544,034	6.20%
Past Service	1,099,754	12.53%
Total	\$ 1,643,788	
Burlington School District (BSD)- Class B		
Normal	\$ 682,709	8.83%
Past Service	586,192	7.58%
Total	\$ 1,268,901	
Other Class B Covered Employees		
Normal	\$ 1,396,719	6.78%
Past Service	1,531,394	7.44%
Total	\$ 2,928,113	

Schedule E provides a development of the past service contribution for Class A and B members of the System for the fiscal year ending 2016.

Schedule F presents historical and projected required City contributions to the Retirement System assuming all actuarial assumptions are realized. No future liability gains or losses are reflected and assets are projected to earn 8% per annum. The projected payroll is assumed to increase 3.5% per annum. The actual annual contributions required by the City will be based upon future actuarial valuations.



Section VI - Accounting Information

Statement 27 of the Governmental Accounting Standards Board (GASB), issued in November 1994, established standards of disclosure of pension information by sponsors of public retirement systems. The Annual Pension Cost is determined as the Annual Required Contribution (ARC) under the Plan's regular funding method with adjustments made to reflect the employer's Net Pension Obligation (NPO). The NPO is the cumulative difference between the Annual Pension Cost and the actual contributions made since January 1, 1987. The Annual Pension Cost is adjusted for interest charged on the NPO at the valuation interest rate and amortization of the NPO.

The Annual Pension Cost for fiscal year 2014 was \$8,332,190. For fiscal year 2014, the City funding of \$8,357,370 was more than the Annual Pension Cost. As a result, the Net Pension Obligation decreased to \$1,884,622 as of June 30, 2014, as compared with \$1,909,802 as of June 30, 2013.

The GASB statements also require the following supplementary information be furnished by the actuary. The Schedule of Funding Progress details the progress made over the last seven years in accumulating sufficient assets to provide for benefits when they are due. The Schedule of Employer Contributions shows the Annual Required Contribution and actual contributions over the last seven years. The Schedule of Annual Pension Cost shows the Annual Pension Cost for the last four years.

In prior years' reports, information required under GASB Statement No. 25 has been presented. Effective with the fiscal year ending June 30, 2014, GASB Statement No. 25 was superseded by GASB Statement No. 67. The disclosures required for the System under Statement 67 as of June 30, 2014, are provided in a separate report. For the fiscal year ending June 30, 2015, GASB Statement No. 27 is superseded by GASB Statement No. 68.



REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Funding Progress¹

Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability ² (AAL) (b)	Excess of Assets over AAL (a - b)	Funded Ratio (a / b)	Covered Payroll (c)	Excess as a percentage of Covered Payroll ((a - b) / c)
June 30, 2008	129,101,729	156,313,830	(27,212,101)	82.59%	36,751,722	-74.04%
June 30, 2009	129,841,522	169,319,955	(39,478,433)	76.68%	39,769,493	-99.27%
June 30, 2010	130,594,539	179,323,343	(48,728,804)	72.83%	41,161,578	-118.38%
June 30, 2011	135,097,458	190,196,691	(55,099,233)	71.03%	42,971,870	-128.22%
June 30, 2012	137,838,546	196,445,981	(58,607,435)	70.17%	43,865,945	-133.61%
June 30, 2013	143,944,820	207,539,449	(63,594,629)	69.36%	45,788,173	-138.89%
June 30, 2014	158,411,427	222,951,312	(64,539,885)	71.05%	47,853,353	-134.87%

Please note: the above schedule (Schedule of Funding Progress) is compiled in accordance with the requirements of GASB 25, which was superseded by GASB 67 for fiscal years beginning after June 15, 2013, and is presented for informational purposes only at the request of the City.

Schedule of Employer Contributions

Year Ended	Annual Required Contribution	Actual Contribution	Percentage Contributed
June 30, 2008	5,978,195	5,719,282	95.67%
June 30, 2009	5,798,294	5,875,295	101.33%
June 30, 2010	5,728,980	5,752,571	100.41%
June 30, 2011	6,778,735	6,779,226	100.01%
June 30, 2012	7,547,910	7,547,954	100.00%
June 30, 2013	8,175,461	8,175,505	100.00%
June 30, 2014	8,357,370	8,357,370	100.00%

Schedule of Annual Pension Cost

Year Ended	Annual Pension Cost	Percentage Contributed	Net Pension Obligation
June 30, 2011	6,756,072	100.01%	1,956,477
June 30, 2012	7,525,512	100.00%	1,934,035
June 30, 2013	8,151,272	100.00%	1,909,802
June 30, 2014	8,332,190	100.00%	1,884,662

Compiled in accordance with the requirements of GASB 25, which is no longer the operative standard for pension accounting in the public sector, and is presented at the request of the City for informational purposes only.
Also known as "past service liability."



Section VII – Experience

Records are maintained whereby the actual experience of active and retired members is compared to that expected on the basis of the tables adopted by the Retirement Board. In this way, deviations in the experience from that anticipated will be noted and any adjustments believed necessary will be brought to the attention of the Retirement Board in the experience studies required by the Burlington Code of Ordinances.

During the last year, the total unfunded actuarial accrued liability (UAL) was expected to decrease from \$63,594,629 to \$63,356,593. The actual UAL at the end of the year was \$64,539,885. The chart below reconciles the expected to actual UAL. The primary sources of changes were a \$44,741 liability loss, a \$4,270,277 investment gain, and a \$5,498,310 addition to the accrued liability as a result of the adoption of an updated mortality assumption and a change in the actuarial cost method used.

The sources of the (Gains)/Losses are as follows:

Actual UAL as of June 30, 2013		\$ 63,594,629
Expected UAL (Prior to Changes) as of June 30, 2014		\$ 63,356,593
Salary Increases	\$ 0	
New Participants	359,886	
Active - Retirements	1,400,828	
Active - Terminations	129,056	
Active - Mortality	(396,137)	
Active - Disabilities	(438,630)	
Retiree Mortality	513,886	
Other (Data Corrections, etc.)	(1,613,630)	
Total Liability (Gain)/Loss		\$ (44,741)
Investment (Gain)/Loss		(4,270,277)
Newly Eligible Employees		0
Actuarial Assumption and Method Changes		5,498,310
Total Change in UAL		<u>\$ 1,183,292</u>
Actual UAL as of June 30, 2014		\$ 64,539,885

The reconciliation of the UAL is as follows:

	Class A Members	Class B Members	Total System
Total UAL as of June 30, 2013	\$ 27,668,857	\$ 35,925,772	\$ 63,594,629
Interest Adjustment	(156,404)	(193,963)	(350,367)
FY 2013 Experience Base	2,892,368	(1,596,745)	1,295,623
Total UAL as of June 30, 2014	\$ 30,404,821	\$ 34,135,064	\$ 64,539,885



Schedule A

Valuation Balance Sheet Showing the Assets and Liabilities Accrued Under the Burlington Employees' Retirement System as of June 30, 2014

Assets

		Class A Members	Class B Members		Total System
Valuation Assets	\$	70,858,939	\$ 87,552,488	\$	158,411,427
Unfunded past service cost		30,404,821	 34,135,064		64,539,885
Total Assets	\$	101,263,760	\$ 121,687,552	\$	222,951,312
Present value of benefits payable on account of	Liabi	lities			
retired members, beneficiaries and members entitled to deferred vested benefits	\$	71,476,307	\$ 60,870,065	\$	132,346,912
Present value of prospective benefits accrued to date on account of present active members Total Liabilities	<u> </u>	29,787,453 101,263,760	\$ 60,816,947 121,687,552	<u> </u>	90,604,400



Schedule B

Outline of Actuarial Assumptions and Methods for Determination of Contribution Amounts

Basis for Assumptions

As required under Part II, Section 24-61 of the Burlington Code of Ordinances, experience studies are performed at least once in every five-year period. Schedule B of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. The assumptions were based on a recent experience study covering the period from July 1, 2007, through June 30, 2012. The mortality assumptions are adopted by the Board based on the study.

Interest Rate

8% per annum, compounded annually.

Separations before Normal Retirement

Representative values of the assumed annual rates of withdrawal and vesting, early service retirement, death and disability are as follows:

		Class A Memb	pers	
Age	Withdrawal and Vesting	Early Service Retirement	Death*	Disability*
20	14.0%			
25	7.0		.1%	.2%
30	6.0		.1	.3
35	6.0		.1	.4
40	5.0		.1	.5
42	4.6		.1	.6
45	4.0	15.0%	.1	.7
50	3.0	15.0	.2	1.3
53	1.2	20.0	.3	1.8
54	0.6	20.0	.3	2.0

		Class B Mem	bers	
Age	Withdrawal and Vesting**	Early Service Retirement	Death*	Disability*
25	15.0%		.1%	.1%
30	12.0		.1	.1
35	10.0		.1	.1
40	4.0		.1	.2
45	4.0		.1	.3
50	4.0		.2	.5
55	4.0	5.0%	.4	.9
60	4.0	10.0	.6	1.7
61	4.0	15.0	.7	2.1
62	4.0	20.0	.8	2.5
63	4.0	25.0	1.0	2.9
64	4.0	25.0	1.1	3.4

^{*} Rates reflect both ordinary and accidental occurrences.

^{**} Rates are assumed to be higher during the first three years of membership (i.e., 27.5% at age 25, 22% at ages 30 and 35, 16.5% at ages 40 - 64).



Outline of Actuarial Assumptions and Methods for Determination of Contribution Amounts

Normal Service Retirement

The representative values of the assumed rates of normal service retirement are as follows:

Age	Class A	Age	Class B
55	20.0%	65	25.0%
56	20.0	66	20.0
57	20.0	67	25.0
58	20.0	68	20.0
59	20.0	69	25.0
60	100.0	70	100.0

Benefit Commencement after Separation

Class A vested terminations are assumed to commence benefits at age 55. Class B vested terminations prior to June 30, 2000 are assumed to commence at age 65. Class B vested retirements after June 30, 2000 are assumed to commence at age 55 with a reduced benefit.

Salary Increases

Representative values of the assumed annual rates of future salary increase are as follows:

Age	Class A&B
25	8.8%
30	7.0
35	5.6
40	4.9
45	4.6
50	4.3
55	4.0
59	3.9
60	3.9
65	3.8
69	3.8

Deaths after Retirement

105% of the probabilities in the RP-2000 Combined Mortality Tables for Males and Females with full generational projection by Scale BB.

Future Expenses

No provisions made.

Adjustments to Allowances

Cost-of-living increases averaging 3% per year were assumed.

Accrual Rate Election

85% of retiring members are assumed to elect the no-COLA accrual rate and 15% of retiring members are assumed to elect the full-COLA accrual rate.



Outline of Actuarial Assumptions and Methods for Determination of Contribution Amounts

Funding Method

Entry Age Normal with normal cost determined as a level percentage of salary. Gains (losses) as they occur, reduce (increase) the unfunded past service cost.

Asset Valuation Method

Based on a five-year expected value of assets method in which actuarial assets are set equal to the market value of assets as of the valuation date plus:

- i) four-fifths of the difference between the expected return on market assets and the actual return on market assets during the year preceding the valuation;
- ii) three-fifths of the difference between the expected return on market assets and the actual return on market assets during the second year preceding the valuation;
- ii) two-fifths of the difference between the expected return on market assets and the actual return on market assets during the third year preceding the valuation; and
- iv) one-fifth of the difference between the expected return on market assets and the actual return on market assets during the fourth year preceding the valuation.

Expected return is equal to a year of expected investment earnings (based on the valuation interest rate) on the market value of assets as of the beginning of the year and the cash flow (contributions minus benefit payments) during the year, assuming mid-year contributions and benefit payments.

Revisions from Prior Year Assumptions

- Funding Method was changed from Projected Unit Credit to Entry Age Normal with level percentage of salary normal cost.
- Post decrement mortality was updated to 105% of the RP-2000 Combined Mortality Tables for Males and Females with full generational projection using Scale BB.

Miscellaneous

The valuation was prepared on an ongoing-plan basis. The valuation was based on members in the System as of the valuation date and did not take future members into account. No provision has been made for contingent liabilities with respect to non-vested terminated members who may be reemployed. The valuation assumptions anticipate future inflation of about 3% a year.



Schedule C

Brief Summary of Principal System Provisions as Interpreted for Valuation Purposes

System Name

Burlington Employees' Retirement System

Effective Date

July 1, 1954.

Average Final Compensation (AFC)

For Class A Police non-union employees, Class A Police employees hired after January 10, 2011, Class A Fire employees hired after October 7, 2011 or Class B AFSCME Local 1343 employees hired after June 7, 2011, or Class B IBEW Local 300 employees hired after October 30, 2012, it is the average earnable compensation during the highest 5 non-overlapping 12-month periods. For all others, it is the average earnable compensation during the highest 3 non-overlapping 12-month periods.

Membership Eligibility

Regular employees of the City of Burlington excluding elective officers other than the mayor and excluding teachers other than certain teachers employed prior to July 1, 1947.

Membership Classification

Class A

Members of the Fire and Police Departments not including clerical employees.

Class B

All other members.

Service Retirement

Eligibility

Class A

For Police employees hired after January 10, 2011, age 40 and 20 years of creditable service. For Fire employees hired after October 7, 2011, age 45 and 20 years of creditable service. For all others, age 45 and 7 years of creditable service. Compulsory at age 60.

Class B

Age 55 and 7 years of creditable service.

Amount of Benefit

Class A

For Fire employees hired before January 1, 2007 and Police employees hired before July 1, 2006, 2.75% of AFC times creditable service not in excess of 25 years plus .5% of AFC times creditable service between 25 and 35 years. For Police employees hired after January 10, 2011, 2.5% of AFC times creditable service not in excess of 20 years plus 5% of AFC times creditable service between 20 and 25 years. For all others, 2.65% of AFC times creditable service not in excess of 25 years plus .5% of AFC times creditable service between 25 and 35 years. Benefit increased by Cost of Living Adjustment detailed below.

In lieu of this benefit, at the time of retirement, a member hired prior to July 1, 2006 may choose either (i) an accrual rate of 3.25% for the first 25 years of creditable service, plus an accrual of .5% for creditable service



Brief Summary of Principal System Provisions as Interpreted for Valuation Purposes

between 25 and 35 years, and a Cost of Living Adjustment equal to one half of the Cost of Living Adjustment detailed below, or (ii) an accrual rate of 3.8% for all years of service prior to June 30, 2006 for the first 25 years, an accrual rate of 3.6% for all years of service commencing July 1, 2006 for the first 25 years, plus an accrual rate of .5% for creditable service between 25 and 35 years, and no Cost of Living Adjustment.

A Fire employee hired on or after January 1, 2007 or a Police employee hired on or after July 1, 2006 may only select a benefit with a full Cost of Living Adjustment.

For Police employees hired after January 10, 2011 or Fire employees hired after October 7, 2011, the above benefits based on AFC and creditable service at retirement are reduced actuarially for the period of time by which retirement precedes age 50.

For Fire employees hired on or before October 7, 2011 who retire on July 1, 2013 or later, the above benefits based on AFC and creditable service at retirement are reduced actuarially until age 48 for the period of time by which retirement precedes age 55.

For all others, prior to age 55, the above benefit based on AFC and creditable service at retirement is reduced actuarially for the period of time by which retirement precedes the earlier of 25 years of creditable service and age 55. For employees who terminate with 20 to 25 years of creditable service the above benefit based on AFC and creditable service at retirement is reduced by 1.82% for each year that creditable service is less than 25 years.

Class B

For employees hired prior to July 1, 2006: Age 65 and older, the greater of (i) 1.6% of AFC (at age 65) times creditable service not in excess of 25 years plus .5% of AFC (at age 65) times creditable service in excess of 25 years or (ii) the actuarial equivalent of the benefit determined at age 65. This benefit will be increased by the Cost of Living Adjustment detailed below.

For employees hired on or after July 1, 2006: Age 65 and older, the greater of (i) 1.4% of AFC (at age 65) times creditable service not in excess of 25 years plus .5% of AFC (at age 65) times creditable service in excess of 25 years or (ii) the actuarial equivalent of the benefit determined at age 65. This benefit will be increased by the Cost of Living Adjustment detailed below.

In lieu of this benefit, at the time of retirement, a member may choose (i) an accrual rate of 1.9% for all years of service prior to June 30, 2006 for the first 25 years, an accrual rate of 1.8% for all years of service commencing July 1, 2006 for the first 25 years, plus an accrual of .5% for creditable service in excess of 25 years, and a Cost of Living Adjustment equal to one-half of the Cost of Living Adjustment detailed below, or (ii) an accrual rate of 2.2% for all years of service prior to June 30, 2006 for the first 25 years, an accrual rate of 2.0% for all years of service commencing July 1, 2006 for the first 25 years, plus an accrual of .5% for creditable service in excess of 25 years, and no Cost of Living Adjustment.

Except for employees detailed below, prior to age 65, the above benefit based on AFC and creditable service at retirement reduced by 2% for each year that retirement precedes age 65. For Class B IBEW employees hired before May 1, 2008, who elect a contribution rate of 4% is elected the early reduction factor is 2% for each year the retirement precedes age 65. For Class B IBEW employees hired before May 1, 2008, who elect a contribution rate of 3% the benefit is reduced by a factor which varies with age. The factor equals 1 at 65 and .4 at 50.



Brief Summary of Principal System Provisions as Interpreted for Valuation Purposes

For Class B IBEW employees hired after May 1, 2008, the benefit is reduced by a factor which varies by age. The factor equals 1 at 65 but is equal to .356 at age 55.

For Class B AFSCME Local 1343 employees hired before January 1, 2006 that meet the Rule of 82 by December 7, 2011 but retire later than December 7, 2011, the reduction is 4% per year at ages 55 to 59 for each year under age 65, and the standard 2% per year reduction for ages 60 to 65. For other Class B AFSCME Local 1343 employees retiring after December 7, 2011, there will be full actuarial reduction from ages 55 to 59 and the standard 2% per year reduction for ages 60 to 65.

Cost of Living Adjustment

Benefits increase annually by changes in the Consumer Price Index of more than 1%. The maximum annual increase is 6%. Increase is not applicable to deferred vested benefit prior to commencement, survivor income benefit, disability benefit prior to normal retirement age or members who choose to have no cost of living adjustment.

Service Adjustment

Class A service for calculation of benefits shall be adjusted such that any Class A employee shall be granted 1.07 years of credit for each year in which the employee worked prior to July 1, 1996, and 1.17 years thereafter, in a position regularly assigned a workweek consisting on average of fifty-three or more hours of work per week.

Disability Retirement

Eligibility

All Members. Permanently disabled. Class B AFSCME Local 1343 employees must have 2 years of creditable service to be eligible for disabilities that are not work-related. Class A Fire employees hired after October 7, 2011 must have 1 year of creditable service to be eligible for disabilities that are not work-related. All other employees are immediately eligible.

Amount of Benefit

A benefit payable until normal service retirement eligibility (Class A - age 55 and 7 years of creditable service, Class B - age 65 and 7 years of creditable service). For Class A Fire employees hired after October 7, 2011, it is equal to 66 2/3% of the member's earnable compensation less workmen's compensation. For Class B IBEW employees hired after October 20, 2012, it is equal to 662/3% of the member's earnable compensation less workmen's compensation. For Class B AFSCME employees, it is equal to 66 2/3% of the member's earnable compensation less workmen's compensation and Social Security. For all others, it is equal to 75% of the member's earnable compensation less workmen's compensation and, in the case of Class B, less Social Security.

After normal service retirement eligibility, a service retirement benefit based on AFC at retirement and creditable service at normal service retirement eligibility, including the period while permanently disabled and receiving a disability benefit from the System.

Accidental Death

Eligibility

Class A only. Death due to accident while in the performance of duty.



Brief Summary of Principal System Provisions as Interpreted for Valuation Purposes

Amount of Benefit

A benefit to the spouse until death or remarriage of the greater of (i) 55% of AFC, and (ii) the participant's current accrued retirement benefit. Upon death or remarriage of the spouse, the benefit will be payable to children until age 21.

Survivor Income

Eligibility

All Members. Death in active service.

Amount of Benefit

Class A

30% of compensation during the July preceding death payable to spouse until earlier of death or 2nd anniversary of remarriage. An additional 5% per unmarried child under 21 (maximum additional 10%) is payable until benefits cease or children no longer eligible. If there is no spouse or spouse dies, the benefit is payable to unmarried children under age 21 until earlier of death, marriage or age 21.

Class B

30% of compensation during the July preceding death payable to spouse until earlier of death, 2nd anniversary of remarriage or age 62. Upon the spouse's attainment of age 62 (if not remarried) a benefit based on the 50% Joint and Survivor form of payment will be paid to the spouse for life. If there is no spouse or spouse dies, the benefit is payable to unmarried children under age 21 until earlier of death, marriage or age 21.

Return of Contributions

Accumulated contributions returned upon separation with less than 3 years of service or upon death with no accidental death benefit payable.

Upon death of a retired member, the excess of his contribution at retirement over the benefits paid will be paid to his beneficiary or estate.

Vested Retirement

Eligibility

All Members. 3 years of creditable service.

Amount of Benefit

Class A

A percentage grading from 20% after 3 years to 100% after 7 years, of the benefit calculated using AFC and creditable service at termination. The benefit is payable commencing at age 55. Member may elect early receipt with reduction as for service retirement prior to age 55.

Class B

A percentage grading from 20% after 3 years to 100% after 7 years, of the benefit calculated using AFC and creditable service at termination. The benefit is payable commencing at age 65. Member may elect early receipt with reduction as for service retirement prior to age 65.



Brief Summary of Principal System Provisions as Interpreted for Valuation Purposes

Survivor Spouse's Pension

Eligibility

All Members. Death of a terminated member entitled to a vested retirement benefit prior to commencement of such benefit.

Amount of Benefit

50% of reduced accrued benefit reflecting the 50% Joint and Survivor form of payment (ages as of date payments commence) payable at member's early retirement date.

Spouse may elect to receive payments later than member's early retirement date with no reduction for receipt at member's 65th birthday.

Offsets on Benefits

Disability and accidental death benefits are offset by workmen's compensation paid for the same disability or death.

Contributions

By Members

Class A

10.8% of earnable compensation for the first 35 years of creditable service, none thereafter.

Class B

For IBEW employees hired before May 1, 2008, who so elect 4.0% of earnable compensation, all other 3.0% of earnable compensation.

By City

Remainder necessary to fund for the benefits of the System on an actuarial basis.

Revisions from Prior Year Plan Provisions:

None.



Schedule D

Table 1: The Number and Annual Earnable Compensation of Active Members Distributed by Age as of June 30, 2014

Class A Members

	M	ale	Female	
Age	Number	Amount	Number	Amount
20	1	29,124		
22	1	45,745	1	46,839
23	2	87,693	1	45,745
24	9	405,487		
25	3	141,241		
26	6	270,961		
27	8	379,360	1	56,505
28	2	88,674	1	57,251
29	6	301,377	1	40,782
30	9	468,296	2	113,195
31	3	170,943	1	58,534
32	7	349,374		
33	11	635,781	1	48,698
34	8	478,613	3	165,633
35	6	336,661	1	51,283
36	3	193,361		
37	5	338,028		
38	5	348,057		
39	10	657,316		
40	5	331,309	1	57,518
41	5	313,960		
42	5	341,551	1	68,188
43	4	256,362		
44	9	655,933		
45	5	294,518		
46	5	350,816		
47	3	222,056	1	83,824
48	5	391,935		
49	1	58,682		
50	2	113,917		
52	1	68,291		
53	1	67,884		
55	1	72,611		
57	1	58,955		
58			1	68,202
TOTAL	158	\$9,324,874	17	\$962,197



Table 2: The Number and Annual Earnable Compensation of Active Members Distributed by Age as of June 30, 2014

Class B Members

	Ma	ale	Female	
Age	Number	Amount	Number	Amount
16	1	39,563		
19	1	5,263		
21	1	41,477		
22	2	67,497	1	22,678
23	1	22,954	2	62,805
24	6	244,518	7	232,251
25	8	273,626	11	329,203
26	7	265,564	3	92,999
27	7	233,858	5	160,889
28	5	228,381	7	183,278
29	10	303,923	3	162,735
30	6	205,656	8	272,192
31	6	256,205	4	140,183
32	6	264,781	4	156,327
33	11	622,180	8	400,616
34	7	398,102	7	270,317
35	4	165,833	7	355,468
36	8	493,037	6	353,161
37	9	396,132	7	348,136
38	3	161,496	6	283,726
39	13	530,627	7	324,096
40	7	355,325	6	220,187
41	7	295,589	4	242,308
42	7	276,162	4	217,183
43	13	682,949	7	317,529
44	13	727,098	7	246,332
45	17	977,303	6	282,665
46	13	677,405	5	256,961
47	10	671,723	15	522,368
48	10	629,471	7	294,850
49	10	668,698	7	263,448



Table 2: The Number and Annual Earnable Compensation of Active Members Distributed by Age as of June 30, 2014

Class B Members (continued)

	M	ale	Fe	male
Age	Number	Amount	Number	Amount
50	15	843,878	9	269,861
51	11	587,528	12	599,343
52	24	1,466,301	7	254,171
53	14	814,636	11	625,326
54	16	1,041,791	15	687,261
55	8	468,033	12	679,850
56	15	829,692	9	428,486
57	15	825,240	5	291,321
58	11	620,490	8	392,292
59	13	797,457	6	243,634
60	12	754,947	7	321,219
61	10	714,184	7	356,665
62	18	1,146,080	8	394,878
63	7	437,421	7	333,525
64	6	282,205	5	276,214
65	5	287,944	4	204,334
66	3	187,511	1	55,761
67	4	120,236		
68	2	91,332	2	142,657
70	2	111,161		
71			1	44,236
72	1	78,310		
73	1	48,725		
75	1	37,977		
78	1	79,341		
81	1	20,984		
82	1	47,104		
85	1	27,459		
TOTAL	447	23,950,360	307	13,615,922



Table 3: The Number and Annual Earnable Compensation of Active Members Distributed by Years of Service as of June 30, 2014

Class A Members

Years of	M	ale	Fen	nale
Service	Number	Amount	Number	Amount
0	20	779,342	2	92,583
1	9	435,605	1	48,698
2	11	532,658		
3	12	657,505	2	92,065
4	4	216,209		
5	7	379,889	3	169,700
6	8	452,761	3	172,288
7	4	210,450	1	58,534
8	2	117,364	1	47,233
9	4	250,525		
10	6	361,356	1	60,881
11	4	255,764		
12	13	818,082	1	83,824
13	7	451,435		
14	9	626,644		
15	8	554,107	1	68,202
16	9	611,198		
17	4	285,054		
18	4	309,138		
19	6	443,322		
20			1	68,188
21	2	202,927		
23	2	131,305		
24	1	70,739		
25	2	171,494		
TOTAL	158	\$9,324,874	17	\$962,197



Table 4: The Number and Annual Earnable Compensation of Active Members Distributed by Years of Service as of June 30, 2014

Class B Members

Years of		Male	Female	
Service	Number	Amount	Number	Amount
0	37	1,291,225	39	1,183,192
1	55	2,775,341	39	1,310,730
2	34	1,548,603	35	1,424,388
3	16	665,775	13	508,199
4	17	959,249	16	633,286
5	21	1,115,229	9	468,057
6	21	1,149,767	11	510,598
7	17	983,199	15	784,765
8	16	850,479	10	384,204
9	14	634,257	9	430,474
10	12	522,707	4	161,419
11	14	724,920	11	612,969
12	11	521,640	4	161,603
13	14	799,109	12	768,778
14	5	214,957	8	396,834
15	19	1,005,797	11	581,537
16	7	507,140	5	191,468
17	7	393,562	7	353,757
18	8	558,624	4	184,803
19	10	572,090	11	623,323
20	4	266,376	1	60,771
21	3	319,471	2	72,285
22			1	51,724
23	5	282,298		
24	4	267,710	1	73,582
25	3	207,044	1	58,648
26	8	565,219	5	296,582
27	5	298,995	4	257,826
28	4	468,143	1	83,397
29	2	111,335	2	96,835
30	11	745,760	2	121,607
31	5	314,051	1	60,771
32	5	303,180	3	178,345
33	5	334,979	1	52,326
34	7	476,114		
35	9	518,964	2	133,802



Table 4: The Number and Annual Earnable Compensation of Active Members Distributed by Years of Service as of June 30, 2014

Class B Members (continued)

Years of		Male	F	emale
Service	Number	Amount	Number	Amount
36	5	380,379	3	167,607
37	2			
38	1	48,725	2	119,669
39	1	56,904	1	
40			1	55,761
41				
43	1	74,225		
45	1	68,092		
47	1	48,725		
TOTAL	410	22,659,135	268	12,432,730



Table 5: The Number and Annual Retirement Benefits of Retirees Distributed by

Age as of June 30, 2014 Class A Members

Service Retirements

	Male		Fen	nale
Age	Number	Amount	Number	Amount
43	1	41,411		
45	2	133,494	1	61,917
46	1	43,107		
47	3	173,735		
48	3	128,072		
49	5	261,732	1	47,201
50	4	254,144		
51	6	239,863		
52	3	141,318	1	69,974
53	7	427,828		
54	4	188,542	1	30,952
55	5	178,915		
56	5	198,625		
57	5	172,063		
58	7	253,820		
59	7	380,184		
60	1	28,572		
61	5	199,178		
62	2	102,261		
63	4	152,528		
64	9	297,462	1	8,395
65	6	216,200		
66	5	128,355		
67	6	250,694		
68	6	192,332		
69	2	80,611		
70	7	268,589		
71	4	138,323		
72	1	31,042		
73	4	125,435		
74	1	20,306		
75	1	1,109		



Table 5: The Number and Annual Retirement Benefits of Retirees Distributed by Age as of June 30, 2014

Class A Members (continued)

Service Retirements

	IV	Male		nale
Age	Number	Amount	Number	Amount
78	1	43,668		
79	1	42,309		
80	1	34,942		
81	1	27,738		
82	1	27,175		
83	1	25,652		
84	1	23,100		
88	1	29,913		
TOTAL	140	5,704,347	5	\$218,440



Table 6: The Number and Annual Retirement Benefits of Retirees Distributed by Age as of June 30, 2014

Class B Members
Service Retirements

	Male		Fer	nale
Age	Number	Amount	Number	Amount
56	2	18,080	2	31,962
57			1	5,965
58	4	61,667	2	26,375
59	2	34,181	3	40,327
60	3	85,091	2	15,076
61	4	92,764	3	17,350
62	8	219,721	1	2,400
63	6	122,075	5	124,187
64	12	273,193	8	94,965
65	19	327,257	17	189,293
66	13	196,915	5	37,337
67	16	259,555	8	91,796
68	7	68,484	7	79,407
69	9	154,135	4	16,934
70	4	40,385	2	26,635
71	6	105,521	6	50,914
72	10	120,227	12	169,448
73	7	106,996	7	151,899
74	2	51,823	6	74,537
75	6	54,024	1	1,357
76	7	91,740	4	68,779
77	6	126,856	4	68,724
78	3	28,253	5	41,806
79	3	21,105	6	41,528
80	5	55,146	3	13,228
81	1	17,694	1	13,624
82	5	77,769	3	52,334
83	3	29,928	3	3,986
84	1	32,601	5	55,707



Table 6: The Number and Annual Retirement Benefits of Retirees Distributed by Age as of June 30, 2014

Class B Members (continued)

Service Retirements

	M	ale	Fen	nale
Age	Number	Amount	Number	Amount
85			2	29,172
86	2	22,718	1	448
87	1	11,284		
88	1	5,114	1	12,393
89			1	2,047
90	1	3,199		
91			1	2,340
93			1	953
94			1	11,283
TOTAL	179	\$2,915,501	144	1,666,516



Table 7: The Number and Annual Retirement Benefits of Retirees Distributed by Age as of June 30,

Class A Members

Disability Retirements

	Ma	ale	Fen	nale
Age	Number	Amount	Number	Amount
46	2	84,580		
51	1	27,013		
67	1	16,670		
82	2	35,306		
TOTAL	6	\$163,569		



Table 8: The Number and Annual Retirement Benefits of Retirees Distributed by Age as of June 30, 2014

Class B Members
Disability Retirements

	Ma	ale	Fen	nale
Age	Number	Amount	Number	Amount
49	1	7,007		
50			1	10,793
51				
52	1	6,037		
53				
54	2	21,190	3	59,044
55	2	43,389	1	15,509
56	2	70,973	2	22,351
58	1	38,866		
59	2	37,707	2	46,542
61	4	77,370	1	5,010
62	2	34,013		
63	2	35,404	3	52,214
64	4	66,899	3	36,633
84	1	5,919		
87	1	5,837		
TOTAL	25	\$450,612	16	248,095



Table 9: The Number and Annual Retirement Benefits of Beneficiaries of Retirees Distributed by Age as of June 30, 2014

Class A Members

Beneficiaries of Deceased Members

	Ma	ale	Fen	nale
Age	Number	Amount	Number	Amount
19	1	15,819		
21			1	7,731
50			1	47,643
51			1	20,727
56			1	6,782
58			1	8,499
61			1	6,916
70			2	26,449
71			1	19,749
72			1	30,354
73			1	12,136
79			1	19,134
82	1	19,088		
84			1	13,691
92			1	18,624
TOTAL	2	\$34,907	14	\$238,436



Table 10: The Number and Annual Retirement Benefits of Beneficiaries of Retirees Distributed by Age as of June 30, 2014

Class B Members

Beneficiaries of Deceased Members

	Ma	ale	Fen	nale
Age	Number	Amount	Number	Amount
29			1	1,093
31	1	1,456		
42	1	10,981		
46			1	24,911
48			2	24,114
49			2	17,379
51	1	9,480		
52			1	11,875
53			1	375
57			1	1,788
58	1	10,981		
59	1	12,774		
60			2	16,990
61			1	4,076
62			1	2,114
63	1	2,949	1	6,853
64			2	27,024
65			2	7,934
66			1	5,346
67			2	46,548
69			1	2,390
70			2	36,000
72			4	23,463
74			6	50,098
76			4	19,991
78			1	8,325
79			2	3,675



Table 10: The Number and Annual Retirement Benefits of Beneficiaries of Retirees Distributed by Age as of June 30, 2014

Class B Members

Beneficiaries of Deceased Members (continued)

	Ma	ale	Fen	nale
Age	Number	Amount	Number	Amount
80			1	4,310
81			2	21,783
82			1	6,063
83	1	1,527	1	3,289
84			2	7,806
85			1	5,632
86			1	11,320
88	1	7,156	1	10,707
90		`	2	10,689
TOTAL	8	\$57,304	53	\$423,962



Table 11: The Number and Annual Retirement Benefits of Service Retirements Distributed by Form of Annuity as of June 30, 2014

Class A Members

	Male		Female	
Form	Number	Amount	Number	Amount
Life Annuity	78	\$3,535,052	4	\$210,045
Certain & Life	17	621,821		
Joint & Survivor	38	1,295,099	1	8,395
Joint & Survivor Pop-up	7	252,375		
TOTAL	140	\$5,704,347	5	\$218,440



Table 12: The Number of Retirees, Disabled Retirees, and Beneficiaries Distributed By COLA Type as of June 30, 2014

Class A Members

COLA Type	Male	Female
No COLA	86	5
Half COLA	13	1
Full COLA	49	13
TOTAL	148	19



Table 13: The Number and Annual Retirement Benefits of Service Retirements Distributed by Form of Annuity as of June 30, 2014

Class B Members

	M	ale	Female		
Form	Number	Amount	Number	Amount	
Life Annuity	69	\$1,092,377	103	\$1,254,435	
Certain& Life	22	\$220,689	18	\$166,090	
Joint & Survivor	61	\$1,041,910	17	\$152,715	
Joint & Survivor Pop-up	27	\$560,526	6	\$93,276	
TOTAL	179	\$2,915,501	144	\$1,666,516	



Table 14: The Number of Retirees, Disabled Retirees, and Beneficiaries Distributed by COLA Type as of June 30, 2014

Class B Members

COLA Type	Male	Female
No COLA	107	98
Half COLA	15	9
Full COLA	90	106
TOTAL	212	213



Schedule E

Past Service Amortization Schedule

Class A Members

Description	Date Established	Original Balance	July 1, 2014 Outstanding Balance	FY 2015 Past Service Contribution	July 1, 2015 Outstanding Balance	Years Remaining to Fund	FY 2016 Past Service Contribution
Initial Amortization	July 1, 2004	\$ 3,698,048	\$ 3,338,576	\$ 333,298	\$ 3,272,364	20	\$ 333,298
FY 2005 Experience	July 1, 2005	6,655,535	6,513,068	638,490	6,395,623	21	638,489
FY 2006 Experience	July 1, 2006	2,588,959	2,575,844	248,368	2,533,544	22	248,369
FY 2007 Experience	July 1, 2007	(1,715,997)	(1,733,262)	(164,622)	(1,707,301)	23	(164,622)
FY 2008 Experience	July 1, 2008	713,490	730,662	68,448	720,667	24	68,447
FY 2009 Experience	July 1, 2009	3,308,275	3,430,815	317,375	3,387,905	25	317,375
FY 2010 Experience	July 1, 2010	3,969,991	4,164,718	380,856	4,117,039	26	380,855
FY 2011 Experience	July 1, 2011	3,564,353	3,728,849	337,419	3,689,738	27	337,420
FY 2012 Experience	July 1, 2012	2,191,929	2,346,386	210,280	2,323,817	28	210,280
FY 2013 Experience	July 1, 2013	2,337,776	2,416,798	214,678	2,395,464	29	214,678
FY 2014 Experience	July 1, 2014	2,892,368	2,892,368		3,123,757	30	277,475
Total			\$30,404,821	\$2,584,589	\$30,252,617		\$2,862,064

Equivalent Single Amortization Period: 24 Years



Schedule E

Past Service Amortization Schedule

Class B Members

Description	Date Established	Original Balance	July 1, 2014 Outstanding Balance	FY 2015 Past Service Contribution	July 1, 2015 Outstanding Balance	Years Remaining to Fund	FY 2016 Past Service Contribution
Initial Amortization	July 1, 2004	\$6,322,451	\$ 5,731,099	\$ 572,148	\$ 5,617,438	20	\$ 572,149
FY 2005 Experience	July 1, 2005	6,670,273	6,615,565	648,537	6,496,272	21	648,537
FY 2006 Experience	July 1, 2006	5,080,481	5,064,691	488,349	4,981,518	22	488,349
FY 2007 Experience	July 1, 2007	(728,430)	(735,759)	(69,881)	(724,739)	23	(69,881)
FY 2008 Experience	July 1, 2008	(3,206,229)	(3,283,404)	(307,585)	(3,238,491)	24	(307,585)
FY 2009 Experience	July 1, 2009	9,475,775	9,826,762	909,046	9,703,857	25	909,045
FY 2010 Experience	July 1, 2010	4,577,654	4,802,187	439,151	4,747,211	26	439,151
FY 2011 Experience	July 1, 2011	2,690,665	2,795,535	252,965	2,766,213	27	252,965
FY 2012 Experience	July 1, 2012	1,410,313	1,509,693	135,296	1,495,172	28	135,296
FY 2013 Experience	July 1, 2013	3,153,185	3,405,440	302,496	3,375,379	29	302,496
FY 2014 Experience	July 1, 2014		(1,596,745)		(1,724,485)	30	(153,182)
Total			\$34,135,064	\$3,370,523	\$33,495,345		\$3,217,340

Equivalent Single Amortization Period: 24 Years



Schedule F

Historical and Projected Contributions

Class A and B Employees

Fiscal Year Ending	Projected Payroll	Normal Contrib	oution	Past Service Contribution	Contribution Shortfall	Total City Contri	ibution
June 30, 2008	35,588,195	3,037,864	8.5%	2,929,190	(256,122)	5,710,932	16.0%
June 30, 2009	36,833,782	3,073,086	8.3%	2,851,003	(48,794)	5,875,295	16.0%
June 30, 2010	40,328,362	3,297,021	8.2%	2,455,550	0	5,752,571	14.3%
June 30, 2011	42,563,572	3,097,260	7.3%	3,681,967	0	6,779,227	15.9%
June 30, 2012	43,148,038	3,045,975	7.1%	4,501,979	0	7,547,954	17.5%
June 30, 2013	43,477,161	3,083,144	7.1%	5,092,361	0	8,175,505	18.8%
June 30, 2014	44,616,671	2,919,432	6.5%	5,437,938	0	8,357,370	18.7%
June 30, 2015	47,918,295	3,077,388	6.4%	5,955,113		9,032,501	18.8%
June 30, 2016	49,392,887	3,859,534	7.8%	6,079,404		9,938,938	20.1%
June 30, 2017	51,121,638	3,994,618	7.8%	6,079,404		10,074,022	19.7%
June 30, 2018	52,910,895	4,134,430	7.8%	6,079,404		10,213,834	19.3%
June 30, 2019	54,762,777	4,279,135	7.8%	6,079,404		10,358,539	18.9%

Notes:

No future liability gains or losses are assumed; assets are assumed to earn 8% per annum.

Projected payroll assumed to increase 3.5% per annum.

Unfunded liability as of June 30, 2004, was amortized over 30 years.

All future changes in unfunded liability will be amortized over 30 years.



Schedule F

Historical and Projected Contributions

Class A Employees

Fiscal Year Ending	Projected Payroll	Normal Contrib	ution	Past Service Contribution	Contribution Shortfall	Total City Cont	ribution
June 30, 2008	9,244,851	1,306,993	14.1%	1,220,155	(103,729)	2,423,419	26.2%
June 30, 2009	9,568,421	1,233,492	12.9%	1,055,533	0	2,289,025	23.9%
June 30, 2010	9,412,887	1,150,199	12.2%	1,123,981	0	2,274,180	24.2%
June 30, 2011	9,478,375	955,410	10.1%	1,441,355	0	2,396,765	25.3%
June 30, 2012	9,505,863	932,642	9.8%	1,822,213	0	2,754,855	29.0%
June 30, 2013	9,440,369	991,311	10.5%	2,159,631	0	3,150,942	33.4%
June 30, 2014	10,367,799	916,997	8.8%	2,369,912	0	3,286,909	31.7%
June 30, 2015	11,224,232	1,047,489	9.3%	2,584,590		3,632,079	32.4%
June 30, 2016	11,414,532	1,236,072	10.8%	2,862,064		4,098,136	35.9%
June 30, 2017	11,814,041	1,279,335	10.8%	2,862,064		4,141,399	35.1%
June 30, 2018	12,227,532	1,324,112	10.8%	2,862,064		4,186,176	34.2%
June 30, 2019	12,655,496	1,370,456	10.8%	2,862,064		4,232,520	33.4%

Notes:

No future liability gains or losses are assumed; assets are assumed to earn 8% per annum.

Projected payroll assumed to increase 3.5% per annum.

Unfunded liability as of June 30, 2004, was amortized over 30 years.

All future changes in unfunded liability will be amortized over 30 years.



Schedule F

Historical and Projected Contributions

Class B Employees

Fiscal Year Ending	Projected Payroll	Normal Contrib	ution	Past Service Contribution	Contribution Shortfall	Total City Cont	ribution
June 30, 2008	26,343,344	1,730,871	6.6%	1,709,035	(152,393)	3,287,513	12.5%
June 30, 2009	27,265,361	1,839,594	6.7%	1,795,470	(48,794)	3,586,270	13.2%
June 30, 2010	30,915,475	2,146,822	6.9%	1,331,569	0	3,478,391	11.3%
June 30, 2011	33,085,197	2,141,849	6.5%	2,240,612	0	4,382,461	13.2%
June 30, 2012	33,642,175	2,113,333	6.3%	2,679,766	0	4,793,099	14.2%
June 30, 2013	34,036,792	2,091,833	6.1%	2,932,730	0	5,024,563	14.8%
June 30, 2014	34,248,872	2,002,435	5.8%	3,068,026	0	5,070,461	14.8%
June 30, 2015	36,694,063	2,029,899	5.5%	3,370,523		5,400,422	14.7%
June 30, 2016	37,978,355	2,623,462	6.9%	3,217,340		5,840,802	15.4%
June 30, 2017	39,307,597	2,715,283	6.9%	3,217,340		5,932,623	15.1%
June 30, 2018	40,683,363	2,810,318	6.9%	3,217,340		6,027,658	14.8%
June 30, 2019	42,107,281	2,908,679	6.9%	3,217,340		6,126,019	14.5%

Notes:

No future liability gains or losses are assumed; assets are assumed to earn 8% per annum.

Projected payroll assumed to increase 3.5% per annum.

Unfunded liability as of June 30, 2004, was amortized over 30 years.

All future changes in unfunded liability will be amortized over 30 years.



Schedule GAnnual Amortization of the Unfunded Past Service Liability

Fiscal Year	Beginning of FY Balance of Unfunded Liability	Amortization Payment in Fiscal Year
2015	\$ 64,539,885	\$ 5,955,112
2016	\$ 63,747,964	\$ 6,079,405
2017	\$ 62,768,396	\$ 6,079,405
2018	\$ 61,710,463	\$ 6,079,405
2019	\$ 60,567,895	\$ 6,079,405
2020	\$ 59,333,921	\$ 6,079,405
2021	\$ 58,001,230	\$ 6,079,405
2022	\$ 56,561,924	\$ 6,079,405
2023	\$ 55,007,473	\$ 6,079,405
2024	\$ 53,328,665	\$ 6,079,405
2025	\$ 51,515,554	\$ 6,079,405
2026	\$ 49,557,393	\$ 6,079,405
2027	\$ 47,442,580	\$ 6,079,405
2028	\$ 45,158,581	\$ 6,079,405
2029	\$ 42,691,863	\$ 6,079,405
2030	\$ 40,027,807	\$ 6,079,405
2031	\$ 37,150,626	\$ 6,079,405
2032	\$ 34,043,271	\$ 6,079,405
2033	\$ 30,687,328	\$ 6,079,405
2034	\$ 27,062,909	\$ 6,079,405
2035	\$ 23,148,537	\$ 6,079,405
2036	\$ 18,921,015	\$ 5,173,959
2037	\$ 15,260,738	\$ 3,886,932
2038	\$ 12,594,664	\$ 3,150,215
2039	\$ 10,452,023	\$ 3,384,718
2040	\$ 7,903,467	\$ 3,623,855
2041	\$ 4,911,889	\$ 2,397,435
2042	\$ 2,907,405	\$ 1,577,429
2043	\$ 1,562,568	\$ 987,044
2044	\$ 700,529	\$ 641,468
2045	\$ 115,104	\$ 124,312
2046	\$ 0	