



BURLINGTON EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION REPORT

JUNE 30, 2018

DRAFT





## Table of Contents

Executive Summary .....	1
Valuation Results and Highlights .....	2
Purpose of the Valuation .....	2
Information Available in the Valuation Report .....	2
Changes Reflected in the Valuation .....	2
Cash Contribution for Fiscal Year Ending 2020 .....	2
Liability Experience During Period Under Review .....	2
Asset Experience During Period Under Review .....	3
Certification .....	4
Development of Unfunded Accrued Liability and Funded Ratio .....	5
Determination of Normal Cost and Actuarially Determined Employer Contribution .....	7
Actuarially Determined Employer Contribution per Group .....	9
Determination of Actuarial Gain/Loss .....	10
Amortization of Unfunded Liability .....	15
Member Data .....	18
Description of Actuarial Methods .....	26
Description of Actuarial Assumptions .....	27
Summary of Plan Provisions .....	33

### Report Prepared By:

Steve A. Lemanski  
Vice President, Practice Leader, Consulting Actuary  
860.856.2073  
[SLemanski@hhconsultants.com](mailto:SLemanski@hhconsultants.com)

Robert P. Lessard  
Team Leader, Actuarial Specialist  
860.856.2106  
[RLessard@hhconsultants.com](mailto:RLessard@hhconsultants.com)



## Executive Summary

	June 30, 2018			June 30, 2017		
	Class A	Class B	Total	Class A	Class B	Total
<b>Number of members</b>						
Active employees	187	733	920	179	666	845
Terminated vested members	15	351	366	15	356	371
Vested in employee contributions only	9	119	128	9	115	124
Retired, disabled and beneficiaries	183	530	713	178	496	674
Total	394	1,733	2,127	381	1,633	2,014
<b>Covered employee payroll</b>	11,485,871	37,526,157	49,012,028	10,903,872	34,746,500	45,650,372
<b>Average plan salary</b>	61,422	51,195	53,274	60,915	52,172	54,024
<b>Actuarial present value of future benefits</b>	148,808,631	159,280,699	308,089,330	134,863,320	161,548,365	296,411,685
<b>Actuarial accrued liability</b>	123,430,832	137,839,385	261,270,217	115,558,431	136,852,540	252,410,971
<b>Plan assets</b>						
Market value of assets	80,065,219	108,944,823	189,010,042	75,014,835	100,456,464	175,471,299
Actuarial value of assets	82,027,416	111,614,786	193,642,202	78,582,438	105,234,035	183,816,473
<b>Unfunded accrued liability</b>	41,403,416	26,224,599	67,628,015	36,975,993	31,618,505	68,594,498
<b>Funded ratio</b>	66.5%	81.0%	74.1%	68.0%	76.9%	72.8%
<b>Actuarially determined employer contribution (ADEC)</b>						
Fiscal year ending	2020	2020	2020	2019	2019	2019
ADEC	5,550,825	4,289,794	9,840,619	4,805,619	5,378,047	10,183,666



## Valuation Results and Highlights

### Purpose of the Valuation

The purpose of the valuation is to develop the Actuarially Determined Employer Contribution (ADEC).

The ultimate cost of a pension plan is based primarily on the level of benefits promised by the plan. The pension fund's investment earnings serve to reduce the cost of plan benefits and expenses. Thus,

$$\text{Ultimate cost} = \text{Benefits Paid} + \text{Expenses Incurred} - \text{Investment Return} - \text{Employee Contributions}$$

The actuarial cost method distributes this ultimate cost over the working lifetime of current plan participants. By means of this budgeting process, costs are allocated to both past and future years, and a cost is assigned to the current year. The current year's allocated cost, or normal cost, is the building block upon which the actuarially determined employer contribution is developed. The June 30, 2018 valuation produces the contribution for the fiscal year ending 2020.

### Information Available in the Valuation Report

The Executive Summary is intended to emphasize the notable results of the valuation from the perspective of the Plan Sponsor. Supporting technical detail is documented in Results of the Valuation, Supporting Exhibits and Description of Actuarial Methods and Assumptions. A concise summary of the principal provisions of the Plan is outlined in Summary of Plan Provisions.

### Changes Reflected in the Valuation

There were changes made to the Class A Fire provisions, as well as a COLA provision change for Class B. The net impact of these plan changes was a decrease in the unfunded liability and ADEC of \$136,000 and \$25,000, respectively. In addition, assumption changes proposed in the Experience Study for the period July 1, 2012 to June 30, 2017 have been reflected in this valuation. With respect to the investment rate of return, an assumption of 7.625% has been reflected. The impact of these assumption changes was a decrease in the unfunded liability and ADEC of \$307,000 and \$74,000, respectively.

### Cash Contribution for Fiscal Year Ending 2020

	Class A	Class B
Normal Contribution Rate	13.5%	4.1%
Past Service Contribution	\$3,892,364	\$2,624,855

The City cost is:	2020 Fiscal Year
Class A	\$5,550,825
Class B	<u>4,289,794</u>
Total	\$9,840,619

### Liability Experience During Period Under Review

The plan experienced a net actuarial gain on liabilities of approximately \$1,343,000 since the prior valuation.

There were gains due to salary increases, as well as for turnover, disability and retirements. These were partially offset by mortality losses for the year.



**Asset Experience During Period Under Review**

	2018 Fiscal Year
Market Value Basis	9.6%
Actuarial Value Basis	7.1%

The Actuarial Value of assets, rather than the Market Value, is used to determine plan contributions. The Actuarial Value spreads the asset volatility over 10 years, thereby smoothing out fluctuations that are inherent in the Market Value.

DRAFT



## Certification

This report presents the results of the June 30, 2018 Actuarial Valuation for Burlington Employees' Retirement System (the Plan) for the purpose of estimating the funded status of the Plan and determining the Actuarially Determined Employer Contribution (ADEC) for the fiscal year ending June 30, 2020. This report may not be appropriate for any other purpose.

The valuation has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with all applicable Actuarial Standards of Practice.

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. The assumptions in this report were based on a recent experience study covering the period July 1, 2012 to June 30, 2017.

In our opinion, the actuarial assumptions used in this report are reasonably related to the experience of the Plan and to reasonable long-term expectations.

In preparing this valuation, I have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the Trustee. I have audited neither the employee data nor the financial information, although I have reviewed them for reasonableness.

The results in this valuation report are based on the Plan as summarized in the *Summary of Plan Provisions* section of this report and the actuarial assumptions and methods detailed in the *Description of Actuarial Methods and Assumptions* section of this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

I have no relationship with the employer or the Plan that would impair, or appear to impair, my objectivity in performing the work presented in this report. I am a member of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Steve A. Lemanski, FSA, FCA, MAAA  
Enrolled Actuary 17-05506

April 26, 2019

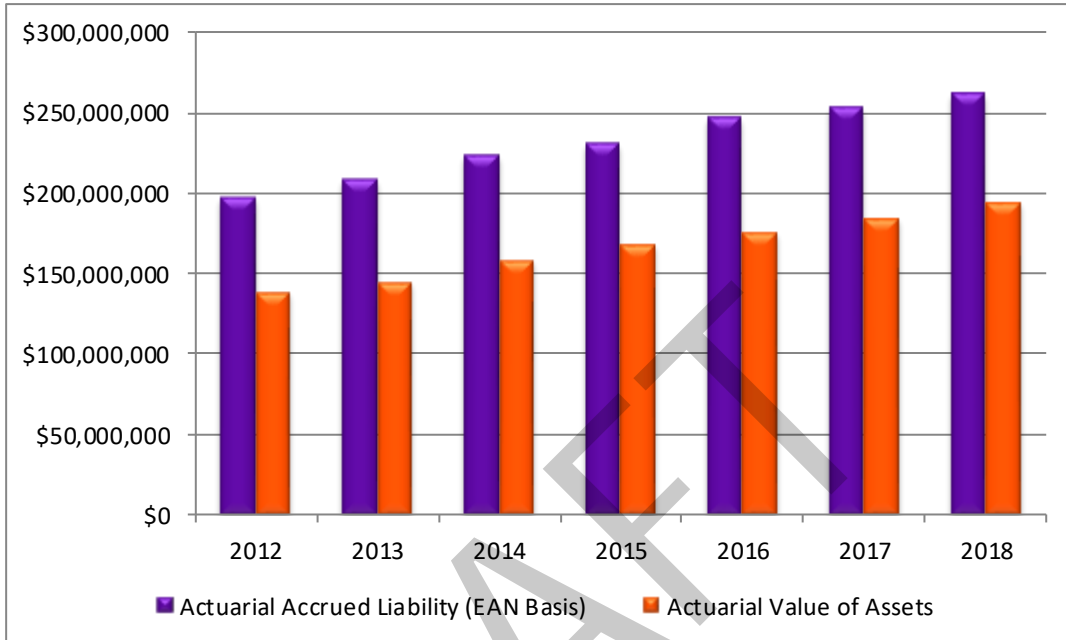


## Development of Unfunded Accrued Liability and Funded Ratio

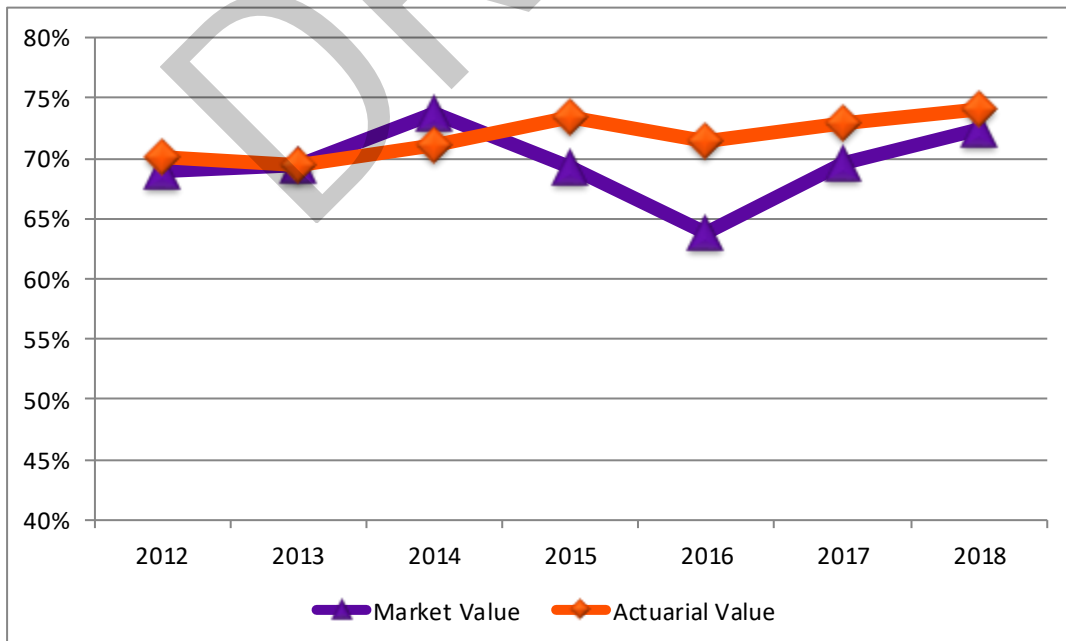
	June 30, 2018			June 30, 2017		
	Class A	Class B	Total	Class A	Class B	Total
Actuarial accrued liability for inactive members						
Retired, disabled and beneficiaries	\$81,717,715	\$76,503,725	\$158,221,441	\$79,082,146	\$73,672,702	\$152,754,848
Terminated vested members	1,053,477	8,043,021	9,096,497	939,222	7,198,353	8,137,575
Due refund of employee contributions only	107,573	297,701	405,274	100,380	285,830	386,210
Total	82,878,765	84,844,447	167,723,212	80,121,748	81,156,885	161,278,633
Actuarial accrued liability for active employees	40,552,067	52,994,938	93,547,005	35,436,683	55,695,655	91,132,338
Total actuarial accrued liability	123,430,832	137,839,385	261,270,217	115,558,431	136,852,540	252,410,971
Actuarial value of assets	82,027,416	111,614,786	193,642,202	78,582,438	105,234,035	183,816,473
Unfunded accrued liability	41,403,416	26,224,599	67,628,015	36,975,993	31,618,505	68,594,498
Funded ratio	66.5%	81.0%	74.1%	68.0%	76.9%	72.8%



### Actuarial Accrued Liability vs. Actuarial Value of Assets



### Funded Ratio



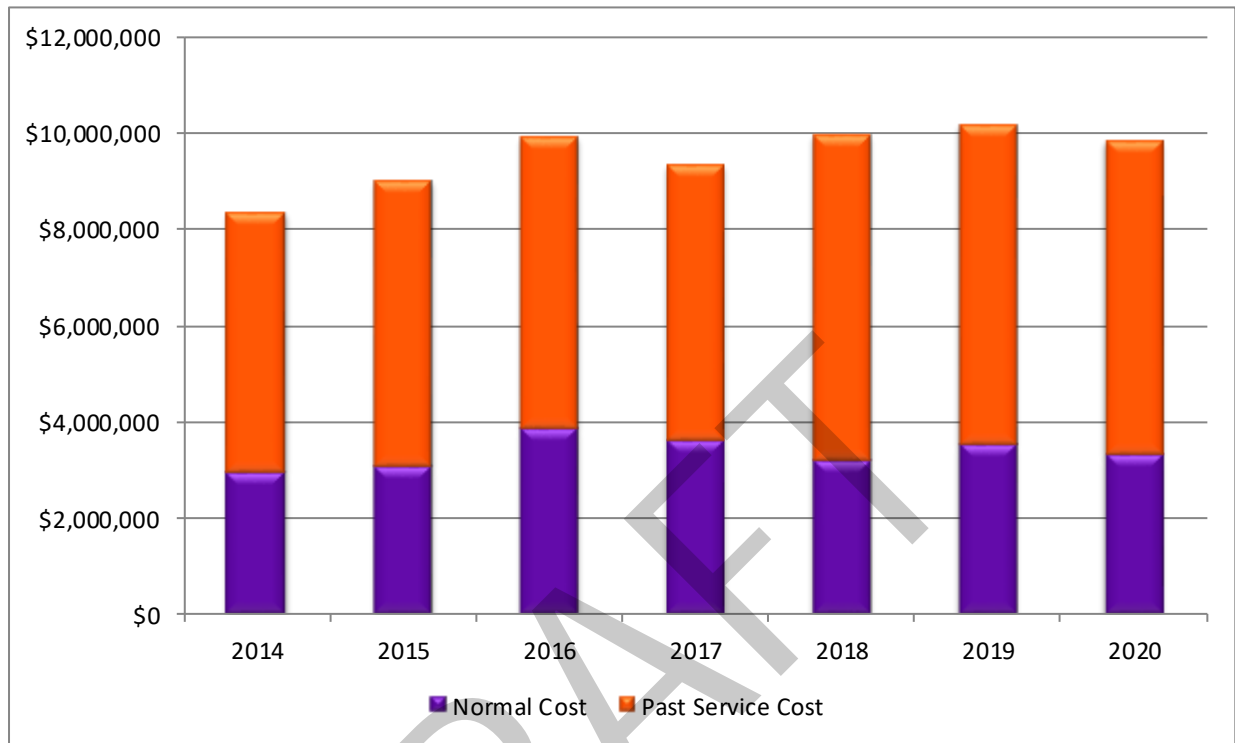




## Determination of Normal Cost and Actuarially Determined Employer Contribution

	June 30, 2018		June 30, 2017	
	Cost	Percent of payroll	Cost	Percent of payroll
Gross normal cost	\$6,223,953	12.1%	\$6,200,159	13.1%
Estimated employee contributions	(2,997,351)	-5.8%	(2,813,315)	-5.9%
City's normal cost	3,226,602	6.3%	3,386,844	7.1%
Amortization of unfunded accrued liability	6,517,219	12.7%	6,678,282	14.1%
Contribution before adjustment as of the valuation date	9,743,821	19.0%	10,065,126	21.2%
Estimated valuation year payroll for actives not yet at 100% assumed retirement age	51,353,510		47,419,400	
Fiscal year ending	2020		2019	
Adjustment for interest and inflation	96,798		118,540	
Actuarially determined employer contribution	9,840,619		10,183,666	

### Actuarially Determined Employer Contribution





### Actuarially Determined Employer Contribution per Group

	Class A	Class B BED	Class B School	Class B Other	Class B	Total
Gross normal cost	\$2,920,685	\$718,548	\$851,374	\$1,733,346	\$3,303,268	\$6,223,953
Estimated employee contributions	(1,310,529)	(411,373)	(371,097)	(904,352)	(1,686,822)	(2,997,351)
City's normal cost	1,610,156	307,175	480,277	828,994	1,616,446	3,226,602
Actuarial accrued liability	123,430,832	47,433,370	25,041,961	65,364,054	137,839,385	261,270,217
Actuarial value of assets	82,027,416	38,408,947	20,277,608	52,928,231	111,614,786	193,642,202
Unfunded accrued liability	41,403,416	9,024,423	4,764,353	12,435,823	26,224,599	67,628,015
Amortization of unfunded accrued liability	3,892,364	903,267	476,870	1,244,718	2,624,855	6,517,219
Contribution before adjustment as of the valuation date	5,502,520	1,210,442	957,147	2,073,712	4,241,301	9,743,821
Estimated valuation year payroll for actives not yet at 100% assumed retirement age	11,913,902	9,071,778	8,835,654	21,532,176	39,439,608	51,353,510
City's normal cost as a percentage of payroll	13.5%	3.4%	5.4%	3.9%	4.1%	6.3%
Contribution as a percentage of payroll	46.2%	13.3%	10.8%	9.6%	10.8%	19.0%
Fiscal year ending June 30, 2020						
Adjustment for interest and inflation	48,305	9,216	14,408	24,869	48,493	96,798
Actuarially determined employer contribution	5,550,825	1,219,658	971,555	2,098,581	4,289,794	9,840,619

## Determination of Actuarial Gain/Loss

The Actuarial Gain/Loss is the difference between the expected unfunded accrued liability and the actual unfunded accrued liability, without regard to any changes in actuarial methods, actuarial assumptions or plan provisions. This can also be referred to an Experience Gain/Loss, since it reflects the difference between what was expected and what was actually experienced.

Actuarial Gain / Loss	
<b>Expected unfunded accrued liability June 30, 2018</b>	
Expected unfunded accrued liability June 30, 2018	
Unfunded accrued liability June 30, 2017	68,594,498
Gross normal cost June 30, 2017	6,200,159
City and employee contributions for 2017-2018	(12,797,761)
Interest at 8.00% to June 30, 2018	5,485,716
Expected unfunded accrued liability June 30, 2018	67,482,612
<b>Actuarial (gain) / loss June 30, 2018</b>	<b>588,443</b>
<b>Actual unfunded accrued liability June 30, 2018, prior to plan provision, assumption and method changes</b>	68,071,055
<b>Sources of (gain) / loss</b>	
Assets	1,931,000
Salary increases	(892,000)
Retiree mortality	1,673,000
Turnover, disability and retirements	(2,062,000)
New entrants	308,000
Data adjustments	(17,000)
Other experience	(353,000)
Total (gain) / loss (rounded to nearest \$1,000)	588,000
<b>Assumption and method changes since prior valuation</b>	(306,572)
<b>Plan provision changes since prior valuation</b>	(136,468)
<b>Actual unfunded accrued liability June 30, 2018, after plan provision, assumption and method changes</b>	<b>67,628,015</b>

### Summary of Fund Activity

	Market Value	Actuarial Value
<b>1. Beginning value of assets June 30, 2017</b>		
Trust assets	\$175,471,299	\$183,816,473
<b>2. Contributions</b>		
City contributions during year	9,172,822	9,172,822
Employee contributions during year	3,624,939	3,624,939
Total for plan year	12,797,761	12,797,761
<b>3. Disbursements</b>		
Benefit payments during year	15,616,191	15,616,191
Administrative expenses during year	385,309	385,309
Other disbursements	20,278	20,278
Total for plan year	16,021,778	16,021,778
<b>4. Net investment return</b>		
Net investment income (loss)	16,762,760	N/A
Expected return	N/A	13,913,073
Recognized gain / (loss)	N/A	(863,327)
Required adjustment due to corridor	N/A	0
Reversal of prior year required adjustment	N/A	0
Total for plan year	16,762,760	13,049,746
<b>5. Ending value of assets June 30, 2018</b>		
Trust assets: (1) + (2) - (3) + (4)	189,010,042	193,642,202
<b>6. Approximate rate of return</b>	9.6%	7.1%

### Relationship of Actuarial Value to Market Value

1. Market value 6/30/2018	\$189,010,042
2. Gain / (loss) not recognized in actuarial value 6/30/2018	<u>(4,632,160)</u>
3. Preliminary actuarial value 6/30/2018: (1) - (2)	193,642,202
4. Preliminary actuarial value as a percentage of market value: (3) ÷ (1)	102.5%
5. Gain / (loss) recognized for corridor minimum / maximum	N/A
6. Actuarial value 6/30/2018 after corridor minimum / maximum: (3) + (5)	193,642,202
7. Actuarial value as a percentage of market value: (6) ÷ (1)	102.5%

### Development of Market Value Gain / Loss for 2017-2018 Plan Year

1. Market value 6/30/2017	\$175,471,299
2. City contributions	9,172,822
3. Employee contributions	3,624,939
4. Benefit payments and other disbursements	15,636,469
5. Administrative expenses	385,309
6. Expected return at 8.00%	<u>13,913,073</u>
7. Expected value 6/30/2018: (1) + (2) + (3) - (4) - (5) + (6)	186,160,355
8. Market value 6/30/2018	<u>189,010,042</u>
9. Market value gain / (loss) for 2017-2018 plan year: (8) - (7)	2,849,687

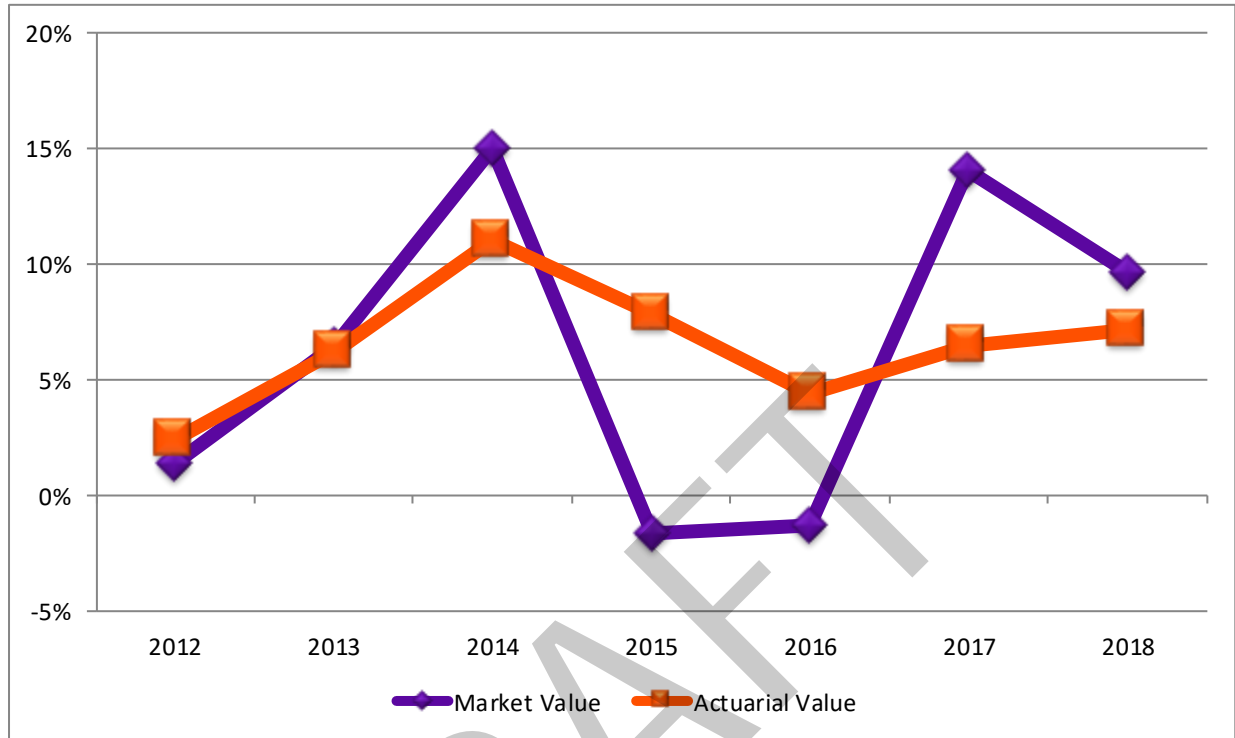
### Recognition of Gain / Loss in Actuarial Value

Year	(a) Gain / (loss)	(b) Total recognized as of 6/30/2017	(c) Recognized in current year: 10% of (a)	(d) Total recognized as of 6/30/2018: (b) + (c)	(e) Not recognized as of 6/30/2018: (a) - (d)
2012-2013	(\$498,233)	(\$249,116)	(49,823)	(\$298,939)	(\$199,294)
2013-2014	8,081,381	3,232,552	808,138	4,040,690	4,040,691
2014-2015	(13,616,950)	(4,085,085)	(1,361,695)	(5,446,780)	(8,170,170)
2015-2016	(14,912,281)	(2,982,456)	(1,491,228)	(4,473,684)	(10,438,597)
2016-2017	9,463,116	946,312	946,312	1,892,624	7,570,492
2017-2018	2,849,687	0	<u>284,969</u>	284,969	<u>2,564,718</u>
Total			(863,327)		(4,632,160)

<b>Rate of Return on Market Value of Assets</b>				
<b>Period Ending</b>	<b>Average Annual Effective Rate of Return</b>			
	<b>June 30</b>	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>
2009	-19.6%	-4.4%	0.6%	N/A
2010	18.6%	-4.0%	2.7%	N/A
2011	21.2%	4.9%	4.7%	N/A
2012	1.4%	13.4%	1.7%	N/A
2013	6.5%	9.4%	4.5%	N/A
2014	15.0%	7.5%	12.3%	6.3%
2015	-1.7%	6.4%	8.2%	5.4%
2016	-1.3%	3.7%	3.8%	4.2%
2017	14.1%	3.4%	6.3%	3.9%
2018	9.6%	7.3%	6.9%	5.7%

<b>Rate of Return on Actuarial Value of Assets</b>				
<b>Period Ending</b>	<b>Average Annual Effective Rate of Return</b>			
	<b>June 30</b>	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>
2009	0.9%	6.2%	4.6%	N/A
2010	1.2%	3.2%	4.9%	N/A
2011	4.4%	2.2%	4.8%	N/A
2012	2.4%	2.7%	3.3%	N/A
2013	6.2%	4.3%	3.0%	N/A
2014	11.0%	6.5%	5.0%	4.8%
2015	7.8%	8.3%	6.3%	5.6%
2016	4.4%	7.7%	6.3%	5.6%
2017	6.5%	6.2%	7.2%	5.2%
2018	7.1%	6.0%	7.3%	5.1%

### Actual Rate of Return on Assets



DRAFT



## Amortization of Unfunded Liability

Schedule of Amortization Bases - Total					
	Date established	Original amount	Amortization installment	Years remaining	Present value of remaining installments as of June 30, 2018
Initial base	June 30, 2004	\$10,020,499	\$882,922	16	\$8,259,148
2005 base	June 30, 2005	13,325,808	1,253,735	17	12,061,872
2006 base	June 30, 2006	7,669,440	716,956	18	7,075,134
2007 base	June 30, 2007	(2,444,427)	(227,997)	19	(2,302,380)
2008 base	June 30, 2008	(2,492,739)	(232,292)	20	(2,395,396)
2009 base	June 30, 2009	12,784,050	1,190,268	21	12,510,400
2010 base	June 30, 2010	8,547,645	795,163	22	8,504,334
2011 base	June 30, 2011	6,255,018	572,034	23	6,216,015
2012 base	June 30, 2012	3,602,242	334,575	24	3,688,949
2013 base	June 30, 2013	5,490,961	500,336	25	5,590,644
2014 base	June 30, 2014	1,295,623	120,161	26	1,359,175
2015 base	June 30, 2015	(2,956,424)	(274,001)	27	(3,134,312)
2016 base	June 30, 2016	10,621,866	983,782	28	11,370,350
2017 base	June 30, 2017	(1,422,825)	(131,697)	29	(1,536,651)
2018 base	June 30, 2018	360,733	33,274	30	360,733
<b>Total</b>			6,517,219		67,628,015

**Schedule of Amortization Bases - Class A**

	<b>Date established</b>	<b>Original amount</b>	<b>Amortization installment</b>	<b>Years remaining</b>	<b>Present value of remaining installments as of June 30, 2018</b>
Initial base	June 30, 2004	\$3,698,048	\$325,006	16	\$3,040,216
2005 base	June 30, 2005	6,655,535	621,973	17	5,983,851
2006 base	June 30, 2006	2,588,959	241,706	18	2,385,232
2007 base	June 30, 2007	(1,715,997)	(160,055)	19	(1,616,279)
2008 base	June 30, 2008	713,490	66,488	20	685,626
2009 base	June 30, 2009	3,308,275	308,019	21	3,237,459
2010 base	June 30, 2010	3,969,991	369,317	22	3,949,875
2011 base	June 30, 2011	3,564,353	326,932	23	3,552,608
2012 base	June 30, 2012	2,191,929	203,586	24	2,244,689
2013 base	June 30, 2013	2,337,776	207,689	25	2,320,664
2014 base	June 30, 2014	2,892,368	268,249	26	3,034,240
2015 base	June 30, 2015	(50,538)	(4,684)	27	(53,578)
2016 base	June 30, 2016	4,439,699	411,198	28	4,752,549
2017 base	June 30, 2017	2,901,660	268,578	29	3,133,793
2018 base	June 30, 2018	4,752,471	382,996	30	4,752,471
<b>Total</b>			3,836,998		41,403,416

**Schedule of Amortization Bases - Class B**

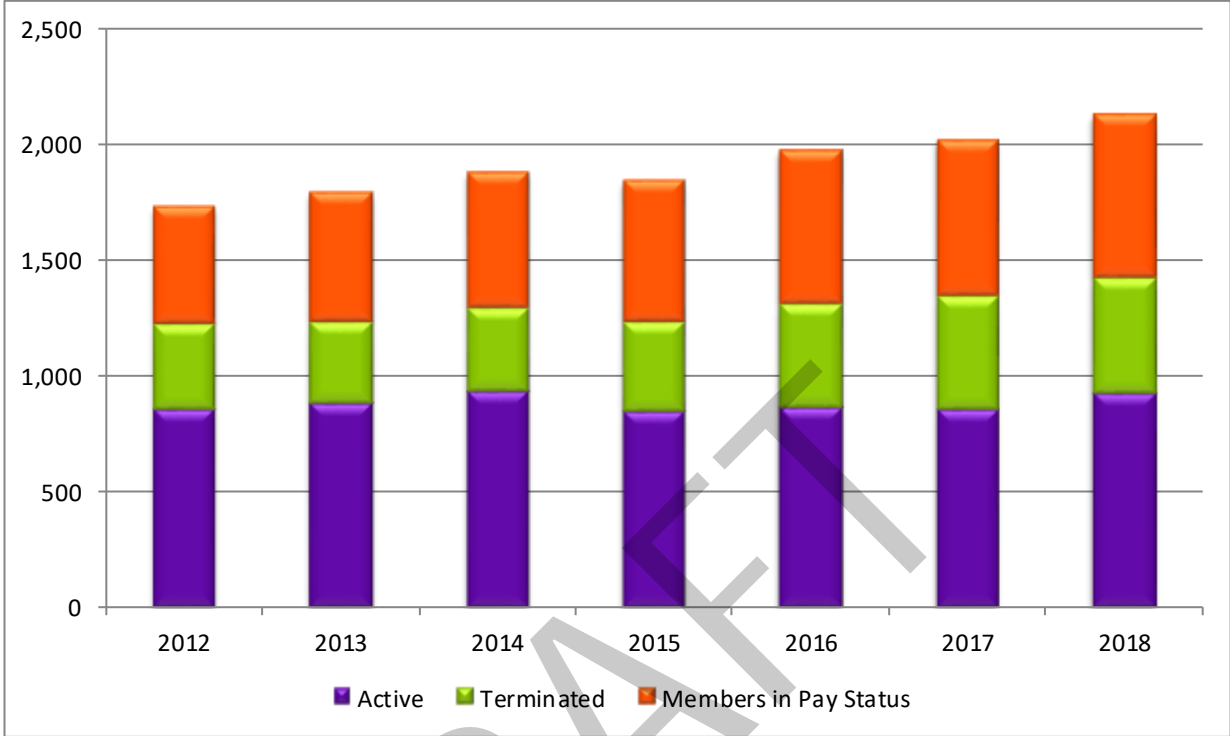
	<b>Date established</b>	<b>Original amount</b>	<b>Amortization installment</b>	<b>Years remaining</b>	<b>Present value of remaining installments as of June 30, 2018</b>
Initial base	June 30, 2004	\$6,322,451	\$557,916	16	\$5,218,932
2005 base	June 30, 2005	6,670,273	631,762	17	6,078,021
2006 base	June 30, 2006	5,080,481	475,250	18	4,689,902
2007 base	June 30, 2007	(728,430)	(67,942)	19	(686,101)
2008 base	June 30, 2008	(3,206,229)	(298,780)	20	(3,081,022)
2009 base	June 30, 2009	9,475,775	882,249	21	9,272,941
2010 base	June 30, 2010	4,577,654	425,846	22	4,554,459
2011 base	June 30, 2011	2,690,665	245,102	23	2,663,407
2012 base	June 30, 2012	1,410,313	130,989	24	1,444,260
2013 base	June 30, 2013	3,153,185	292,647	25	3,269,980
2014 base	June 30, 2014	(1,596,745)	(148,088)	26	(1,675,065)
2015 base	June 30, 2015	(2,905,886)	(269,317)	27	(3,080,734)
2016 base	June 30, 2016	6,182,167	572,584	28	6,617,801
2017 base	June 30, 2017	(4,324,485)	(400,275)	29	(4,670,444)
2018 base	June 30, 2018	(4,391,738)	<u>(349,722)</u>	30	<u>(4,391,738)</u>
<b>Total</b>			2,680,221		26,224,599

## Member Data

The data reported by the Plan Sponsor for this valuation includes 920 active employees who met the Plan's minimum age and service requirements as of June 30, 2018.

Member Data					
	Active	Terminated vested	Due refund of contributions	Members in pay status	Total
<b>Total members June 30, 2017</b>	845	371	124	674	2,014
Adjustments	+1	-1	0	+1	+1
Retirements	-22	-14	N/A	+36	0
Disabilities	-2	N/A	N/A	+2	0
Terminations					
Vested	-10	+10	N/A	N/A	0
Lump sum payments	-30	0	0	N/A	-30
Due contributions only	-2	N/A	+2	N/A	0
Deaths					
With death benefit	0	0	0	-2	-2
Without death benefit	0	0	0	0	0
Transfers	0	0	0	N/A	0
Rehires	+2	0	0	N/A	+2
New beneficiaries	N/A	N/A	N/A	+2	+2
New entrants	+138	N/A	+2	N/A	+140
<b>Total members June 30, 2018</b>	920	366	128	713	2,127

### Member Counts by Status



DRAFT

Member Data				
	Active	Terminated vested	Due refund of contributions	Members in pay status
<b>Average age</b>				
June 30, 2017	45.3	53.8	37.7	68.5
June 30, 2018	44.4	54.4	38.7	69.2
<b>Average service</b>				
June 30, 2017	10.4	N/A	N/A	N/A
June 30, 2018	9.7	N/A	N/A	N/A
<b>Covered employee payroll</b>				
June 30, 2017	\$45,650,372	N/A	N/A	N/A
June 30, 2018	49,012,028	N/A	N/A	N/A
<b>Total annual benefits</b>				
June 30, 2017	N/A	\$1,792,334	N/A	\$14,944,747
June 30, 2018	N/A	1,808,401	N/A	15,882,875

Member Data - Class A					
	Active	Terminated vested	Due refund of contributions	Members in pay status	Total
<b>Total members June 30, 2017</b>	179	15	9	178	381
Adjustments	+1	0	-1	0	0
Retirements	-2	-1	N/A	+3	0
Disabilities	-2	N/A	N/A	+2	0
Terminations					
Vested	-1	+1	N/A	N/A	0
Lump sum payments	-2	0	0	N/A	-2
Due contributions only	-1	N/A	+1	N/A	0
Deaths					
With death benefit	0	0	0	0	0
Without death benefit	0	0	0	0	0
Transfers	0	0	0	N/A	0
Rehires	0	0	0	N/A	0
New beneficiaries	N/A	N/A	N/A	0	0
New entrants	+15	N/A	0	N/A	+15
<b>Total members June 30, 2018</b>	187	15	9	183	394

Member Data - Class B					
	Active	Terminated vested	Due refund of contributions	Members in pay status	Total
<b>Total members June 30, 2017</b>	666	356	115	496	1,633
Adjustments	0	-1	+1	+1	+1
Retirements	-20	-13	N/A	+33	0
Disabilities	0	N/A	N/A	0	0
Terminations					
Vested	-9	+9	N/A	N/A	0
Lump sum payments	-28	0	0	N/A	-28
Due contributions only	-1	N/A	+1	N/A	0
Deaths					
With death benefit	0	0	0	-2	-2
Without death benefit	0	0	0	0	0
Transfers	0	0	0	N/A	0
Rehires	+2	0	0	N/A	+2
New beneficiaries	N/A	N/A	N/A	+2	+2
New entrants	+123	N/A	+2	N/A	+125
<b>Total members June 30, 2018</b>	733	351	119	530	1,733



**Member Data - Class B - Burlington Electric Department**

	Active	Terminated vested	Due refund of contributions	Members in pay status	Total
<b>Total members June 30, 2017</b>	97	74	2	136	309
Adjustments	0	0	0	+1	1
Retirements	-3	-3	N/A	+6	0
Disabilities	0	0	N/A	0	0
Terminations					
Vested	0	0	N/A	N/A	0
Lump sum payments	-2	0	0	N/A	-2
Due contributions only	0	N/A	0	N/A	0
Deaths					
With death benefit	0	0	0	-1	-1
Without death benefit	0	0	0	0	0
Transfers	0	0	0	N/A	0
Rehires	0	0	0	N/A	0
New beneficiaries	N/A	N/A	N/A	+1	+1
New entrants	+7	N/A	0	N/A	+7
<b>Total members June 30, 2018</b>	99	71	2	143	315

**Member Data - Class B - Burlington School District**

	<b>Active</b>	<b>Terminated vested</b>	<b>Due refund of contributions</b>	<b>Members in pay status</b>	<b>Total</b>
<b>Total members June 30, 2017</b>	184	75	76	121	456
Adjustments	0	-1	0	0	-1
Retirements	-5	-1	N/A	+6	0
Disabilities	0	0	N/A	0	0
Terminations					
Vested	-4	+4	N/A	N/A	0
Lump sum payments	-13	0	0	N/A	-13
Due contributions only	0	N/A	0	N/A	0
Deaths					
With death benefit	0	0	0	-1	-1
Without death benefit	0	0	0	0	0
Transfers	0	0	0	N/A	0
Rehires	+1	0	0	N/A	1
New beneficiaries	N/A	N/A	N/A	+1	+1
New entrants	+68	N/A	+2	N/A	+70
<b>Total members June 30, 2018</b>	231	77	78	127	513

**Member Data - Class B - Others**

	<b>Active</b>	<b>Terminated vested</b>	<b>Due refund of contributions</b>	<b>Members in pay status</b>	<b>Total</b>
<b>Total members June 30, 2017</b>	385	207	37	239	868
Adjustments	0	0	0	0	0
Retirements	-12	-9	N/A	+21	0
Disabilities	0	0	N/A	0	0
Terminations					
Vested	-5	+5	N/A	N/A	0
Lump sum payments	-13	0	0	N/A	-13
Due contributions only	-1	N/A	+1	N/A	0
Deaths					
With death benefit	0	0	0	0	0
Without death benefit	0	0	0	0	0
Transfers	0	0	0	N/A	0
Rehires	+1	0	0	N/A	1
New beneficiaries	N/A	N/A	N/A	0	0
New entrants	+48	N/A	0	N/A	+48
<b>Total members June 30, 2018</b>	403	203	38	260	904



## Description of Actuarial Methods

### Asset Valuation Method

The Actuarial Value of assets used in the development of plan contributions phases in the recognition of differences between the actual return on Market Value and expected return on Market Value over a 10-year period at 10% per year.

### Actuarial Cost Method

Changes in Actuarial Cost Method: None.

Description of Current Actuarial Cost Method: Entry Age Normal (level percentage of salary)

Normal Cost: Under this method, the total normal cost is the sum of amounts necessary to fund each active member's normal retirement benefit if paid annually from entry age to assumed retirement age. Entry age is the age at which the employee would have been first eligible for the plan, if it had always been in effect. The normal cost for each participant is expected to remain a level percentage of the employee's salary. The normal cost for the plan is the difference between the total normal cost for the year and the anticipated member contributions for that year.

Past Service Liability: The present value of future benefits that relates to service before the valuation date is the total past service liability. The unfunded past service liability is the difference between the total past service liability and any assets (including accumulated member contributions).

Unfunded accrued liabilities as of June 30, 2004 were amortized over a closed 30-year period. Future changes in the unfunded accrued liability will be amortized separately, assuming a new 30-year amortization each valuation.

Experience Gains and Losses: All experience gains and losses (the financial effect of the difference between the actual experience during the prior period and the result expected by the actuarial assumptions for that prior period) appear directly in the past service liability and are amortized at the same rate the plan is amortizing the remaining unfunded past service liability.



## Description of Actuarial Assumptions

### Changes in Actuarial Assumptions

The valuation reflects changes in the actuarial assumptions listed below. (The assumptions used before and after these changes are more fully described in the next section.)

- Investment rate of return
- Rate of compensation increase
- Inflation
- Mortality
- Retirement
- Termination prior to retirement
- Disability
- Cost of living increases
- Accrual rate election
- Payroll growth

The assumptions indicated were changed to represent the Enrolled Actuary's current best estimate of anticipated experience of the plan.

### Investment rate of return (net of investment-related and administrative expenses)

7.625%. (Prior: 8.00%)

### Rate of compensation increase (including inflation)

#### Class A

Completed Years of Service	Rate
<1	10.0%
1	8.5%
2	7.3%
3	6.3%
4	5.9%
5	5.6%
6	5.4%
7	5.2%
8	5.0%
9	4.8%
10	4.7%
11	4.6%
12	4.5%
13	4.4%
14	4.3%
15	4.2%
16	4.0%
17	3.8%
18	3.7%
19	3.6%
20+	3.5%

#### Class B

Completed Years of Service	Rate
<1	6.6%
1	6.0%
2	5.5%
3	5.1%
4	4.9%
5	4.7%
6	4.5%
7	4.4%
8	4.3%
9	4.3%
10	4.2%
11	4.2%
12	4.1%
13	4.0%
14	3.9%
15	3.8%
16	3.8%
17	3.8%
18	3.7%
19	3.6%
20+	3.5%



**Rate of compensation increase (including inflation) (continued)**

Prior: Graded scale (sample rates shown below):

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%

For Class A Firemen and Class B AFSCME employees, salary increases rates as described above were reduced by 2% during fiscal year 2015-2016, 1.5% during fiscal 2016-2017, 0.5% during fiscal 2017-2018 and 0.25% during fiscal 2018-2019 to reflect lower short term salary increase per the collective bargaining agreements in place.

The assumption was changed to better reflect anticipated experience.

The actuarial assumption in regards to rate of compensation increases shown above are based on the results of an actuarial experience study for the period July 1, 2012 through June 30, 2017.

**Inflation**

2.60%. (Prior: 3.00%)

This assumption is consistent with the Social Security Administration's current best estimate of the ultimate long-term (75-year horizon) annual percentage increase in CPI, as published in the 2018 OASDI Trustees Report.

The assumption was changed to better reflect anticipated experience.

**Mortality**

Class A (Non-Disabled): RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2018.

Class B (Non-Disabled): RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2018, set forward 2 years.

Class A and B (Disabilities): RP-2014 Adjusted to 2006 Disabled Mortality Table, projected to the valuation date with Scale MP-2018.

Prior: 105% of the probabilities in the RP-2000 Mortality Table with separate male and female rates, with no adjustment, combined table for non-annuitants and annuitants, projected to the valuation date with Scale BB.



### Mortality Improvement

Projected to date of decrement using Scale MP-2018 (generational).

Prior: Projected to date of decrement using Scale BB (generational).

We have selected this mortality assumption because it is based on the latest published pension mortality study released by the Society of Actuaries.

The mortality assumption was changed to better reflect anticipated experience.

### Retirement age

#### Class A

Completed Years of Service	Rate
<15	0%
15-18	5%
19	15%
20-23	25%
24	30%
25	75%
26-29	50%
30-34	75%
35+	100%

Compulsory retirement is assumed at age 60.

#### Class B

Age	Rate
55-59	5.0%
60	7.5%
61	12.5%
62	18.0%
63	22.5%
64-65	25.0%
66-69	30.0%
70-74	50.0%
75+	100.0%



**Retirement age (continued)**

Prior:

Class A	
Age	Rate
45-46	15%
47-48	30%
49-51	5%
52	18%
53-59	20%
60	100%

Class B	
Age	Rate
55-59	5%
60	10%
61	15%
62	20%
63-65	25%
66	20%
67	25%
68	20%
69	25%
70	100%

**Termination prior to retirement**

**Class A**

Completed Years of Service	Rate
<1	8.0%
1	7.0%
2	6.0%
7	5.0%
8	4.5%
9	4.0%
10+	0.0%

**Class B:** 100% of the Vaughn Select & Ultimate Withdrawal Table for service prior to 3 years, and 130% of the Vaughn Select & Ultimate Withdrawal Table thereafter.

Sample rates

Age	Completed Years of Service			
	0	1	2	3+
20	29.8%	25.0%	21.0%	24.18%
25	27.8%	22.5%	18.5%	17.68%
30	25.8%	20.0%	16.0%	13.13%
35	23.8%	17.8%	13.8%	10.27%
40	21.8%	15.8%	11.8%	8.45%
45	19.8%	14.1%	10.1%	7.15%
50	17.8%	12.6%	8.6%	5.85%
55	0.0%	0.0%	0.0%	0.00%





**Termination prior to retirement (continued)**

Prior:

Class A		Class B		
Sample Rates		Sample Rates		
Age	Rate	Years of Service		
		Age	0-2	3+
20	14.0%	20	27.5%	15.0%
25	7.0%	25	27.5%	15.0%
30	6.0%	30	22.0%	12.0%
35	6.0%	35	22.0%	10.0%
40	5.0%	40	16.5%	4.0%
45	4.0%	45	16.5%	4.0%
50	3.0%	50	16.5%	4.0%
55	0.0%	55	16.5%	4.0%
		60	16.5%	4.0%
		65	16.5%	4.0%
		70	0.0%	0.0%

**Disability**

Class A: 1985 Pension Disability Study Class 2 Table for Males and Females.

Class B: 1985 Pension Disability Study Class 1 Table for Males and Females.

Prior:

Class A		Class B	
Age	Rate	Age	Rate
20	2.0%	20	0.08%
25	2.4%	25	0.09%
30	2.9%	30	0.12%
35	3.8%	35	0.14%
40	5.0%	40	0.20%
45	7.4%	45	0.29%
50	12.5%	50	0.49%
55	0.0%	55	0.90%
		60	1.73%
		65	0.00%

The actuarial assumptions in regards to rates of decrement shown above are based on the results of an actuarial experience study for the period July 1, 2012 through June 30, 2017.

The assumptions were changed to better reflect anticipated experience.

**Administrative expenses**

Currently, there is no expense load assumed for administrative expenses.



### **Cost of living increases**

2.60%.

Prior: Cost of living increases averaging 3% per year were assumed. For employees retiring after July 1, 2017, cost of living increases were capped at 2.75%

This assumption was changed to be consistent with the inflation assumption.

### **Accrual rate election**

Class A: 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.

Class B: 75% of retiring members are assumed to elect the no COLA accrual rate and 25% of retiring members are assumed to elect the full COLA accrual rate.

Prior: All: 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.

The assumption was changed to better reflect anticipated experience.

### **Payroll growth**

3.00% per year.

Prior: 3.50% per year.

This assumption was changed to be consistent with the lowering of the inflation assumption.

### **Percent of active employees married**

80%.

### **Spouse's age**

Husbands are assumed to be 3 years older than wives.

The assumption changes decreased liabilities by about 0.1%.



## Summary of Plan Provisions

*This exhibit summarizes the major provisions of the Plan. It is not intended to be, nor should it be interpreted as a complete statement of all plan provisions. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.*

### Plan identification

Single-employer pension plan

### 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, Class B AFSCME Local 1343 employees hired after June 7, 2011, Class B IBEW Local 300 employees hired after October 30, 2012 or any employees hired on or after January 1, 2018, 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 before July 1, 2006, age 42 and 5 years of creditable service. For Police employees hired after January 10, 2011, age 40 and 20 years of creditable service. For other Police Union employees, age 45 and 5 years of creditable service. For Fire employees hired after October 7, 2011, age 45 and 20 years of creditable service. For Fire Union employees hired on or before October 7, 2011, age 45 and 5 years of creditable service. For all others, age 42 and 5 years of creditable service. Compulsory at age 60.

Class B

Age 55 and 5 years of creditable service.



## Service retirement (continued)

### 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 0.50% of AFC times creditable service between 25 and 35 years. For Police employees hired after January 10, 2011, 2.50% of AFC times creditable service not in excess of 20 years plus 5.00% of AFC times creditable service between 20 and 25 years. For Fire employees hired after January 10, 2011, 3.00% of AFC times creditable service not in excess of 25 years plus 0.50% of AFC times creditable service between 25 and 35 years. For all others, 2.65% of AFC times creditable service not in excess of 25 years plus 0.50% 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 0.50% for creditable service 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 3.80% for all years of service prior to June 30, 2006 for the first 25 years, an accrual rate of 3.60% for all years of service commencing July 1, 2006 for the first 25 years, plus an accrual rate of 0.50% 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. Any Fire employee hired after October 5, 2015 cannot receive a pension that exceeds 90% of the employee's average final compensation.

For Police employees hired after January 10, 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 all other Police employees, 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.

For Fire employees hired after January 10, 2011, 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.

For Fire employees hired on or before January 10, 2011 who retire on July 1, 2013 or later, 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 and have attained age 48, 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. Employees that retire at age 50 with at least 20 years of creditable service receive an unreduced benefit.



## Service retirement (continued)

### Class B

For employees hired prior to July 1, 2006: Age 65 and older, the greater of (i) 1.60% of AFC (at age 65) times creditable service not in excess of 25 years plus 0.50% 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) 1.40% of AFC (at age 65) times creditable service not in excess of 25 years plus 0.50% 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 1.90% for all years of service prior to June 30, 2006 for the first 25 years, an accrual rate of 1.80% for all years of service commencing July 1, 2006 for the first 25 years, plus an accrual of 0.50% 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 2.20% for all years of service prior to June 30, 2006 for the first 25 years, an accrual rate of 2.00% for all years of service commencing July 1, 2006 for the first 25 years, plus an accrual of 0.50% 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.

For Class B IBEW employees hired after May 4, 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%. For Class A Fire employees retiring after October 5, 2015, Class A Police employees retiring after August 29, 2016, Class B AFSCME employees retiring after October 30, 2015, Class B IBEW employees retiring after March 9, 2016, and Class B Non-Union and Burlington School District employees retiring after July 1, 2017, the maximum annual increase is 2.75%. For all other participants, the maximum annual increase is 5%. Increases are 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. For all employees retiring after July 1, 2017, the maximum annual increase is 2.75%. Class B employees that retire after July 1, 2018 will not receive a cost of living adjustment prior to age 65 unless the BERS is at least 81% funded. For Class A Police employees who retire after February 1, 2019 and Fire employees who retire after March 28, 2019, the retirement COLA will be determined annually by the BERS Board equal to the CPI-U Northeast Region, with a maximum COLA of 2.75%, except that if the Class A funding level of the BERS falls below 73%, the BERS Board may reduce or vote for no COLA for the upcoming year.



## 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 5 years of creditable service, Class B - age 65 and 5 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 66 2/3% 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.

### 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.



### **Survivor Income (continued)**

#### 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 no vested benefits under the plan or upon death with no accidental death benefit payable. Interest will accrue on these contributions at a rate of 5.5% until December 31, 2017 and 2.0% thereafter, or at a higher rate as may be set by the Retirement Board. Interest will only accrue on contributions made after June 30, 1980.

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

5 years of creditable service.

Vesting percentage.

100% after 5 years.

#### Amount of Benefit

##### Class A

Vesting percentage times 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

Vesting percentage times 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.

### **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

11.0% of earnable compensation for Class A employees for the first 35 years of creditable service, and none thereafter.

Class A employees shall contribute to the BERS a percentage of their salary. The total contribution required from both the City and employees will be based on the annual system valuation prepared by the City's actuaries. Effective retroactive to July 1, 2018, employees shall contribute a percentage so that all employees are contributing 28% (and the City is contributing 72%) of the total contribution required. For Fiscal Year 2019, this means that each Class A employee contributes 12.69% of the employee's base pay. The individual employee contribution for each subsequent fiscal year will be determined prior to the beginning of the fiscal year.

Effective July 1, 2020, employees shall contribute a percentage so that all employees are contributing 29% (and the City is contributing 71%) of the total contribution required.

Effective July 1, 2021, employees shall contribute a percentage so that all employees are contributing 30% (and the City is contributing 70%) of the total contribution required.

#### Class B

Member contributions for Class B employees, who elected to continue to be eligible for early retirement benefits at 2% per year deduction between ages 55 and 65, in accordance with the 2006-2009 collective bargaining agreement will be 4.8% in fiscal year 2016-2017, and 5.2% beginning with fiscal year 2017-2018. Member contributions for all other Class B employees will be 3.8% in fiscal year 2016-2017, and 4.2% beginning with fiscal year 2017-2018.

Class B employees shall contribute to the BERS a percentage of their annual salary. The total contribution required from both the City and employees will be based on the annual system valuation prepared by the City's actuaries.

Effective retroactive to July 1, 2018, employees shall contribute a percentage so that all employees are contributing 28% (and the City is contributing 72%) of the total contribution required. For Fiscal Year 2019, this shall mean that the contribution rate for a Class B employee is 4.41% of the employee's base pay.

Effective July 1, 2020, employees shall contribute a percentage so that all employees are contributing 29% (and the City is contributing 71%) of the total contribution required.

Effective July 1, 2021, employees shall contribute a percentage so that all employees are contributing 30% (and the City is contributing 70%) of the total contribution required.

Notwithstanding the above, an individual Class B employee's contribution shall not exceed 5.6% of their eligible wages in Fiscal Year 2019, 5.8% in Fiscal Year 2020, 6.2% in Fiscal Year 2021, or 7% in Fiscal Year 2022.