



BURLINGTON EMPLOYEES' RETIREMENT SYSTEM

GASB 67 DISCLOSURE

REPORTING AS OF JUNE 30, 2021 (MEASUREMENT DATE: JUNE 30, 2021)





## Table of Contents

Certification .....	1
Contributions Compared to ADEC and Payroll .....	2
Discount Rate Calculation.....	3
Schedule of Changes in Net Pension Liability and Related Ratios.....	4
Schedule of Net Pension Liability .....	6
Disclosure Overview as of June 30, 2021 .....	7
Changes in the Net Pension Liability .....	8
Components of the Pension Expense for the Fiscal Year Ended June 30, 2021.....	9
Pension Expense and Deferred Outflows and Inflows of Resources Related to Pensions.....	14
Sensitivity of the Net Pension Liability to Changes in the Discount Rate.....	18
Participant Breakdown as of July 1, 2020.....	18
Description of Significant Changes Prior to Year End.....	19
DROP Balances.....	19
Valuation Date and Roll Forward Process .....	19
Funding Policy.....	19
Assumption Selection .....	19
Description of Actuarial Methods .....	20
Description of Actuarial Assumptions .....	21
Summary of Plan Provisions .....	25

**All the items listed below are required by GASB 67 and GASB 68 but are not included in this report:**

- Money-Weighted Rate of Return
- Schedule of Investment Returns
- Statement of Changes in Fiduciary Net Position
- Statement of Fiduciary Net Position
- Investments That Represent 5% or More of the Plan’s Fiduciary Net Position
- Target Allocation and Expected Rate of Return
- Investment Policy
- Pension Board Composition
- Authority to Amend Plan

**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  
 Reviewing Actuary  
 860.856.2106  
[RLessard@hhconsultants.com](mailto:RLessard@hhconsultants.com)

Rebecca Lunt  
 Actuarial Associate  
 860.856.2133  
[RLunt@hhconsultants.com](mailto:RLunt@hhconsultants.com)



## Certification

This report presents the results of the June 30, 2021 GASB 67 and GASB 68 Disclosure for the Burlington Employees' Retirement System (the Plan). The report is intended to satisfy the requirements of both GASB 67 and GASB 68. This report may not be appropriate for any other purpose.

The report has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with the Actuarial Standards Board 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. This report contains the full set of assumptions and methods used in the current valuation. The assumptions were based on an experience study covering the period July 1, 2012 to June 30, 2017. The assumptions were adopted by the Board on the basis of the study.

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 disclosure report, I have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the Plan Sponsor or Trustee. I have audited neither the employee data nor the financial information, although I have reviewed them for reasonableness.

The results in this disclosure report are based on the Plan as summarized in the Summary of Plan Provisions section of this report and the actuarial methods and assumptions detailed in the Description of Actuarial Methods and Procedures and Description of Actuarial Assumptions sections 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 20-05506

Robert P. Lessard, ASA, FCA, MAAA  
Enrolled Actuary 20-08801

March 25, 2022



### Contributions Compared to ADEC and Payroll Schedule of Contributions Last 6 Fiscal Years

	2021	2020	2019	2018	2017
Actuarially determined employer contribution (ADEC)	\$ 10,236,862	\$ 9,715,893	\$ 9,516,913	\$ 9,172,822	\$ 9,219,098
Contributions in relation to the ADEC	10,236,862	9,715,893	9,516,913	9,172,822	9,219,098
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered payroll	\$ 52,121,603	\$ 50,694,990	\$ 50,482,389	\$ 49,012,028	\$ 45,650,372
Contributions as a % of covered payroll	19.64%	19.17%	18.85%	18.72%	20.20%

	2016
Actuarially determined employer contribution (ADEC)	\$ 9,149,159
Contributions in relation to the ADEC	9,149,159
Contribution deficiency (excess)	\$ -
Covered payroll	\$ 48,107,717
Contributions as a % of covered payroll	19.02%



## Discount Rate Calculation

The long-term expected rate of return on investments may be used to discount liabilities to the extent that the plan's fiduciary net position and future contributions are projected to be sufficient to cover expected benefit payments and administrative expenses for current plan members. Projections of the plan's fiduciary net position incorporate all cash flows for contributions from the employer and employee and administrative expenses. Professional judgment should be applied to the projections of contributions in circumstances where (a) contribution amounts are established by statute or contract or (b) a formal written policy exists. Consideration should also be given to the most recent five-year contribution history as key indicators of future contributions. It should not include cash flows for future plan members.

If the amount of the plan's fiduciary net position is projected to be greater than or equal to the benefit payments and administrative expenses made in that period, the actuarial present value of payments should be discounted using the long-term expected rate of return on those investments. A 20-year, high quality (AA/Aa or higher), tax-exempt municipal bond yield or index rate must be used to discount benefit payments for periods where the fiduciary net position is not projected to cover expected benefit payments and administrative expenses.

Plans that are projected to have sufficient fiduciary net position indefinitely will use the long-term expected return on investments to determine liabilities but will have to substantiate their projected solvency.

GASB permits alternative methods to evaluate the sufficiency of the plan's net fiduciary position. Based on the plan's current net pension liability and current contribution policy, the plan's projected fiduciary net position will be sufficient to cover projected benefit payments and administrative expenses indefinitely. Therefore, since the fund is not projected to run out of money, we have used the 7.30% interest rate assumption to discount plan liabilities.



## Schedule of Changes in Net Pension Liability and Related Ratios Last 6 Fiscal Years

	2021	2020	2019	2018	2017
<b>Total pension liability</b>					
Service cost	\$ 6,708,721	\$ 6,513,321	\$ 6,374,840	\$ 6,670,326	\$ 5,939,730
Interest	21,120,066	20,412,921	19,718,409	19,961,295	19,571,180
Changes of benefit terms	3,851,405	-	-	(138,534)	-
Differences between expected and actual experience	3,263,952	1,826,152	-	(1,453,843)	(4,272,574)
Changes of assumptions	2,243,904	2,153,694	-	(7,508,856)	10,370,856
Benefit payments, including refunds of member contributions	(18,411,850)	(17,338,220)	(16,617,928)	(15,616,191)	(14,770,644)
<b>Net change in total pension liability</b>	<b>18,776,198</b>	<b>13,567,868</b>	<b>9,475,321</b>	<b>1,914,197</b>	<b>16,838,548</b>
<b>Total pension liability - beginning</b>	<b>287,739,213</b>	<b>274,171,345</b>	<b>264,696,024</b>	<b>262,781,827</b>	<b>245,943,279</b>
<b>Total pension liability - ending: (a)</b>	<b>\$ 306,515,411</b>	<b>\$ 287,739,213</b>	<b>\$ 274,171,345</b>	<b>\$ 264,696,024</b>	<b>\$ 262,781,827</b>
<b>Plan fiduciary net position</b>					
Contributions - employer	\$ 10,236,862	\$ 9,715,893	\$ 9,516,913	\$ 9,172,822	\$ 9,219,098
Contributions - member	3,522,346	3,458,775	3,630,844	3,624,939	2,712,823
Net investment income (loss)	59,811,879	4,500,108	9,561,727	16,762,760	21,882,460
Benefit payments, including refunds of member contributions	(18,411,850)	(17,338,220)	(16,617,928)	(15,616,191)	(14,770,644)
Administrative expenses	(762,205)	(411,925)	(338,039)	(385,309)	(361,811)
Other	(50,100)	(50,100)	(50,100)	(20,278)	-
<b>Net change in plan fiduciary net position</b>	<b>54,346,932</b>	<b>(125,469)</b>	<b>5,703,417</b>	<b>13,538,743</b>	<b>18,681,926</b>
<b>Plan fiduciary net position - beginning</b>	<b>194,587,990</b>	<b>194,713,459</b>	<b>189,010,042</b>	<b>175,471,299</b>	<b>156,789,373</b>
<b>Plan fiduciary net position - ending: (b)</b>	<b>248,934,922</b>	<b>194,587,990</b>	<b>194,713,459</b>	<b>189,010,042</b>	<b>175,471,299</b>
<b>Net pension liability - ending: (a) - (b)</b>	<b>\$ 57,580,489</b>	<b>\$ 93,151,223</b>	<b>\$ 79,457,886</b>	<b>\$ 75,685,982</b>	<b>\$ 87,310,528</b>
<b>Plan fiduciary net position as a % of total pension liability</b>	<b>81.21%</b>	<b>67.63%</b>	<b>71.02%</b>	<b>71.41%</b>	<b>66.77%</b>
<b>Covered payroll</b>	<b>\$ 52,121,603</b>	<b>\$ 50,694,990</b>	<b>\$ 50,482,389</b>	<b>\$ 49,012,028</b>	<b>\$ 45,650,372</b>
<b>Net pension liability as a % of covered payroll</b>	<b>110.47%</b>	<b>183.75%</b>	<b>157.40%</b>	<b>154.42%</b>	<b>191.26%</b>



	<b>2016</b>
<b>Total pension liability</b>	
Service cost	\$ 5,327,448
Interest	18,268,523
Changes of benefit terms	(414,295)
Differences between expected and actual experience	6,852,487
Changes of assumptions	-
Benefit payments, including refunds of member contributions	(13,971,175)
<b>Net change in total pension liability</b>	<u>16,062,988</u>
<b>Total pension liability - beginning</b>	<u>229,880,291</u>
<b>Total pension liability - ending: (a)</b>	<u><u>\$ 245,943,279</u></u>
<b>Plan fiduciary net position</b>	
Contributions - employer	\$ 9,149,159
Contributions - member	2,304,971
Net investment income (loss)	(2,088,531)
Benefit payments, including refunds of member contributions	(13,971,175)
Administrative expenses	(320,908)
Other	-
<b>Net change in plan fiduciary net position</b>	<u>(4,926,484)</u>
<b>Plan fiduciary net position - beginning</b>	<u>161,715,857</u>
<b>Plan fiduciary net position - ending: (b)</b>	<u><u>156,789,373</u></u>
<b>Net pension liability - ending: (a) - (b)</b>	<u><u>\$ 89,153,906</u></u>
<b>Plan fiduciary net position as a % of total pension liability</b>	63.75%
<b>Covered payroll</b>	\$ 48,107,717
<b>Net pension liability as a % of covered payroll</b>	185.32%



### Schedule of Net Pension Liability Last 7 Fiscal Years

	2021	2020	2019	2018	2017
Total pension liability	\$ 306,515,411	\$ 287,739,213	\$ 274,171,345	\$ 264,696,024	\$ 262,781,827
Plan fiduciary net position	248,934,922	194,587,990	194,713,459	189,010,042	175,471,299
Net pension liability (asset)	\$ 57,580,489	\$ 93,151,223	\$ 79,457,886	\$ 75,685,982	\$ 87,310,528
Plan fiduciary net position as a % of total pension liability	81.21%	67.63%	71.02%	71.41%	66.77%
Covered payroll	\$ 52,121,603	\$ 50,694,990	\$ 50,482,389	\$ 49,012,028	\$ 45,650,372
Net pension liability as a % of covered payroll	110.47%	183.75%	157.40%	154.42%	191.26%

	2016	2015
Total pension liability	\$ 245,943,279	\$ 229,880,291
Plan fiduciary net position	156,789,373	161,715,857
Net pension liability (asset)	\$ 89,153,906	\$ 68,164,434
Plan fiduciary net position as a % of total pension liability	63.75%	70.35%
Covered payroll	\$ 48,107,717	\$ 44,765,172
Net pension liability as a % of covered payroll	185.32%	152.27%





## Disclosure Overview as of June 30, 2021

	Plan's Funded Status			Deferred Outflows/(Inflows) of Resources			Recognized in Net Pension Liability	Recognized in Total Pension Expense
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability	Experience (Gains)/ Losses	Assumption Changes	Investment (Gains)/ Losses		
Balances -- prior year disclosure	(287,739,213)	194,587,990	(93,151,223)	1,006,154	(261,944)	7,335,169	(93,151,223)	
Changes in net pension liability:								
Service cost	(6,708,721)		(6,708,721)					6,708,721
Interest	(21,120,066)		(21,120,066)					21,120,066
Net investment income		59,811,879	59,811,879					(59,811,879)
Contributions - employer		10,236,862	10,236,862				10,236,862	
Contributions - member		3,522,346	3,522,346					(3,522,346)
Changes of benefit terms	(3,851,405)		(3,851,405)					3,851,405
Benefit payments, including refunds of member contributions	18,411,850	(18,411,850)	-					
Administrative expense		(762,205)	(762,205)					762,205
Other		(50,100)	(50,100)					50,100
Recognized in total pension expense								
Differences between expected and actual experience				(1,181,062)			1,181,062	1,181,062
Changes of assumptions					590,822		(590,822)	(590,822)
Differences between projected and actual earnings on pension plan						8,834,905	(8,834,905)	(8,834,905)
Deferred outflows/inflows of resources								
Differences between expected and actual experience	(3,263,952)		(3,263,952)	3,263,952			(3,263,952)	
Changes of assumptions	(2,243,904)		(2,243,904)		2,243,904		(2,243,904)	
Differences between projected and actual earnings on pension plan						(45,610,962)	45,610,962	45,610,962
Total pension expense							(6,524,569)	6,524,569
Balances -- end of year	(306,515,411)	248,934,922	(57,580,489)	3,089,044	2,572,782	(29,440,888)	(57,580,489)	



## Changes in the Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
<b>Balances as of June 30, 2020</b>	\$ 287,739,213	\$ 194,587,990	\$ 93,151,223
<b>Changes for the year:</b>			
Service cost	6,708,721		6,708,721
Interest	21,120,066		21,120,066
Differences between expected and actual experience	3,263,952		3,263,952
Changes of benefit terms	3,851,405		3,851,405
Changes of assumptions	2,243,904		2,243,904
Contributions - employer		10,236,862	(10,236,862)
Contributions - member		3,522,346	(3,522,346)
Net investment income		59,811,879	(59,811,879)
Benefit payments, including refunds of member contributions	(18,411,850)	(18,411,850)	-
Administrative expense		(762,205)	762,205
Other		(50,100)	50,100
<b>Net changes</b>	<u>18,776,198</u>	<u>54,346,932</u>	<u>(35,570,734)</u>
<b>Balances at June 30, 2021</b>	<u>\$ 306,515,411</u>	<u>\$ 248,934,922</u>	<u>\$ 57,580,489</u>



## Components of the Pension Expense for the Fiscal Year Ended June 30, 2021

Description	Amount
Service cost	\$ 6,708,721
Interest on the total pension liability	21,120,066
Differences between expected and actual experience	1,181,062
Changes of assumptions	(590,822)
Changes of benefit terms	3,851,405
Member contributions	(3,522,346)
Projected earnings on pension plan investments	(14,200,917)
Differences between projected and actual earnings on plan investments	(8,834,905)
Pension plan administrative expense	762,205
Other changes in fiduciary net position	50,100
<b>Total pension expense</b>	<b>\$ 6,524,569</b>



### Increase (Decrease) in Pension Expense from the Recognition of the Effects of Differences Between Expected and Actual Experience

Year	Differences between Expected and Actual Experience		Recognition		
	Experience	Period (Years)	2021	2022	2023
2018	\$ (1,453,843)	4.0	\$ (363,460)		
2019	-	4.0	-	\$ -	
2020	1,826,152	4.0	456,538	456,538	\$ 456,538
2021	3,263,952	3.0	<u>1,087,984</u>	<u>1,087,984</u>	<u>1,087,984</u>
Net increase (decrease) in pension expense			<u>\$ 1,181,062</u>	<u>\$ 1,544,522</u>	<u>\$ 1,544,522</u>



### Increase (Decrease) in Pension Expense from the Recognition of the Effects of Changes of Assumptions

Year	Changes of Assumptions	Recognition Period (Years)	2021	2022	2023
2018	\$ (7,508,856)	4.0	\$ (1,877,214)		
2019	-	4.0	-	\$ -	
2020	2,153,694	4.0	538,424	538,424	\$ 538,422
2021	2,243,904	3.0	747,968	747,968	747,968
Net increase (decrease) in pension expense			<u>\$ (590,822)</u>	<u>\$ 1,286,392</u>	<u>\$ 1,286,390</u>



### Increase (Decrease) in Pension Expense from the Recognition of Differences between Projected and Actual Earnings on Pension Plan Investments

Year	Differences between Projected and Actual Earnings on Pension Plan Investments		Recognition Period (Years)				
	Investments	Recognition Period (Years)	2021	2022	2023	2024	2025
2017	\$ (9,464,869)	5	\$ (1,892,973)				
2018	(3,503,731)	5	(700,746)	\$ (700,747)			
2019	4,471,955	5	894,391	894,391	\$ 894,391		
2020	9,933,077	5	1,986,615	1,986,615	1,986,615	\$ 1,986,617	
2021	(45,610,962)	5	<u>(9,122,192)</u>	<u>(9,122,192)</u>	<u>(9,122,192)</u>	<u>(9,122,192)</u>	<u>\$ (9,122,194)</u>
Net increase (decrease) in pension expense			<u>\$ (8,834,905)</u>	<u>\$ (6,941,933)</u>	<u>\$ (6,241,186)</u>	<u>\$ (7,135,575)</u>	<u>\$ (9,122,194)</u>



### Interest on the Total Pension Liability Recognized in Expense

	Amount for Period	Portion of Period	Interest Rate	Interest on the Total Pension Liability
Beginning total pension liability	\$ 287,739,213	100%	7.40%	\$ 21,292,702
Service cost	6,708,721	100	7.40	496,445
Benefit payments, including refunds of member contributions	(18,411,850)	50	7.40	<u>(669,081)</u>
Total interest on the pension liability				\$ 21,120,066

### Projected Earnings on Pension Plan Investments Recognized in Expense

	Amount for Period	Portion of Period	Projected Rate of Return	Projected Earnings
Beginning plan fiduciary net position	\$ 194,587,990	100%	7.40%	\$ 14,399,511
Contributions - employer	10,236,862	50	7.40	372,005
Contributions - member	3,522,346	50	7.40	128,001
Benefit payments, including refunds of member contributions	(18,411,850)	50	7.40	<u>(669,081)</u>
Administrative expense and other	(812,305)	50	7.40	<u>(29,519)</u>
Total projected earnings				\$ 14,200,917



## Pension Expense and Deferred Outflows and Inflows of Resources Related to Pensions

For the fiscal year ended June 30, 2021, the recognized pension expense is \$6,524,569. As of June 30, 2021, deferred outflows and inflows of resources related to pensions are reported as follows:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 3,089,044	
Changes of assumptions	2,572,782	
Net difference between projected and actual earnings on pension plan investments		\$ (29,440,888)
Total	<u>\$ 5,661,826</u>	<u>\$ (29,440,888)</u>

Amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in the pension expense as follows:

Year Ended June 30:	
2022	\$ (4,111,019)
2023	(3,410,274)
2024	(7,135,575)
2025	(9,122,194)
2026	-
Thereafter	-





### Deferred Outflows and Inflows of Resources from Differences between Expected and Actual Experience

Year	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in Pension Expense through June 30, 2021 (c)	Balances at June 30, 2021	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2020	\$ 1,826,152		\$ 913,076	\$ 913,076	
2021	3,263,952		1,087,984	2,175,968	
				<u>\$ 3,089,044</u>	<u>\$ -</u>



## Deferred Outflows and Inflows of Resources from Changes of Assumptions

Year	Increases in the Total Pension Liability (a)	Decreases in the Total Pension Liability (b)	Amounts Recognized in Pension Expense through June 30, 2021 (c)	Balances at June 30, 2021	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2020	\$ 2,153,694		\$ 1,076,848	\$ 1,076,846	
2021	2,243,904		747,968	1,495,936	
				<u>\$ 2,572,782</u>	<u>\$ -</u>



## Deferred Outflows and Inflows of Resources from Differences Between Projected and Actual Earnings on Pension Plan Investments

Year	Investment Earnings Less Than Projected (a)	Investment Earnings Greater Than Projected (b)	Amounts Recognized in Pension Expense through June 30, 2021 (c)	Balances at June 30, 2021	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2018		\$ (3,503,731)	\$ (2,802,984)		\$ (700,747)
2019	\$ 4,471,955		2,683,173	\$ 1,788,782	
2020	9,933,077		3,973,230	5,959,847	
2021		(45,610,962)	(9,122,192)		(36,488,770)
				<u>\$ 7,748,629</u>	<u>\$ (37,189,517)</u>



## Sensitivity of the Net Pension Liability to Changes in the Discount Rate

	<b>Current Discount Rate (7.30%)</b>	<b>1% Decrease (6.30%)</b>	<b>1% Increase (8.30%)</b>
Net pension liability as of June 30, 2021	\$ 57,580,489	\$ 92,402,074	\$ 28,408,740

## Participant Breakdown as of June 30, 2020

	<b>Participant Count</b>
Inactive plan members or beneficiaries currently receiving benefits	767
Inactive plan members entitled to but not yet receiving benefits	627
Active plan members	880
Total members	<u>2,274</u>



## Description of Significant Changes Prior to Year End

The outcome of recent IBEW arbitration was reflected as a plan change, which created an increase in liabilities of approximately \$3.9 million.

## DROP Balances

Currently, there is no Deferred Retirement Option Plan (DROP). Therefore, the DROP balances are \$0.

## Valuation Date and Roll Forward Process

The Plan Sponsor uses the July 1, 2019 Actuarial Valuation to calculate the ADEC for the fiscal year ending 2021.

The June 30, 2020 Actuarial Valuation directly calculated the June 30, 2020 Total Pension Liability (TPL). The June 30, 2020 TPL was increased by service cost and interest and decreased by benefit payments to estimate the TPL as of June 30, 2021. The TPL as of June 30, 2021 was also adjusted to reflect any material plan changes after the valuation, if applicable.

## Funding Policy

The Plan Sponsor uses the Entry Age Normal Actuarial Cost Method to calculate the plan liabilities. The Funding Policy has two parts.

1. Normal Cost
2. Amortization of the Unfunded Actuarial Liability (UAL)

Each year the Plan Sponsor pays the Normal Cost plus an amortization of the plan's UAL. 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.

## Assumption Selection

The selections of all assumptions used in determining the total pension liability were made in conformity with Actuarial Standards of Practice issued by the Actuarial Standards Board.

The actuarial assumptions used in the valuation were based on the results of an actuarial experience study for the period July 1, 2012 through June 30, 2017.



## 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

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
- Mortality improvement

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

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

7.30%. (Prior: 7.40%)

### 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%

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%.

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

## **Mortality**

Class A (Non-Disabled): RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2020.

Class B (Non-Disabled): RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2020, 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-2020.

Prior: Class A (Non-Disabled): RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2019.

Class B (Non-Disabled): RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2019, 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-2019.

## **Mortality Improvement**

Projected to date of decrement using Scale MP-2020 (generational).

Prior: Projected to date of decrement using Scale MP-2019 (generational).

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

The mortality improvement assumption was updated 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%

## 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%



### Termination prior to retirement (continued)

**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

Completed Years of Service				
Age	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%

### 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.

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.

### Administrative expenses

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

### Cost of living increases

2.60%.

### 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.

### Payroll growth

3.00% per year.

### Percent of active employees married

80%.

### Spouse's age

Husbands are assumed to be 3 years older than wives.

The assumption changes increased liabilities by about 0.7%.



## 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 disclosure 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 January 10, 2011, age 45 and 20 years of creditable service. For Fire Union employees hired on or before January 10, 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 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 on or after January 10, 2011, who are at least age 45 with 20 years of creditable service, the normal retirement benefit is reduced actuarially for the period of time by which retirement precedes age 50. For employees who terminate with 20 to 25 years of creditable service who retire at age 50 or later, 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 25 years of creditable service receive an unreduced benefit.

For Fire employees hired on or after January 1, 2007 but before January 10, 2011, the normal retirement benefit is reduced actuarially for the period to time by which retirement precedes 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 or at age 45 with at least 25 years of creditable service receive an unreduced benefit.

For Fire employees hired before January 1, 2007, the normal retirement benefit is reduced actuarially for the period of time by which retirement precedes the earlier of age 55 or 25 years of creditable service. 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. Employees that retire at age 45 with at least 25 years of creditable service receive an unreduced benefit.



## Service retirement (continued)

### Class B

For employees hired prior to July 1, 2006 (on or before May 4, 2008 for IBEW): 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.

In lieu of this benefit, at the time of retirement, an IBEW member may choose (i) an accrual rate of 1.90% for all years of service prior on or before May 4, 2008 and an accrual rate of 1.80% for all years of service after May 4, 2008, 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 on or before May 4, 2008 and an accrual rate of 2.00% for all years of service after May 4, 2008, and no Cost of Living Adjustment.

In lieu of this benefit, at the time of retirement, a member not in IBEW 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 on or after 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 (on or before May 4, 2008 for IBEW) for the first 25 years, an accrual rate of 2.00% for all years of service on or after 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.

For employees hired on or after July 1, 2006 (after May 4, 2008 for IBEW): 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.

An employee hired on or after July 1, 2006 (after May 4, 2008 for IBEW) may only select a benefit with a full 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 IBEW employees hired before May 4, 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 IBEW employees hired before May 4, 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 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 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 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 all employees retiring after July 1, 2017, the maximum annual increase is 2.75%. For all other members, 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 Class B employees that retire after July 1, 2018, the retirement COLA will be determined annually by the BERS Board equal to the CPI-U Northeast Region, with a maximum COLA increase of 2.75%, except that if the funding level of the BERS falls below 81%, the BERS Board may reduce or vote for no COLA for payees prior to age 65 for the upcoming year. 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 and 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.

#### 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. Prior to July 1, 2017, several groups had a graded vesting schedule of 20% after completion of 3 years of creditable service to 100% after completion of 7 years of creditable service.

### 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.

## **Employee Contributions**

### 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 contributed 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 was 4.41% of the employee's base pay.





**Contributions (continued)**

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.