



CITY OF BURLINGTON OPEB PLAN

ACTUARIAL VALUATION REPORT

JUNE 30, 2021



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## Executive Summary

	June 30, 2021	June 30, 2019
<b>Number of members</b>		
Active members	623	673
Retired members and dependents	<u>439</u>	<u>398</u>
Total	1,062	1,071
<b>Covered employee payroll</b>	40,380,463	40,337,114
<b>Average plan salary</b>	64,816	59,936
<b>Actuarial present value of future benefits</b>	10,174,067	8,183,571
<b>Actuarial accrued liability</b>	6,182,312	5,320,280
<b>Plan assets</b>		
Market value of assets	0	0
Actuarial value of assets	0	0
<b>Unfunded accrued liability</b>	6,182,312	5,320,280
<b>Funded ratio</b>	0.0%	0.0%



## Valuation Results and Highlights

### 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

Various assumption changes were reflected in the valuation. See the Description of Actuarial Assumptions section for more details. The combined impact of the assumption changes was to increase the actuarial accrued liability by approximately \$1,083,000. The primary driver was due to the change in discount rate, which accounted for \$961,000 of the increase.

### Liability Experience During Period Under Review

Plan experience resulted in a gain of \$751,000. Most of the gain was due to census data changes. It was offset slightly by medical premiums increasing slightly more than anticipated.

### Asset Experience During Period Under Review

The assets are \$0, as the plan is unfunded.



## Certification

This report presents the results of the June 30, 2021 Actuarial Valuation for City of Burlington OPEB Plan (the Plan) for the purpose of estimating the funded status of the Plan. 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.

I certify that the actuarial assumptions and methods that were selected by me and represent my best estimate of anticipated actuarial experience under the Plan.

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.

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Enrolled Actuary 20-08801

September 1, 2022



## Development of Unfunded Accrued Liability and Funded Ratio

	June 30, 2021	June 30, 2019
Actuarial accrued liability for active members		
Members under age 65	\$2,231,150	\$1,811,237
Members over age 65	662,412	523,512
Dependents under age 65	1,170,658	935,125
Dependents over age 65	0	0
Total	4,064,220	3,269,874
Actuarial accrued liability for inactive members		
Members under age 65	575,070	788,598
Members over age 65	1,450,068	1,041,238
Dependents under age 65	92,954	220,570
Dependents over age 65	0	0
Total	2,118,092	2,050,406
Total actuarial accrued liability	6,182,312	5,320,280
Actuarial value of assets	0	0
Unfunded accrued liability	6,182,312	5,320,280
Funded ratio	0.0%	0.0%

	Discount Rate (2.16%)	1% Decrease (1.16%)	1% Increase (3.16%)
Actuarial accrued liability for active members	4,064,220	4,726,432	3,514,952
Actuarial accrued liability for inactive members	2,118,092	2,362,673	1,917,693
Total actuarial accrued liability	6,182,312	7,089,105	5,432,645

	Healthcare Cost Trend Rates (6.50% decreasing to 4.60%)	1% Decrease (5.50% decreasing to 3.60%)	1% Increase (7.50% decreasing to 5.60%)
Actuarial accrued liability for active members	4,064,220	3,546,305	4,695,540
Actuarial accrued liability for inactive members	2,118,092	2,104,978	2,131,599
Total actuarial accrued liability	6,182,312	5,651,283	6,827,139



### Development of Unfunded Accrued Liability and Funded Ratio by Group

	General Fund	Burlington Electric	Revenue Departments	Total
Actuarial accrued liability for active members				
Members under age 65	\$1,937,363	\$173,717	\$120,070	\$2,231,150
Members over age 65	351,755	177,444	133,213	662,412
Dependents under age 65	969,503	115,621	85,534	1,170,658
Dependents over age 65	0	0	0	0
Total	3,258,621	466,782	338,817	4,064,220
Actuarial accrued liability for inactive members				
Members under age 65	468,464	106,173	433	575,070
Members over age 65	890,137	397,005	162,926	1,450,068
Dependents under age 65	44,942	48,012	0	92,954
Dependents over age 65	0	0	0	0
Total	1,403,543	551,190	163,359	2,118,092
Total actuarial accrued liability	4,662,164	1,017,972	502,176	6,182,312
Actuarial value of assets	0	0	0	0
Unfunded accrued liability	4,662,164	1,017,972	502,176	6,182,312
Funded ratio	0.0%	0.0%	0.0%	0.0%



## Member Data

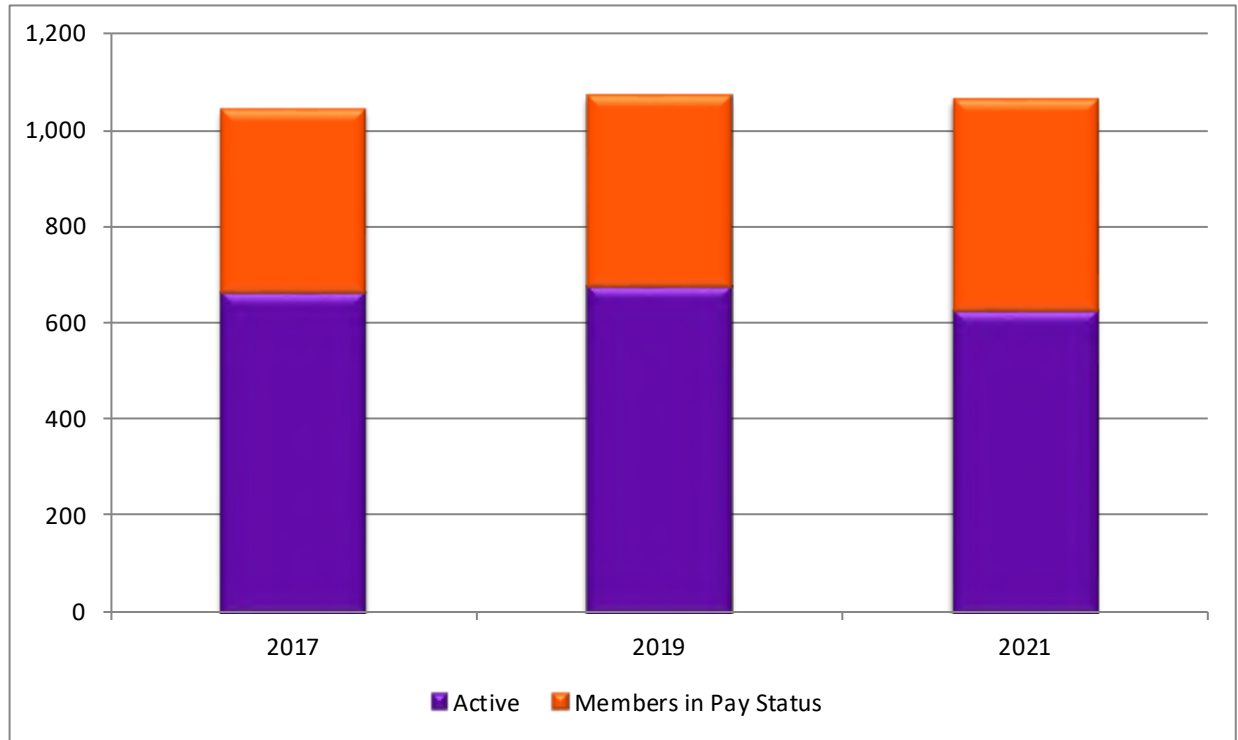
The data reported by the Plan Sponsor for this valuation includes 623 active employees who met the Plan's minimum age and service requirements as of June 30, 2021.

	General Fund	Burlington Electric	Revenue Departments	Total
<b>Total members June 30, 2021</b>				
Active members	432	94	97	623
Retirees	312	91	30	433
Dependents of current retirees	1	5	0	6
Total	745	190	127	1,062
<b>Average age June 30, 2021</b>				
Active members	42.4	49.6	45.0	43.9
Retirees	67.1	71.4	70.8	68.2
Dependents of current retirees	60.0	64.0	N/A	63.3
<b>Total members June 30, 2019</b>				
Active members	464	104	105	673
Retirees	283	86	22	391
Dependents of current retirees	5	2	0	7
Total	752	192	127	1,071
<b>Average age June 30, 2019</b>				
Active members	42.0	49.1	45.6	43.7
Retirees	67.2	71.4	70.5	68.3
Dependents of current retirees	60.0	62.7	N/A	60.7





### Member Counts by Status





## Expected Benefit Payments

The table below presents projected annual benefit payments for the next twenty plan years. The following assumptions are reflected in this table:

- Retirements among active participants will occur consistent with the Plan's retirement assumption.
- Benefits will continue to accrue according to the provisions of the Plan.

Differences between actual experience and that assumed will affect the pattern of benefit payments.

Participant categories reflect status as of June 30, 2021.

Year	Active as of June 30, 2021	Retired and Terminated as of June 30, 2021	Total Benefit Payments
2021	\$17,377	\$217,116	\$234,493
2022	46,536	183,785	230,321
2023	76,319	192,123	268,442
2024	108,763	187,572	296,335
2025	123,942	149,384	273,326
2026	167,341	73,620	240,961
2027	179,137	76,086	255,223
2028	185,237	78,808	264,045
2029	204,247	81,779	286,026
2030	220,196	84,989	305,185
2031	228,075	69,193	297,268
2032	255,311	70,078	325,389
2033	278,286	70,833	349,119
2034	285,677	71,400	357,077
2035	296,857	71,713	368,570
2036	318,450	71,720	390,170
2037	332,501	71,350	403,851
2038	345,743	70,554	416,297
2039	369,882	69,276	439,158
2040	397,776	67,484	465,260



### Expected Per Capita Claims (without Medicare Integration)

Sample Age	Expected Claim (Male)	Expected Claim (Female)
45	\$8,002	\$11,153
50	10,450	12,996
55	13,712	15,139
60	17,664	17,658
64	21,572	20,671



## Description of Actuarial Methods

### Asset Valuation Method

Not applicable (unfunded plan).

### 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).



## Description of Actuarial Assumptions

### Interest

2.16%. (Prior: 3.51%)

Since the OPEB plan is not funded, the selection of the discount rate is consistent with the GASB 74/75 standards linking the discount rate to the 20-year AA municipal bond index for unfunded OPEB plans. The discount rate used for this valuation is equal to the published Bond Buyer GO 20-Bond Municipal Index effective as of June 30, 2021.

### Rate of annual aggregate payroll growth

2.60%.

### Inflation

2.60%.

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 2019 OASDI Trustees Report.

### Mortality

Class A: RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2021.

Class B: RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2021, set forward 2 years.

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

Class B: RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2019, set forward 2 years.

### Disabled Mortality

RP-2014 Adjusted to 2006 Disabled Mortality Table, projected to the valuation date with Scale MP-2021.

Prior: 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-2021 (generational).

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

The mortality assumption was changed to better reflect anticipated experience.



## Retirement

### 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 (cont.)

**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.

### Utilization

20% of eligible active members will elect medical coverage at retirement.

### Medicare Eligibility

100% of current actives and retirees are assumed to be Medicare Eligible.

### Spousal Coverage

40% of active members are assumed to be married and elect spousal benefits at retirement with wives 3 years younger than husbands.

### Healthcare Cost Trend Rates

6.50% in 2021, reducing by 0.2% each year to an ultimate rate of 4.60% per year rate for 2031 and later.

(Prior: 6.50% in 2019, reducing by 0.2% each year to an ultimate rate of 4.60% per year rate for 2029 and later.)

Healthcare cost trend rates reflect both the current and long-term outlook for increases in healthcare costs. The short term rates are based on recent industry surveys, plan experience and near-term expectations. The long term trend rate is based on our general inflation assumption plus an adjustment to reflect expectations for long-term medical inflation.



### Premiums/Allocation rates

	Employee	Employee Plus Spouse
Allocation Rate	\$941.47	\$1,779.38
COBRA Rates	\$960.30	\$1,814.97

Allocation rates were used as the basis for per capita costs.

### Expected Claim Costs

The sample per capita claim for plans not integrated with Medicare was developed as follows: Using the total count of active participants eligible for post-retirement medical benefits and retirees currently electing medical coverage in a non-Medicare supplement plan, we calculate the total projected claims by multiplying the total count by the average annual premium. Using the cost increases derived from a study sponsored by the Society of Actuaries prepared by Dale H. Yamamoto from May 2013: "Health Care Costs from Birth to Death", we allocate the total projected claims by age and gender.

For plans integrated with Medicare, the post Medicare eligible premium is assumed to be unaffected by age.

### Patient Protection and Affordable Care Act (PPACA)

For purposes of this valuation, extended coverage for adult children and 100% coverage of preventive care are assumed to be reflected in per capita costs.

For purposes of this valuation, elimination of lifetime maximum benefits and removal of the limits on essential healthcare are assumed to have no impact on plan liabilities.





## 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.*

### Retirement Eligibility

#### Class A:

Police hired before 7/1/2006: Normal Retirement is the earlier of age 42 with 25 years of service, or age 55 with 5 years of service. Early Retirement is 42 with 5 years of service.

Police hired on or after 7/1/2006 and on or before 1/10/2011: Normal Retirement is the earlier of age 45 with 25 years of service, or age 55 with 5 years of service. Early Retirement is 45 with 5 years of service.

Police hired after 1/10/2011: Normal Retirement is the earlier of age 50 with 20 years of service, or age 55 with 5 years of service. Early Retirement is 40 with 20 years of service.

Fire hired on or before 10/7/2011: Normal Retirement is the earlier of age 45 with 25 years of service, age 50 with 20 years of service, or age 55 with 5 years of service. Early Retirement is 45 with 5 years of service.

Fire hired after 10/7/2011: Normal Retirement is the earlier of age 50 with 25 years of service, or age 55 with 5 years of service. Early Retirement is age 45 with 20 years of service.

All others: Normal Retirement is the earlier of age 42 with 25 years of service, or age 55 with 5 years of service. Early Retirement is 42 with 5 years of service.

#### Class B:

Normal Retirement is age 65 with 5 years of service, Early Retirement is age 55 with 5 years of service.

The School group is not covered by the City plan and was excluded from this valuation.

### Ordinary Disability Eligibility

All members are eligible where permanently disabled.

### Retirement Medical Insurance

Retired employees pay 100% of their post-retirement medical premium costs, which are based on COBRA rates for pre-65 coverage.

### Life Insurance

The City of Burlington provides \$2,000 in life insurance for retirees, except for members of AFSCME and IBEW unions who receive \$10,000 in life insurance. Certain current retirees have \$6,000 of life insurance in force.

### Dental Insurance

Retired employees pay 100% of their dental costs. Dental coverage for retirees is generally available for up to 18 months. The City of Burlington does not subsidize this benefit.